

Gazetteer of India
ARUNACHAL PRADESH
East Siang & West Siang Districts

ARUNACHAL PRADESH DISTRICT GAZETTEERS



सत्यमेव जयते

EAST SIANG AND WEST SIANG DISTRICTS

By

S.Dutta Choudhury
Former Editor

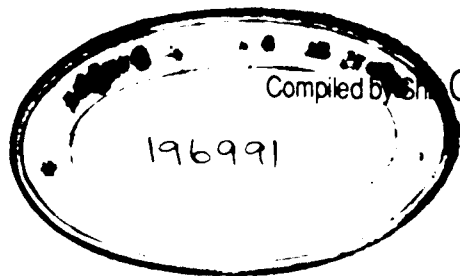
GOVERNMENT OF ARUNACHAL PRADESH
1994

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FOREWORD

This is indeed a very happy occasion for me to present the East Siang and West Siang Districts Gazetteer to the people of Arunachal Pradesh. It is a complete document giving physical and historical features of the State.

This Volume covers a wide range of Subjects. The development so far in various fields, and changes that have taken place in political, social, economic and cultural spheres over the years in these districts have been reflected in this document.

I hope, this would prove useful to the scholars, educationists, researchers and administrators; and all those who are keen to know in detail about the socio-economic transformation which these districts have been undergoing in the recent years.

Mata Prasad
(Mata Prasad)

27/11/93

PREFACE

The present volume is the fourth in the series of Arunachal Pradesh District Gazetteers. With the promulgation of Arunachal Pradesh (Reorganisation of Districts) Act, 1980 (Act No.3 of 1980) from June 1, 1980, the Siang District has been divided into two new districts - East Siang District and West Siang District. This volume covers both the East Siang and West Siang Districts and the draft of which was seen by the Members of the Advisory Board for Arunachal Pradesh Gazetteers and examined and scrutinised by the concerned Ministries of the Government of India and also by the Survey of India. The draft was modified in conformity with the observations and suggestions of the concerned Ministries of the Government of India.

The Draft Gazetteer was sent to the different concerned Ministries of the Government of India in November, 1983 for their scrutiny, observation and clearance for publication. Most of the concerned Ministries **Conveyed** their clearance for publication earlier. The Ministry of Home Affairs, however conveyed their final clearance for publication of the Gazetteer in December, 1992.

This Gazetteer of East Siang and West Siang Districts is the first of its kind. There is no earlier Gazetteer of these districts which could be revised. The old volumes of the Assam District Gazetteer, namely B.C. Allen's Lakhimpur District Gazetteer published in 1905 and the Sadiya and Balipara Frontier Tract Gazetteer brought out in 1928 are, however, our important sources.

The present volume comprises statistical data up to the year 1983-84, and a good deal of important information ranging from early times to the recent past has been incorporated in it. However, some additional statistical figures concerning developmental activities of the Development Departments have also been appended up to the year 1990-91.

It may be mentioned in this context that in former times the term 'Abor' was mistakenly or confusedly used to address the Adis. This term occurring in passages which have been quoted in this volume has been changed into 'Adi', by which name the tribe is known. The word 'Abor' or its variants, however, appear only in quotations of passages from some old documents, particularly of the 19th century.

I would like to take this opportunity of expressing my deep gratitude to Shri Mata Prasad, Governor of Arunachal Pradesh, who has kindly written the foreword of this Gazetteer.

I am grateful to Shri Gegong Apang, Chief Minister, Shri Dera Natung, formerly Minister of Information and Public Relations and Tourism, Arunachal Pradesh, and to the Chief Secretary to the Government of Arunachal Pradesh

and Chairman of the Advisory Board and to the Secretary (IPR/Gazetteer), Government of Arunachal Pradesh, for the kind and continuous interest they took in the Gazetteers work.

I am grateful to the members of the Advisory Board for Arunachal Pradesh Gazetteer for their valuable suggestions and comments.

My thankful acknowledgements are due to the then Deputy Commissioner of West Siang District, Along, Shri T. Dai for his suggestions and valuable contributions. Indeed, I am obliged to many officers of the Government of Arunachal Pradesh for help and cooperation extended by them.

As for the valuable and important reports on Geology, flora, fauna and climatology, I am thankful respectively to Shri B. Kakoti, the then Geologist (Sr)-in-charge, Geological Survey of India, Arunachal Pradesh Circle; Dr. S.K. Jain, the then Deputy Director, Botanical Survey of India, Eastern Circle and Shri C.L. Malhotra, Systematic Botanist; Dr A.K. Ghosh, the then Officer-in-charge, Eastern Regional Station, Zoological Survey of India and Shri B.B. Sen of the India Meteorological Department.

I am also thankful to the officers of the Map Publication Office, Survey of India, Dehradun, for their important contributions towards preparations and publication of maps in the Gazetteers. I am grateful to Shri A.K. Paul, Deputy Director, Shri D.N. Ram, Cartographer, Shri A.K. Sharma, Artist, Shri K.J. Pandit, Senior Artist of the Directorate of Census Operations, Arunachal Pradesh, Shillong for the personal care taken by them to prepare the maps.

The original draft volume of the Gazetteer was compiled by Shri C.K. Shyam, Compiler, and edited by my predecessor Shri S. Dutta Choudhury. I made some unavoidable additions and alterations wherever necessary in the final stage.

I would express my hearty thanks to all of my colleagues, the officers and members of staff of Gazetteer Department - Shri K. Ghosh, Compiler and Shri S.S. Kharakor, Stenographer, in particular for their contributions and assistance.

Shillong
The 1st March, 1994.

R.N. Bagchi
State Editor (Gazetteers)
Arunachal Pradesh
Shillong

FOREWORD

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GUIDE TO SPELLING AND PRONUNCIATION OF SOME PLACE, RIVER AND OTHER NAMES

(Based on Survey of India List of Names)

<u>For</u>	<u>Read</u>
Arunachal	Arunāchal
Pasighat	Pāsighāt
PANGIN	PĀNGIN
Mechuka	Menchukha
Basar	Bāsār
Dibang	Dibāṅg
Karko	Kārko
Payum	Payum
Rumgong	Rumgong
Kaying	Kaying Dolung
Darak	Dārak
Tato	Tāto
Likabali	Likābāli
Kadai	Kādāi
Yang Sang Chhu	Yang Sāṅ Chu
Yinkiyong	Yinkiong
Monigong	Manigong
Garu	Gāru
Tatamori	Tātāmori
Daring	Dāring
Dali	Dāli
Sirapathang	Sirapathang or Sirong
Pango	Pāngo
Patkoi	Pātkai
Naga	Nāga
Cachar	Cāchār
Garro Hill	Gāro Hills

Pakam
Miguing
Kapang la'
Dihang
Liromopa
Dihong
Dibong
Disang
Tirap
Namsing
Namsai
Nepal
Tada Dege
Peri
Kambang
Karbak
Yomsha
Gamlin
Esi
Rapum
Dorjeeling
Shimang
Tungula Pass
Gesing
Pangri
Karle
Kark
Papigro
Namasiba
Pulom
Yomgong

Payam
Miging
'Kepang La'
Dihang
Liromoba
Dihang
Dibang
Disang
Tirap
Namsing
Namsai
Nepal
Tadadege
Peri Dolung
Kamba
Karbak
Yomcha
Gamlin Ratak
Esi Rite IB
Rapum
Darjiling
Simang
Tungu La
Gasheng
Pangri
Kate
Karle
Papigro
Namasib
Pulam
Yomgo

Yiyo
Payun
Pame
Gasheng
Gatte
Gameng
Paying
Yapuik
Irgo
Tagur
Ramsing
Ninging
Pango
Bomdo
Minging
Jedo
Paling
Rikor
Puging
Anging
Gobuk
Gosang
Riu
Domroh
Ringong
Bordak
Dambuk
Sissiri
Gekku
Pan-Kang
Renging
Yambung

Yio
Payun
Pame
Gasheng
Gatte
Gameng
Paying
Yapuik
Hirgo
Tagur
Ramsing
Ningguing
Pango
Bomda
Miging
Jidu
Paling
Rikor
Puging
Angguing
Gobuik
Gosaing
Riew
Dumro
Rungong
Bodak
Dambuk
Sesser
Geku
Pangkang
Rengging
Yembung

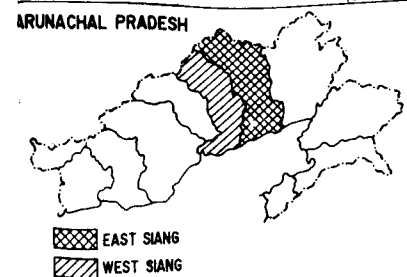
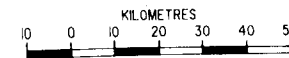
Monku
Kamarupa
Dimapur
Kacharis
Yembopani
Balek
Memsipu
Bordak
Simong
Parong
Pangin
Kobo
Sille
Karko
Payum
Yapuik
Likabali
Silapathar
Taliha
Yapik
Poyom
Yomsa
Yapik
Tagur
Herong
Raksap
Shikar
Gasheng
Gameng
Bame
Gusar
Itanagar

Mongku
Kamarupa
Dimapur
Kacharis
Yembung
Kalek
Memsiba
Badak
Shimong
Pareng
Pangin
Kabu
Silli
Karko
Payum
Yapuik
Likabali
Silapathar
Taliha
Yapuik
Payam
Yomcha
Yapik
Tapur
Hirong
Raksab
Shikar
Gasheng
Gameng
Bame
Gusar
Itanagar

Jianing
Kambang
Rungong
Komba
Tego-Gamliu
Yinkion
Changlang
Gauhati
Titabar
Tabasora
Bilat
Telam

Jining Moku
Kombong Dolung
Rungang
Kamba
Hego Gamlin
Yinkiong
Changtang
Guwahati
Titabar
Tabasora
Bilat
Telam

ARUNACHAL PRADESH EAST SIANG AND WEST SIANG DISTRICTS



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" DISTRICT	— — — — —
" SUB-DIVISION	— — — — —
" CIRCLE	— — — — —
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DISTRICT, SUB-DIVISION, CIRCLE	● ● ●
RIVER	~~~~~
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CHAPTER I

GENERAL PHYSICAL FEATURES AND NATURAL RESOURCES

Origin of the Names of the Districts and their Formation as Administrative Units

The names of the districts of East Siang and West Siang of Arunachal Pradesh (the erstwhile North-East Frontier Agency or NEFA) have been commonly derived from the river-name Siang. Known in Tibet as Tsangpo, the Siang (also called Dihang), the principal river of this region, enters the Indian territory in West Siang through the main Himalayan watershed east of Gelling. In its southward course the river flows through the entire length of East Siang until it descends into the plains of Assam south of Pasighat, where it meets the Dibang and Lohit, and then in a great confluence goes by the name of Brahmaputra. The Siang is revered as 'father' (*abu*) by the people.

The history of formation of these districts as administrative units may be traced back to the year 1914, when the areas occupied by the present East Siang and West Siang districts were a part of the administrative division called Central and Eastern Sections, North-East Frontier Tract. In 1919, this division was redesignated as the Sadiya Frontier Tract, which was, in 1948, bifurcated into two separate administrative charges called the Abor Hills District and the Mishmi Hills District. In 1954, the Abor Hills District came to be known as the Siang Frontier Division, which in turn was renamed as the Siang District in 1965. Under the provisions of the Arunachal Pradesh (Re-organisation of Districts) Act, 1980 (Act No. 3 of 1980) coming into force from June 1, 1980, the Siang District has been divided into two administrative units, namely the East Siang District and the West Siang District, each under the charge of a Deputy Commissioner.¹

Location General Boundaries, Area and Population

The traditional and customary boundary of India in the Eastern Sector obtained added sanction under the Indo-Tibetan Agreement of 24-25 March, 1914.

East Siang

The East Siang District with its headquarters at Pasighat is bounded by the West Siang District on the north and west, by the Dibang Valley District of Arunachal Pradesh on the east and by the Lakhimpur District of Assam on the south.

1. See Chapter II for a detailed account of the history of administrative growth and developments.

The district covers an area of 6,512 sq.km¹ inhabited by 99,985 persons of whom 53,730 are males and 46,255 are females according to the 1991 Census. The density of population per sq.km is nearly 15 persons. The decennial growth of population from 1971 to 1981 is about 40.04 per cent and from 1981 to 1991 is about 31.05.

West Siang

The West Siang District with its headquarters at Along is bounded on the north by Tibet (China), on the east by the East Siang and Dibang Valley Districts of Arunachal Pradesh, on the south by the Lakhimpur District of Assam and on the west by the Upper Subansiri and Lower Subansiri Districts of Arunachal Pradesh.

The district occupies an area of 12,006 sq. km² populated by 89,778 persons of whom 47,954 are males and 41,824 are females according to the 1991 Census. The density of population per sq.km is 7 persons. The decennial growth of population from 1971 to 1981 is about 27.04 per cent and from 1981 to 1991 is about 31.41.

Sub-divisions and Circles

EAST SIANG

The East Siang District is for administrative purpose divided into five sub-divisions, namely Pasighat (*Sadar*), Yinkiong Tuting, Boleng and Ruksin which are further divided into a total of twelve administrative circles. The Sub-divisions are each in charge of a Sub-divisional Officer and the circles are each under a Circle Officer.

Pasighat

The Pasighat (*Sadar*) Sub-division with Pasighat as the district as well as sub-divisional headquarters occupies the southern part of the district. The Sub-division is divided into several Circles.

The population of 55,170 persons of the Sub-division is composed mainly by the Padams, Minyongs, Gallongs, Pasis and Mishings.

Yinkiong

Yinkiong, a Sub-divisional as well as a circle headquarter situated 158 km north of Pasighat between the river Siang and the headwater of the Yamne. The administrative Centre was first opened in the year 1959. The local people are mainly the Shimongs and the Minyongs.

Tuting¹

Situated in the remote northern part of the district, the Tuting Sub-division consists of three circles - Tuting, Gelling and Singa. The local people of this Sub-division includes the Ashings, Tangams, Membas, Khambas and Idus.

Boleng and Ruksin

For administrative purpose these two Sub-divisions are created with their headquarters at Boleng and Ruksin under the East Siang District.

WEST SIANG

For administrative purpose the West Siang District is divided into five sub-divisions, namely Along (*Sadar*), Basar, Mechuka, Likabali and Yomcha, which are again divided into a total of sixteen administrative circles. The sub-divisions are each in charge of a Sub-divisional Officer and the circles are each under a Circle Officer.

Along

The Along (*Sadar*) Sub-division with Along as the headquarters of both the district and the sub-division is situated at the heart of the district. It is divided into seven circles - Along, Liromoba, Payum, Tirbin, Rumgong, Kaying and Darak.

The Sub-division has a population of 43,881 persons, and the area is inhabited predominantly by the Gallongs. The Minyongs and Boris also form segment of the population.

Basar

The Basar sub-division lies to the south of the district. With Basar as its headquarters, the sub-division is divided into three circles - Basar, Gensi and Likabali.

The Gallongs constitute almost the whole of this sub-divisional population of 17,389 persons.

Mechuka

The Mechuka Sub-division with its headquarters at Mechuka lies in the north-western extremity of the district. It comprises three circles - Mechuka, Manigong and Tato.

Having a population of 7,050 persons, the sub-division is inhabited by the Bokars, Ramos, Pailibos and Membas.

Likabali

For administrative purpose, the Likabali administrative centre has been upgraded to Sub-division with headquarters at Likabali.

1. The area figure of the district is provisional.
2. The area figure of the district is provisional.

1. The Tuting sub-division has been brought under administrative jurisdiction of East Siang District vide Government of Arunachal Pradesh notification No. GA (B) 28/88 dated 9th September, 1990.

Yomcha Sub-division: A new administrative sub-division with headquarters at Yomcha has recently been formed in the West Siang District by carving out some of the existing circles of the Along (*Sadar*) Sub-division, namely, Tirbin, Liromoba, Darak and Kadai and Tego - Gamlin villages of the Along (*Sadar*) Circle.

Note : According to the latest re-organisation of the administrative units, for administrative purpose the East Siang District is divided into five Sub-divisions, namely Pasighat (*Sadar*) Yingkiong, Boleng, Tuting and Ruksin. The sub-divisions are under the administrative control of either the Additional Deputy Commissioners or Sub-divisional Officers. Mariyang administrative unit is under the administrative control of Extra Assistant Commissioner. Pangin, Gelling, Singa, Nari, Jengging, Geku, Bilat, Koyu, Mebo, Palling and Katan are Circle headquarters, under the administrative control of Circle Officers.

The West Siang District is divided into five Sub-divisions, namely Along (*Sadar*), Mechuka, Yomcha, Basar and Likabali. The Sub-divisions are under the administrative control of either the Additional Deputy Commissioners or Sub-divisional Officers. Payum, Rumgong, Kaying, Tirbin, Liromoba, Darak, Gensi, Manigong, Tato, Kangku and Pidi are Circle headquarters, under the administrative control of Circle Officers.

TOPOGRAPHY

The 18,518 sq.km. area of the Eastern Himalayas comprising the East and West Siang Districts is almost wholly a rugged mountainous terrain extending over the central region of Arunachal Pradesh. The region has been described as 'an intricate labyrinth of precipitous, rocky and high hills and mountains' with beautiful green valleys drained by innumerable rivulets and mighty rivers cascading down from upper elevations. The landscape presents a splendid view of scenic beauties and diversities.

The tangle of hills and mountains throwing a series of spurs and towering to majestic heights of eternal snow is the most imposing topographic feature of Siang. The hills ranging generally from 305 to 3,050 metres high configurate the region extensively. The tract to the right of the Siang river is less hilly than the area lying between the Siang and the Dibang, which has mountains rising from 3,050 to 4,572 metres. There are lofty snow-clad mountains in the north.

Strips of flat land is interspersed in the riverine tracts, of which the most prominent is the level area of Pasighat. The hills are decked with wooded forests. The lower regions and the foothill areas adjacent to the plains of Assam have a luxuriant growth of vegetation with tall trees and thick undergrowth of scrubs.

RIVER SYSTEM

There are innumerable streams and rivers in Siang, and generally they flow in a north-south direction. The major rivers are the Siang and Siyom. Yamne and Yang Sang Chu are also important rivers. The Siang being the river artery constitutes the main drainage system.

Siang

The Siang (or Dihang) known in its upper course in Tibet as Tsangpo, as already mentioned, is the principal river, which has given the districts of East and West Siang their names. After the river breaks through the mountain ranges along the international border and makes its way into the Indian territory east of Gelling, it flows south-west and south-south-east until it takes a southerly turn. At Pangin the river bends towards the south-east and runs up to Pasighat where it again sharply turns due south. Finally, the Siang descends down into the plains of Assam and becomes the Brahmaputra after it is joined by the Lohit and Dibang. The course of the river in these districts covers a length of about 250 kilometres, and throughout this course it is fed by many tributaries, of which the Siyom, Yamne and Yang Sang Chu with numerous feeders of their own are large rivers. The downstream of the river, a little south of Pasighat, divides into two main channels and it is navigable throughout the year.

Siyom

The Siyom, next to the Siang, is the second largest river. It rises from the Pari Mountains in the Mechuka Sub-division. The headwater of the river is formed mainly by two streams, the Si and Yom. The Siyom flows east through the country inhabited by the Membas, Ramos, Pailibos and Bokars, and then taking a turn due south it flows through the Bori area until it again turns towards the east near Along in the Gellong country. The river finally merges with the Siang near Pangin. The Siyom is fed by many streams and rivulets in its course.

Yamne

The Yamne takes rise in the high snowy mountains in the north-east of the East Siang District and flows south-west until it is joined by another stream flowing from due north and bearing the same name. Fed by many streams, the river moves on forming a curve towards the south-west and then running south-east-south to meet the Siang below Jero village.

Yang Sang Chu

The Yang Sang Chu, another important tributary of the Siang originates from the mountains in the north-east of the West Siang District. Flowing north-west and fed by a number of streams it meets the Siang in its upper course.

Simen

The Simen river emerges from the high hills east of Basar. Flowing southward it merges with the Brahmaputra.

Among the other notable rivers are Kiddi and Siken, which have also the same area of origin as Simen. They flow south-west across Basar and Gensi circles and meet the Subansiri river as feeders.

GEOLOGY

Siang (East and West Siang Districts) has been covered geologically mainly along the major river-sections, such as Siang and Siyom. The generalized litho-tectonic successions of these valley-sections are as follows :-

Siyom Valley Area (from West to East)	Siang and Yamne Valley Area (from North to South)
Manchukha granite and gneisses	Tuting granite and gneisses
----- Thrust -----	----- Thrust -----
S a. Garnetiferous schists,	S a. Ultramafice and amphibolites
I schistose quartzite and marble.	I and metavolcanics
Y b. Schistose quartzite with bioti-	A b. Staurolite, garnet bearing
O te schist bands.	N graphite schists,
M	G

G c. Gneisses, granites and	G garnetiferous biotite schists
R migmatites.	R and calc silicate rocks.
O d. Schistose quartzite with	O c. Biotite gneisses.
U phyllite and black slates and	U
P limestones.	P
----- Thrust -----	----- Thrust -----
Miri quartzite and associated rocks	Miri quartzite and associated rocks
----- Thrust -----	----- Thrust -----
Abor Volcanics	Abor Volcanics
	Yinkiong Formation and
	Sillikorong Formation with
	basic volcanics.
	----- Thrust -----
	Gondwanas and Eocenes (?)
	----- Thrust -----
	Siwaliks

Tuting Granite and Gneisses

The Tuting granite and gneisses are extensively exposed in the northern part of Siang and represent the uppermost tectonic unit of regional dimensions. These are thrust over the rocks of the Siang and Siyom groups along a northerly dipping thrust plane, which shows deflection of the trends from northwest-southeast to northeast-southwest in the eastern and western parts of Siang respectively. The Tuting granite and gneisses encompass augen gneiss, porphyritic biotite-granite, biotite granite and hornblende granite.

The Tuting granite and gneisses are comparable to the Sela group and Mishmi diorite-granodiorite complex of Kameng and Dibang Valley-regions of Arunachal Pradesh respectively.

Siang and Siyom Groups

A thick succession of psammitic pelitic and a semi-pelitic rocks which underlie the Mechuka/Tuting granites and gneisses with a tectonic contact, exhibit varying litho assemblage in the Siang and Siyom valley areas. Since this litho-assemblage is bound at base as well as top by the same tectonic planes, these can be tentatively considered as belonging to the same litho-tectonic horizon.

Siang Group : It comprises medium to high grade metamorphic rocks, such as garnetiferous graphite schist, staurolite-garnet-graphitic schist, calc-silicate rocks, staurolite-garnet-biotite schists, biotite gneisses etc. At Angguing, the graphitic schists are characterized by the idiomorphs of staurolite prisms. Near Yamelling (Singa), the white marble bands are present

in association with graphitic schists.

Siyom Group : In the Siyom valley areas, the Siyom group is represented by biotite schists, schistose quartzite, amphibolite, gneisses, migmatites, schistose quartzites, with phyllite, black slates and limestone. The same litho-assemblage has also been recognized in the Subansiri region, where the gneisses, migmatites etc. are known as Ziro gneisses, Daporijo gneisses etc.

The metavolcanics exposed at Tuting succeed the Siang Group with an extrusive contact, the contact being marked by a gametiferous zone of about 10-15 cm in thickness. It is ascribable to the effects of thermal metamorphism. These metavolcanics are not traceable beyond Sirup Chu for these are cut off by the thrust plane which is responsible for bringing Tuting granites and gneisses against the rocks of Siang Group.

The ultramafics and amphibolites have invaded the rocks of Siang Group and metavolcanics. At Dewa Kota, near Mahang Kota, the ultramafics are represented by the actinolite schists and soapstone. The amphibolite bodies present at Monigong may be related to the ultramafics and amphibolites intrusions recorded at Tuting and suburbs. Such intrusions are not present in the Siyom valley areas.

Miri Quartzite and Associated Rocks:

White to pinkish and medium to coarse grained quartzite associated with grey limestone is well exposed in the Yamne, Siang and Siyom valley areas. The quartzite is associated with this intercalations of purple shales and siltstones. The basic dykes and sills are commonly noticed. The sedimentary structures, such as primary stratifications, ripple marks, current bedding etc. are well preserved. The oligomitic conglomerate bands are associated with it. The pebbles of quartzite are set in the matrix of sericite and fine quartz. Locally the pebbles are elongated.

Near Paling and suburbs, the contact between the Siang Group and the Miri quartzite is gradational. The quartzite near its contact with overlying gneisses of Siang Group becomes schistose and shows abundance of biotite. The biotite schists bands are also present within the quartzite in varying proportions. Before the gneisses commence, the quartzite becomes feldspathic. Otherwise this contact in other areas appears to be tectonic.

Abor Volcanics

Tectonically underlying the Miri quartzite, the Abor Volcanic include basaltic and andesitic rocks with intertrappean ash beds and sedimentary rocks. These are extensively developed in the Yamne and Siang valley areas. Near Pugging, the volcanics occupy a large tract of land. The volcanics rocks are vesicular and amygdaloidal. This volcanic activity was essentially of continental type as indicated by the associated sedimentary rocks. Near

Dalbuig, where the Miri Quartzite overrides the Abor volcanics along a thrust plane, the latter are foliated and the vesicles and amygdules are stretched along the foliation plane. At places, the volcanics are altered into chlorite schist.

Yingkiong Formation

Occupying a large tract of land between Yamne and Siang valleys, the Yingkiong Formation comprises a thick succession of light grey sandstone, siltstone, purple and pale green shales black shale/slate and volcanogenic sediments. Earlier this succession was considered to be of Precambrian age. Recent investigations indicate that the Yingkiong Formation is of Lower Eocene Age, for it is intimately associated with nummulitic limestone bands (the nummulite is the index fossil for the Eocene Age). Discovery of Eocene fossils from the Yingkiong Formation has necessitated revision with regard to the age of the Abor Volcanics.

Recently, Palaeozoic fossils have been discovered from the Yingkiong Formation near Dalbuig area. This fossiliferous horizon physically underlies the hummulitic bearing horizon. Further work is needed to establish the true nature of disposition of the Palaeozoic fossil bearing horizon with respect to the Yingkiong Formation.

Undifferentiated Gondwanas and Eocene Rocks

Gondwanas are characterized by the carbonaceous phyllite with coaly lenses, grey sandstone, black slates with calcareous nodules as observed at Ganu, Gensi, Tatamori, Daring and Rylu areas. Along Pasighat-Rotung road section the contact between Gondwanas and Miri may be of transitional nature. Local shearing along the contact has also been noticed. Near Pasighat, the nummulite bearing arenaceous limestone is exposed. Its extent and true nature of disposition is little known.

Siwaliks

The Sub-Himalayan zone is occupied by the Siwalik belt. These can be divided into Lower Unit, Middle Unit and Upper Unit. The Lower Unit is composed of hard brownish grey sandstone with clay intercalations. The massive medium to coarse grained sandstone is the dominant lithology of the Middle Unit. The Upper Unit includes silty clays, sands and pebble and boulder beds.

The Siwalik belt is separated from the Miri quartzite and Gondwanas by a system of steep faults, commonly known as Main Boundary Fault.

Acid and Basic Igneous Activity

The rocks of Siyom Group have been invaded by the tourmaline granites and pegmatites. These occur as concordant as well as discordant bodies. These are post-tectonic intrusions and are possibly of Tertiary Age.

The basic volcanics associated with Yingkiong Formation are of Tertiary

Age. In Yamne area, the basic volcanic rocks are exposed and show many volcanic structures such as bulbous, whorls, agglomerates and ignimberites. Near the confluence of Yamne and Siang rivers, the basic volcanic rocks have been observed emplaced along the joint planes of Miri quartzite/Sillikorong quartzite. At places, the large blocks of this quartzite are noticed within the volcanics, suggesting their effusion after the Miri quartzite/Sillikorong quartzite and Yingkiong Formation.

MINERAL OCCURRENCES

Coal : Impersistent lenses and pockets of semi-carbonised woody lignite and peat occur in association with the tertiary sediments. Small lenticular bodies of coal belonging to the Gondwana occur in highly deformed condition near Ichage and a few other localities. The deposits, however, are not economically viable.

Graphite : The deposit of graphite schist is located near Tai village (27° 59' : 94° 31'). It is about 37 km from Bame on the Bame-Daponjo road and 45 km away from Basar.

Graphite is amorphous, compact and mixed with micaceous material in varying proportions. It is usually in the form of layers upto a thickness of 2 cm. The exposed strike continuity is 3 km with an average width of 11 metres.

The chemical analyses of channel sample have shown 7.31% to 31.95% graphitic carbon, the average for the deposit being 16.76%. A bulk sample sent to Regional Research Institute, Bhubaneswar gave 20% graphitic carbon which could be upgraded on beneficiation. The reserves, calculated on the basis of available data, are of 10.35 million tonnes down to the depth of 130 m.

Limestone : Deposits of limestone have been located near Dali (27° 54' : 94° 47') and Kabu (28° 12' : 94° 45') villages.

Dali limestone deposit occurs about 30 km south of Along. The carbonate bands comprising dolomite and limestone occur within fine grained schists (overlying) and phyllites (underlying) of Daling sequence.

The limestone is siliceous and high in insoluble (23% average). CaO varies from 30% to 35% and MgO and R₂O₃ are less than 2%.

The total inferred reserves are estimated at 225.5 million tonnes. In view of huge reserves and general acidic nature, limestone may be used for lime making and agricultural purposes.

Kabu limestone deposit occurs near Kabu, about 6 km west of Along on the Along-Kaying road. The limestone bands extend for 346 metres along the strike with an average width of 50 metres. Estimated reserves down to a depth of 50 metres from the hill top are of the order of 149 million tonnes. The chemical analyses of 40 chip samples have shown 42.48% CaO, 3.49% MgO

and 1.77% R₂O₃.

Considering the overall quality and quantity of this deposit, the limestone may essentially be used for lime making.

Marble : Occurrence of marble are reported from near Sheit and Mechuka in the upper parts of Siyom valley. At Mechuka, the cream to light grey coloured marble bands are extensively exposed. It is very coarse grained, and calcite grains are easily recognisable. This marble can be used for decorative purposes and as marble-chips.

White coarse grained marble bands (1-2 metres thick) have been noticed in the Yang Sang Chu valley near Simuli (28° 50' 55" : 95° 10' 10"). It is being used for the decoration of Chartens (religious monuments).

Ferrous minerals : Veins of hematite and magnetite of minor significance occur in boulders of schists and phyllites from Tirbin.

Encrustations of hematite and limonite over the graphitic schists, exposed near Nyukong, have been noticed. The botryoidal form is well exhibited and on breaking, the laminae are distinct.

Sulphide mineralisation : An assemblage of pyrite, pyrrholite and chalcopryrite has been noticed in the garnetiferous amphibolite bodies, emplaced along the schistosity planes of the graphitic schists. In the Yang Sang Chu valley near Yamelling (Singa) this assemblage is quite prominent. It occurs as irregular patches.

Clay : Small pockets of grey coloured clay are noticed at Paying Dem near Nyukong (28° 55' : 94° 51'). The clay has good plasticity and is being used as cementing materials in the construction of Chartens (religious monuments).

Kyanite : Kyanite bearing quartz veins (10-15 cm thick) occur along the Siang river near its confluence with Sirapathong river near Pango. Such veins have also been recorded near Ngamuing in the Sitik Nala.

The kyanite occurs as blades of light blue to indigo blue colour. It is transparent to translucent. The blades are arranged oblique to the length of the quartz-veins.

Earthquakes

A report on the seismicity of the north-eastern region of India is as follows :¹

"Arunachal Pradesh is located in a highly seismic zone of India. Several earthquakes of moderate to great intensity have been located in this region in the past.

1. Source : The Director General of Observatories, Govt. of India.

"Earthquakes in Assam as well as in Arunachal Pradesh area are due to its tectonic setting. The area is bounded in the North by great Himalayan Mountain ranges. These mountains rise very rapidly from the plains, the foothills region being narrow and the sub-Himalayas comparatively lower in altitude than in the other areas. At its eastern end, the Himalayan Range turns from an East-West trend towards South-West; the bend is sharp and indicative of the forces operating in the area. The mountain ranges after the above hair pin bend continue southwards across Assam and then through Burma, their trend gradually changing from South-West to South. This gives the mountain range an accurate structure. The rise of the Himalayan mountain chain is attributed to forces acting from the North which resulted in folds and thrusts. According to the studies made, there is a zone of overthrusting along the southern base of the Assam Himalayas. The strata in the hills are overturned towards the South. In the upper Assam region, the Patkoi and Naga hills lie South of Brahmaputra and along their northern margin the beds are overthrust northwards but not overturned. Further South, the Patkoi and Naga hills sweep from East-North-East to southwards axis and continue as the Arakan Yoma of Burma. These ranges of buckled and folded rocks are due to a push from the East and North-South folding is seen in the ranges for the West Manipur, the Tripura hills and in South Sylhet.

"The effect of Burma push (from the East) has made the structural geology of North Cachar complicated but the resultant of the Burma push and the Himalayan push is recognised in the Garo Hills. Here a series of strong faults trending NNE to SSW have sliced the plateau transversely. Also each sliced portion to the West is a little advanced (southwards) than that to the East of it. They are an echelon and it is along these cross faults that movement appears to occur. It was on one of these faults lines that the 1897 earthquake occurred or at least a definite displacement was noted by Oldham.

"In the eastern end of Arunachal Pradesh along with Himalayas, there is a hairpin bend from easterly to south-western direction. This feature is indicative of the relative movement of the two land masses and enormous stresses in operation which resulted in the form of the great earthquake of 15th August, 1950.

"From the above observations it may be seen that due to different forces operating in the area, there are number of faults, thrusts and other weak zones in Assam. These happen to be the seats of earthquakes and, in fact, their presence offers explanation of the high seismicity of the region.

"In the earthquake zoning map of India prepared under the auspices of Indian Standards Institution, the whole of Arunachal Pradesh lies in zone V, where intensity due to earthquakes may exceed VIII on the Modified Mercalli

Scale - 1931."

As regards the great earthquake of August 15, 1950 (epicentre - 28.5N 96.7 E, magnitude 8.6), which shock the entire north-eastern region most violently, the report states the following :

"The areas worst hit by the earthquake were the Abor and Mishmi Hills districts and northern portions of Upper Assam. Severe damage was reported from Lakhimpur District and northern portion of Sibsagar District. Chasm, gapping fissures, and subsidence of ground was a common feature over the Central Brahmaputra valley. Due to land slides in the hilly areas, destruction of 70 villages and death of 156 people was reported in the Abor Hills. Land slides were responsible for formation of natural dams in the upper reaches of the rivers and almost every one of the tributaries of the Brahmaputra was thus affected. The dam across Subansiri burst after 4 days of the earthquake and a wave 20 ft high swept away villages and caused 532 deaths.

Estimated area of NE Assam over which extensive and heavy damages occurred was 1,800 Sq. miles. Estimated area in Assam which suffered minor damage was 30,000 Sq.miles. Estimated area in India, Burma and East Pakistan over which shock was felt was 650,000 sq.miles. The shock was followed by a train of after shocks some of which reached destructive magnitude near epicentre."

FLORA

Siang comprising the East and West Siang Districts is one of the botanically very little known areas of our country. The whole area consists of steep hills and deep gorges, harbouring dense forests of *Abies* on the top. The hill slopes are often subjected to land slide and soil erosion due to heavy rainfall. This area receives heavy rainfall (average 400 cm) from the monsoons. It is very difficult to differentiate the types of forests in this region because of the merging of temperate species along with sub-tropical ones, along the lower slopes of the Siyom and Siang river valleys irrespective of the latitude.

The main vegetative types obtainable in this region are humid evergreen tropical forests up to 900 metres and wet sub-tropical evergreen forests upto 1500 metres which in turn gradually merges into humid sub-temperate forests over an altitude of 1800 metres.

The tropical evergreen forest covers a considerable area from Payam and Along to Garsing, and the regions along the Siyom river. Due to human interference and practice of *jhum*, these forests are restricted to isolated parts of hills. The common tree species of such forests are *ficus pomifera*, *F. clavata*, *Dipterocarpus pilosus*, *Terminalia myriocarpa* mixed with dense growth of bamboos and the common herbaceous weeds like *Ageratum*

conizoides and *Eupatorium odoratum*. The cleared and burned areas are often completely covered by the luxuriant growth of *Saccharum arundinaceum* and *Neyraudia reynaudiana*. The orchid flora of this region seems to be not so rich.

Typical sub-tropical evergreen forest is the type occurring over the extensive areas around Tuting and especially around the entire Siang river valley from Miguing upto Kepang La, combining both tropical and temperate species. The tree species like *Dipterocarpus macrocarpus*, *Terminalia myriocarpa*, *Ficus hispida*, *F. hirta* var. *roxburghiana*, *Mallotus albus*, *Dillenia* etc., mixed with tall and dwarf varieties of *Musa*, form the dominant component of the vegetation. Palms, such as *Livistona jenkinsiana*, *Pinanga gracilis*, *Didymosperma nana* and *Caryota urens* grow scatteredly. Species of *Calamus* are well represented throughout the tract. The total root parasite *Balanophora dioica* grows abundantly along the slopes of Tuting, Sichung and Purang.

The general vegetation in the Bori area along the track from Takepakong to Sirang is typical of sub-temperate type with *Quercus*, *Castanopsis*, *Michelia*, *Rhododendron*, *Cephalostachyum*, association as the dominant vegetation. *Cephalostachyum fushianum*, the thin reed like bamboo, grows abundantly along the tract. The general composition of the shrubby and herbaceous species like *Glycosmis cyamocarpa*, *Zantho xylum hamiltonianum*, *Micromilum integrimum*, *Eugenia arborensis*, *Hydrangia robusta*, *Sarcopyramis nepalensis*, *Aralia pholiolosa*, *Triumfeta tomentosa*, *Ixora subsessilis*, *Mussaenda glabra*, *Clerodendron griffithianum*, etc. mixed with sparse growth of tree ferns and species of *Musa* are quite common. Robust climbers like *Raphidophora* and *Pothos* mixed with tender climbers such as species of *Piper*, *Dioscorea*, *Vitis* *Smilax* etc. form the dominant component covering the tree trunks and rocks along the region. *Gnetum ula*, a woody climber of gymnosperm, has also been recorded.

Although this region is less known botanically, the Botanical Survey of India has carried out preliminary surveys and recorded some more additions, such as *Syzygium mishmiensis*, *Molineria prainiana*, *Gualtheria seshagiriana*, *Arisaema setosum*. Siang, like other parts of Arunachal Pradesh, harbours an enormous plant wealth. There are records of elements which were previously reported from other regions, such as *Nauclea gageana* (Sikkim), *Coelogyne carnes* (Malaya), *Beccarinda cordifolia* (North-East Burma-China), *Impatiens jurpia* (Nepal-Bhutan), *Dioscorea scortechinii* (South-West China-Malaysia) etc.

Like other areas of Arunachal Pradesh Siang also forms a natural abode for very many species of orchids of surpassing horticultural value. A more detailed study is essential for an assessment of the real wealth of orchids in this

region.

Several species of Algae, Liverworts and Mosses have been collected from this region. There is ample scope for study of the pteridophytic flora of Siang. About 74 species of ferns were collected by the Botanical Survey of India.

The ethno-botanical knowledge about Siang remains very meagre as compared to other districts. Intensive survey and study would of course lead to enrichment of knowledge in this field.

The common food crops cultivated by the tribal people are *Oryza sativa*, *Eleusine coracana*, *Zea mays* and *Coix lacrymajobi*. Other subsidiary pulses and vegetable crops like *Cajanus*, *Lablab purpurens*, *Ipomea batatas*, *Dioscorea spp.*, *Glycine max* (Soyabean), *Phaseolus calcaratus*, *Cucurbita pepo*, *Colocasia antiquorum* and *Chenopodium alatum* are also grown.

The large bamboo *Dendrocalamus giganteus* (15-25 cm in diameter) is used as pitchers for bringing water from distant places. The indigenous palm *Livistona jenkinsiana* grow in large grooves near many villages. Its fan like leaves are used for thatching huts. In most of the villages near Along a very sweet variety of *Citrus* is cultivated.

FAUNA

The fauna of the districts of East and West Siang is rich and varied. It includes some rare species of wild animals. Owing to the dense vegetation and a wide range of climatic and geographical variations, there is a great faunistic diversity.

Mammalia

Of the wild mammals, the following are the important ones. Among the carnivores, the leopard (*Panthera pardus Linnaeus*) is occasionally met with. It prefers rocky terrain. They are nocturnal in habit. The jungle cat (*Felis chaus guldenstaedti*) inhabits the drier and more open areas. The Golden Cat (*Felis temminckii* Vigors & Horsfield) inhabits rocky terrain and is seldom seen. The large Indian civet cat (*Viverra zibetha Linnaeus*), the common Palm Civet (*Paradoxurus hermaphroditus* Hodgson) and the spotted linsang (*Prionodon pardicolor* Hodgson) are abundant in the jungle. The jackal (*Canis aureus Linnaeus*) is often found in the low lands.

The Indian elephant (*Elephas maximus Linnaeus*) is fairly common. Different kinds of deers, such as sambar (*Cervus unicolor Kerr*), hog deer (*Axis porcinus Linnaeus*), and the barking deer (*Muntiacus muntjak Zimmermann*) are met with in the thickly wooded hills. The serow (*Capricornis sumatraensis* Bechstein) is a solitary creature found at an elevation ranging from 2000 to 3000 meters. The wild boar (*Sus scrofa Linnaeus*) is found in grass and bushy jungles.

Among the other common mammals, the Assamese macaque (*Macaca*

assamensis Mc Clelland) is abundant in forests and occurs in small or large troupes. The capped langur (*Presbytis pileatus* Blyth) inhabits the southern portion of the district and causes much damage to cultivation.

The Chinese Pangolin (*Manis pentadactyla* Linnaeus) live in self made burrows and feeds on ants and termites.

Insectivores and rodents are fairly common. Rats are responsible for causing heavy damage to cultivation and several kinds of human diseases, such as plague, rat-bite fever etc. The common varieties are the long-tailed tree mouse (*Vandeleuria oleracea* Bennet), the common house rat (*Rattus rattus* Linnaeus), the white bellied rat (*Rattus niviventer* Hodgson), the fawn coloured mouse (*Mus cervicolcor* Hodgson) and the bamboo rat (*Cannomys badius* Hodgson). Various types of squirrels, such as the Pallas's squirrel (*Callosciurus erythraeus* Pallas), the Irrawaddy squirrel (*Callosciurus pygerythrus* Geoffroy), the Giant flying squirrel (*Petaurista petaurista* Pallas), and the Malayan Giant squirrel (*Ratufa bicolor* Sparrmann) are found at different altitudes.

Shrews are helpful to Mankin in eradicating a large variety of obnoxious insects. But they are equally destructive to plantations as they cut down the roots of the plants at the time of burrowing. The common tree shrew (*Tupaia glis* Diard), the eastern mole (*Talpa micrura* Hodgson), the house shrew (*Suncus murinus* Linnaeus) and the burrowing shrew (*Anourosorex squamipes* Milne-Edwards) are of common occurrence.

Lagomorph like mouse hare (*Ochotona pusilla* Pallas) is also found in this region.

The common insectivorous bats found are the fruit bat (*Cynopterus sphinx* Vahl), the Himalayan horse-shoe bat (*Rhinolophus perniger* Hodgson) the mustachioed bat (*Myotis muricola* Hodgson), the Indian pipistrelle (*Pipistrellus coromandra* Gray) and Indian pigmy pipistrelle (*Pipistrellus mimus* Wroughton). Another variety of occasional occurrence is the Indian false vampire (*Megaderma lyra* Geoffroy) which is a blood sucking bat, feeding upon the blood of small mammals.

Birds

The avifauna of Kameng, Siang and Subansiri districts are not well known. The common birds of the adjacent areas can also be expected here. Following is a general note on the avifauna of Arunachal as a whole.

In the low land, alluvial, grassy and marshy areas, several species of babblers, warblers and chats, such as the spotted babbler (*Pellorneum palustre*), the Assam babbler (*Pellorneum albiventris*), the red capped babbler (*Timalia pileata*), the march warbler (*Megalurus palustris*) the bush chat (*Saxicola torquata*) are found. In the perennial water reserves and pockets in the forests, water birds, such as coots, jackanas, teals, geese, sand pipers etc., are met

with. The low land mid montane jungles having a dense mixed flora afford abode to babblers, bulbuls, warblers, fly-catchers etc. Some game birds, such as the jungle fowl (*Gallus gallus*), the black breasted kaleege (*Lophura leucomelana*), the peacock pheasant (*Poiplectroh bicalcaratum*), the hornbill (*Anthraceroceros malabariensis*, *Berenicornis comatus*), the green pigeons (*Treron* sp.) and the imperial pigeons (*Ducula aenea*, *Ducula badia*) are common sights in fruiting groves. The much sought, rare, white-winged wood duck (*Cairina scutulata*) are sometimes accidentally met with in lagoons and stagnant streams in deep undisturbed forests. It was reported to be the common in eastern Assam and Arunachal some fifty years ago. It is a rare bird today. It is significant to note that the montane jungles have some typical high altitudinal birds, such as the Himalayan trogon (*Harpactes wardi*) the Sclaters monal pheasant (*Lophophorus sclateri*) the nefous throated hill partridge (*Arborophila rufogularis*), the Himalayan barbet (*Megalaina virens*), the babblers (*Alcippe cinerea*, *Siva* sp. *Yujina* sp), the chestnut-headed wren (*Tesia Castaneocoronata*), the white-tailed and beautiful nut hatches (*Sitta himalayensis*, *S. formosa*) etc.

The following is a list of birds recorded from Siang recently :

1. Mishmi blood pheasant (*Ithaginis cruentus kuberi* Beebe),
2. Sclaters or Mishmi monal pheasant (*Lophophorus sclateri* Jerdon).
3. Elwes's Earad pheasant (*Crossoptilon crossoptilon harmani* Elwes),
4. Lord Derby's parakeet (*Psittacula derbyana* Fraser).

Amphibia

Various amphibians have been recorded. Some are purely arboreal and the others are either aquatic, semi-aquatic or terrestrial. The arboreal forms are found under the leave of trees and inside the holes made on tree trunks, barks and bushes. The variety which is found inside bushes is commonly called bush-frog (*Philautus argus*, *P. tuberculatus*) and those living on trees are known as tree frogs (*Rhacophorus maculatus*, *R. maximus*, *R. Maso*, *R. microdiscus*, *Phrynoderma moloch* and *Megalophrys kemp*). the paddy field frog (*Rana limnocharis limnocharis*), the Himalayan bull frog (*Rana libigu*), the Himalayan stream frog (*Rana alticola*, *R. gerbillus*, *staurois afghana*) are found either in or near water sources.

The purely terrestrial amphibians are toads which do not require water before breeding season, as they possess moisture absorbent glands on their skin. The Himalayan toad (*Bufo himalayanus*) has also been recorded from this region.

On the evolutionary scale the amphibia form a link between the fishes and all higher vertebrates, such as reptiles, birds and mammals since they were the first group of vertebrate animals to emerge from an aquatic environment and

live upon land for most of their adult lives. None of them has a poisonous bite, they do not rob fields of grain and fruits and have not inflicted any major disease upon humans. Most of them prey on insects and their larvae.

Reptilia

A wide variety of lizards, snakes and tortoises constitute the reptilian fauna. Reptiles are the first true land dwellers among the vertebrates. Their horny skins are almost always divided in to scales and plates for protection. Their body temperature depends on that of the surroundings. They prefer warm climatic zones. Among reptiles the large turtles under favourable conditions be able to live for about 200 years. Reptiles have a remarkable capacity to change their body colours and patterns by expanding and shrinking the pigment cells present in their body. There are at present about 2750 species each of lizards and snakes; about 220 species of turtles and about 21 species of crocodiles in the world. The only reptiles which harm man directly are a few species of poisonous snakes. Even in these cases, the danger they present to mankind in their own habitats is overestimated. Snake poisons are special objects of biomedical research. Snake serum which is the only real help for snake poisoning is prepared from the poisons obtained from the captured wild snake. The flesh of many snakes, lizards and turtles are used as food. Their skins are also used in making many fancy articles. Above all, the snakes control the rodents in the agricultural fields and the lizards check the insect population. The information on the occurrence and distribution of the reptilian fauna of Aunachal Pradesh as a whole is scanty.

Some good information on the occurrence and distribution of the reptilian fauna of Siang is available. The following is a list of reptiles recorded.

Family - Gekkonidae

1. *Gymnodactylus khasiensis* (Jerdon).
2. *Hemidactylus brooki* (Gray).
3. *Hemidactylus bowringi* (Gray).
4. *Hemidactylus frenatus* (Schlegel).
5. *Platyurus platyurus* (Schneider)

Family - Agamidae

6. *Ptyctolaemus qularis* (Peters)
7. *Acanthosaura minor* (Gray)
8. *Calotes jerdoni* (Guenther).
9. *Draco maculatus* (Gray)

Family - Scincidae

10. *Lygosoma indicum* (Gray)
11. *Lygosoma courcyanum* (Annandale)

12. *Mabuya macularia* (Blyth)

Family - Lacertidae

13. *Takydromus sexlineatus* (Daudin)

Family - Anguidae

14. *Ophiosaurus gracilis* (Gray)

Family - Varanidae

15. *Varanus bengalensis* (Daudin)

Family - Typhlopidae

16. *Typhlops jerjoni* (Boulenger)

17. *Typhlops diardi* (Schlegel)

Family - Colubridae

18. *Trachischium menticola* (Cantor)

19. *Blythia reticulata* (Blyth)

20. *Polidontophis collaris* (Gray)

21. *Liopeltis pavo* (Annandale).

22. *Liopeltis frenatus* (Guenther).

23. *Liopeltis porohyraecus* (Cantor)

24. *Oligodon albocinctus* (Cantor)

25. *Oligodon erythrorachis* (Wall).

26. *Coluber taeniurus* (Cope)

27. *Ahaetulla gorei* (Wall).

28. *Amphiesma platyceps* (Blyth).

29. *Amphiesma khasiensis* (Boulenger)

30. *Amphiesma piscator* (Schneider)

31. *Psammodynastes pulverulentus* (Boie)

32. *Dryophis prasinus* (Boie).

33. *Amblycephalus monticola* (Cantor).

34. *Elaphe porphyracea* (Cantor)

35. *Elaphe mandarina* (Cantor)

36. *Elaphe taeniura* (Cope)

37. *Boiga gokool* (Gray)

38. *Dendrolaphis gorei* (Wall).

39. *Ptyas mucosus* (Linnaeus)

40. *Ptyas korros* (Schlegel)

41. *Pseudoxenodon macrops* (Blyth).

42. *Preas monticola* (Cantor).

43. *Siynophis collaris* (Gray)

Family - Elapidae

44. *Calloolis macclellandi* (Reinhardt)

45. *Bungarus niger* (Wäll.)^{*}

Family - Viperidae

46. *Trimerasurus monticola* (Guenther)

47. *Trimerasurus gramineus* (Shaw)

Family - Emydidae

48. *Kachuga tectum* (Gray)

49. *Kachuga kachuga* (Gmelin)

Family - Crocodilidae

50. *Gavialis gangeticus* (Gmelin)

Fishes

Fishes are the oldest major group of vertebrates. Fossilised fish bones and scales have been found in rocks 400 million years old. They show great diversity in their way of life. Fishes are finned, back boned animals that live in water, and breathe by means of gills. Many fishes live only in fresh water; many are marine and a few divide their lives in between. Some prefer brackish water, where rivers mingle with the ocean. Some species live only in cold water, others in warm. Fishes as wild life play an important role in the natural environment. Oceans, lakes and rivers have their own natural communities of plant and animal life that include fishes. Fishes serve as food for many vertebrates.

The following is a list of fish fauna recorded from Siang :

1. *Barilius bandelisis* (Ham)
2. *Danio aequipinnatus* (Mc Clell)
3. *Danio dangila* (Ham)
4. *Danio dovatio* (Ham)
5. *Danio rerio* (Ham)
6. *Garra mcClellandi* (Jerdon)
7. *Garra naganensis* (Hora)
8. *Aborichthys elongatus* (Hora)
9. *Noemacheilus multifasciatus* (Day),
10. *Noemacheilus rupecola* (Mc Clell),
11. *Channa orientalis* (Bl & Schn),
12. *Channa stewartii* (Playfair).

Inveterbrata

A great variety of invertebrates have been recorded from Siang. They belong to the following broad types :

Phylum - Annelida

Class - Chaetopoda

Order - Oligochaeta

Family : Moniligastridae, Megascolecidae and Melaniidae.

Order - Basommatophora

Family : Lymnaeidae and Planorbidae.

Class - Gastropoda

Order - Mesogastropoda

Family : Cyclophoridae

Order - Stylommatophora

Family : Rathousiidae, Clausiliidae, Ferussaciidae, Endodontidae, Corillidae and Ariophanditae.

Phylum - Annelida

Class - Hirudinia

Order - Arhynchobdelle

Family : Hirudidae

Phylum - Arthropoda

Class - Arachnida

Order - Scorpionis

Family : Chaerilidae and Vejovidae

Order - Pseudoscorpiones

Family : Cheliferidae

Order - Opiliones

Family : Phalangidae

Class - Chilopoda

Order - Scolopendromorpha

Family : Scolopendridae

Class - Insecta

Order - Diptera

Family : Tipulidae, Bibionidae, Mycetophilidae, Simuliidae, Tabanidae, Bombyliidae, Asilidae, Conopidae, Syrphidae, Sepsidae, Tephritidae, Diopsidae, Muscidae and Calliphoridae.

Order - Isoptera

Family : Termitidae

Order - Thysanura

Family : Lepismatidae

Order - Diplura

Family : Campodeidae

- Order - Collembola
 Family : Entomobryidae
 Order - Hymenoptera
 Family : Formicidae (ants), Apidae (honey bees and carpenter bees)
 Vespididae (wasps), Ichneumonidae (Parasitic wasps)
 Order - Miscellaneous Insect
 Family : Agriidae, Ceenagriidae, Libellulidae and Gomphidae.
 Order - Dictyoptera
 Family : Blattidae and Mantidae
 Order - Dermaptera
 Family : Carcinophoridae and Forficulidae
 Order - Dermptera
 Family : Pygidicranidae
 Order - Orthoptera
 Family : Acrididae, Pyrgomorphidae, Eumastacidae, Tettigoniidae,
 Tetrigidae, Gryllidae, Tridactylidae and Gryllotalpidae.
 Order - Coleoptera
 Family : Brenthidae, Carabidae, Cerambycidae, Coccinellidae,
 Cicindelidae, Chrysomelidae, Curculionidae, Cucujidae, Claridae,
 Endomychidae, Drotylidae, Elateridae, Helotidae, Histeridae,
 Lucanidae, Languiidae, Meloidae, Passalidae, Hydrophilidae,
 Dytiscidae, Scarabaediae, Tenebrionidae and Staphylinidae.
 Order - Lepidoptera
 Family : Danidae, Satyridae, Nymphalidae, Amathusiidae, Acridasae,
 Erycinidae, Lycaenidae, Papilionidae, Pieridae, Arctidae,
 Noctuidae, Pyralidae, Pterothysinae, Agaristidae, Limacodidae,
 Geometridae and Cymatophoridae.

CLIMATE

The region lies mainly in the catchment area of the Siang (Dihang). The terrain is mountainous except for a narrow strip in the south-east which is a plain country having an elevation of somewhat less than 200 metres. From the plains the terrain rises rapidly towards the north to reach an height of 3000 to 5000 metres. Deep and narrow valleys run generally north to south in the mountains.

Owing to the mountainous terrain of Siang, the climate varies significantly from place to place, depending mostly on elevation. No generalisation is, therefore, possible as regards the climate of this region.

There is only one meteorological observatory, which is at Pasighat. As it is a low level station, its data based on records of 13 years represent weather conditions in the plains only. But spatial variation in climate are large over the region outside the plains due to, as already mentioned, the undulating

character of the terrain. The following description, however, gives out the general climatic features.

Meteorological data are given in the tables at the end of this chapter.

The year may be divided into four seasons :

- (i) the winter season prevailing generally from December to February,
- (ii) the pre-monsoon season from March to May,
- (iii) the South-West Monsoon season mainly from June to September, and
- (iv) the post-monsoon season or the transition period during October and November.

Rainfall

Annual rainfall exceeds 400 cm in the south-east decreasing northward with elevations beyond about 1000 metres. The northern portions of the region receive rainfall of about 250 cm annually. Valleys receive more rainfall than the surrounding mountainous areas.

South-West Monsoon is the chief rainfall season accounting for about 70 per cent of the annual rainfall over the plains and over 50 per cent over the northern parts. July is the rainiest month. During the pre-monsoon season from March to May about 15 to 20 per cent and 20 to 25 per cent of the annual rainfall is received in the plains and in the northern parts respectively. During the months of November to March, the region periodically comes under the influence of western disturbances causing precipitation, mostly as snowfall, over the mountains.

Inter-annual and inter-monsoon variability of rainfall is not significant in this region. Number of rainy days, (i.e. days with rainfall 2.5 mm or more) in a year is 125 on an average.

Temperature

Temperature vary considerably from place to place, depending on elevation and exposure to the sun. Diurnal variations in temperature are large particularly in the valleys during the winter.

January is normally the coldest month when the mean daily maximum and minimum temperatures in the plains are about 22.5° and 12.2° C respectively. Lower temperatures are experienced over the mountains depending on elevation. At places with elevation exceeding 3000 metres the mean daily (maximum + minimum - 2) temperature is below 0°C. Occasionally, the cold weather conditions are accentuated in the wake of western disturbances.

Both day and night temperatures rise rapidly in March and continue to rise till August which is the warmest month with mean maximum and mean minimum temperatures of about 30.8°C and 23.5°C respectively over the plains. The daily maximum temperature occasionally exceeds 37°C when

oppressive weather is experienced in the plains. Lower temperatures prevail over the mountains. Night and day temperature fall appreciably from October onwards.

The extremes of temperature recorded at the Pasighat observatory are 37.9°C as maximum on June 26, 1963 and 7.1°C as minimum on January 25, 1959.

Humidity

The relative humidity in the region is high throughout the year, the winter months being slightly less humid.

Cloudiness

Clear or lightly clouded skies are common during the post-monsoon season. In the cold season the morning sky often remain overcast due mainly to lifted fog, which gets cleared with the advance of the day. In the pre-monsoon months skies are generally moderately clouded. Heavily clouded to overcast skies prevail in the monsoon season when hills and ridges are enveloped in cloud.

Wind

Winds are generally light during the South-West Monsoon season. In the rest of the year, winds are generally moderate, becoming strong at times in association with thunderstorms. Strong katabatic winds down the valleys are experienced as local effects produced by the nature of terrain. The direction of wind is highly influenced by local conditions except over the plains where winds generally blow from the north-west throughout the year.

Special Weather Phenomena

Thunderstorms mainly occur during February to September, maximum frequency being in April and minimum in December. During the pre-monsoon months thunderstorms are often violent like the norwesters, and from December to April they are occasionally accompanied by hail. Fog is frequent in the valleys during the winter. Hill fog occurs during the monsoon months.

Table - I

RAINFALL AT PASIGHAT

GENERAL											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec Annual
A 54.3	84.6	124.1	201.1	448.9	864.4	1000.2	839.2	504.1	195.6	31.1	14.7 4362.6
B 4.2	6.2	9.0	11.0	15.8	19.2	21.1	18.6	12.5	6.9	2.1	1.3 12
C 30.7	137.6	99.3	95.8	211.4	410.5	389.3	344.3	217.0	142.6	45.8	23.0 41
1970	1961	1961	1965	1969	1974	1967	1974	1960	1971	1965	1964
22	4	19	27	19	19	7	4	14	7	2	14

A Normal rainfall in mm.

B Rainy days, i.e. days with rainfall 2.5 mm or more.

C Extremes of rainfall in 24 hours with year and date, based on data for the period 1958-1974.

Source : India Meteorological Department, Government of India, New Delhi.

Month	Mean Daily Maximum Temperature		Mean Daily Minimum Temperature		Highest Maximum ever recorded **		Lowest Minimum ever recorded **		Relative Humidity	
	°C	°C	°C	°C	°C	°C	°C	°C	%	%
January	22.5	12.2	29.6	1973 Jan 30	7.1	1959 Jan 25	69	76		
February	22.8	13.8	31.5	1975 Feb 28	7.5	1959 Feb 2	71	73		
March	26.0	16.4	34.0	1973 Mar 29	10.6	1962 Mar 1	68	68		
April	28.2	19.0	35.4	1959 Apr 29	12.5	1965 Apr 4	70	71		
May	28.7	21.0	37.4	1961 May 29	13.9	1961 May 1	79	78		
June	30.1	22.8	37.9	1963 Jun 26	18.9	1966 Jun 8	85	81		
July	30.4	23.3	37.7	1967 Jul 31	20.2	1966 Jul 12	89	83		
August	30.8	23.5	37.6	1957 Aug 21	20.1	1965 Aug 10, 11	87	83		
September	30.7	22.8	36.9	1961 Sep 14	17.4	1966 Sep 29	83	85		
October	29.3	20.3	34.7	1958 Oct 8	15.0	1966 Oct 19	74	85		
November	26.7	16.2	31.9	1969 Nov 6	11.0	1965 Nov 8	67	83		
December	24.1	13.3	29.0	1974 Dec 22	7.2	1961 Dec 16	67	79		
Annual	27.5	18.7					76	79		

* Hours I.S.T.

** Based on data available up to 1975.

Source : India Meteorological Department, Government of India, New Delhi.

Table - 3

ANNUAL RAINFALL AT DIFFERENT PLACES OF SIANG

Sl. No.	Rain Gauge Station	(in centimetre)							
		1974	1975	1976	1977	1978	1979	GENERAL	
1	2	3	4	5	6	7	8		
1.	Along	271	182	171	241	185	225		
2.	Basar	270	213	230	223	199	198		
3.	Gensi	463	312	288	344	NA	NA		
4.	Mechukha	98	128	NA	NA	NA	279		
5.	Liromoba	179	248	NA	NA	NA	NA		
6.	Manigong	179	121	134	NA	NA	106		
7.	Tuting	460	347	341	471	200	420		
8.	Gelling	295	208	369	NA	NA	NA		
9.	Likabali	NA	NA	NA	392	NA	308		
10.	Pasighat	648	423	500	552	572	NA		
NA - not available									

Source : Statistical Hand Book of Arunachal Pradesh, 1978-79 and 1980-81.

Annual Rainfall at Selected places of West Siang and East Siang Districts. (In M.M.)

Sl. No.	Rain Gauge Stations	(In M.M.)												
		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990		
1	2	3	4	5	6	7	8	9	10	11	12	13		
1.	Along	256	NA	NA	3535.70	4089.70	4038.80	3440.87	3199.95	2289.20	3461.70	1572.5		
2.	Pasighat	427	447	419	4295.70	5357.20	5135.80	3919.30	5598.80	8223.70	4526.40	4526.9		

Source : Statistical Abstract of Arunachal Pradesh, 1986 to 1990.

Table - 4
TEMPERATURE RAINFALL AND HUMIDITY IN SIANG
Year 1974

Month	Temperature (centigrade)		Rainfall (millimetre)		Humidity (percentage)	
	Maximum	Minimum				
1	2	3	4	5		
January	23.4	6.2	20.4	92	%	GENERAL
February	27.9	8.2	16.0	83	%	
March	24.8	14.4	153.8	91	%	
April	28.3	22.0	159.4	86	%	
May	30.2	22.2	204.2	88	%	
June	35.2	19.8	466.2	86	%	
July	30.6	18.5	703.9	95	%	
August	31.0	17.8	346.4	90.8	%	
Sept	28.4	17.0	467.0	94	%	
October	28.5	16.4	118.2	90	%	
November	33.1	8.4	2.3	83	%	
December	25.4	8.3	25.8	95	%	
			Annual	2683.6		

Source : Regional Meteorological Centre, Alipore, Calcutta.

CHAPTER II HISTORY

ANCIENT PERIOD

Introduction

The extent sources, literary or material do not provide a comprehensive account of the prehistory of the area. The archaeological remains discovered so far in the region belong to a later period of time. The present stage of our knowledge is traceable to the studies of classical sanskrit literature and other contemporary sources, tribal traditions and mythology and findings of the recent ethnological researches which may help in drawing an outline of the early history by tracing the course of tribal migrates that crossed over to this region in waves from times immemorial.

The Adis of Siang have a keen sense of history and many of them have excellent powers of memory, 'being able to recite interminable genealogies tracing their race back to the beginning of the world.' According to an Adi myth, Tani (also called Abo Tani) is the father of mankind. It is significant to note in this context that besides the Adis some other renowned tribes of Arunachal Pradesh, such as the Nishis, Tagins, Apa Tanis and Hill Miris also trace their descent from a common mythical ancestor known as Abo Tani or Abo Teni. All these tribes including the Adis live in the central part of Arunachal Pradesh and they form the largest group of people of this territory. 'Even now, all the Adis trace their genealogy to Tani and the word Tani is still used to indicate the Adi race.' It may be surmised that the tribes who identify themselves as descendants of Tani were distantly related. Today the name Tani recalls a bond of ethnic unity and fraternal relationship among them.

Early-Migrations

From the evidences of Vedic literature and old Sanskrit scriptures as well as the epics, it seems quite probable that hordes of some migratory tribes of the early Mongoloids were drifted to India through the eastern extremity of Arunachal Pradesh and Assam before 1000 B.C. Their advent in the east was an event probably as old as the arrival of the Aryans in the west. Judging from the widely scattered tribal settlements all over Assam and its adjacent hills, it may reasonably be surmised that these early migrants belonged to the great tribal community of the Bodos, who were the early and most dominant people of north-east India till the advent of the Ahoms in the 13th century. According to Dr. Suniti Kumar Chatterji, 'the North-Assam tribes of the Adis and Akas, Nishis and Miris, and Mishmis appear to have come later, and to have established themselves in the mountains to the north of the Brahmaputra plains already in occupation of the Bodos, and by some Austric and possibly

Table - 5
MONTHLY AVERAGE TEMPERATURE
Year 1978

Month	Along		Pasighat	
	Maximum	Minimum	Maximum	Minimum
1	2	3	4	5
January	19.0	8.0	18.9	13.3
February	21.0	10.0	22.2	17.2
March	24.0	11.0	24.4	17.8
April	27.0	15.0	28.9	22.2
May	36.0	19.0	30.0	19.0
June	37.0	21.0	32.0	19.6
July	38.0	21.0	28.0	23.0
August	39.0	22.0	27.6	23.6
September	32.0	20.0	26.8	23.2
October	31.0	19.0	25.4	21.8
November	36.0	14.0	22.6	14.2
December	26.0	9.0	16.2	13.6

(in centigrade)

also Dravidian tribes which preceded the Mongoloid Bodos in this tract ...¹ This observation is supported by toponymic evidences as noted by Gait. "The wide extent and long duration of Bodo domination is shown by the frequent occurrence of the prefix *di* or *ti*, the Bodo word for water, in the river names of the Brahmaputra valley and the adjoining country to the west, e.g., Dibru, Dikhu, Dihing, Dihong, Dibong, Disang, Diphang, Dimla, etc. In some cases the old name is disappearing the Dichu river, for instance, is now better known as the Jaldhāka - while in others it has already gone, as in the case of the Brahmaputra, which in the early days of Ahom rule was known as the Tilao. The latter word was doubtless the origin of another old name for this river, viz., Lohit or Lau-hitya (red) ... The Ahoms ruled in Assam for six hundred years, but their word for river (*nām*) occurs only in a few instances in the extreme east, e.g., Nāmrup, Nāmtsik and Nāmsang. They called the Dikhu the Nāmachau, but the earlier Kāchari name has survived in spite of them. The Ahoms, of course, were relatively few in numbers, but they were the dominant race; and the fact that, compared with the Bodo tribes, they have left so few marks on the toponymy of the country may perhaps be taken to show that the period for which the latter were supreme was far longer than that for which the Ahoms are known to have ruled."² The river and place-names Dibang, Dihang, Digaru, Dihing, Namsai, Namsang, Nampong, Namsing etc. in Arunachal Pradesh bear to this day the Bodo and Ahom reminiscences. The river Dihong (or Dihang) was presumably known earlier by its Austric name Hong, meaning water. The Bodos renamed the river by prefixing *di* with *hong*. This may be a typical example of how the old geographical names had undergone changes.

The toponymy proves beyond doubt that some of the Bodo tribes penetrated deep into the river valleys of the Siang, Dibang, Lohit, Noa-Dihing and Tirap of Arunachal Pradesh, and formed a substratum of its early population. Now there is hardly any trace of the Bodos in Arunachal, a fact which may be partly due to their fusion with other tribes who came after them and partly to tribal feuds and Ahom invasions resulting in large scale migrations.

Some of the North-Assam tribes, as already named, descended into India from the east and proceeded along the western course of the Brahmaputra down to Assam and then probably turned north towards the mountainous tracts of what is now known as Arunachal Pradesh.³ There behind the barriers of hills they settled and there they remained to this day. "... we feel justified in

1. Suniti Kumar Chatterji, *The Place of Assam in the History and Civilisation of India*, (Gauhati, 1970), p. 9.
2. Edward Gait, *A History of Assam*, (Calcutta, 1967), pp. 6-7.
3. Suniti Kumar Chatterji, *Kirāta - Jana - Krti*, (Calcutta, 1974), pp. 44-45.

concluding that the tribes of present Arunachal Pradesh with their variation of so-called Mongoloid characters had a South-East Asian origin and their migration to their present area of dispersion took place from that direction in prehistoric times ... It is untenable to assign a northern route of migration to these tribal groups on the evidence of language alone which is of course Tibeto-Burman. It has been agreed to by scholars that language, taken alone, cannot be a sure guide to either migration or racial affiliation of any people. The Newars of Nepal, for example, show very strong Aryan features, but now speak a Tibeto-Burman language of the Sino-Tibetan language family ...¹ "It stands to reason that the various ethnic groups of present Arunachal Pradesh are mainly a scattered branch of the Paleo - Mongoloid humanity which in prehistoric times also found its way down the Brahmaputra into the Assam valley and populated its hills on both banks of the great river. As one author put it, the tendency of migration of ethnic groups from the direction of South-East Asia following the same route over the Patkoi and other passes continued up to comparatively recent past"².

The legends and traditions of the people of Siang, however, tell a different story of migrations. Almost all the tribal groups of the Adis as well as the Buddhist tribes of the Membas and Khambas trace the course of their migrations to their present settlements originally from the north. The traditional stories are indicative of a general north-south trend of movements.

It would be worthwhile to quote here extensively the passages concerning the tribal legends of migration from the research works on the Adis.

"Long ago, say the Gallongs, they lived in the fringes of the Indo-Tibetan frontier. Streams of migrating families came down from time to time from upper areas and, in absence of adequate geographical knowledge, they followed the easiest track. Gradually, the lower areas gave them shelter and they slowly established permanent settlements. Marauding raiders from beyond the frontier raided their settlements very often, and, as they were, at that time, not very powerful in their military prowess, in comparison with the raiders, they had to emigrate. There are no written records available, and we have, therefore, to depend on the people's own traditions. The Karka Gallongs, for example, had their original settlements at Pa-Pigru, near Tadadege. Having migrated from this place they came down via the Bori area, through Peri, Kambang, Karbak, Boje, Bole to Yomsha. Yomsha became their next permanent settlement for decades. But, with increase in population, the village could not

1. The examples of the Ahoms, a Thai or Shan tribe, adopting the Aryan language of the Assamese and the Khasis having a predominance of Mongoloid strain but speaking an Austric language may also be cited.
2. J.N. Chowdhury, *Arunachal through the Ages*, (Shillong, 1982) pp. 63, 64 & 66.

accommodate all, and consequently, from here also different migrations took place in different directions. Lombi came to Jirigi and finally settled at Lombi; Tirbin came direct to Tirbin; Gamlin came to Kadai and thence to Gamlin; Esi came by the bank of the Rimi river."¹

The origin, migration and present distribution of the other Adi groups are described as from north to north-east and then southwards.

"From the legends available, it appears that the ancestors of the Ramos and the Bokars were brothers. The Ramos descended in a direct line from Dungram, the elder brother of Dumgumi, the ancestor of the Bokars.

"The ancestors of the Ramos left their original settlement, moved from place to place and finally came to Tadadege area and settled there. Their migration from Tadadege to Rapum, which they still inhabit took place long ago.

"At present, the Ramo area consists of Rego, Rapum, Hiri, Puryi, Kiposhi, Paduche and Harne villages. Rego is the last Ramo village on the way to Mechuka. There is one village, called Dorjeeling, where both Membas and Ramos live together.

"The Bokars claim descent from the first man, Abo Tani. Abo Tani had several sons. One of them was Nikar, whose eldest son, Karbo, was the father of Bodung, who in turn had two sons. From the younger son, Dungumi, runs the direct line of descent of the present day Bokars.

"The ancestors of the Bokars due to pressure of population, started migrating and settled near about Tadadege, in a place which is at present known as Pui. Another version claims that their ancestors came down from north and settled near the Simang river, presumably near the source of the Sike river, a tributary of the Siyom. The Bokars are very alike to the Ramos and Pailibos and bear no resemblance to the Membas. There are altogether twenty-two small villages in the Bokar area. The biggest is Gesing. The less important villages are Pangri, Yangrang, Taihiyong, Rote, Pidi, Ruying, Kate, Luto, Ramni, Hemi or Mote, Pote, Karle, Manigong, Ingo, Pulom, Simegong, Papigro, Tadadege, Lapugora, Yorkongdo and Namasiba.

"The Bori villages are situated on the tops of the hills on both the banks of the Siyom or Yomgong and the Sike. The area is surrounded by high ranges of hills on three sides – in the east by the Luyor range, in the west by the Piri hills and in the north by the wall formed by these ranges closing together. The important villages of the Boris are Yiyo, Dupu, Payun, Pame, Gasheng, Gatte, Gameng, Paying, Bogu and Mega.

"It is believed that the Pailibos are descendants of Bomong. As far as we

know, they used to inhabit an area originally near about Dosing. They started migrating southwards, but due to natural calamities, they had to turn back by the right bank of the Siyom and finally settle in the area near about Yapuik. They at present inhabit a small area of rough terrain on the right bank of the Siyom. Their neighbours on the south-east are the Gallongs from whom they are separated by the Bayor hills; to the east are situated the highly populated Bori villages; to the north-east are the Bokars and on the north-west the Ramos. They are a small tribe, and their important villages are Yapuik, Irgo, Yapu, Tadogitu, Tagur, Lipo, Pauru, Boge, Silli and Tato, which is the last Pailibo village on way to Mechuka.

"The Tagins are belived to have migrated from north to Tadadege region. From Tadadege, they seem to have migrated to their present settlements.

"The Ashing area starts from Tuting in the north and extends as far as Ramsing village in the south. The northernmost village is Tuting on the right bank of the Siang, to the south of which is Ninging. Pango, a moderately big Ashing village, lies south of Ninging. In between Pango and Bomdo, the largest settlements of the Ashings, are the two comparatively small settlements, Minging and Mosing.

"The Tangams originally inhabited that part of the Adi country which extends from the gorge, which the Siang breaks through, to as far as the 29th parallel of latitude. More than a century ago, they were pushed down and were evicted from their best lands and forced to migrate towards Kuging.

"They are now found distributed in Nyereng and Kuging on the right bank of the Yang Sang Chu, east of Jedo. Mayum is situated on the left bank of the Tsangpo, north of Jedo.

"The Shimongs seem to have migrated very late. From their original home they came down to the Nigong valley. They could not move further south beyond the present Shimong village, as the Minyongs, the Padams and the Pangis were already in occupation of that area. Thus in course of time, they had to turn back northwards as far as Jedo.

"They occupy the northernmost region on the left bank of the Siang, Jedo being the northernmost village situated between the Yang Sang Chu and the Siang. The area occupied by the Shimongs extends as far as Gobuk in the south. The principal Shimong village is Shimong. The next large village is Gete which lies on the bank of the Siang, north of Shimong. Less important villages from north to south are Anging, Singing, Paling, Rikor, Puing. Gobuk is the southernmost village on the bank of the Yamne.

"The Karkos believe that one of their ancestors, Dunkor, migrated from the upper Siang valley unobstructed upon Gosang village. From Gosang, they migrated to Didung and finally to Karko village. They followed the Padams in

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), pp 5-6.

their migration. The Karkos occupy today the region on the right bank of the Siang, the area lying between the villages of Ramsing and Pankang.

"Milan, Dalbin and Modi, the three villages that form a triangle between the upper reaches of the Yamne in the north and the Sidip in the south, belong to another section of the Adis known as the Milans.

"The ancestors of the Milans are believed to have migrated from Pango to Karko and then to Riga. From Riga, they were forced by the Minyongs to cross the Siang and settled for some time in Riu. They were further compelled to migrate and settled in a place between the present Damroh and Milan. From there they spread to their present habitat.

"It is said that the Padams came from the north and were originally the inhabitants of Bomi, a place near Ramsing. They started migrating, and passed through Sira Pateng, Dempui, Nugong, Ringong, Kilive, Pegu, Silluluak, Tayek Puigo. From Tayek Puigo, all the clans of the Padams other than the Legos, migrated to a place called Ngling. The Lego clan went to Milan and finally to Damroh. The Irang clan of the Padams also left the main body and went to Jokan and finally to Damroh. The main body of the Padams went to a place called Anatko in the Komkars' land and from there to Kesting and then joined with the Irangs and Legos at Damroh. The Padam are now starts from the Sidip on the left bank of the Yamne, covers the whole of the region on this side and extends as far as the Siku river in the south and the Dambuk village in the south-east. The northernmost Padam village by the side of the Yamne is Damroh, the next two villages towards the south being Padu and Silli. Bordak is the last Padam village in the higher region of the Adi hills. In the lower region there are five Padam villages, all on the left bank of the Siang. The first of this series is Ayeng situated at the foot of the hill by the side of the Siku. The next village east of Ayeng is called Mebo. Further east, there is a group of three villages named Silluk. The villages of the Padams on the eastern side are Dambuk, Meka and Rayeng on the bank of the river Sissiri, and are under the jurisdiction of the Lohit Frontier Division.

"The Panggis are believed to have inhabited a part of the Siyom valley. They were too pushed southwards across the Siang by a more powerful section of people and finally settled in the Yamne valley. The Panggis occupy the main Yamne valley and are confined to the right bank of the river. The important villages are Jeru, Sibum and Gekku.

"The ancestors of the Minyongs used to live on some snow - ranges near about Telilidung. In their southward migration, they did not follow the course of the Siang. Instead, they came down the Angong valley to Mani-Pere and crossed the Takek-Adi near Dibok and finally settled at Riga past Pankang. Later they managed to cross the Siang near Tayek-Puigo near about Riu and spread over the area from Kebang, Yemsing and Pangin as far as Ledum. The

Minyongs nowadays occupy an area on the right bank of the Siang and a part of the Valley lying between the Siang and the Yamne. The northernmost Minyong settlement is Pankang and Renging the southernmost. The principal Minyong villages are Riga, Komsing, Riu, Panging, Kebang, Rotung, and Renging. There are, however, a few small settlements of the same group, such as Pankang, Dosing, Jorsing and Yambung.

"The Pasis took a different route in their migration. They were driven from Sigong (Sira Pateng) by other powerful groups of the Adis and migrated south, halting at Nugong, Ringong, Koliyive, Pegu, Silluluak and finally crossed the Siang at Tayek Puigo. They then proceeded to Ngling and settled in a place halfway between Damroh and Adi Pasi. From there they followed the right bank of the Yamne southwards to Kuying Yive and then to Sire Kumu, north of their present village. They settled at Adi Pasi for some time, and then due to the increase in population, they came down near about Pasighat and settled in Ramkang and Monku. At present, Adi Pasi is the only Pasi settlement a solitary village in the upper regions, lying between Damroh and Padu. Their other settlements are in the lower region, a few miles from Pasighat. These villages are known as Balek group, composed of Romkang, Tigra, Balek, Roing, Rasam, Monku, Kellek and Gine.

"A study of the legends relating to their original home, would suggest that the Adis came to their present home from the north. The real cause of their immigration cannot be ascertained at present. It may have been occasioned by some great natural upheaval in their home-land or by large scale racial movements set in motion by political happenings in those regions. Nor can it be said whether they came in a single mass or gradually in small batches in successive waves through centuries. In the former case, it is just possible, they might have come in a sweeping mass down to the plains of Assam and been driven back afterwards into highlands, they occupy now, by a superior power. Anything definite cannot be said upto this point; but it is comparatively easy to picture their later dispersion. Once they had settled in the mountainous regions below the Himalayas, growing communities would be forced to send out colonists in search of new lands. These colonists would establish settlements which, in their turn, would find others. In this way, expansion would continue in a sort of chain work. It may be taken for granted that, in the initial stages, the expansion was from east to west, particularly, in the Siang area. The southward expansion occurred later, when this area was fully occupied and could not accommodate any further settlement".¹

1. Sachin Roy, *Aspects of Padam Minyong Culture*, (Shillong, 1966), pp. 12-17. See also the article 'The Adis - Their origin and migration' by T.K. Bhattacharjee, published in *Resarun* 1975 (Shillong, 1976) by the Directorate of Research, Government of Arunachal Pradesh.

The legends are tales of the shadowy past. Usually every tribe has a legend of its origin and migration believed by the succeeding generations as true. A legend, in which human imaginations are allowed to play freely, may, however, conceal a kernel of historical truth. The historicity or otherwise of a legend is a matter of research. The legends of the Adis have been preserved through their age-old traditions, and no tradition can be built on absolute untruth. The oldest traditions of the Adis retained in the *abangs* (repository of myths) are yet to be studied properly. But, as the author of the 'Aspects of Padam - Minyong Culture' points out, 'tradition or absence of it is not always the correct guide to the history of racial migrations. The Indian Aryans for instance do not have any tradition regarding their migration from anywhere outside India, yet their migration from the west is widely accepted as historically true'. There is, however, a difference as one may point out. While the Indian Aryans lack any tradition about their course of migration to India, the Adis do have a tradition as regards where they came from and how.

Across this line the two cultures differ with each other in almost all essential features. In the cultural area of Tibetan pattern, the people live in solid houses of stone and wood, dress in elaborate woollen garments covering the whole body, wear felt hats and shoes, while in the other cultural area, the dwelling house of the people are bamboo huts built on piles or stilts, and the dress consists of short coats or jackets with loin cloth for men and skirt for women. The craft of one area is characterised by excellent wood-carving and mask-making, while of the other by fine work in cane and bamboo. The two cultures are also strikingly dissimilar in many other respects. The village organisations, agricultural practices, religious beliefs, art of weaving, in short the ways of life of the people of the two sides differ greatly and distinctly. The Adis have dormitories for boys and girls, which are not to be found in the other area. They sing and dance, but have no dance drama or mimic art.

While the Adi culture stands in sharp contrast to that of the Tibetan, it has clear affinities with the culture of the tribal groups living south of the Brahmaputra. The same emphasis on cane and bamboo, the almost identical nature of youth organisations, similar house type, preference of pig to cattle as livestock, the weaving patterns are the common traits of culture which link the Adis with the trans-Brahmaputra tribes. The Adis also resemble the tribes of the south in physical features.

The trans - Brahmaputra cultural affinities between the two cognate groups of people suggest that the Adis represent an early wave of migrations involving many tribes who moved along both the banks of the Brahmaputra westward and gradually spread out to populate the adjacent hills to the north and south of the great river.

Kirā tas

Assam and its neighbouring hills came within the domain of the 'Mahabharata' in the pre-Christian era. The early people of the Brahmaputra valley and the hill tracts of what is now Arunachal Pradesh were known to the Vedic Aryans as Kirata long before Christ. According to the Indologists, the term Kirāta occurring first in the Yajurveda and subsequently in the Atharvaveda, the Mahabharata and the Ramayana and other ancient scriptures refers to the Indo-Mongoloid tribes living in the hills and mountains, particularly the Himalayas and in the north-eastern areas of India. "From the Yajurveda onwards, the mountain regions of North and North-eastern India-the Himalayas particularly, are well attested as the abode of the Kirātas. In the Mahabharata, the Kirātas are dwellers in Himalayan regions, particularly in the Eastern Himalayas ...

"We may be permitted to reconstruct the picture of the Kirāta or Early Mongoloid Movements on the soil of India right down to the beginning of the Christian era. They entered probably through Assam, and their advent in the east might have been as old as that of the Aryans in the west, at some period before 1000 B.C. By that time they might have pushed along the Himalayan slopes as far west as the Eastern Panjab Hills. They came to be known to the Vedic Aryan as a caved dwelling people from whom the Aryans obtained mountain produce like drugs and herbs and the sōma plant. The four books of the Vedas were compiled in all likelihood in the 10th century B.C., so that the passages in the Yajurveda and the Atharvaveda mentioning the Kirāta are at least as old as that period. When the Mahābharata and the Rāmāyana were taking shape, between 500 B.C. to 400 A.D., particularly in the pre-Christian centuries, they had occupied the southern tracts of the Himalayas and the whole of North-eastern Indiā, North Bihar contiguous to Nepal and to the north of the Ganges, the greater part of Bengal, and Assam, including the areas through which the Ganges (the Padmā or Paddā of the present day) passed into the sea. Eastern Nepal and the Lauhiya or the Brahmaputra valley were the lands specially connected with them."¹

The Kirata people of Assam, as observed by Dr. S.K. Chatterji, 'appear to have been of the great Tibeto- Burman tribe of the Bodos.'² According to him, the North-Assam tribes including the Adis, as already mentioned, may also reasonably be identified with the Kirāta.³

In the Vedic literature the name Kirāta was also applied to a people living

1. Suniti Kumar Chatterji, *Kirāta-Jana-Krti*, (Calcutta, 1974), pp. 30, 36-37.
2. Suniti Kumar Chatterji, *The Place of Assam in the History and Civilisation of India*, (Gauhati, 1970), p. 17.
3. Suniti Kumar Chatterji, *Kirāta-Jana-Krti*, (Calcutta, 1974), p. 38.

in the caves (*guha*) of mountains as it appears clearly from the dedication of the Kirāta to the caves in the Vajasaneyi Samhita and from the reference in the Atharva Veda to a Kirāta girl (*Kairatika*), who digs for a herbal remedy on the ridges of the mountains. In the Puranas, Kiratas are designated as 'foresters', 'mountaineers' etc. Kirāta appears to be a common name given to all the Indian tribes of Mongoloid origin. They are described in the Mahabharata as 'gold-like', i.e. yellow in colour unlike other pre-Aryan peoples. In the Ramayana, they are mentioned as pleasant-looking with hair done in pointed top-knots (cf. the hair-do of the Nishis, Bangnis, Hill Miris and Apa Tanis) and shining like gold. Their yellow complexion evidently distinguished them from other peoples of India. They were experts in the art of weaving (as they still are), making cloth of various kinds. Their cotton and woollen fabrics were very much in demand among the civilized Hindus of the plains.

The Mahabharata bears eloquent testimony to the fact that the Kirāta of North - East India came into contact with the Vedic Aryans as far back as the Battle of Kurukshetra (c. 900 B.C.). The Sabhā Parva (Book II) of the Mahabharata testifies that Bhagadatta, the King of Pragjyotisha (Kamarupa or Assam), with his army of Kirāta took part in the battle as an ally of the Kauravas. He was defeated by Arjuna and both the king and his Kirāta followers were compelled to pay tribute. Elsewhere in the Mahabharata, Bhagadatta is addressed as Shailālaya Raja or 'the mighty king whose home is in the hills', and the Kirāta soldiers of his army are described 'as appeared to be in gold; their troops had the appearance of a forest of *Karnikāras* (with yellow flowers).'

The Greek classical literature also bears evidence that the north-eastern region of India was not wholly unknown to the author of the Periplus of the Erythrean Sea (1st-2nd century A.D.) as also to Ptolemy. The Geography of Ptolemy (c.150 A.D.) states that Serica, a country probably located in Assam, is bounded on the east and the north by hills and forests where canes are used for bridges. Verily, there are wonderful cane-bridges in Arunachal Pradesh even today, and they display the superb craftsmanship and engineering skill typical of its people. Although these vague allusions do not convey much about the land and the people, the Kirrhadae mentioned in the Periplus and the Kirrhadae of Ptolemy have an unambiguous reference to the country of the Kirātas extending from the far-off North-East India to South-East Bengal.

Account of Hiuen Tsang

Hiuen Tsang, the great Chinese traveller who came to Assam in about 642 A.D. during the reign of Bhaskaravarman, noted that the country of Kamarupa was ruled over by a Hindu king and its extent was about 10,000 li (nearly

1,700 miles) in circumference. He observed that the manners of the people were simple and honest. The men were of small stature and their complexion a dark yellow. Their language differed a little from that of mid-India.

The boundary of Kamarupa as described by Hiuen Tsang suggests that it included almost the whole of erstwhile Assam. Incidentally, the Yogini Purana (c. 8th century A.D.) states that Kamarupa extended right up to the Himalayan range in the north. The description of the people as having short stature and yellow complexion may be taken as proving their Kirāta or Indo-Mongoloid origin, more particularly their Bodo characteristics.

MEDIEVAL PERIOD

Verrier Elwin's 'A Philosophy for NEFA' begins with a prelude that "the history of what is now known as the North-East Frontier Agency (Arunachal Pradesh) ascends for hundreds of years into the mists of tradition and mythology. Of the vast hinterland there are only recent accounts, but a number of ruins in the foothills suggest some contact between the ancient rulers of Assam and the tribesmen living near the plain." The historical perspective is, however, not so dismal as it appears to be. In fact, the history of certain areas of Arunachal Pradesh emerges fairly clearly from legend and dubious tradition even earlier. The written records of the Ahoms known as *buranjis* (chronicles) contain a wealth of information about their relations with the tribes of Arunachal, and these records throw a flood of light on the late medieval history of this territory. But, before this is discussed let us turn our attention to Malinithan an important archaeological site in Siang.

MALINITHAN

Site

Malinithan is situated in the West Siang District on a foothill mound, about 60 metres in height, near the Arunachal - Assam border, one kilometre east of the circle headquarters at Likabali and a little away from the road leading to Along.

Myth and Legend

It is traditionally believed that the site is one of the *pithasthanas* or holy places described in the Kalika purana (c.8th century A.D.). Like a number of sacred places in North-East India, this site is also associated with Krishna legends. The legend is that Krishna and his consort Rukmini, daughter of King Bhismak took rest at this place on their way to Dwaraka. There at that time Siva with Durga (Parvati) was in meditation. Durga offered them garlands of choicest flowers. Krishna reciprocated the gesture by addressing her Malini (mistress of the garden) as a compliment. From then on, as the tradition goes the place came to be known as Malinisthan or Malinithan - the seat of Malini.

Exploration and Excavation

In the early twenties of the present century, W.H. Calvert, Assistant Political Officer, Pasighat, visited Malinithan and met an ascetic (*sadhu*), who was staying at that place. It was reported by the local people that Calvert was guilty of damaging some of the valuable images lying there. Next to visit Malinithan was D. Barua, then a Base Superintendent, followed by B. Bhuyan, Political Officer, Abor Hills District. Bhuyan came across a replica of sivalinga (phallic stone) without its base and many damaged stone images of which the one of Durga (*Dasabhuja*), an excellent piece of workmanship, attracted his attention. He made an attempt to restore the broken pieces of the image to their original positions. Some silver pieces with floral designs and smoking pipes also came to his notice. All these finds led him to conclude that it was a sacred place visited by pilgrims from time to time.

Excavation of the site was undertaken in 1968 by L.N. Chakravarty, the then Deputy Director of Research (History), Arunachal Pradesh Administration. In course of a series of excavations carried out by him till 1971, ruins of an elegantly designed basement of temple, over one hundred exquisitely carved images of various deities - gods and goddesses of the Hindu pantheon, Yaksas in dancing postures, sculptured panels, animal motifs of bull, lion, elephant etc. were unearthed. Besides these, iron dowels or clamps used as binding material in lieu of mortar and many other works of art in stone executed in relief with geomatric and floral designs, were dug out. It was a 'buried treasure' indeed.

Lintel adorned with carvings of an auspicious pitcher (*mangalghat*) flanked by two lions, jambs with carved images, capital of a pillar, broken columns and a large number of sculptures littered all over the mound as well as the trace of a base-line of stones around the ruins of the temple, which were excavated, present a distant but clear picture of the existence of a beautiful temple or a number of temples at Malinithan in the past. A temple complex is believed to have once existed at this place, which enshrined various deities of whom the magnificent images of Indra seated on elephant (*airavata*), Surya (Sun God) standing on a chariot drawn by seven horses, Durga Ganesha, Kartikeya on peacock, an icon resembling Saraswati with harp (*bina*) and a representation of Lakshmi have been discovered. A massive figure of Nandi bull, the vehicle of Siva, is prominent among the finds. These images were obviously some of the principal objects of worship. The galaxy of images of which Durga predominates, and the mythology of Hara-Parvati associated with this holy place (*pitha*) suggest that the presiding deity of Malinithan was Goddess Durga worshipped in her *Sakti* form, presumably in some like manner as the Goddess is worshipped in Bengal and Assam today. Devi

images and figures of Parvati were found in many temple sites in Assam¹. The history of Durga Puja in Assam seems to go back to a date earlier than what is generally supposed. "From ancient times, says Hem Barua, "Kamarupa enjoys the far-flung reputation of being one of the three principal *Saktipithas* of India. When the worship of Durga was gradually introduced here, the assimilation of the two identical forces into a consolidated form was easier of accomplishment. The fact that a 'Hinduised Indo-Mongoloid empire' as pointed out by Dr. S. K. Chatterjee was thus achieved during the middle of the 7th century A.D. proves that the Hindu-path was already paved for the ultimate attainment of the goal, and the later-day introduction of Durga Puja is a milestone in this development. The Durga image discovered at *Surjya-pahar*, an archaeological site in the district of Goalpara, besides the images of Siva, justify this conclusion. History has it that the Palas (a dynasty of Assam kings reigning from 990 A.D. to 1138 A.D.) were austere followers of the Sakti-cult, and Durga was one of their principal deities of worship. It might not be in the way of the earthen image that we have today; this was by all conclusions a later-day innovation"².

Significance of Relics

What do the relics of Malinithan convey? The first thing to catch the eye is the stony picture that Malinithan presents. Here the sculptural and architectural remains are all entirely of stone. Most of the sculptures are works in sandstone. Some figures are carved in granite, which were probably brought from outside and installed in the outer walls of the temple. The total absence of brick distinguishes Malinithan from most of the other archaeological sites in Arunachal Pradesh where bricks were much in use. Moreover the archaeological wealth of Malinithan seems to be richer than most of the other sites so far located. The early Sanskrit literature refers to two types of architecture - *asmamayii* or of stone and *ama* or of raw unbaked mud brick. The remains of Malinithan evidently belong to the first type. There is hardly any trace of free standing Hindu temples preceding the Gupta period. The Gupta temples were constructed without mortar, but the famous one at Deoghar near Jhansi assigned to the 6th century A.D. is an exception, which shows the use of iron dowels to hold the masonry together.³ Iron dowels were also discovered in the ruins of the stone temple of Tamreswari in the Dibang Valley District. Some of the relics of this temple bear close resemblance with the ruins of Dimapur in Assam of the medieval period.⁴ On all these evidences

1. B.K. Barua, *A Cultural History of Assam* (Gauhati, 1969), p. 194.

2. Hem Barua, *The Red River and the Blue Hill* (Gauhati, 1962), p. 195.

3. A.L. Basham, *The Wonder that was India* (New York, 1959), p. 356.

4. See *Annual Report of the Archaeological Survey of India, 1904-05* by T. Bloch.

viewed in the wider perspective the ruins of Malinithan may be ascribed to a wide period of time ranging from early medieval to late medieval. This assumption is also supported by the ruins of a stone temple, probably of the sixth century, found in a village called Dah Parbatiya near Tezpur and other relics lying about in its vicinity which have close affinities with the relics at Malinithan. The affinities are distinctly perceptible in the floral designs and the carved images. These apart, the architectural pattern of the temples at both the places also speak of their similarities. The Dah Parbatiya temple is probably the oldest of its kind in Assam. It is quite probable that Malinithan came under the sphere of influence of the culture that developed around Tezpur on the north bank of the Brahmaputra. But the Dah Parbatiya and other Tezpur ruins do not belong to the same period of history, their dates vary widely from about the 6th century A.D. to the 12th century A.D.¹ The ruins of Malinithan do not also seem to be of the same age as the relics differ from crudity to excellence in artistic conception, style and execution.

A striking feature of the Malinithan remains is the frequent occurrence of maithuna figures in various postures. These erotic sculptures are no doubt the survivals through Tantricism of the fertility cult of the primitive tribal society upholding the mother principle as the procreative power of nature. B.K. Barua writes of the maithuna figures thus : "The occurrence of these figures mainly in the Siva and Śākta temples, as suggested by Sir William Rothenstein, was a part of the Tantric attitude which was characteristic of Indian religious philosophy between the 10th and 12th centuries, it appears that these erotic sculptures have the support of the traditional practices of centuries of temple building, and have been enjoined by the sacred texts such as the *Kāmasūtra*".²

The sculpture of the bull is one of the most significant finds from Malinithan. In Indian mythology and religion the bull named Nandi is always associated with Siva as his vehicle. The Nandi bull is symbolic of asceticism and religious discipline and according to rule an image of seated Nandi is installed in front of temple dedicated to Siva. The style of the Malinithan bull is simple, the representation fairly lively and the ornamentation resembles the Hoysala style.

It may be mentioned in passing that the lion on elephant motif, an interesting find from Malinithan, were found in the Dimapur ruins and in

1. (a) K.L. Barua, *Early History of Kamarupa (Gauhati, 1966)*, pp. 108-115.
- (b) P.C. Choudhury, *The History of Civilisation of the people of Assam (Gauhati, 1966)*, pp. 432-434.
- (c) B.K. Barua, *A Cultural History of Assam (Gauhati 1969)* pp. 189-191.
2. B.K. Barua, *A Cultural History of Assam (Gauhati 1969)* p. 194.

various parts of Orissa as well. The hair-dress of a female figurine of Malinithan also seems to resemble the style of Orissa sculptures.

Malinithan raises two important questions-how-old are the relics and who were the builders of the temple and makers of its sculptures? An attempt on the basis of contemporary evidences has been made in the foregoing account to suggest answers, but they are in no way conclusive. No inscription has been found so far, nor any literary record. A study of iconography and evolution of Indian temple art, however, indicate that the cultural period to which the Malinithan remains belong extends probably from about the 10th century A.D. to the 14th century A.D.

Malinithan embodies a variety of culture traits. The archaeological relics give definite evidence of contact between different groups of people and the contribution of architects and sculptors of Assam, of the Orissa School as well as the Pala School of Bengal and Bihar. Malinithan bears valuable material evidences of a cultural link that connected the fringe of Arunachal with the neighbouring eastern parts of India in the medieval period.

Incidentally, it may be mentioned here that there are remains of a stone structure resembling a temple at the Nari village in the Pasighat Sub-division, adjacent to Arunachal -Assam border. The site, called Vasudev Than, is associated with legends.

AHOM ASCENDANCY

The late medieval period of history of North-East India is marked by the ascendancy of the Ahoms in Assam. Our main sources for this period are a series of important chronicles known as the Ahom Buranjis. The arrival of the Ahoms is a landmark not only of the history of Assam, but of Arunachal Pradesh as well, for from then on we can clearly trace the main course of political history of the entire north-eastern India on the basis of written records. The Ahoms ruled in Assam for long six centuries from 1228 A.D. to 1826 A.D., and their buranjis contain valuable information of their relations with different tribes of Arunachal. These sources do not give us a connected account, but are precise as historical documents. The written record of political history of this part of the country may, therefore, be taken as beginning from the advent of the Ahoms.

The Ahom invasion of Assam led by Sukapha began in 1228 A.D. They came from North Burma crossing the Patkai range, and made steady advances along the course of the Noa-Dihing river and then forced their way along the western course of the Brahmaputra. In their bid to gain supremacy in Upper Assam the Ahoms had to measure their swords first with the Chutiyas and the Kacharis, the two powerful Bodo tribes of the north-eastern Assam, and in a series of battles lasting for centuries they came out victorious. Consequent

on the decline of the Chutiyas and also of the Kacharis the Ahoms gradually annexed the whole strip of land from Sadiya up to the area east of the Bhoroli river on the north bank of the Brahmaputra fringed by the hill ranges of Arunachal Pradesh, and in doing so they gradually came into contact with the northern tribes of Arunachal Pradesh, such as the Mishmis, Adis, Nishis, Hill Miris and Akas, and established extensive relations with them.

The works of the Muslim writers and historians of this period contain valuable information about the political relations between the Ahoms and the northern tribes. One such writer was Shihabuddin, also known as Talish, who accompanied a Mogul expedition to Assam in 1662-63 led by Mir Jumla during the reign of Jayadhwaj Singha (1648-63). Mir Jumla's forces advanced to the fringes of the present Arunachal Pradesh bordering Assam. Shihabuddin's *Fathiyah-i 'Ibriyah* conveys that 'although most of the inhabitants of the neighbouring hills paid no taxes to the Raja of Assam yet they accepted his sovereignty and obeyed some of his commands'.

Another document containing an account of the interview which the Assamese ambassador Madhabcharan Kataki had with the Mogul commander Raja Ram Singh refers to the tribal legions of the Ahom army and it declares: 'Numerous chieftains of the mountainous regions have become our willing allies in the campaign. They consist of a total strength of three lakhs of soldiers... Their participation in this campaign has been directly sanctioned by His Majesty.'

As a result of the victory over the Chutiyas¹ and deportation of their leaders from their stronghold in the lower reaches of the Lohit and Dibang Valley Districts in the vicinity of Sadiya in Assam, the Ahoms, as already stated, gained control of the entire stretch of level area on the north bank of the Brahmaputra. In the northern hills adjacent to this area lived various tribal groups of the Adis between the rivers Dibang and Dihang (Siang) and further westward. Neighbourly with the Adis lived the Mishings (Miris) in the plains and lower hills along the north bank of the Brahmaputra from the Dihang river on the east to the Subansiri river on the west. It was observed by Mackenzie² that the Miris having close cultural affinities with the Adis had migrated originally from the same area as the Adis did, and the intercourse between the two was constant and intimate. The Miris appear to be the earlier migrants and related with the Adis distantly. In fact, the Miris are a progressive tribe living scatteredly and settled on cultivation in the foothill areas. Under the Ahom Government they performed the job of go-betweens of

1. The name Chutiya is also spelt as 'Sootiya'.

2. Alexander Mackenzie *The North-East Frontier of India*, (Delhi, Reprint 1979), p. 33.

the Adis and the traders of Assam, a fact in which the Assamese term 'Miri' meaning intermediary has had its origin. The Adis had a claim of supremacy over the Miris of the plains, whom they considered as their subservients. But the Hill Miris, who enjoyed the right of '*posa*' granted by the Ahom rulers, were evidently an independent people distinct from the Miris of the plains.

The Ahom Buranjis do not explicitly account for the relationship that existed between the Adis and the Miris of the plains. But they indicate that during the reign of Pratap Singha, (1603-41) some villages with paddy fields in the plains and *beels* (fishing lakes) were assigned to the Adis. On account of these assignments, the Ahoms are stated to have exempted the cultivators of these villages and the fishermen, who were to supply paddy and fish to the Adis, from paying taxes. In return for these privileges, the Adis had to pay annual tributes to the Ahom Government¹.

The Adis claimed an inalienable right to all the fish and gold found in the Dihang and other rivers flowing from their hills through the Miri settlements. The Ahom Government anxious to conciliate their highland neighbours accepted this claim and relieved the Miris of all revenue charges, acknowledging thereby the subjection of the Miris to the Adis.

In the islands of the Brahmaputra and along the lower courses of its northern feeders, were numerous villages of gold-washers and fishermen called Beeahs or Beheeahs, who used to frequent the Dihang, Dibang and other tributaries of the Brahmaputra in the pursuit of their avocation. The Adis would always extract from them some conciliatory payments and acknowledgements of superiority.

The Ahom policy towards the hill tribes was conciliatory. They granted the Nishis, Hill Miris and Akas what is called '*posa*' that is the right to receive payments from certain specified villages in the foothills, provided annual tributes were paid to the Ahom kings. The word *posa* literally means a collection or subscription for a common purpose. In the olden days, the various hill tribes from the north would descend annually to the plains to receive subscriptions from certain border villages. The subscription raised by a village to meet the customary demands of the hillmen was paid in kind. It appears that the quantities demanded from each village or hamlet were fixed and well known to both parties; and as no individual inhabitant of a plains village was liable for any particular article, the whole amount was raised collectively by a village subscription, or *posa*'.

A striking feature of the Ahom-Adi relations is that unlike the other northern tribes, the Adis, though very powerful, had no acknowledged right

1. See Mrs. Lakshmi Devi, *Ahom - Tribal Relations*, (Gauhati, 1968), p. 158.

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to *posa*. It appears that the relation-ship that existed between the Adis and the Ahoms was not direct, but through the Miris, who were officially recognised to be the interpreters of the Adis. The reason of the Adis not having the right to *posa* was also evidently due to their comparatively remote situation, separated as they were by the great river Dihang from the cultivated country along the Brahmaputra Valley. Moreover, the conciliatory policy of the Ahoms must have contributed towards developing friendly relations with the Adis. It is, therefore, in the fitness of things that the *buranjis* speak less about the Adis and nothing at all about any Ahom-Adi conflict.

After the British took over possession of Upper Assam from the Ahom king Purandar Singha (1832-38) in 1838, the payment of *posa* in kind was commuted for fixed money payments. In 1852, the Nishis were finally induced to commute their claims for a money payment. The system of '*posa*' introduced by the Ahom king Pratap Singha (1603-41) to conciliate the northern tribes and maintain peace and order in the country was in fact followed by the British for many years as a legacy until the payment was finally stopped from the forties of the present century by order of the government.

The Ahoms, as we have seen, had extensive political relations with the northern tribes. They adopted and wisely pursued a policy of conciliation to deal effectively with the frontier tribes. In exercise of their sovereign power, they mediated and settled inter-tribal disputes and regulated relations between the tribal people and those of the plains. They were greatly successful in inducing different groups of people to fulfil each other's obligations and settle on a peaceful life.

MODERN PERIOD

The Ahoms were on the decline towards the end of the eighteenth century. Misrule of some weak and incompetent kings, internal dissensions and uprising in various parts of the country had shaken the very foundation of the Ahom Government. The Moamaria rebellion broke out in Assam in 1769 and continued till the early part of the nineteenth century. The serious turmoil caused by the rebellion was further aggravated by the Burmese invasions of Assam (1816-24), which finally led to the downfall of the Ahoms. The devastated Brahmaputra Valley fell into a deplorable state of chaos, disorder and extreme sufferings of the people. The Burmese were driven out with the help of the British but the Ahoms were then a spent force and the Ahom administration was crumbling. In the absence of a strong central authority, gradual annexation of Assam by the British, therefore, 'lay in the logic of history'. It was decided that the Brahmaputra Valley with the exclusion of

two tracts in Upper Assam, namely Sadiya and Matak,¹ would be provisionally administered as a British province. In 1823, David Scott was appointed Agent to the Governor General for administration of the whole eastern frontier. By the Treaty of Yandabo (1826) Assam was ceded to the British. Eventually, in 1838, as already mentioned, the British took over the administration of Upper Assam from Raja Purandar Singha, the tributary ruler of that region, who was for his misrule deposed and pensioned. "When the British took over the control of Assam from Purander Singh in 1838, writes Verrier Elwin," they found that the warlike tribes of the frontier had become even more aggressive as a result of the breakdown of the authority of Government, and for the remainder of the century they largely followed the policy of the Ahom Kings. They did what they could to make friends with the tribes; they protected the plains people against their raids; they established outposts in the foothills, and from time to time imposed blockades and made punitive expeditions into the interior. In addition, a few daring explorers penetrated deep into the mountains, but it is doubtful whether they had any very great effect upon the outlook of the people, most of whom continued to resent visitors."²

British-Adi Relations

The Adis claimed, as indicated earlier, an absolute sovereignty over the Miris of the plains, who for a long time accepted their position of intermediaries between the Adis and the Assamese traders. During the Burmese invasions and after the British annexation of Assam, some group of the Miris found it to their advantage to move away from the vicinity of their Adi overlords. The Adis (Padams) urged upon the British authorities in 1830 to send back the Miris who had left their village to the detriment of the Adi trade. The demand of the Adis was conceded by the British to the extent that they tried to induce the Miris 'to settle where they could minister to the wants of the Adis in the way of trade.' Eventually the Miris returned to their original village, and the Adis were persuaded to undertake to leave them free of exaction for two years. This early negotiation shows the eagerness of the British to establish friendly relations with the Adis.

The following observation by Col.L.W. Shakespear in his History of the Assam Rifles (1929) gives an idea of the British - Adi relations at the initial stage.

"Up to about 1840 fairly friendly terms seem to have existed between the

1. Matak lay to the south of Sadiya between the Brahmaputra and the Burhi-Dihing, and was inhabited by people belonging mainly to the Moamaria Sect. Sadiya and Matak tracts were annexed to the British territory in 1842.
2. Verrier Elwin, A Philosophy for NEFA, (Shillong, 1964), p. 2.

Abors (Adis) and the officials at Sadiya, even to the extent of some sections of the tribe helping us against the Hkhamtis (Khamtis) and Singphos in the troubles of 1838-39 with whom the Mishmis at that time were in alliance. The first-recorded trouble with the Abors (Adis) arose in 1848, which originated over the gold-washing pursuits of the Miris and certain Cacharis who worked in the rivers flowing out of the hills. The tribe while on intimate terms with the Miris, had for long asserted their right to a percentage of gold and fish taken from rivers flowing from their hills, and this year disputes with the gold-washing led to a raid across the border in which several Miris and Cacharis were carried off."

During the British days, the country inhabited by the Adis was first visited by Captain Bedford, Lieutenant R. Wilcox and Captain Neufville in 1825-27 in connection with a survey and settlement of a number of feuds existing between the Adis and the Miris. Father N.M. Krick, a French missionary and explorer visited the Padam village of Mebo in 1853, and left an important description of the tribe, their village life and organisation. Next to visit the same Mebo village in 1855 was E.T. Dalton, then Principal Assistant to the Governor-General Agent in Assam. Their memoirs and accounts contain valuable information about the people they came in touch with, and these helped the British Government to have some intimate knowledge of the country.

In 1825, Captain Neufville reported that the Adis were giving assistance to the Sadiyakhowa Gohain (originally an Ahom title), the Khampti ruler of Sadiya, against the Singphos. In 1841, W. Robinson wrote, "The Abors (Adis) were always looked upon as the allies of the ancient Assamese government, and it is said that a large body of them, to the amount of 20,000 or 30,000 came down to assist the Bura Gohain in repelling the Moamarias, who were devastating all the country east of Jorhat."¹

The British-Adi relations continued to be amicable till 1847 when Captain Vetch, the Political Agent, had a most friendly conference with the Adi group of the Pasis and Padams with the result that negotiation for the establishment of trading posts on the Dihang was started. But, only a year or so later the good relation became strained over the question of restoration of the gold-washers carried off by the Adis as mentioned by Shakespear. The captives were restored as demanded by Captain Vetch, but his camp was attacked at night. The Adis fell back only after a hard fight. It was stated earlier that the Adis used to extract some conciliatory payments from the gold-washers called Beeahs in assertion of their superiority over them.

1. John F. Michell, *The North-East Frontier of India*, (Delhi, Reprint 1973), pp. 53, 55.

Apparently, therefore, they had some reason for kidnapping the gold-washers, who under the British rule began to repudiate their claims and many of them, like the Miris, moved lower down the valley. Captain Vetch, however, went to the length of burning down the village of the "Dubba Abors" living west of the Dihang, who were thought responsible for the attack. The punitive measure taken by Vetch led to the submission of the offenders but the excesses committed by him had an adverse effect on the hitherto existing friendly relations. From the year 1851, frequent outrages perpetrated by the Adis and remonstrances made by the British officials were reported.

The first serious Adi outrage occurred in January 1858, when the Minyongs of Kebang in the present East Siang District raided the Beeah village of Sengajan on the north bank of the Brahmaputra not far from Dibrugarh, and killed ten or twelve villagers. It was apparently a planned act of outrage to punish the Beeahs, who deserted their village some years ago and refused recently to pay the dues which the Adis demanded of them. The troops sent immediately to follow up the raiders failed to enter the inaccessible hills owing to various mischances, and got back to Dibrugarh with difficulty.

The failure of the operation emboldened the Adis of Kebang, who showed no inclination to make an unconditional surrender. As this was a serious matter involving questions of law and order, it was decided by the British authorities to send out a strong expeditionary force into the hills. The Kebang village was reported to be 'on the Yembung, a tributary of the Dihang only four and half days' direct journey from the plains'. Attempts were made to conciliate the 'intermediate clans' for success of the expedition. The expedition began in March 1858 and an armed force advanced through an extremely difficult mountainous terrain facing many problems. Contrary to expectations, no help was rendered by the 'intermediate clans' and signs of hostility soon manifested themselves. Various groups of the Adis seemed to have it a common cause to stand against the expeditionary force. "The troops had had to fight almost every step of the way," and though the force probably got very near the destination, it could not reach the Kebang village. In fact, the expedition ended within a few days in complete failure.

The reasons for the failure, as observed by Michell, were that the expedition was not of sufficient strength nor was it properly organised or efficiently commanded.

In 1859, another expedition, a larger one this time, led by Colonel Hannay was despatched against the Minyong Adis of Kebang. The Adis put up a stiff resistance at Pasi, which village and a neighbouring village were taken and burnt but the expeditionary force failed to reach Kebang.

Later in the same year, a strong reconnoitring party passed through the Adi country without facing any opposition by the tribes.

In July 1860, the Pasi Adis, who were eager for a rapprochement, were befriended. But the Minyongs were still irreconcilable, and towards the close of 1861 they again raided a Beeah village near Dibrugarh, killing some of its inhabitants.

A punitive force under Lt. Colonel Garston was sent against the offending Adis. But the question of taking effective steps against further raids now engaged the attention of the government more seriously. A series of measures were taken for opening of road and fortification, besides a scheme for deployment of troops. These measures made an abiding impression on the Adis about the might of the British Government. They made overtures for a general reconciliation and the Government, though strong, could only afford to conciliate. At length, on November 5, 1862, the Deputy Commissioner of Lakhimpur met the Meyong (Minyong) Adi deputies in a conference at Lallimukh near Kobo, and after a prolonged discussion extending over seven days, an agreement was concluded between the British Government and eight *khels* or communities of the Minyong Adis.¹ By the agreement the Adis, who did not have an acknowledged right to *posa*, secured some kind of conciliatory payments annually from the British Government. The yearly payment to be received by them were 100 iron hoes, 30 maunds of salt, 80 bottles of rum, 2 seers of akbarree opium and 2 maunds of tobacco. "In lieu of money stipends to Chiefs, the treaty provided for payments in kind of articles that could be distributed among the whole community. The democratic nature of the Abor (Adi) system of government made this course advisable, and the plan has the advantage of giving each leading member of the clan a personal interest in keeping the peace. Numerous other societies of Abors (Adis) have given their assent to similar engagements."² The Adis of Kebang executed an agreement of this nature in 1863. The Padams entered into agreements in 1866.³

These agreements no doubt improved the relations of the government with the Adis, at least provisionally. The annual payment to the Adis made in kind were commuted to money payments from 1877.

The thrust of the Padams to move across the Dibang river 'to obtain possession of the Mishmi path to Sadiya' caused anxieties for some time past and it led the British Government to take a forward step in 1881 for

1. A copy of the agreement will be found in *The North-East Frontier of India* (Delhi, Reprint 1979), by A. Mackenzie, pp. 43-44.
2. A. Mackenzie, *The North-East Frontier of India* (Delhi, Reprint 1979), pp. 43-44.
3. See C.U. Aitchison, *A Collection of Treaties Engagements and Sanads*, (Delhi, Reprinted 1983), Vol. XII, PP. 159, 162.

establishment of strong military posts at Bomjur and Nizamghat. The Chief Commissioner of Assam was, however, not satisfied merely with preventive measures. He suggested more positive means, whereby friendly communications with the hill tribes could be opened, and they were convinced of the advantage of maintaining good relations with the government.

In November 1882, J.F. Needham was appointed Assistant Political Officer at Sadiya. This appointment is considered to be the first important step towards setting up of an elementary administration, at least in the foothills, as well as for establishment of more friendly relations with the frontier tribes of what is now known as Arunachal Pradesh. Needham undertook long tours in the deep interior areas and visited a number of Adi villages including Mebo and Balek in 1884 and 1885. He was received hospitably by the villagers every where and his visits helped to create an atmosphere of better understanding between the Adis and the government. An immediate result of his friendly endeavours was that the Adis, who refused for a long time to attend the Sadiya fair for trading purposes, participated in the fair held in January 1885. It is interesting to note that in 1884 only 50 Adis attended the fair, while in 1885 the number rose to about 900. These fairs obviously served the purpose of creating friendliness. Needham stayed at Sadiya till 1905.

Meanwhile, clouds were gathering for an impending storm. In 1886, the Adis turned out to be less friendly and put forward many grievances. They objected to the orders which prohibited them from coming armed to Sadiya. They complained that the Mishmis were better treated than the Adis when they visited Sadiya. In 1889, four Miris were entrapped across the Inner Line by the Minyongs and were murdered. A blockade of the Pasi-Minyong country was imposed immediately, and the consequent inconvenience caused to everyone was so great that the powerful village of Kebang forced the offenders to compensate by paying sixteen *mithun* to the government.

In November 1893, the Padams made an attack on a police patrol in which three sepoy of the Bomjur outpost were killed. It was suspected that tribesmen of Bomjur assisted by those of Dambuk and Silluk were involved in this crime. Another police party was attacked in the following month. The outrages were too ominous to be ignored by the government, and a decision for a punitive expedition was taken. This came to be known as the 'Abor Expedition of 1893-94.' It was plainly evident that some group of the Adis grew restive and defiant.

In January 1894, a large expeditionary force advanced on Dambuk. The following is a detailed description of the expedition:

"The force consisted of 100 men of the 44th Gurkha Rifles, 300 men of the

Lakhimpur Military Police, 100 men of the Naga Hills Military Police and two 7-pounder guns. Captain R.M. Maxwell, Commandant of the Lakhimpur Military Police, was put in command and Mr. Needham was appointed Political Officer. The expedition was not being regarded as a military expedition and the commander was not given any responsibility for the plan and conduct of the operation. Needham, in his subsequent report, claimed in clear terms that 'all details as to direction and management of the same' were relegated to him by the Chief Commissioner.

"The expedition met with no opposition at Bomjur, but on its advance on Dambuk, it encountered resistance at 'tremendously strongly built stockade, 2000 yards long, 10 feet high.' It was taken successfully with loss of 3 killed and 22 wounded. The expedition then returned to Bomjur, and went over westward across Sesserri to Mimasipu and Silluk. There was some resistance at Silluk. Both the village were burnt down.

"Needham was convinced that Damroh, a village to the north, was the main source of power behind the hostile elements. The Chief Commissioner described Damroh as 'headquarters and stronghold of the Padam Abor occupying the country between the Dihong and the Dibong'. Needham sought and obtained the Chief Commissioner's permission to advance upon Damroh.

"It was decided by Needham to proceed to Bordak above Pasighat on the left bank of Dihang, and leave extra rations and heavy baggage at that place under one Subadar with sepoy and other retinue, 60 people in all. This ill-fated decision was taken in view of the shortage of transport and, it would appear, against the wishes and advice of Captain Maxwell. He later explained in his report that no guard was asked for, and none provided, as Mr. Needham considered the situation at Bordak perfectly safe. It would also appear that the position as well as the distance of Damroh was miscalculated. The expedition started on 22nd February, 1894 under the most inauspicious circumstances with the question of transport of ration still left uncertain. The expedition passed through Silli and Dukku without any opposition. On the next stage of the march to a camping site on the left bank of the Yamne river, the Adis harassed the expedition. Lieutenant East was wounded with a poisoned arrow piercing his arm. Next day, Lieutenant Camilleri and his company had to withdraw with difficulty in the face of the enemy who attacked with guns, arrow fire, and rolling of boulders. Leaving 100 men under Muspratt at the camp, Needham and Maxwell tried to reach Damroh with the rest of the column. After a miserable march through thick jungle, pursued by heavy rain, Damroh still remained beyond reach. With ration in short supply and incessant rain adding to the misery, decision was taken on the 27th February to turn back. Before reaching back to Silli, Needham received the news that the

camp at Brodak had been attacked, every one massacred and rations destroyed. It turned out that the only survivors were a Khasi coolie and a *dhobi*. On the return march, Needham destroyed Padu and Membu, two villages, suspected of complicity in the massacre at Brodak. Bomjur was evacuated and burnt. Needham claimed that the expedition was preeminently successful, for Bomjur, Dambuk and Silluk had been punished. The Chief Commissioner made a feeble attempt to justify the expedition in his despatch to the Government of India: "One important result of the expedition is that we now know the way to Damroh, and the nature of opposition we may expect if any future expedition is undertaken against that village."¹

The Government of India did not approve of a second expedition to Damro, but sanctioned the following punitive measures against the Adis:

(1) That until all the rifles and firearms were recovered a blockade should be imposed on all the tribes living north of Sadiya and on the left bank of Dibang to prevent these tribes from having any intercourse with the plains.

(2) That all further payment of *posa* to the Adi villages in the above named tract should cease, and

(3) That the Adis of Bomjur should not be permitted to rebuild their village on the old site.²

The blockade was strictly enforced and the concerned tribes, who were in difficulty, had to return all the rifles snatched away by them from the sepoy in November and December 1893 and during the expedition in 1894. But many other articles taken away by the Adis were still with them, and the blockade continued. In March 1896, the blockade against the Pasis and Minyongs was raised, but that against the Padams was maintained till 1900. The payment of so-called *posa* to the Adis was, however, not revived.

In December 1905, J.F. Needham was succeeded by Noel Williamson as Assistant Political Officer, Sadiya. Williamson left an indelible mark in the history of the British-Adi relations. After having assumed the charge at Sadiya, he set out on extensive tours and made pioneering efforts to explore the Adi country as well as other remote areas. In 1907, he went up the Lohit to near about Rima in Tibet. In 1908, he visited all the Pasi villages, the Minyong villages at the foothill and some of the Gallong villages. 'He was credited with having acquired considerable knowledge of the tribal ways of life and established good relations with the frontier tribes.' In February 1909, he made his way as far as the Kebang village, which was supposed to

1. J.N. Chowdhury, *Arunachal Through the Ages*, (Shillong, 1982), pp. 138-139.

2. L.N. Chakravarty, *Glimpses of the Early History of Arunachal*, (Shillong, 1973), p. 41.

have several villages under its control. The venture of Williamson merits special mention in that he was the first European to get at that far away place. But as ill luck would have it, his ambitious career came to a tragic end all too soon and suddenly.

In March 1911, Williamson accompanied by Dr. J.D.Gregorson, a tea garden doctor from Tinsukia in Assam, and a party of attendants and porters left Pasighat for Komsing in the present Pangin circle of the Pasighat Sub-division. Dr. Gregorson with some sick members of the party camped at Pangi, while Williamson with the rest of the party proceeded to Komsing. On March 31, 1911, the day of his arrival there at Komsing, Williamson along with his followers was murdered. Dr. Gregorson and the sickmen were also killed on the previous day at their camp at Pangi. Only six persons of the party of altogether fifty-two members could escape the massacre.¹

According to the British records, the apparent cause of the massacre lay in the fear of some Adi porters, who were also engaged, that they were suspected of a theft and would be punished. They decided to get themselves rid of the anxiety by having recourse to murder. This one version of the tragic incident, but unfortunately we have no record to know of the tribal viewpoint, whether the tribesman implicated in the massacre had a different version of the tragedy and what they were to say.

It was reported that several villages took part the slaughter campaign. 'Kebang and Rotung committed the murders, and Babuk, Sissin and Pangi were responsible for the killing of the fugitives.'

The Government of India took a serious view of the murder of Williamson and Gregorson, and their proposal for sending a military expedition into the heart of the hills was agreed to by the Secretary of State for India. The expedition organised under the command of Major-General H.Bower was overwhelmingly strong and massive in composition. The expedition had, *inter alia*, the following objects in view:

"(1) To exact severe punishment and reparation for the murder of Mr. Williamson, Dr. Gregorson, and their party in March last; and, by establishing our military superiority in the estimation of the tribe, to endeavour to compel the Minyongs to surrender the chief instigators and perpetrators of the massacre.

(2) To visit as many of the Minyong villages as possible, and to make the tribe clearly understand that, in future, they will be under our control, which, subject to good behaviour on their part, will for the present be of a loose political nature.

1. For a fuller account of the murder of Williamson and Gregorson, see J.N. Chowdhury, *Arunachal Through the Ages*, (Shillong, 1982). pp. 142-143.

(3) To visit the Bor Adi or Padam village of Damroh, which the expedition of 1893-94 failed to reach. Provided the Padams behave themselves, the visit to their country will not be of a punitive nature..."¹

The expedition which began on October 28, 1911, met with no serious encounter on its way. Any attempt to oppose the expeditionary force was dealt with most severely. With the fall of the powerful village of Kebang on December 9, the active opposition of the tribe broke down.

The substance of various official reports on the primary object of the expedition was that it resulted in the punishment of the offending villages. All the men who had taken a leading part in Mr. Williamson's murder were tried and punished and practically all the looted property was restored. The power of Kebang was finally broken. The village lost a large number of its fighting men.

The result of the 'Abor Expedition of 1911' was fraught with many important political and administrative consequences. General Bower, the officer in command of the expedition, made a suggestion in January 1912 that the frontier should be divided into three sections, namely the Western, the Central and the Eastern Sections. The Deputy Commissioner of Lakhimpur, A.H.W. Bentinck, also held a similar view that the frontier areas should be separated from the Darrang and Lakhimpur districts of Assam. They seem to have initiated an action which ultimately led to important administrative reorganisation and formation of the North-East Frontier Tract. We would return to this point again in the context of administrative growth and developments.

"Incidentally, we must give credit to Mr. Bentinck who, in a rare moment of introspection, reflected on British relation with the tribes and the nature of their opposition to them. He rightly attributed it to the world of difference between the tribal system of values and the strange and utterly unfamiliar ways of the new British rulers. In his political report, Mr. Bentinck made following observations:

'It may be taken that those who visit a new tribe expecting to find an unpleasant savage will not be disappointed wherever they may go but it does not follow that they are correct... I grant also a certain surliness, but only when their fears and suspicions are aroused; it must be remembered that to the vast bulk of the people whom we visited we were utter and mysterious strangers, and that our appearance, our habits, our methods, and our designs were alike new and unintelligible to them ... Treachery has for long been branded on the

1. Sir Robert Reid, *History of the Frontier Areas Bordering on Assam, from 1883-1941*, (Delhi, Reprint 1983), pp. 225-226.

Abor that to refute the charge fully would need an examination of every occasion on which the charge had been made..... I do not mean to hold up the Abors as Bayards, but they have a code and recognises the obligations which it imposes."¹

In the wake of the expedition of 1911, topographical survey and exploratory tours on an extensive scale in the interior of Siang were undertaken by civil and military officers. In December 1912, Bentinck with a party of officers visited the Minyong area. The tour covered the important villages of Riu, Riga, Geku and Shimong. The party went up to Singging to the north. Bentinck held a meeting of the *gams* (chiefs) at Komkar, which was attended by representatives of important villages including Shimong, Damro, Riu and Pangis. He made it clear to the village representatives that all people were entitled to trade where they liked and the government was against any trade blockade. Different parts of Siang were also simultaneously visited by other British Officers. Along the course of the Yamne a party going upstream visited many Padam villages including Damro. Another touring party visited Minyong villages on the right bank of the Yamne as far as Pareng. A survey party toured to the village of Dosing, Pareng and Yuying. Captain Dunbar visited Kompong, an important village of the Gallongs. These tours helped to have a clear knowledge of the topography and establish a close contact with the Adi tribes.

Soon after the expedition of 1911 an Assistant Political Officer was posted at Pasighat. Trade posts, one at Pasighat and another in the neighbourhood of Rotung, were also established. These steps were taken to enable the tribes living in the interior areas, who were hitherto prevented by some intervening tribes from coming down to the plains for trade to have a free passage to the trading centres. Police outposts were also opened at Kobo, Pasighat and Balek. It was stated in the Annual Report for 1915-16 that a poll tax was levied on the Padam villages.

The Adis extended help to carry out the survey work along the foothills and there was an interlude of peace until it was disturbed in 1927 by a feud between the Minyongs and the Pangis, which was long standing and which again flared up in a serious form resulting in considerable loss of lives on both sides. It took an alarming shape when the Padams joined hands with the Minyongs against the Pangis whose settlements 'spread out to some extent to the poll tax paying villages and whose inhabitants were all related more or less closely, to one or the other of the contending parties.' The Padam-Minyong combination sustained heavy losses when they made an

attack on Geku village, which was stated to have been forewarned by some renegades. An attempt by the Political Officer to settle the dispute between the villages of Dosing and Yoksing (Yuying) villages on the one side and the Pangis on the other failed due to non-cooperation of the former. Opening of an Assam Rifles outpost at Pangin at this time had, however, helped to maintain peace in the area. The feud between the Minyongs and the Pangis continued for some more years till both sides were tired of the fratricidal conflict, which died out gradually from 1934-35.

In the following years, disturbances broke out in the Gallong area due to certain inter-village rivalry and raids in which the villages of Dorge, Laliang and Torajan were involved. The government dealt with the situation effectively and succeeded in releasing the captives. A fine of four *mithuns* was realised from the offending village.

Meanwhile, the British Government's policy with regard to the north-east frontier of India came under a review in relation to the current international developments. In September 1936, the Governor General wrote the following to the Governor of Assam :

'I am sure, however, that you will agree that the time has come in view of the development in the Far East and particularly to the impending separation of Burma to pay more attention to this area.'

In January, 1938, it was decided by the Government of India to form a 'Control Area' to the north of Pasighat.

In the same year, R.W. Godfrey succeeded W.H. Calvert as the Political Officer, Sadiya Frontier Tract. Under specific instructions of the Government of Assam agreed to by the Government of India, Godfrey performed an extensive tour deep into the Adi country beyond Karko in February-March 1939. He visited a large number of villages, all of which received him most cordially. His accomplishments during the tour, which were of varied nature, pertained to hearing of cases, discussion of village matters with the *gams* of Pangin, issue of orders to Karko, Riga and Pangkang to remove trade blocks, settlement of claims and land disputes amicably in Kebang (village council), settlement of cases concerning Damro and medical treatment provided to the tribal people.

Sanction was accorded by the Government of India on August 30, 1940 to the establishment of cold-weather outposts at Karko and Riga in the Upper Siang Valley. Earlier, in April of the same year, Godfrey went up the Siyom valley exploring the Gallong area. In the course of his tour, he settled a serious land dispute between the Gallongs and the Minyongs, and thus averted a feud.

On a review of the administrative measures taken in 1940-41 in the upper

1. J.N. Chowdhury, *Arunachal Through the Ages*, (Shillong, 1982), p. 146.

reaches of the Siang, the Governor of Assam observed that 'progress had been made towards the pacification of this area, that feuds had been checked, trade routes opened and our abhorrence of slavery impressed on the inhabitants.' The Governor paid a visit to this region in December 1941. At Pangin he met 370 representatives of 75 villages of the Gallongs, Padams, Minyongs and Pangis in an atmosphere of friendliness. The Governor impressed upon them the necessity of giving up the practice of slavery and removing trade blockades.

The history of Siang in the forties till a couple of years following the attainment of Indian Independence in 1947 is marked by government endeavours to exercise better administrative control over the far-flung areas, maintain law and order and develop a close relation with the tribes. With this aim in view, the Political Officer and the Assistant Political Officer undertook extensive tours in the upper Siang and Siyom valleys, proceeding as far north as Tuting and Gelling along the northern border. The villages in the Bori area were also visited. The history of this decade also indicates that the tribes showed an increasing awareness of the changing circumstances and of the necessity of co-operating with the government for common interest and benefit as well as peace and tranquillity in this region.

ADMINISTRATIVE POLICY AND DEVELOPMENTS

The administration of India's North-East Frontier now known as Arunachal Pradesh has been established and consolidated all over the territory through many decades of administrative jurisdiction and control exercised effectively by the Government up to the international boundary and the constructive activities undertaken by them for development of this tribal area.

The British Government generally pursued the conciliatory policy of the Ahoms in relation to the frontier tribes during the initial decades of their administration in the nineteenth century. It was in practice a policy of expediency devised to meet emergent situations. Following the footsteps of the Ahom rulers, the British tried to contain the tribes in their own hills and protect the people of the plains. They also, like the Ahoms, made efforts to befriend them. The political relations were, however, occasionally marred by sudden raids or outrages committed by the tribes which called for imposition of blockades, expeditions and other punitive measures taken by the government. It took a pretty long time for the British authorities to make a proper appreciation of the tribal sentiments and feelings, of their love for freedom. For obvious reason, it seems that the tribes were at first suspicious of the 'strangers' and feared that they might encroach upon their traditional rights and privileges and on their land. The severity of punitive measures, which were sometimes taken to excess, might also have made them more

sudden raids or outrages committed by the tribes which called for imposition of blockades, expeditions and other punitive measures taken by the government. It took a pretty long time for the British authorities to make a proper appreciation of the tribal sentiments and feelings, of their love for freedom. For obvious reason, it seems that the tribes were at first suspicious of the 'strangers' and feared that they might encroach upon their traditional rights and privileges and on their land. The severity of punitive measures, which were sometimes taken to excess, might also have made them more apprehensive of British intentions. They, therefore, occasionally resented visitors from outside. It is true that there took place a series of raids and feuds, murders and kidnappings but it would be extremely untrue to say that hostility and warfares are the whole of history of this period. There are also contemporary evidences of mutual understanding, hospitality, friendliness and a tradition of trade relations with the plains people of Assam.

The policy of the British Government, particularly up to the first decade of the present century, was directed generally to leave the tribes more or less to look after themselves, and not seek to establish any detailed administration in these tribal areas such as was to be found in the rest of British Indian territory. But the British authorities never failed to exercise the sovereign jurisdiction of the Indian Government where question of law and order were involved. They regulated inter-tribal relations and the relations between the tribal people of the hills and the inhabitants of the plains. They were generally inclined to 'leave the tribesmen alone' in view probably of the inexorable historical forces which were beyond their control and also the difficult and seemingly unrewarding task of administering the remote mountainous areas, at the formative stage of their rule.

The Inner Line restrictions enforced under the Bengal Eastern Frontier Regulation I of 1873 were an important administrative measure taken by the British Government to regulate the commercial relations between the frontier tribes and the plains people. The Regulation of 1873 empowered the British authorities to prescribe a line to be called the Inner Line and to prohibit any British subject living outside the area from going beyond that line without a licence. No rubber, wax, ivory or other jungle products was to be obtained from the hill areas by people from outside. They were also not to hunt wild elephants beyond the Inner Line without special permission of the Government.

Under this Regulation of 1873 a detailed description of the Inner Line

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dividing the tribal areas from the plains districts of Assam was issued. This line has been laid down along the northern, eastern and south-eastern borders of the Brahmaputra Valley. Notifications describing the Inner Line in the Lakhimpur District and the Inner Line in the Darrang District were issued in 1875 and 1876 respectively. In 1884, a revised notification regarding the Inner Line in Lakhimpur was issued. Under the Regulation of 1873 passage to the hill areas now known as Arunachal Pradesh was not permitted without a permit or Licence. This Regulation was enacted not with the intention (as is so often thought) of isolating the hill people from the plains, but to bring under more stringent control the unrestricted commercial intercourse which formerly existed between the traders from the plains of Assam and the frontier tribes, and prevent the traders from exploiting rubber and other hill products. In Lakhimpur, the operations of speculators in rubber 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 considerable difficulties. In order to prevent the recurrence of these difficulties, power was conferred on the local authorities by the regulation of 1873 to prohibit people from going beyond a certain line, laid down for the purpose, without a pass or licence. The Regulation also laid down rules concerning trade and possession of land and property beyond the line.

The Inner Line marked merely an administrative limit and that the area to the north of it was also controlled by the Government of India. The Inner Line, revised by notifications from time to time, e.g., in 1928, 1929, 1934 and 1958 still remains in force.

The murder of Williamson and Gregorson in March 1911, as narrated earlier, was an incident of far-reaching consequences. The political and administrative developments in the following years of 1912-13 brought about a definite change, as we have seen, in the government's approach to tribal problems. Extensive topographical survey and exploration of the deep interior areas, as already stated, were undertaken. These activities eventually led to the formation of new administrative units.

It may be recalled that in 1912 suggestions were made by General Bower and Bentinck, the Deputy Commissioner of Lakhimpur for a division of the north-east frontier into three sections and separation of the frontier from the control of the Deputy Commissioners of Darrang and Lakhimpur. These suggestions came into effect under the Government of India, Foreign and Political Department, Notification of 1914, which promulgated that the

Assam Frontier Tracts Regulation of 1880 would extend to the hills inhabited or frequented by Abors (Adis), Mishmis, Miris, Singphos, Nagas, Khamptis, Akas, Daflas (Nishis) and Bhutias.¹ These hill areas were separated from the then Darrang and Lakhimpur Districts of Assam, and as a result the North-East Frontier Tract consisting of the following three administrative units came into existence:

- (1) The Central and Eastern Sections, North-East Frontier Tracts,
- (2) The Lakhimpur Frontier Tract,
- (3) The Western Section, North-East Frontier Tract.

In 1914, the first and third units were each placed under the charge of a Political Officer and the second unit under the Deputy Commissioner, Lakhimpur District, in addition to his own charge. The Political Officer of the Central and Eastern Sections had his headquarters at Sadiya, while the Political Officer of the Western Section was stationed at Charduar.

In 1919, on the recommendation of Beatson Bell, 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 Lakhimpur Frontier Tract, however, continued to be known as such. This position held good till 1937 during which period certain areas were either excluded from or included in the so-called North-East Frontier Tract.

In 1921, all the frontier tracts of Assam were declared 'backward tracts' in which, under the new Government of India Act of 1919, only such laws would operate as the Governor in Council might direct. The Government of India Act of 1935 made special provisions for the administration of these hill areas upto the international boundary whereby the erstwhile 'backward tracts' were reclassified as 'excluded' or 'partially excluded' areas. In 1937, the Balipara, Sadiya and Lakhimpur Frontier Tracts came to be known collectively as the excluded areas of the province of Assam under the provision of Section 91(1) of the Government of India Act of 1935, which was given effect to by the

1. *Abor is the old name for Adis. Miris are a section of the Adis mostly settled along the foothills and the adjoining plains. Mishmi includes the Idus, Digarus and Mijus of the Lohit District. Bhutia is a general name for Bodic groups and here refers to the Monpas and Sherukpens of the Kameng and the Membas, Khambas of the Siang and the Zakhings and Meyors of the Lohit District. The Daflas are a large group spread over a wide tract stretching from the eastern half of the Kameng in the west to the eastern boundary of the Subansiri District in the east, under various local names such as Bangni, Nisi, Nishang etc. Akas are a small but prominent tribe akin to Khoas and Mijis. Naga is another 'general' name for tribal groups south and east of the Brahmaputra valley - and include the Tangsas, Noctes and Wanchos of the Tirap District. Singphos belong to Tirap and the Khamptis to the Lohit District." - See P.N. Luthra, Constitutional and Administrative Growth of the North-East Frontier Agency, (Shillong, 1971), pp. 9-10.*

Government of India (Excluded and Partially Excluded Areas) Order of 1936. Under Section 92 of the 1935 Act these excluded areas came under the charge of the Governor of Assam who administered them in his discretion under the general control of the Governor-General.

"In the year 1943, a new administrative charge was created with certain areas from the Lakhimpur Frontier Tract and the Sadiya Frontier Tract and was named as the Tirap Frontier Tract. The Tirap Frontier Tract was placed under a separate Political Officer with headquarters at Margherita. In 1946, the Balipara Frontier Tract was divided, for administrative convenience, into the Se La Sub Agency and the Subansiri Area. In 1948, the remaining portion of the Sadiya Frontier Tract was bifurcated into two separate administrative charges, namely, the Abor Hills District and the Mishmi Hills District."¹

The new administrative charges were each placed under a Political Officer. The Political Officer of the Abor Hills District had his headquarters at first at Pasighat, which was subsequently shifted to Along with effect from February 1, 1953.

"In the year 1943, it was felt that these areas should be brought under the normal administration and developed through the policy of gradual penetration of the administrative machinery. Consequently, it was considered essential that above the Governor's Secretary, there should be an Adviser to the Governor of Assam which post was accordingly created in that year directly by the Government of India. The office of the Adviser was first established in 1943 and it was concerned with the administration of North-East Frontier Tracts."²

Since 1937 the excluded areas, as already stated, were administered by the Governor of Assam through the Political Officer and the Deputy Commissioner of Lakhimpur. The Constitution of India, which came into force on the 26 January, 1950, made detailed provisions under the Sixth Schedule for the administration of the whole area now known as Arunachal Pradesh. The Constitution brought about a change in the administrative set-up of the 'excluded areas,' and accordingly the North-East Frontier Tract comprising the Balipara Frontier Tract, Tirap Frontier Tract, Abor Hills District and Mishmi Hills District was administered by the governor of Assam acting as the agent of the President of India under the provisions of paragraph 18 of the Sixth Schedule to the Constitution and Part B of the Table below Paragraph 20 of that Schedule.

1. P.N. Luthra, *Constitutional and Administrative Growth of the North-East Frontier Agency*, (Shillong, 1971), p. 11.
2. P.N. Luthra, *Constitutional and Administrative Growth of the North-East Frontier Agency*, (Shillong, 1971), p. 14.

"In the year 1951, the plains portions of the Balipara Frontier Tract, Tirap Frontier Tract, Abor Hills District and Mishmi Hills District were transferred to the administrative jurisdiction of the Government of Assam. The aforesaid areas minus the transferred plains portions of the Frontier Tracts together with the Naga Tribal Area were thereafter renamed collectively as the North-East Frontier Agency."¹

Under the North-East Frontier Areas (Administration) Regulation of 1954 the North-East Frontier Tract came to be known as the North-East Frontier Agency, and according to this Regulation the administrative units were also reconstituted and renamed with redefined boundaries. The administration of the North-East Frontier Agency was carried on by the Governor of Assam as the agent of the President of India.

Before 1950, administrative centres were opened at Pasighat in 1911 and at Along in 1948. There were winter outposts at Karko and Riga, first opened in 1940. Besides these, trade posts at Pasighat and Rotung and police outposts at Kobo, Pasighat and Balek were established after the expedition of 1911. The civil administration further extended to far flung areas in the fifties, when a number of administrative centres were set up at Yingkiong in 1950; Mechuka and Gelling in 1951; Mebo, Pangin, Mariyang and Damro in 1952; Tuting in 1953, Basar in 1955, Sille and Manigong in 1956; and Liromoba, Gensi and Payum in 1959. In this context, the extensive tours undertaken in 1951-52 by B.C. Bhuyan, the then Political Officer, Abor Hills District; K.T. Khuma, the then Assistant Political Officer, Along, and U. Hiphson Roy, the then Assistant Political Officer, Mechuka, may merit special mention in that their reconnaissance of the north-western part of Siang paved the way for establishment of administrative centres in the Mechuka region. Consolidation of the administration continued in the sixties when some more centres came up. These are Likabali and Singa opened in 1962 and Dosing and Tato in 1963.

Under the North-East Frontier Areas (Administration) Regulation, 1954 (Regulation No.1 of 1954), the Abor Hills District was renamed as the Siang Frontier Division. P.L.S. James was the first Political Officer of the Siang Frontier Division. With the coming into force of the North East Frontier Agency (Administration) Regulation, 1965 (Regulation No.7 of 1965), the administrative unit was again renamed in 1965 as the Siang District, and the Deputy Political Officer of the erstwhile division was redesignated as the Deputy Commissioner. Shri K. Banerji became the first Deputy Commissioner of the Siang District. Finally, under the provisions of the Arunachal Pradesh (Reorganisation of Districts) Act, 1980 (Act No.3 of 1980) promulgated from June 1, 1980, the Siang District has been divided into two new districts – the

1. P.N. Luthra, *Constitutional and Administrative Growth of the North-East Frontier Agency*, (Shillong, 1971) pp. 11-12.

East Siang District and the West Siang District with headquarters at Pasighat and Along respectively. Shri J.M. Tangu and Shri B.S. Kharayat were the first Deputy Commissioner of the East Siang District and the West Siang District respectively.

Epilogue

The British policy was directed towards exercising an active jurisdiction and administrative control of the government over the frontier tracts. They were primarily concerned with the questions of law and order, which they tackled effectively. But their policy had very little to do with the welfare of the people. There was hardly any emphasis on improving the living conditions of the tribal people. The British authorities were apparently indifferent to the developmental aspects. The overall effect of the policy tended to seclude the tribes. As a result, the people continued to live in a state of isolation and distress during the British regime.

The barriers of isolation were broken in 1947 when India won freedom. The national upsurge for freedom had its ripples in Siang. It is important to note that several leading personalities of the Adi community had participated in the freedom movement.

Late Shri Moji Riba and his younger brother Late Shri Moje Riba of the Daring village in the Basar Sub-division of the present West Siang District were the torch-bearers of the Indian freedom struggle in Arunachal Pradesh. Led by the Riba brothers a good number of the Adis joined the Indian National Congress. The Ribas and a score of Congress members were arrested and kept by the British under custody as a punishment for their active participation in the freedom movement and hoisting of the Congress Flag in a number of villages. Both Shri Moji Riba and Shri Moje Riba were awarded *Tamra-Patras* for their important contributions as freedom fighters.¹

A new era of progress and developments in all spheres of tribal life began with the attainment of independence. It brought about a fundamental change in the government policy in regard to tribal administration in the north-east frontier. There could be no longer any question of leaving the tribes in isolation or neglecting them in a free welfare state. They were given the full rights of Indian citizenship, and their socio-economic, cultural and educational interests were to be promoted with special care according to the specific provisions of the Constitution of India for the Scheduled Tribes and national objectives for integration and development.

This was entirely a new approach to the tribal problems, based on the policy formulated by the late Prime Minister Jawaharlal Nehru. He said, 'It was

not possible or desirable to isolate them...', 'Development in various ways there has to be, such as communications, medical facilities, education and better agriculture'. 'The Government of India', he declared, is determined to help the tribal people to grow according to their own genius and tradition; it is not the intention to impose anything on them'. 'Development', he emphasised again, 'must be according to their own genius and not something that they cannot absorb or imbibe'.

The tribal people in general came forward to associate themselves with the execution of the new policy of the National Government in which they saw an expression and fulfilment of their hopes and aspirations for a better and prosperous life. It opened immense opportunities for them for development and advancement, and they have availed themselves of the opportunities with a remarkable ability to adjust themselves with the changing conditions.

Under the provisions of the North-Eastern Areas (Reorganisation) Act of 1971, the erstwhile North-East Frontier Agency was formed as an Union Territory on January 21, 1972, the date from which the territory came to be known as Arunachal Pradesh. According to the Constitution-37th Amendment Act 1975, the Territory has been provided with a legislature from August 15, 1975. There is now an elected government in Arunachal Pradesh formed by the representatives of the people, which is a fact of great historical importance and a proof in itself of the progress achieved by them since the Independence of India. The Union Territory of Arunachal Pradesh has attained the statehood, on the 20th February, 1987.

Shri Prem Khandu Thungon was the first Chief Minister of Arunachal Pradesh who was succeeded by Shri Tomo Riba as the next Chief Minister. The present Chief Minister is Shri Gegong Apang. Shri Riba and Sri Apang are both from Siang, belonging to the West Siang District and East Siang District respectively.

1. For details see 'A Freedom Fighter Speaks' by C.R. Barpatragohain published in *Arunachal News*, September 1978, pp. 24-28.

CHAPTER III

PEOPLE

Population

The total population of Siang comprising the districts of East Siang and West Siang is 1,89,763 souls according to the 1991 Census. Barring the two towns of Pasighat and Along, the entire area is rural. The density of population per square kilometre is 15 in the East Siang District and 7 in the West Siang District. The total of rural and urban population of East Siang is 85,460 and 14,825 respectively and the total of rural and urban population of West Siang district is 78,680 and 11,098 respectively. The composition of population according to the 1981 Census is as follows.

<u>East Siang District</u>	<u>Rural</u>	<u>Urban</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Total Population	61,312	9,139	38,097	32,354	70,451
Scheduled Tribe	48,463	2,265	25,515	25,213	50,728

Population

<u>West Siang District</u>	<u>Rural</u>	<u>Urban</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Total Population	66,090	8,074	38,797	35,367	74,164
Scheduled Tribe	59,546	2,777	30,922	31,401	62,323

Population

The Scheduled Tribes constitute 72 per cent of the total population of the East Siang District, and 84 per cent of that of the West Siang District. The Scheduled Caste population is only 259 persons in East Siang and 307 persons in West Siang.

The decennial growth rate of population from 1971 to 1981 is about 43.40 per cent in the East Siang District and 25.17 per cent in the West Siang District.

Siang is the homeland of the Adis and some other small tribal groups. The indigenous population of the area is almost wholly constituted by different Adi groups. The Gallongs in West Siang, and the Minyongs, Padams and Shimongs in East Siang are numerically the most prominent groups. In the remote northern part of the West Siang District along the international boundary live the Membas and Khambas, the two small Buddhist tribes, and of them the Membas are much the larger group. Besides them, there in both parts of Siang, east and west, live various other groups of people, who have come from different parts of India in connection with government services, public works, trade and business etc.

In the table below is shown the distribution of population according to the

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sub-divisions and circles as enumerated in the 1981 Census:

District/ Sub-division/ *Circle	Scheduled Caste Population	Scheduled Tribe Population	Total Population
1	2	3	4
EAST SIANG DISTRICT	259	50,728	70,451
Pasighat Sub-division	258	36,436	55,170
1. Pasighat Circle	230	15,068	26,181
2. Pangin Circle	-	4,668	5,951
3. Mebo Circle	18	6,925	8,187
4. Boleng Circle	4	5,417	6,999
5. Nari Circle	6	4,358	7,852
Mariyang Sub-division	1	14,292	15,281
1. Mariyang Circle	1	9,716	9,922
2. Yingkiang Circle	-	2,809	3,564
3. Karko Circle	-	1,767	1,795
WEST SIANG DISTRICT	307	62,323	74,164
Along Sub-division	216	36,824	43,881
1. Along Circle	198	16,420	22,321
2. Liromoba Circle	9	3,457	3,548
3. Payum Circle	-	1,742	1,798
4. Rumgong Circle	2	5,270	5,488
5. Kaying Circle	-	2,388	2,737
6. Darak Circle	4	4,017	4,354
7. Tirbin Circle	3	3,530	3,635
Basar Sub-division	46	13,500	17,389
1. Basar Circle	36	7,314	9,599
2. Gensi Circle	6	2,191	2,519
3. Likabali Circle	4	3,995	5,271
Mechuka Sub-division	9	6,766	7,050
1. Mechuka Circle	8	2,427	2,644
2. Tato Circle	1	1,287	1,305
3. Manigong Circle	-	3,052	3,101
Tuting Sub-division	36	5,233	5,844
1. Tuting Circle	36	3,395	3,849
2. Gelling Circle	-	892	927
3. Singa Circle	-	946	1,068

* The Geku Circle of Mariyang Sub-division and the Ruksin Circle of Pasighat Sub-division formed after the 1981 Census enumerations are not shown in the table.

TRIBAL GROUPS OF POPULATION AND THEIR DISTRIBUTION

Siang is almost entirely populated by the Adis. The other tribes are the Membas and Khambas, who inhabit only parts of Mechuka and Singa circles and the area around Gelling to the far north. The Mishings (Miris) live in the foothill areas. A small number of the Idus live in the extreme north-east corner of Siang.¹

The Adis

The Adis were formerly referred to as 'Abor', a rather derogatory word interpreted variously as meaning 'unruly', 'disobedient' or 'savage'. The Adis had a strong disliking for this foreign appellation given to them, which they quite reasonably considered unjust and abusive. They urged that they should be properly called Adi denoting hill people, and this term has been accepted and recognised as the common name of all groups of the Adis.

The word Adis comprises a large number of tribal groups, 'united by a language that in spite of dialectical variations is fundamentally everywhere the same, and by a similar culture and temperament'. The Adis are broadly divided into two sections - the Minyongs, Padams, Shimongs, Milangs, Pasis, Karkos, Ashings, Pangis, Tangams and Boris may be grouped in one section, and the Gallongs in the other section, with which may be associated the Ramos, Pailibos and Bokars.

The character and temperaments of the Adis were described variously by the early British writers. They were considered a very powerful people, proud and plain-spoken, brave and of independent character, suspicious of strangers and at the same time friendly, hospitable and social, agricultural rather than warlike and kind-hearted. Today they are regarded as a progressive community, a co-operative and resourceful people capable of making great advances and achievements. Verrier Elwin described Siang as 'one of the most fascinating and exciting parts of NEFA' and said, 'the people are charming, hospitable and filled with a zest for life: tribal institutions still retain their vitality. It is a country of song and dance, of hard eager work, of fine spinning and weaving'.

Physically, the Adis on the whole are of 'the Dolichocephalic Mongoloid type'. L.A. Waddell¹ was the first to take somatometrical measurements of the Adis. Sachin Roy² made a detailed study of the physical characteristics of some tribal groups of the Adis, namely the Padams, Minyongs, Pasis, Milangs, Shimongs and Ashings. His studies indicate that the Adis are mainly of 'short' stature with a tendency towards 'medium' with 'clear black hair, dark brown

1. See L.A. Waddell, *The Tribes of the Brahmaputra Valley*, (Delhi, Reprint 1975), pp. 15, 74.

2. Sachin Roy, *Anthropometry of the Adis*, (Shillong) pp. 7, 99, 101.

1. A detailed account of the Idus of the Dibang Valley will be found in the Lohit District Gazetteer.

eyes, the majority having a straight eye slit but percentage of slight oblique eyes is not altogether negligible, having a trace of the Mongolian fold with a medium opening of the eye-slit, inverted oval faces, with medium thick lips'. The skin colour varies from dark brown to brown with a gradual tendency towards the lighter shades. The Ashing and Shimong women are comparatively fairer. 'The majority of the Adis have a straight nasal bridge with a medium to deep root of the nose'.

The Gallongs have well-built features. "Men are of medium stature; women are short. Prognathous faces are rare. The presence of the epicanthic fold is common. The canthi become more and more covered and the obliquity of the eye more pronounced, as we proceed toward the northern areas. Nose is broad without much depression. Eversion and thickness of lips are uncommon ... Ecological conditions, nature of the country, amount of hard labour, necessity for climbing hills, all amalgamate together to give the people a stout, sturdy and proportionate figure. Physically, both the sexes are strong and hardy. In spite of the fact that there is the serious problem of under-nutrition, their bodies are well-built and fully developed. They can afford to do the hardest of labour which actually is demanded of them in cultivation of their fields"¹. The complexion is dark brown to brown tending towards fair. The Gallongs are fine and impressive in physical appearance.

The Adis taken as a whole are good-looking, sturdy and vigorous. G.D.S. Dunbar writing of the Adis about seventy years ago said that 'some exceedingly well-made specimens of manhood have been seen among them... The Padams are of fine physique.'

The distribution of Adi tribes interspersed over a fairly large area is almost regional if a line is drawn from north to south through about the middle of Siang along the boundary between the districts of West Siang and East Siang. The Gallong section in the West Siang District inhabits the area roughly between the Subansiri and the Siang, while in the East Siang District the other section represented more numerous by the Minyongs, Padams and Shimongs occupies the Siang valley extending to the lower reaches of the Dibang river. The areas of settlement of the two section of tribes, though well-demarcated, do not, however, strictly follow the boundary line between districts of East Siang and West Siang as for example, there are Gallong villages in East Siang, while the Ashings are settled in West Siang.

Among the Adis, the Gallongs as a group are renowned and the most numerous. The sub-divisions of Along, Basar and Yomcha of the West Siang District are inhabited predominantly by them. A branch of the Gallongs is settled in the Daporijo Sub-division of the Upper Subansiri District, where

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), p. 12.

they are mainly concentrated in the Dumporijo circle along the left bank of the Subansiri river. There are Gallong villages also in the East Siang District mostly in the Nari Circle and some in the Pasighat Circle. The Gallongs are one of the most advanced tribal communities of Arunachal Pradesh. They are now found at the high level of government services and in other pioneering activities.

The Minyongs occupy the area on the right bank of the Siang and a part of the valley between the Siang and the Yamne. Among the principal Minyong villages are Kebang, Renging, Pangin, Komsing and Rotung in the Pangin circle and Riga in the Dosing circle of the Pasighat Sub-division. The Minyongs, who are numerically more conspicuous amongst the Adi tribes living in the East Siang District, are a strong and courageous people mentioned frequently in the history of British-Adi relations and known today as one of the most progressive tribes of Arunachal Pradesh having a great village solidarity.

The Padams are another very important tribal group of the Adis. They are mainly concentrated in the Mebo circle of the Pasighat Sub-division and also a part of the Mariyang circle of the Mariyang Sub-division. Damro is the famous northernmost Padam village on the left bank of the Yamne. The Padam settlement extends in the east to Dambuk and Roing circles of the Dibang Valley District. Formerly known as Bor Abors or 'great' Abors, the Padams figure very prominently in the history of the British days for their bravery. Father N.M. Krick writing in 1853 said, "The Padam is very active, jolly, a lover of freedom and independence, generous, noble-hearted, plain-spoken, more honest than the average Oriental, not over-moderate in eating and drinking, at least as far as quantity is concerned. I have not lived long enough among them to be able to speak of their morality. I confess I have never been able to discover what they understand by modesty; they seem to possess much of the child's simplicity, and Mimbo (Mebo) is undoubtedly less corrupt than Paris."¹

Today they are an advanced group of people and a good number of them are holding high positions in government service.

The Shimongs are an active and energetic people, well-known as a numerous group of the Adis. They are concentrated in the Yingkiang circle of the Mariyang Sub-division along the left bank of Siang.

The Milangs inhabit the Mariyang circle of the Mariyang Sub-division between the upper reaches of the Yamne in the north and the Sidip in the

1. Verrier Elwin, *India's North-East Frontier in the Nineteenth Century*, (London, 1962), p. 249.

South. They form quite a sizeable group of the Adis.

The Pasis, an advanced and enterprising group of the Adis, are concentrated in the Pasighat circle. Pasighat, the headquarters of the East Siang District, owes its name from them. They have also one solitary village in the Mariyang circle known as Adipasi.

The Karkos are settled in Karko circle of the Mariyang Sub-division on the right bank of the Siang.

The Bokars occupy almost the whole of Manigong circle of the Mechuka Sub-division in the remote northern region of the West Siang District along the international boundary. They are comparatively a large group of the Adis.

The Pailibos inhabit the Tato circle and the Ramos live in the Mechuka circle of the Mechuka Sub-division.

The Ashing settlements lie mostly in the Tuting circle to the extreme north of the West Siang District.

The Pangis are confined to the right bank of the river Yamne in the Mariyang circle.

The Tangams of the Tuting Sub-division are a small tribal group. They live along the upper reaches of the Siang and the right bank of the Yang Sang Chhu in the north-eastern extremity of the West Siang District.

The Boris inhabit the Payum circle of Along Sub-division. They are a small group of people living at the higher elevations of hills in the central region of the West Siang District.

The Membas and Khambas

The Membas and Khambas, as already said, live remotely along the northern border of the West Siang District. The Membas inhabit a part of the Mechuka circle and the area around Gelling, while the Khambas of the Yang Sang Chhu valley occupy a part of the Singa circle of the Tuting Sub-division. The Membas are by far a larger group than the Khambas. They are two handsome and gentle Buddhist tribes having ethnic affinities probably with the Monpas of the West Kameng District.

The Mishings (Miris)

The Mishings, also known as Miris, are a well-known tribal community living along the foothills belt of Siang, mostly in the East Siang District, adjoining the plains of Assam. They are also settled in various parts of Assam near the banks of the Brahmaputra and the Subansiri rivers. According to the 1971 Census, there were 1,331 Mishings/Miris in the erstwhile Siang District. The Mishings have close ethnic affinities with the Adis. They are progressive farmers practising settled cultivation in the level areas inhabited by them. The Mishings are a hospitable people.

Language

According to Grierson's linguistic classifications, a number of languages spoken in Arunachal Pradesh from the West Kameng District to the Lohit District are put together under the 'North Assam group' of the 'Tibeto-Burman speech - family'. This affiliation is obviously geographical rather than philological. "The North Assam group is not a well defined philological group with salient grammatical features distinguishing it from other Tibeto-Burman forms of speech. The Abor (Adi) - Miris and the Daflas (Nishis) speak dialects which are so closely related that they can justly be considered as one and the same form of speech".¹ The Adi language belongs to what may be termed the Central Sub-group of the 'North Assam group' which dominates the linguistic topography of Arunachal Pradesh. The language comprises a number of dialects, and it is perhaps the richest in Arunachal Pradesh in dialectal variations. The major Adi dialects are Gallong, Minyong and Padam. A dialect in a particular linguistic area may vary from one group of villages to another in phonetic peculiarities. There may be sub dialects of a dialect as in Gallong.

The Adi language is relatively agglutinative in which relationship between principal words in sentences is expressed by means of affixes, generally suffixes and infixes. Distinction of reciprocity, repetition etc. are conveyed by the addition of affixes.

The Adi language is free from inflectional complexities. 'Among the consonants, retroflexes are absent and alveolars are used instead of dentals. Phonetic changes are noticed in nasalization of final plosives before following nasals and changes of surds into sonants and sonants into surds, according to the nature of the sounds that follow'.

A characteristic feature of the Tibeto-Burman languages is that they are largely monosyllabic. 'But in Adi, words, with two or more syllables are far more common than words with single syllables'.

The Tibeto-Burman languages are said to evince a difficulty in forming words for abstract ideas. But Adi has got a definite system of forming abstract nouns from verbs and adjectives'.

Adi Literature : "The Adi language till recently was without any script. But it is rich in oral literature, both religious and secular. The religious literature is represented mainly by rhapsodies known as *abangs* relating myths of creation, origins of social institutions and the original history of the people. The exact number of *abangs* is not yet known and the collection may be said to have merely started. One of them deals with the origin of the *moshup* (bachelor's dormitory for boys, a very important social institution of the Adis). It is divided into three sections. The first narrates the creation of

this world and the titanic struggles between the originator of the human race and his adversaries. In the second part, it deals with the progress of the race and the development of agriculture and war. In the third, it recounts how the *moshup* came into being and stresses its importance in the social structure of the Adis.

"The *abangs* may be compared with the Puranas of the Sanskrit literature and the sagas of the Teutons. They are written in an archaic esoteric language which is unintelligible to the uninitiated layman. They exist in the memory of a special class of Miris and even among them, only the most experienced and learned remember them correctly, and understand and can explain their exact significance...

"More sublime in tone are the funeral hymns known as *penge*. These are traditional compositions written in rhythmic prose and are endowed with the simple grandeur of Biblical psalms. In them, the soul of the deceased is directed along the path of the land of the departed and in this, they resemble the Vedic funeral hymns, especially the famous *Setu sāma* and the Tibetan Book of the Dead..."¹

Ponungs are lengthy ballads of the origin of things and the Adi race as narrated in the *abangs*. These popular ballads are sung to the accompaniment of dances held on various religious festivals. Each *ponung* is known according to the festival in which it is performed.

Abes may be treated as the Political literature of the people. They are the collection of introductory speeches delivered by *kebang-abus* (members of a village council) when the *Kebang* (council of village elders) is in session.

The traditional Adi literature has been transmitted orally by generations of Miris, who are a class professional rhapsodists. Unfortunately, this class is now gradually fading out as a result of the spread of modern education and socio-economic developments.

None of the Adi dialects has a script of its own. They are now written in Roman script or in a modified form of Devanagari script.

The Memba and Khamba dialects belong to the Bodic group of the Tibeto-Burman languages which has a Tibetan script.

Among the other Indian languages spoken in Siang, Assamese, Hindi and Bengali are numerically important, but the use of these languages is confined mostly to government employees and people engaged in trade and commerce, public works etc. A colloquial form of Assamese used by the indigenous people serves as a medium of speech between different tribes as well as between them and the other groups of people. A form of broken Hindi is also used for this purpose. English is the official language and also the medium of

1. G.A. Grierson, *Linguistic Survey of India*, Vol. III, Part I, (Delhi, Reprint 1967), p. 568 (the words within brackets are ours).

1. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), pp. 45-46.

instruction in educational institutions.

Religion

The religion of the Adis comprehends a rich variety of ideas, beliefs and faiths so profound, complex and subtle that it is hardly possible for us within our limited scope to make a full and just treatment of the subject with proper understanding and objectivity. However, an attempt may be made to indicate some of the important features of the religion.

There is apparently an element of fear or helplessness in the genesis of all religions. The Adis have been historically ordained to live in a most difficult and formidable mountainous country. For centuries they lived in an environment of some anxiety and insecurity. A fear of lurking dangers, natural calamities, epidemics or sudden misfortunes sometimes haunted them. It had been for them a relentless struggle with harsh and inimical surroundings. They suffered and died of strange and irremedial diseases. Yet, they did not break down. They faced the hostilities of nature with courage and succeeded in scraping out a living. There were also compensations for a hard life. The grandeur and loveliness of nature gave them solace and filled their mind with a sense of awe and wonder, an admiration for great and beautiful things. The environment was not wholly dismal, it also bestowed on them many natural gifts for sustenance.

The religious concepts of the Adis developed in the process of their psychological and intellectual adjustments and reconciliation with the environment have two distinct features - a belief in the existence of a host of spirits, good or evil, generally called *Uyu* or *Wiyu* and a conception of a Supreme Being personifying eternal truth. They composed myths to seek an explanation of the mysteries of nature, which they endowed with a spiritual quality. The mythology of the Adis is replete with ideas and imaginations of the supernatural and creation as embodied in their *abangs* or rhapsodies. "Myth is regarded as representing metaphorically a world-picture and insight into life generally and may, therefore, be considered as primitive philosophy or metaphysical thought. If this is true, as I think it is, it means that the NEFA tribes have their own philosophy of religion, even though it is expressed in poetic or metaphorical form. In the tribal Puranas, as we may call them, we find a strong sense of history, a pride in the descent of the race from a great ancestor, the record of heroic deeds and, most interestingly, traces of a belief in the value of supreme self-sacrifice for the good of mankind."¹

The myths of various groups of the Adis have an essential unity of ideas.²

1. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), p. 212.

2. See Verrier Elwin, *Myths of the North-East Frontier of India*, (Shillong, Reprint 1968), pp. 15-16, 96-97.

Some of these may be related in this context.

Gallong : 'In the sky were the old man Puk and his woman Yuk. At that time the earth was covered with water. The prawn and the crab tried to dry it up. The prawn used his antennae to collect the rubbish, leaves, grass and bits of wood that were floating on the surface and the crab dug a deep pit down below. The water poured into the pit and the earth appeared. The prawn's pile of rubbish turned into mountains.

But the earth was very soft at first. Then the Sun and the Moon came up and hardened it by their heat. Puk and Yuk looked down from the sky and saw the earth bare and dry : there were no trees, no grass. Puk said to his wife, "There is nothing green there : water the earth that grass and trees may grow." Yuk objected. 'How can I water the earth ?' she said. In a temper she pulled up her cane-girdle and exposed herself.

Now her parts were bright as the Sun and they flashed across the sky as lightning. Puk too was angry, and he beat his pipe on his water-tube and made the sound of thunder. Then the rain fell and the earth was green.'

Minyong : 'At first all was water : the earth was below. Even the rocks were soft as wet mud. Kayum-Sedi-Nane-Wiyu looked on the water everywhere and tried to make the earth, but he could not. He found a spirit, Kayum-Polung-Saboo-Wiyu, who had the form of a great mithun, and said to him, 'Make a pit with your horns that the water may flow into it.' The mithun-spirit dug such a pit and all the water drained away and the earth appeared.

There was a Wiyu, Sedi-Irping-Puing-Idum-Botte, who had lived always on the face of the waters. When they dried up, he had nowhere to live and he died. His corpse turned into a mountain. From his bones came every kind of tree, from his hair the thousand grasses, and they spread as forest over the earth.

Men went to cut trees and grass on the hills, at the beginning as they do now. If they do not sacrifice to Kayum-Polung-Sabbo and Sedi-Irping-Puing-Idum-Botte, these Wiyus get angry and try to turn the world again to water by shaking it'.

Dr. Elwin's comment on these myths about creation of the world is significant : 'It is remarkable that people who have never seen the sea nor even, so far as we can tell, large sheets of water of any kind, should have devised the idea of a primaeval ocean from which all things have emerged. The tradition, of course, is as old as the Upanishads, several of which declare that the original material of the world was water.'

'In the days of yore, gods, men and animals lived all together without any distinction between them.' This idea pervades a large number of myths. There are also spirits who influence the destiny of man. Some of them are malevolent while the others are benevolent.

The evil spirits are known among various Adi groups by a special name *Epom*. It is the *Epoms* who are at enmity with man. "There is an amount of vagueness about this term. Some are of opinion that it is the name of one individual spirits, while others opine that it designates a class. It would be more plausible to treat the term as the name of an undefined spirit of the wilderness, that assumes shapes at will and causes death by accidents. Its different manifestations also are called *Epom* and may have in many cases some special names attached to it. This may have given rise to the idea of a family of *Epoms*. The primeval forests alive with a thousand strange and uncanny sounds and full of hidden unknown dangers suggested to the early Adi mind the existence of an unsubstantial being the *Epom*. None know what it looks like. It is just like the wind they say but capable of taking any form it chooses and what man sees or hears of it are its disguises. As a familiar figure it entices its victim to his destruction. A laugh draws a curious man to his doom. A man falls down a tree or a precipice unaccountably; a mysterious attraction lures him to deep water and drowns him. A branch of a tree falls unexpectedly on him and crushes him to death; a rock rolls down as if of its own accord and smashes him under its weight; all these are the doings of the *Epom* and its manifestations."¹

There is another group of spirits which cause diseases and spell death through them. Allied to them there are more powerful spirits responsible for causing fatal epidemics. These spirits, known as *Pulitalam* according to Haimendorf, are very much dreaded by the people.

The Adis have also a belief in the disembodied souls of men, who die unnatural death and do not receive proper funeral rites and offerings. Such souls turn into evil spirits called *uram*. They hung about their former earthly abodes and work all sorts of evil on the inmates. 'Nipong, the unquiet soul of a woman who died during pregnancy, is the most implacable and harmful of all the *urams*'.

According to the beliefs of the Gallongs, the spirits residing in the cultivation fields and the granaries are very influential. They take care of their cultivation and help to get a good yield. Of these spirits, *Pirku-Pirte*; *Liku-Lite* and *Pinku-Pinte* are the most influential. Sacrifices are offered to propitiate them. If they do not receive the offerings due to them before clearing of jungles, they are offended and do harm. *Chute-Gamte* and *Ite-Boite* are the important house spirits, who look after the welfare of inmates. They are invoked and given their due shares when sacrifices are made to other spirits. Among the water spirits, *Jeru-Poru*, *Lipe-Pompe* and *Kiru-Ramro* are

most venerated, for no fish will be available against their will. Similarly there are spirits in the jungle, in the air and sky and in the underground. 'All these spirits dwell always in pairs, the first being the husband and the second his wife. Life of the spirits in their own world, is similar to that of human beings, though they are more powerful than the latter.'

Now, the belief in the existence of an invisible world of spirits is not peculiar to the Adis, or for that matter typical of any tribal people, but is more or less common to even world religion in their ritualistic and popular forms. As observed by Dr. Elwin, 'similar conceptions are to be found in popular Hinduism today, and for centuries the sable wings of Satan overshadowed the sunlit teachings of Jesus Christ. Another author has remarked, "It is little wonder, therefore, that in the midst of a paralysing sense of insecurity, the Adi mind imagined itself as beset by an invisible world of hostile spirits of all kinds."¹ But the Adis do not conceive of the supernatural world as merely a domain of evil spirits, who are to be appeased with appropriate sacrifices. They also have a conception of infinitely powerful spirits, who are favourably disposed towards man and want him to observe the rules of conduct scrupulously.

The Adi religion transcends into a far higher level of theology than the so-called spiritism or animism. An important aspect of their religion is the idea of the dual deities or the deities in pairs. The following myth of the Minyongs is a beautiful illustration of this duality.

'Formerly Sedi, the Earth, and Melo, the Sky, lay close together, for they were wife and husband. But when Polung-Sabbo, the mithun, was born and wandered over the hills, his horns hit the clouds and in his anger he tossed them away, far above the Earth.'

'But afterwards, when the dry land appeared, Sedi desired to return to Melo, to be one with him again. As she was raising her body towards him, Doini, the Sun, and Pollo, the Moon, came out and there was light. Sedi was ashamed and could go no farther. That part of her which was reaching towards her lord, the Sky became fixed forever, as the great mountains.'²

The myth of Sedi and Melo is suggestive of the creation of the earth. Their husband and wife relationship represents the male and the female principles in creation, or in other words the procreative power of nature. In the words of Dr. Elwin, "The NEFA stories of the origin or creation of the word, the sky and the earth, and the heavenly bodies have an almost Miltonic grandeur of conception. Earth and sky are lovers and when the sky makes love

1. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), p. 234.

1. J.N. Chowdhury, *A Comparative Study of Adi Religion*, (Shillong, 1971), p. 37.
2. Verrier Elwin, *Myths of the North-East Frontier of India*, (Shillong, Reprint 1968), p. 28.

to the earth every kind of trees and grass and all living creatures come into being. But the lovers must be separated, for so long as they cling together, there is nowhere for their children to live.

The Adis have in their religious pantheon powerful deities and high gods, who are venerated as creators and sustainers of the world. The idea of divine manifestations behind the natural phenomena has led them to personify different aspects of nature with distinct characters and qualities.

"It may be generally said that, in the distinction which the Adis make between lesser spirits, mostly to be dissuaded from doing harm by means of propitiatory sacrifices, and supernatural beings credited with the creation of the natural order of things and not dependent on sacrifice, they take a great leap over rudimentary spiritism or animism. For instance, Doying-Angong is such a god who does not need any offerings of food. As Haimendorf puts it, 'he liked men to make such offerings as a song of respect'. What is more important, however, is that the question of the moral order of things is associated with such divine beings. While they have in their custody the life-giving blessings in the form of timely rain and good harvest, they are wont to take offence at moral transgressions on the part of their protege. Most of the prayers, we are told, begin with invocation of Doying Angong who is apparently credited with the power to grant good harvest and other boons. But he is at the same time the moral governor who keeps watch over the doings of men.

"While pointing out that the Adis are a practical race and too prone to weigh everything in terms of loss and gain, Sachin Roy heartily admits that invocations at the beginning of *kebangs* and ordeals are some of the most sublime utterings in the Adi language. They are prayers offered to the highest deities at a time when the moral tune of the human soul is pitched to the highest. In them one feels the spirit of submission in its full sincerity'.

"Haimendorf also noted the same belief in the exalted moral stature of Doying-Angong who 'could see everything'. It is believed that certain offences such as clan-incest or breach of customary law arouse the wrath of Doying-Angong. Invocations are addressed to him at expiatory feasts, under the guidance of the *kebang*, praying for condonation of the crime. In other interpretations, Doying-Angong being placed at the very beginning of all things with no part in the creation, he cannot be credited with active intervention in the mundane order. This position of the supreme governor is ceded to Sedi-Melo (earth-sky-deity) whose eyes are Donyi(sun) and Polo (moon)"¹.

1. J.N. Choudhury, *A Comparative Study of Adi Religion*, (Shillong, 1971), pp. 109-110

The Minyongs, as noted by Dr Haimendorf, believe in a supreme sky god called alternatively Doying-Angong and Doying Bote. Of his different attributes, Doying Bote is also referred to as Father Sky. Now, this appellation is somewhat perplexing in that Melo is the sky deity in the dual conception of Sedi-Melo. It has, however, been said that 'among the innumerable gods and goddesses of the Adis, Doying-Bote occupies the highest throne.' He is a male deity known as 'Sedi Didong Doying Bote' or simply 'Doying Bote' symbolizing in a way, perhaps, the beginning of all creations.

Another female deity of ambiguous character is Shidking Kede. 'She is considered the mistress of the earth as a whole. But as she is always invoked along with Doying Bote, she should preferably be placed in the same category as he.' This again creates some difficulty in regard to the identification of various earth deities as well as the determination of their position in the hierarchy of supernatural beings. The compound deity Sedi-Melo is sometimes credited with the creation of the earth and sometimes, identified as the earth and the sky. Moreover, 'Universal motherhood and love' is attributed to a deity addressed as Kine-Nane, who is associated with agricultural productivity.

In his description and characterisation of the Adi religion, the author of the 'Aspects of Padam-Minyong Culture' writes, "The conceptual structure of their universe is pyramidal with animatism at the base and supernaturalism at the top.....And the final traits of materiality gradually disappear as one goes up the hierarchy from Donyi Polo upwards till one reaches the apex in Keyum who is a curious mixture of the paradoxical concepts of existence and non-existence - an approximation of nothingness... To them the innumerable concrete forms of the material world merge imperceptibly into a formless primeval energy"²

The religion of the Adis seems to have attained to a remarkable height of philosophical abstraction in their conception of a supreme reality represented by Keyum, who is 'unknown and unknowable'. According to Dr Elwin, 'Doini-pollo is not indeed the creator or the prime mover of creation. That dignity belongs to the enigmatic Keyum, the Great Mother whose character and activity is shrouded in the mists of antiquity, who is not worshipped, who does not intervene in human life and who is but rarely remembered except in the great genealogical songs of the Miris (a class of professional rhapsodists)... From Keyum descended a line of mysterious beings down to Pedong Nane, the living rock from whom Wiyus, men and animals were born.'

The primal cause of creation is obviously attributed to Keyum, who is also

1. See Oshong Ering, 'Some Adi Myths,' published in *NEFA Information*, March 1969
2. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), pp. 241-243.

sometimes called the Great Mother. Sedi-Melo, the compound deity, is the first to come into being from the womb of the enigmatic Keyum. By another tradition, Sedi, the primordial earth, is derived from Umseng who was born of Keyum. Melo, the sky, was her brother and, as there were no others, the creation process began with them. 'According to the Gallongs, the supreme creator is Sisi which is their name for the mother earth or Sedi.'

Of the many offsprings of Sedi-Melo, a female deity called Pedong Ane or more commonly Pedong Nane, mentioned earlier, is important, 'who in a sense stands last in the line of creators'. She has been variously described as 'Rain Mother', 'rain that descends from heaven and links earth to the sky in a chain of existence', 'the great grand-daughter of Sedi-Melo' and as prolific 'as Sedi-Melo in creation'.

A special kind of *abang* (mythical song) called *bari* by the Minyongs and *Yane* by the Gallongs narrates the chain of creation from Keyum. This is sung by the Minyongs as follows:

Keyum kenmange yayange ko
 Kero kamnge yayange ko;
 Sedi dimyange myane ko,
 Melo lomyange myane ko;
 Keyum kenmange yaya namde,
 Kero kamange yaya namde;
 Sedi jimipe jyanya lenkai,
 Keyum monepe repin repyon lemka;
 Doni aji takam ngolu,
 Dongor olo takamngolu;
 Sedi gordunge ketulo;
 Aji komjinge reyi dung,
 Olo dokpange sisa dung.
 The lines as translated mean:

'In the beginning there was emptiness in this universe. The unknown of the unknown and unseen of the unseen, the infinite of the infinite started throwing out an ethereal vibration or friction. This then shattered the eternal silence and filled the emptiness with waves of ethereal vibration. The dirt *Sedi Dimuange Myane Ko* accommodated and turned in to earth. In the beginning the earth was soft but in course of time it became hard. The earth was considered as female. The *Melo Lomyange Myanie Ko* became the sky and was considered as male. From the union of *Sedi* (earth) and the *Melo* (sky) life, star, planet and animals appeared. Later *Doni Aji*, a female offspring and *Dongor Alo*, a male offspring was born from them. Both the offsprings began

to stay together on the earth. All the human beings were the children born and brought up in the divine home - the earth (*Sedi*).¹

The world is conceived here as originating from Keyum, and unknown and infinite cosmic power. Sedi, who was the first to appear from the unknown, and is identified with the earth; is the Supreme Creator according to the traditional faith of the Adis. The world in this sense is the manifestation of Sedi. In many myths Sedi-Melo, the dual deity are credited with the creation of the world. 'In their creative effort they remained united as a conjugal pair and were separated when Donyi and Polo chased away darkness that enveloped the universe before.' The origin of man is also traced back to the creators of the world through a complex genealogy of mythical beings Donyi-Polo, Donyi the Sun and Polo the Moon, sometimes conceived as a duality, is regarded by all the Adi groups as a great divinity. Donyi-Polo is not something which may literally mean simply the sun and the moon, he is revered as a celestial being who is 'the great witness in the sky', the upholder of truth. "In the border land stand Donyi Polo the Sun-Moon duality. They are not creators themselves but stand aloft in an ethical grandeur above the rest. They may be taken to represent the Adi idea of moral deities who watch over the maintenance of law and order in the universe. Donyi and Polo are endowed with light that illuminates the world and lifts the cover of darkness and are favoured with a position high above in the sky to overlook all. They are also extremely regular in their courses across the heavenly expanse. Naturally they are looked upon as the custodian of law and truth. That is why they are invoked in the beginning of *kebangs* on disputes to reveal the truth and expose the false".² In the words of Dr. Elwin, "Although this august being does not seem to have created the world, he reigns unchallenged in the heavens; he is the eye of the world; he is as important to man as the eye is to the body. He watches everything; he is the witness of truth; he shows men the way to go; he protects them; he treats them with mercy. Above all, he is the lord of truth and an oath taken on his name is the most binding of all. Though he is not offered special sacrifices, for he does not need them, his name is invoked on every ritual occasion. He is the unifying force behind popular religion from the Siang to the Upper Kamla and perhaps beyond, and it may well be that he will provide a basis whereby Adi religion can develop along the lines of the Truth and Goodness which are his most conspicuous attributes."³

1. See the article entitled 'Bari' An Abang of the Minyong' by H. Borgohain, published in *Resarun*, Vol. VIII, No. 1, 1982, pp. 33-34.
2. Sachin Roy, *Aspects of Padam - Minyong Culture*, (Shillong, 1966), p. 239.
3. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), p. 211.
 Also see the article 'Concept of Donyi-Polo' by Tago Tamut, published in *Arunachal News*, April - May 1983, pp. 31-35.

" The high regard for Donyi-Polo is reflected in the following invocation which is recited before giving evidence or taking an oath before the *kebang*:

Donyi ane-a

Polo abu-a;

Ngo pyosi-ko pyodak milo,

Siyum-ke sadak-na donyi no ;

Siyum-ke adakana polo no ;

Takam-e kabeng kenbeng do -pe,

Sangge' angge' daklangka

Translated, the lines go as follows:

Sun mother !

Moon father !

If I have committed theft or any other crime,

If I have drunk anything forbidden,

This day's rising sun, you ,

This eve's setting moon, you,

In a manner that all can see and know clearly

Testify.¹

Now, Sedi is regarded by the Adis as the Supreme Creator. It is Sedi who created Donyi and Polo as well as all forms of living and non-living, and to whom the Adi concepts of *Runa* (Creator) and *Rutum* (Lord) are attributed. The term Sedi is composed of two words - *Sekokom dimang* = Se + Di = Sedi, meaning nobody has planted, or in other words Sedi is said to have originated spontaneously'. Sedi is the Supreme God; other gods, goddesses and deities are subordinate to Sedi in descending order.²

The Supreme Being, whom the Gallongs call Jimi and who is venerated as the creator of the world and also of Donyi and Polo, seems to have the same attributes as of Sedi.

The religious ideas and imaginations of the Adis about the supernatural are

1. J.N. Chowdhury, *A Comparative Study of Adi Religion*, (Shillong, 1971) p. 119.
2. For this passage, see :
 - (a) Lummer Dai, *Donyi-Poloism - A Scientific Religion*, *Arunachal News*, Independence Day Number, August 1977, pp. 56-57.
 - (b) Oshong Ering, 'Religion of the Adis', *Arunachal News Republic Day Issue* - 1980, pp. 31-32.
 - (c) Pajing Pertin, 'Adi Faith Through the Ages', *Arunachal News. Republic Day Number*, January 1981, p. 12.
 - (d) N.N. Osik, 'Why the Dove Weeps', *Arunachal News*, April - May, 1981, pp. 6-8.
 - (e) T.K. Bhattacharjee, 'Concept of Doni Polo - An Assesment', *Resarun*, Vol. VIII, No. 1 1982, pp. 14-15.
 - (f) *Arunachal News*, October - November 1982, pp. 18-19.

essentially the expression of their spiritual yearning for solving the mysteries of life and death, the creation of the world and of man. In their religious quest for supreme reality, they have conceived of Keyum as the primal cause, 'the unknown and unknowable,' the infinite universal power. From Keyum appeared Sedi as the Supreme Creator of the world, and there high above the sky stands Donyi-Polo as the benevolent and omniscient Lord of Truth. These concepts are as sublime as of any great religion.

Eschatological Beliefs

The Adi eschatology is based upon beliefs in a life after death. Among the Gallong tribe of the Adis, *yase* - the spirit of the deceased and *yalo* - the soul substance are the two essential elements of these beliefs. The spirit of the deceased goes to the spirit world, while the soul of a person after death goes either to *gite* (heaven) or *giche* (hell) according to the nature of life the deceased has lived in this world. The pious goes to *gite*, but the sinner or law-breaker goes invariably to *giche*. Both these places are believed to be in the underground, since a man born of the earth (*sisi*) must after death go back to it. *Jiku* and *Jite* are the rulers of *gite* and *giche* respectively. It is believed that life after death in these underworlds is similar to the life on earth.

The belief in a continued existence of life after death is common among the Adis. They believe that man does not cease with death, in death he changes his material life for spiritual.

"There is a land beyond the grave and man continues his existence there in a subtle form which corresponds to a certain extent to the concept of soul. The land beyond the grave is but a shadowy replica of this material world. It is divided into several regions which are the domains of the different *uyus*. The soul of a man after its separation from the body goes to the domain of that spirit who has been the instrument of his death. The souls of the women go to the realm of Nipong; those killed in forests become subject of Epom and Miris go to a special district ruled by Boki and Bogo.'

"In the land of the souls, they enjoy the status that they had on earth and lead the same way of life and they also feel the same want for the things they owned here. That is why, it is customary to dedicate the possessions of a man when he dies. These are placed either inside the grave or on the top of it and if it is not possible to part with such things, representative tokens are buried instead. In the funeral rites, animals are sacrificed in the belief that they go to their owners in their spirit forms. A man must be supplied by his descendants with all his cherished possessions, trophies of war and chase, food and drink for his life after death. Unless this is done, his hungry soul will torment them.¹

1. Sachin Roy, *Aspects of Padam - Minyong Culture*, (Shillong, 1966), p. 251.

Religious Functionaries

In the Adi society there is a class of persons who are regarded as capable of combating the evil spirits and performing religious rites and sacrifices according to the traditional beliefs and customs of the tribal people. Those persons are looked upon as specially gifted with psychic and spiritual or supranormal powers. They show the signs of their psychic superiority by early propensities to fall in trance and foretell things to come. Children that show these signs are marked for the office of the spiritual guardian of the people.

There are two types of such persons - one is called the Epak Miri, the other Nyibo. The functional distinctions between the two are not exactly known. Some are of the view that Nyibo is a diviner, whereas Epak Miri is a curer of diseases and other calamities. They are paid for their services. The nature and amount of payments vary with the sacrifices to be offered to spirits for different purposes. They get portions of a mithun or a chicken, which are usually sacrificed. Payments in rice and beads are also made. But they do not enjoy any special privilege in the society. The office of the Epak Miri is not restricted to either sex, nor is it hereditary.

The Nyibo, among the Gallongs, is the only functionary in the religious rites and ceremonies. He, on behalf of the people, communicates to the spirits requests for redress of sufferings, offers them sacrifices and invokes their blessings. Early proof of one's inherent qualities and talents determines one's real qualification for being eligible for the profession of a Nyibo, which is neither elective nor selective.

Festivals

In the tribal societies of Arunachal Pradesh festival are of special significance and value. It has been said that the tribes of this territory are a festival-loving people. The Adis, in particular, observe a variety of festivals throughout the year in accordance with their religious beliefs and customary rites, and these festivals are a remarkable feature of their socio-religious life. Each festival has a distinct purpose for which it is celebrated. Some festivals may be seasonal corresponding to different phases of agricultural production or connected with fertility rites, while some others may appear to be merry-making celebrations, but they are all essentially religious in character irrespective of their observance by individuals, families or the community as a whole. The community festivals are not only occasions for rejoicings and jublations, they also remind the people of their cultural heritage and reflect the fraternal feelings of all the members of the society. Hopes and aspirations of the people find a most solemn and joyful expression through these festivals. Of the popular and traditional festivals of the Adis, Mopin and

Solung as celebrated today are the most important. These two festivals having a mythical background of the olden days of the Adis are described in brief as follows :

Mopin

Mopin is one of the great and most popular festivals of the Adis, more particularly of their Gallong group. The festival is held during the Adi months of *Lumi* and *Luki* corresponding to March - April.

The *abangs* (the Adi rhapsodies relating myths of creation, the original history of the people etc.) provide the mythological background of the festival. According to the mythology Abo Tani (father Tani), the first man, (Abo Tani is regarded as the common ancestor of the Tanis comprising to various groups of the Adis as well as the Nishis, Apa Tanis, Tagins and Hill Miris), was given agricultural seeds and tools by the Mopin deities - Pinku and Pinte, who are the deities of wealth. The Mopin also gave him advice as to the proper methods of cultivation to be followed for prosperity and wealth. With the blessings of the Mopin, Abo Tani did exactly what he was told. This was how agriculture began.

In commemoration of this event, Mopin is celebrated at the time of sowing or immediately thereafter for a good harvest. The festival in its positive form is closely related to agriculture. It is believed that performance of the festival would bring forth abundant food, health and happiness for the people.

Preparations for the festival are made in good time if omens read on a fowl egg are considered favourable. A *Kebang* (village council) is held in the *dere* (village community hall) for the purpose of celebrating the festival in a befitting manner. The whole community rise to the occasion since Mopin is a festival for all. Villages hum with activities for collection of food-stuffs, especially fish and meat, making of rice-powder and rice-beer (*opo*). The main items of sacrifice are mithuns and pigs. With every household making its own preparations and the young boys and girls moving about cheerfully, the village atmosphere wears a gay and festive look.

The Mopin festival is celebrated for five days with great enthusiasm and solemnity. Well-versed religious functionaries or priests called *Nyibos* conduct the festival. Before the actual commencement of the festival the *dipe* ceremony is performed in which images of the Mopin, of the ancestors and of Doli, the god of rain are made of bamboo, bamboo shavings and twigs and leaves of sacred trees. While the images are installed, hymns are chanted by two *Nyibos* assisted by two youngmen, all dressed in white turban, wrapper and a large number of beads.

From the next day the festival for the five days begins amidst great

jubilations. A team consisting of one man from each family, who assemble at the *dere*, collect rice, fish, meat and beer from each house of the village. The whole night is spent in enjoyments over a feast, while the *Nyibos* go on reciting the hymns and invoking the Mopin to come to the village.

On the second day, each house again contributes food stuffs, which are stored in the *dere*. It is obligatory for members of all families to go to the *dere* else, it is believed, evil would befall them. A cow mithun is sacrificed to the Mopin and the *Nyibos* pray to the deities to bestow health, wealth and happiness on the people. Women from each family come to the altar and receive *yilibong* or blessings of Mopin. Meat of the sacrificed mithun is then taken to the *dere*. A fowl is also sacrificed. The sacrifices over, the *Nyibos* lead a group-dance to the tune of *poper-tingum*, a ballad narrating a myth. This gets an instant response from the people assembled there, who also start dancing in groups and shouting 'hey Mopin'. As the dance goes on, a girl moves in and smears the face of *Nyibo* with rice-powder and there everybody takes the cue and rubs one another's face and hands profusely with the powder. The ceremonial rice-powder signifies purity of heart and mind, thought and deed. All without any discrimination of rich and poor, old and young, participate jovially in this ceremony. Sprinkling or rubbing of the rice powder on the body of a relative of the same family is however, forbidden. Funs and merrymakings mark the proceedings of whole day and a great community feast is held in the afternoon. Guests are entertained with dainties in every house in the evening. Special cakes are prepared for the Mopin.

The next day is called *Buloi*. On this day the meat and the Mopin cakes are distributed equally among the villagers. The guests from other villages are also given shares. The *Nyibos* get special shares of meat of the sacrificed animals. At midday there is again a grand feast in which the meat of the mithun is the *piece de resistance*. Guests are entertained at every house as usual.

On the fourth day, the leaves of the packets of cakes are hung round the Mopin image, and the *Nyibos* keep on chanting hymns. The third and the fourth days of the festival are specially dedicated to the spirits of the dead. It is a taboo to go out of one's own village on these days.

The fifth and the concluding day of the festival is marked by a mixed feeling of joy and sorrow - joy, because the people would now hopefully look forward for success of their cultivation and enough food for the year; and sorrow, because the happy festival is drawing to a close. A farewell feast in honour of the Mopin is held. The people bid good-bye to the Mopin with a heavy heart, and the festival is over.

Solung

Solung, one of the great and most popular traditional festivals of the Adis, is celebrated annually sometime during the months from June to September. It has been said that the term Solung is derived from two words : *eso* (mithun - an animal of the bovine species) and *alung* (herd), meaning a herd of mithuns.¹ A myth about this festival relates how the first mithun was born on the earth. Commemoration of the coming of mithun is an important aspect of the Solung festival. Many other myths and legends expressing the religious ideas and beliefs of the people are connected with festival.² One such myth relates how staple food crops were successfully introduced into the earth. Kine Nane, the goddess of fertility, is propitiated among other deities who are invoked during the festival.

It has been observed that 'the Solung, though primarily a festival connected with the agricultural activities of the people, is a socio-religious festival'. The Solung in its present form is a festival of joy and merriments and it is observed with great solemnity, pomp and customary rejoicings.

The following is a description of the Solung festival.³

Solung festival is celebrated in the Adi months of 'Tanno' and 'Yo' corresponding to July-August. Different villages celebrate it on different days. Usually the 'Kebang' or the village-council fixes a date considering the convenience of the people. Sometime the 'Gam' or the headman does it with the consent of other leaders of the village. After the date is fixed people start preparation of rice-beer or *Apong* for this festival. Vegetables also are stored for the occasion.

The Solung lasts for seven days. On the first day mithuns and pigs are slaughtered early in the morning. A family may sacrifice both mithuns and pigs. On the day of sacrifice there is no special dinner though *Apong* is prepared in plenty and made available. The meat of the slaughtered animals is preserved for the following days.

The second day is called *Yegling*. On this day one third of the meat is distributed to the relatives. Moreover, arrangement is made for a special

1. See Olen Tayeng, 'Solung Festival', *Arunachal News*, October - November 1982, p. 23.
2. For the mythological background of the Solung festival see :
 - (a) Oshong Ering, 'Traditional Faiths and Beliefs behind the Solung Festival', *NEFA Information*, January and February 1968.
 - (b) P.C. Dutta, *Solung*, (Shillong, 1969).
 - (c) T. Rukbo, 'The Central Feature of Adi Culture.' *Arunachal News*, December 1977.
3. The description is wholly a reproduction of the article 'Solung' by Lumner Dai published in the book entitled 'Our Festivals' compiled by M.N. Bardoloi, (Shillong, 1968), pp. 31-33.

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dinner on that day; and neighbours, especially women and children are invited to the dinner. *Apong* is prepared on all the days. On the fourth day, one of the members of the family goes to the field and sacrifices there a fowl for *Kine Nane*. *Etting* or cake and *Apong* are generally offered along with the sacrifice. In actual practice, this is done by a woman or girl. This day is called *Binnyat*. On the seventh day, old men assemble at the *Musup* (village dormitory) and make bows and arrows and fasten it on the doors of every house. This day is done to resist the evil spirit from entering the house. This day is called *Ekob*. On the tenth day weak plants of paddy, spoiled by worms or insects are uprooted and then thrown on a small platform constructed for the purpose, just by the side of the main path near the village. It is done to bring to the notice of *Kine Nane* that there are worms and insects in the fields which are spoiling the plants of paddy. By such act people hope that the goddess will drive the worms and insects out of the fields. This day is *Iru*.

Ponung, a kind of dance is part and parcel of Solung. There is no *ponung* in other festivals or functions except in Solung. In other words, the dance organised on Solung is called *Ponungom* the first day of Solung at night. Girls between 14 and 18 only join *Ponung*. These girls are called *ponung bona*, that is, *Ponung* dancers. The *Ponung* dancers select a man who has the best knowledge of past happenings. He is called *Mirui*, (Miri). He narrate the story how the creatures and plants of the earth, especially domestic animal as well as other wild animal and plants which are necessary for the existence of men, came into existence. This narration is called *Abang*. The *Mirui* narrates it while he dances. The *ponung* dancers dance round the *Mirui* in a circular form. They repeat the first line of the narration. The line which is repeated by the *ponung* dancers has no relation with the rest of the narration, and there is no particular meaning in it. This line is, perhaps, added just to maintain the vitality of the *ponung*. If there is no voice of the *ponung* dancers the *Ponung* seems to dull. The duration of *ponung* is about 13 hours a day, that is, it begins from about 9 p.m. and ends at 6 a.m. Again it begins at about 1 p.m. and ends at 6 p.m.

This place where the *ponung* is organised is called *Yinkong*. People assemble at *Yinkong*, to witness *ponung*. Young men, who are interested in *Abang* listen to the *Abang* carefully. If the *Mirui* narrates something wrong they at once criticise him. They also tell the *Mirui* that it should be this and that. Here some young men are so sensitive that they ask the *Mirui* to leave the *Yinkong* and even to resign from *Miruiship*. As a result, some new-coming *Miruis* become nervous. The criticism of the young men, however, does not annoy or offend the *Mirui*. Rather it helps him to be cautious.

From the social point of view, the Solung may be called the festival of refreshment. Just from the mid-spring people are busy in the fields. In the early morning they go to the fields and return home in the evening. From the midspring to the beginning of Summer, they clear jungles for cultivation. After clearance of jungles, seeds are sown in the fields they are then busy in cleaning weeds. Then plantation comes. After finishing plantation, the works become a bit light. But the light works do not last long. The fields will again become weedy after plantation of paddy. In this short period of light work, the Solung is celebrated. Although short, people forget miseries, grievances, weariness and heavy work in this great festival. There are no other works except merry-making on the holidays of the festival. People again become efficient and active.

The origin of the Solung festival is connected with a legend of growth of paddy. The legend says that the paddy grew from the life-juice of *Yidum Bote*, son of the god of knowledge, and the plant was reared by *Kine Nane*, the goddess of the underworld. The squirrel went to *Kine Nane* as messenger of man to ask for paddy. The goddess agreed to give paddy to man if he sacrifices mithuns and pigs every year. The legend also says that one day *Kine Nane* caught the wild pig which was chased by man, and it went to the nether regions where *Kine Nane* put some paddy in the ears of the wild pig. The wild pig went back to the earth and thus man got paddy and started paddy cultivation.

Social Life

Organisation of Society

Adi is a common name for a variety of tribal groups living in the East Siang and West Siang districts. The Adis, as mentioned earlier, are broadly divided into two sections, which may be conveniently termed Padam-Minyong and Gallong. The Padam-Minyong section comprises the Minyongs, Padams, Shimongs, Milangs, Pasis, Karkos, Ashings, Pangis, Tangams and Boris, while the Gallong section includes the Gallongs, Ramos, Pailibos and Bokars. In spite of the difference in names, all these tribal groups are collectively known as the Adis.

In the Padam-Minyong section, a tribal group consists of a number of clans and each of the clan is composed of several sub-clans. A sub-clan is constituted by a group of families. The Minyongs, in particular, are divided into two societies, known as Kumuing and Kuri, each of which is sub-divided into a number of exogamous clans. The Gallongs are divided into what has been called sub-tribes, which are further divided into numerous clans. As a matter of rule, clans are exogamous, that is to say, marriage is not legitimate within a clan. A breach of the clan rules is a major offence. The rule of clan

exogamy is common to all the Adi tribes. However, there may be some restrictions on marriage between certain class as among the Shimongs.

The socio-cultural traits which apparently distinguish the two sections of the Adis, are the dormitories for bachelors and unmarried girls, marriage system, dress style and hair-do. These distinctive features will be separately discussed later. But, despite some distinctions all the Adis have a common form of language, religion and culture. All have a similar socio-political institution called *kebang*¹ (village council), which is most democratic in composition and function. All the people love dancing and their delightful *ponungs* or ballads are as popular among the Minyongs, Padams and other groups as among the Gallongs. Indeed, the Adis are a tribal community of closely allied groups, who are known by different names. They have a bond of unity and a fraternal feeling for an Adi people as a whole and all of them are proud of being called Adi irrespective of the broad divisions and groupings.

The Adis of the Padam-Minyong section have two important social institutions - the *moshup* and the *rasheng*. These are dormitories - the *moshup* for boys and young men and the *rasheng* for unmarried girls.

Moshup: As observed by Dr. B.S.Guha, the *moshup* is the most distinguish in feature in the life of the tribal groups belonging to the Padam-Minyong section of the Adis. "Through this organization the adolescent and the young receive training in hunting, warfare, traditions and the values cherished by the tribe as well as the regulation of premarital sexual life so that they can grow up as full members, well trained in the correct canons of behaviour and in different activities pertaining to the welfare and prosperity of the tribe." Dr. Guha further wrote about the *moshup* thus "There are two underlying principles on which the institution is built, namely, the creating of the habit of discipline among children at their formative stage of life and in the developing of a spirit of co-operation and collaboration so that the tribe can act as unit, and fissiparous tendencies within the body politic of the tribe may have very little room for growth. In addition, it develops among the young a spirit of responsibility, alertness and habit of taking risks in the face of danger which are essential for the existing of the tribe. Although emphasis is laid on the training for the groups to work together and face a common danger, there is also a provision for showing respect and consideration to the elders of the tribe, specially those who are old and infirm and dependent on the younger members for their living."²

1. See Chapter XII for details.

2. See Sachin Roy, *Aspects of Padam - Minyong Culture* (Shillong), 1966, pp. 194-195.

The institution is known by different names among the Adis. The Minyongs call it *dere*, Padams term it *moshup* and among the Milang and other allied groups, the institution is known as *ngaptek* and Boris and Ashings call it *bange*.

The *moshup* is usually built in a prominent part of the village suitable as the centre of community life and from where all approaches to it can be watched and guarded. "The construction is carried out by the people of the village, and is similar to that of the dwelling houses with the different that it is a longer construction without any compartment as a rule. The back side of the *moshup* is covered with wooden planks as protection against cold wind and other three sides are left upon. In some villages *moshups* are covered on all sides with provisions for numerous exits. The entrances are on the low side and on the high side there are rows of pigsties. The walls, the floors and the partitions if any, are usually made of rough hewn planks and not well fitted. Logs of notched woods are used as staircases and are many in number. There are a number of fireplaces or *merums* in a *moshup*. These *merums* have occasionally partition walls in between. The number of *merums* in a *moshup* corresponds to the number of sections in the village which also are known as *merums*. Each *merum* has a separate entrance to the *moshup*, and has a platform or a shelf for keeping the belongings of its members. There are suspended trays over each fireplace on which are kept the trophies of animals killed during community hunting."¹

The *moshup*, a bachelor's dormitory for boys, is used as a sleeping-house by all young men of the village from the age of ten till they take wives to their homes. Boys come to the *moshup* after their day's work and night meal and sleep round their own *merums*. Each *merum* is in charge of a senior boys responsible for the maintenance of discipline of his *merum*. He is empowered to punish any defaulter. 'Side by side with the *merums*' writes Dr Guha, 'there is another hearth called *romsom* where the old and the infirm male members of the families belonging the *merums* sit together, gossip during the day and may even sleep at night. Each *merum* has a *romsom* attached to it, both of which must act as a single unit and supplement each other.

The *moshup* is also used for deliberations of the *kebang* (village or tribal council) as well as feasts and festivals. In the old days, the *moshup*, like the Naga *morang*, served as the centre from which various expeditions were undertaken. It could also function as an organisation for village defence.

According to Dr.Guha, 'the personality structure of the Adis grows through the *moshup* in a manner most suitable for the welfare of the tribe where

1. Sachin Roy, *Aspect of Padam - Minyong Culture*, (Shillong, 1966), p. 195.

struggle for existence is very great and where there is very little scope for the weak and inefficient persons of fissiparous nature'.

Rasheng: The *rasheng* or the girls' dormitory is the women's counterpart of the *moshup*. The adolescent and unmarried girls of the village sleep in their respective clan *rashengs* at night. "Rasheng, literally, a meeting place or rest-house. The Abang gives the reason for its construction as the need for gaiety, amusement and the art and regulation of love-making. The boys are trained in the *Moshup* in the various spheres of men's activities such as hunting, warfare, administration and rituals connected with these. In the case of women, however, the duties chiefly concern household affairs, such as jhum cultivation, weaving, cooking and taking care of children. But amusement such as dancing, music and the art of love-making cannot be taught by the parents, so Idum Bote or the Doying felt, on the completion of the *Moshup*, that a similar institution was necessary for women. As, however, love-making cannot be carried on under the observation of *Uyus* (spirits) their presence was not invoked. Thus, the *Rasheng* is of a purely secular character and has no sanctity or spiritual significance behind it like the *Moshup* which is sacred as an abode of the good gods to ensure successful hunting. Unlike the *Moshup* it has no central institution but is made purely on the basis of clan organization. Like the clan *Moshups* there are several *Rashengs* in a village ...

"Although the *Rasheng* is not so well organized as the *Moshup*, it has its own system which is strictly followed. The girls constituting the members of a *Rasheng* are called Ponung i.e. bevy of girls organized for music and dancing. Discipline is enforced by the leader of the Ponung called "Ponung Rotum" and any disobedience or neglect of duties is punished with reprimand or fine. Younger girls pass through a period of novitiate when they bring firewood, light fire and do other work assigned to them. They come to the *Rasheng* after their meals and it is their duty to see that the fire is lighted so that when the older girls come they find everything in order. The younger girls or the novitiates sleep on one side of the hearth and the older on the other where they receive their lovers."¹

The *rasheng* is a training institute for young girls and, like the *moshup*, place under supervision of a senior and experienced girl. Here the girls are trained in all vital matters of life and taught the principles of discipline and obedience. In the *rasheng* a girl after adolescence or attaining the age of puberty enters a life of courtship and selects a boy of her own choice. Young boys from the *moshup* come and join the girls in the *rasheng* at night. A girl is free to choose any boy as her consort. It is noteworthy that the society

1. B.S. Guha, *Moshup Abang - Moshup Legape Doying Agom Lunen*, (Shillong, 1966), p. 198.

allows an appreciable amount of premarital freedom to the young people of both the sexes.

"The *moshup* and *rasheng* are central institutions where boys and girls get practical training in the traditional mode of life. Here the boys and the girls are allowed to find their way into the mysterious of life; in addition to the social and communal life, to the mysteries of sex. In this, the dormitories may be considered as schools of preparation for matrimony."¹

Dere: The *dere* an important social institution of the Gallongs, is a village community hall used for holding of *kebang*, entertainment of guests, for festivals, feasts and other purposes. The *dere* is not the same as the *moshup* of the Padam-Minyong section in character, scope and function. The institution of *rasheng* is not found among the Gallongs. They do not have communal dormitories. It has been stated that the Gallongs have not developed them for various reasons. One reason is that the Gallong villages are generally single-clan villages and the fundamental rules of clan exogamy do not provide for any girls' dormitory in a village. Another reason given is that there is a strain of polyandry among them, which does not exist among other Adi tribes. The *dere*, though not organised on the same principle as the *moshup* and the corresponding *rasheng*, is an important feature of the community life of the Gallongs, and it served some purpose of a dormitory where in former times there were occasional inter-village feuds. The reason for the absence of dormitory among Gallongs is, however, not due to any individualistic nature of their society as one may presume. Their *dere* is itself a centre of a good deal of co-operative activities.²

Each of the tribal groups of the Adis is broadly endogamous, to wit, members of a tribal society usually marry within it. The endogamous tribes, as already said, are divided into clans. In the Padam-Minyong section, sub-clans or groups of families may be considered to be the smallest units. The Gallongs are a fairly large tribal community. Among them, the so-called sub-tribes are each composed of a number of exogamous clans, but the sub-tribes are not necessarily endogamous groups. A clan among the Gallongs may be regarded as the basic unit of the society. All the Adi tribal groups are territorially organised in cohesive societies based on clan and kinship. There

1. Sachin Roy, *Aspects of Padam - Minyong Culture*, (Shillong, 1966), p. 198.
2. For the absence of dormitory system among the Gallongs see :
 - (a) B.S. Guha, *Moshup Abang*, (Shillong, 1964), p. 13.
 - (b) Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), p. 17.
 - (c) Verrier Elwin, *Myths of the North-East Frontier of India*, (Shillong, Reprint 1968), p. 481.
 - (d) L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), pp. 70-71.

may be certain social distinctions or class division in some groups due to traditions and economic disparities, but caste system exists nowhere, nor is society stratified into clearly fixed hierarchical order.

Family, Property and Inheritance

All the tribal groups of the Adis are patrilineal, whereby descent is reckoned through the father being the head of the family. A family, among the Adis, normally consists of a nucleus of parents, their sons and unmarried daughters. The agnatic relationship determines the right of inheritance to property, which devolves through male members of the family.

Gallong : Among the Gallongs, a family is composed of the father, the mother, their sons with their wives and unmarried daughters as well as married daughters till they attain motherhood. The family is headed by the father, and all its members in obeisance recognise his authority. The sons inherit the family property. The daughters in marriage are given a small dowry depending upon the amount of brideprice received.

"A son also in extreme circumstances, as when he does not take part in the agricultural and other family affairs, can be disinherited from the property. The younger sons even after they get married are supposed to remain in the same house. If the family affairs force a son to have a separate dwelling, separate house at the initiative of his father, and if he is dead, of his eldest brother, is made for him, but still he continues to cultivate the fields jointly with his other brothers...

"So long as the brothers live together, the property is jointly owned and all the produce of the land is stored jointly. Payments like bride-wealth (for the unmarried brothers) have to be made with the consent of the brothers, from the common stock, and each member shares the responsibility for such payments."¹

The Gallongs have a sort of fraternal polyandry, whereby the unmarried young men in the family have a customary right to mate with the wives of their brothers. The brother who married a wife ceremonially is, however, recognised as the only husband of that wife, and also the father of the children born to his wife in the typical polyandrous family.

Relations among the members of a Gallong family are cordial and affectionate. The behaviour of the son towards his father and mother is that of respect. He also behaves respectfully with his father's brothers. 'He often goes to the field and helps his father and father's brothers.' Father's sister is

also a respectable member of the family. The daughter is more closely attached to her mother. But she is always obedient and obliging to her father as well, and works with him in the field. Relationship between brothers and sisters is sweet and amiable. The younger ones are treated with love and care. The brother-sister relationship melts into a tenderly feeling when the sister after marriage goes to live in her husband's house and the brothers call on her at times and offer a little meat or smoked fish.

Padam-Minyong : Among the tribal groups of the Padam Minyong section, a family is constituted by the father and mother with their sons and daughters. As descent is traced through the father, the children take the paternal clan. 'But in case of children of extra marital relations the boy belongs to the father's clan and girl to the mother's.

"Within the family, the world of man is clearly distinguished from that of the woman. There is no segregation, nor is any seclusion of women observed, but each has a special sphere of activities clearly demarcated. From the early childhood, a girl knows the type of work she has to do and the boy knows his. So, a boy always looks up to his elder brothers and father for guidance in regulating his behaviour. In the same way does a girl derive her instruction from and builds up her behaviour on the pattern of her mother and sisters. This division of labour is scrupulously observed and both the man and the woman accept the traditional pattern without any question and grumbling. Of course, their idea about activities suitable for man and woman differs from ours. An Adi man for instance, does not mind looking after a child while his wife is away from home in the fields. He may even lend a hand in cooking. But in no case will he handle a loom, so will a woman refrain rigorously from felling trees and setting fire to debris in a jungle clearing. In social life, no woman will formally join a *kebang* though she does not hesitate in making her voice heard and her opinion felt. This distinction of man and woman makes itself manifest in the behaviour of the household members and unconsciously young boys and girls have their character and outlook moulded in the traditional form."¹

A family is stable and viable if its economic position is sound. The economic security of all its component parts is provided by a division of property into two categories, personal and joint. A plot of land in a village allotted to each family is held jointly by the members of a family. This land belongs to the family as a whole and as the family splits economically consequent on the death of the father, the land is divided equally among the sons. The house is another valuable item of immovable property. The father

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), pp. 59, 62.

Also see Chapter X for the ownership of property and inheritance among the Gallongs.

1. Sachin Roy, *Aspects of Padam - Minyong Culture* (Shillong, 1966), pp. 205-206.

owns the house and the family uses it. When the father dies, each son can claim a share in the house. Usually the elderly sons start making their own houses during the life-time of their father and the youngest son staying with the father gets an automatic possession of it after his death. But the house is equally divided among the sons if they separate before the death of the father. It is normally the responsibility of the eldest son to look after the widowed mother, but she prefers to live with the youngest son as he remains in the parental house.

"Besides these two type of immovable properties, every house has its movable property in the form of domestic utensils, implements, live-stock and ornaments. Ornaments are personal properties. Beads and silver ornaments brought by a girl from her father's house and those given to her by her husband are her personal belongings. These are generally inherited by her daughters and daughters-in-law. In the same way, the father may have beads inherited from his father, his trophies of war and chase, his bows and arrows, daos purchased by him and items of dress woven for him by his wife. Some of these go to decorate his grave. Beads of real worth are not wasted in that way but are substituted by imitation ones. The real manis are inherited by the sons and they pass down the family as family heirloom. Rice punder, *danki* and such other valuable possessions of which only single items are available in a family, are divided among the brothers by mutual understanding. The live-stock is equally divided. Where physical division is not possible, as for instance where only one mithun is possessed by a man, the division is made either on the basis of value or it is included in the miscellaneous list consisting of single item possessions such as *danki* and rice punder and apportioned among the sons according to their need or desire. In such cases, arbitration may be felt necessary and the village elders sit in *kebang* on it.¹

A little difference in the composition and character of the family and the right of inheritance is noticed among the Boris. The elementary unit of society of the Boris is the family, which usually consists of parents - the family head and his wife - the eldest son, his wife and his children, unmarried sons and daughters. A man may have more than one wife if he is rich enough to afford the high bride-price. Polygynous families are, however, rare.

"The Boris have the following types of family :

(1) **Nuclear Family or Primary Family** : It is a primary family which consists of two or more members living together in one house and maintaining close kinship ties. The husband and wife living together with none of their male children married.

(2) **Patrilocal Extended Family** : It is a family where a husband and wife live together with their eldest son - his wife and children - unmarried sons and daughters.

(3) **Polygynous Form of Polygamous Family** : It is a type of family where a man with two or more wives lives together with his children in one house.

(4) **Fraternal Extended Family** : This type of family is to be observed temporarily when an unmarried brother (or brothers) lives with his elder brother and his family till he gets married and has built his house to shift into with his wife along with children if any."¹

The father is the family head. The absolute control he exercises over the family and the responsibilities he shoulders for its maintenance are of the nature of a patriarchy. His word is final in all social and marital matters or in case of disputes within the family. The wife and old parents, if any living, are consulted casually, but their counsels do not prevail against his wishes. The grown up sons do not challenge his authority. He rules over the family and commands obedience from its members.

The eldest son gets the major share of the father's property according to the Bori law of primogeniture. The younger sons build their own houses and live separately after marriage. With a kindly feeling for the sons, the affectionate father goes to live with each of them in turn for a month or two at a time.

Among the Tangams, a married daughter continues to live with her parents till the birth of her first child. To them, the son is more preferable than the daughter, for through him the patrilineal chain of the family continues and the property devolves. The daughter is also welcome for she is considered to be an asset of the family. It is she who does a lot of hard work in the field and in the house, and keeps the family going.

It may be reiterated that inheritance in the Adi society descends in the male line. The general character of the customary laws of inheritance amongst the tribal groups of the Padam-Minyong section is indicated in the following:

"(i) No son can inherit the property of his father while he is living.

(ii) In the lifetime of his father, a son may, however, marry and start a separate household of his own.

(iii) On the death of the father, the property is equally divided among the sons.

If, however, a son starts living separately before his father's death, the son or sons living with the father at the time of his death gets or get a larger

1. Sachin Roy, *op. cit.*, p. 207.

1. K. Kumar, *The Boris*, (Shillong, 1979), pp. 121-122.

share or shares in the form of the residential house but landed property is equally divided.

(iv) Widows and daughters do not inherit anything. In case a man dies without any issue, the property may remain in the possession of the widow until she marries again. If she marries in accordance with the laws governing the re-marriage, it goes to the next-of-kin and in absence of any such blood relation, to the members of the sub-clan of the deceased husband.

(v) If a man leaves a minor son or sons behind, his brother shall look after the property as a guardian of the minor son or sons during his or their minority, and hand over to each his share according to the customary law of partition as and when he or they attains or attain majority.

Every village has its own hunting-grounds and fishing areas, properly demarcated from those of the adjacent villages. Within the village, hunting grounds are separately allocated to each *merum* and fishing areas to each family. Hunting and fishing rights are very carefully guarded and violation of rights of ownership has to be compensated by payment of amounts equal to the prevailing market value of one mithun.¹

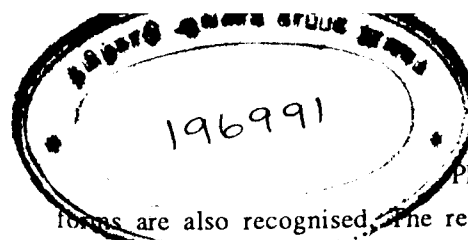
In regard to the Pasis and Padams, it has been said that the wife is sometimes allowed to inherit the property of her deceased husband by virtue of the right conferred to her to perform his mortuary rites. This is primarily intended to safeguard her position against any possibility of her being neglected by her sons or adopted son.²

Marriage

Monogamy is the general rule of marriage, but instances of polygyny are not rare. Polyandry among the Gallongs, as already mentioned, is socially recognised. The rule of clan exogamy is, however strictly and scrupulously followed by all, whatever the different forms of marriage may be. A clan is regarded as a group of allied families bound by agnatic ties. All the members of a clan are believed to have descended from one common ancestor, and they consider themselves as close kins in relation to one another. It is, therefore, customary for them to marry outside their own clan. Marriage within the clan or consanguinity is abhorred as incestuous, a serious breach of the clan rules and a major offence against the society. Polygyny is permissible, but in reality it is the privilege of a few rich, for the bride-price one has to pay in a wedding is often so heavy that it acts as a deterrent to polygynous marriage to have a plurality of wives. Levirate, sororate and cross-cousin marriages in various

1. Sachin Roy, *Aspects of Padam - Minyong Culture*, (Shillong, 1966), pp. 228-229.

2. M. Darin, *Law of Pasi-Padam Heirship*, *Arunachal News* November - December 1979, p. 17.



forms are also recognised. The residence of a married couple is normally patrilocal.

Gallong : The marriage system of the Gallongs is remarkable in many ways. Monogamy, polyandry and polygyny all in a complex form are in vogue in their society. It has been observed that 'the Gallongs have a sort of polyandry, which is unknown elsewhere'. The polyandry prevalent among the Gallongs, as stated earlier is typical. There is obviously an important economic reason for it. The high bride-price, which is deterrent to marriage, does not usually permit each of the brothers in a family to have a wife for himself. Generally, the eldest brother is married to a girl and the bride-price is paid by the whole family. Some of the younger brothers may also get married. But, it may not be always possible for an average family to make arrangement or ceremonial marriage of all the brothers by paying the compulsory bride-price in each case and provide for more wives in the family. According to the polyandrous custom of the Gallongs, a wife brought to a family by a brother belongs to other brothers as well. This has been described as a kind of fraternal polyandry. It should, however, be noted that the brother who married her by performing all the required ceremonies is recognised as the actual husband.

A rich person among the Gallongs can afford to have more than one wife and give bride-price for each of them separately. In a polygynous family the first wife has a key position and her opinion is always sought by the husband if he wishes to marry another woman. All the wives live together in the same house.

Cross-cousin marriages with either mother's brother's daughter or father's sister's daughter are allowed, but the preference is for the former. 'Marriage by exchange, where two men exchange their sisters is also common. Sororate is not obligatory and is not favoured'. Levirate in some form in polyandrous family is inherent.

"The marriageable age of the Gallongs ranges from infancy to a little above adulthood. Minor boys and girls of five to six years of age can be married or betrothed and finally married after attaining age. It mostly depends upon the parents to decide at what age they would like to get their children married...

"There is hardly any freedom in the selection of wives. The girls are not left unmarried till they can express their opinion. Cases of young girls not liking their husbands, to whom they were married in their childhood, are becoming numerous and the consequent incidence of divorce is thus increasing ...

"At the time of marriage, payments are made by both the parties. The

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amount of bride-wealth is transferred from the family of the groom to that of the bride. This bride-wealth consists of mithuns, cows and pig and small brass bowls. The family of the groom as a whole and the groom himself have to make provisions for such payments, and these payments are made to the bride's family as a whole and not to the bride. The parents of the bride are also to transfer a little amount of their wealth to the groom's parents as dowry. This question of dowry is also decided at the time of settling the quality and quantity of the items of bride wealth. Generally, the dowry is sent to the groom's parents together with the bride. This dowry has to be distributed among the kinsmen of the groom, on the day it reaches there, and only after a prolonged argument, it is decided as to who should get what portion of the dowry. The bride-wealth is paid before the marriage is performed. The payment of a fraction of the bride-wealth, however, can be deferred at the wishes of the bride's parents...

"After the marriage is settled, a party of kinsmen and clan members of the groom goes to the village of the girl on an auspicious day to bring her to their village. Next day, the bride's brother's wife starts dressing her from early in the morning. A big brass bowl is invertedly put on her head which looks like a helmet. Small bells are attached to this helmet on the back side. Brass wristlets varying from six to eight are worn by her. In this dress-up, her girl friends help her. The women *nyibo*, at the same time, goes on with her incantations, saying to the girl, 'You are going to another village, in the realm of other spirits, may you be helped in all your activities.' After the bride is fully dressed, she is taken out of the house and, at the door below, she is offered rice and meat. She takes only a few grains ceremonially and throws back a little of it four times over her shoulders. This done, he leaves the village accompanied by her brothers and sisters together with groom's party. All the items of dowry, if any, are put in conical baskets, besmeared with rice paste, and are carried by the members of the groom's party. Before she starts, care is taken to ensure that no dog is allowed to go ahead of the party, as it is considered inauspicious. When the whole party reaches the outskirts of the village, they halt for a short time for preparing bamboo containers for beer which is to be offered to the members of the bride's party from the groom's side. A little before reaching the groom's village, the whole party is received by a few girls from the groom's village, who offer beer first to each member of the bride's party and then to their own villagers accompanying the party. It is for the bride's brother's wife's brother to give customary gifts to the girls. The go-between from the groom's village also offers beer to the bride's party, but he is not to get any reciprocal gifts for that. On reaching the outskirts of the groom's village another party comes to offer beer, and finally, the members of the reception party come beating brass bowls and plates to receive

the bride. They repeatedly create ceremonial obstructions for the bride's party on the way to the groom's village. When the party reaches the village, all of them sit down together, and rice, meat and beer are offered to them by the groom's parents and clan members. After the feast is over, the party starts again and reaches the house of the groom. A new gate is constructed at a distance of 15 to 20 feet from the house. Near the entrance below the house, a long aqueduct made of a banana stem is kept supported by two vertical poles. At the end of the aqueduct, a receiver is kept. A chicken is killed, and the blood is allowed to trickle down the banana aqueduct. A little water is poured to then. The bride takes a few bamboo shavings and sprinkles this blood three times over her head and towards the back. Water is then poured down the aqueduct, and the bride washes her hands and feet. She is a stranger to the house and she must enter it after having cleaned herself of the foreign materials. A new bamboo ladder is made for her as well as for the groom to enter. This ladder is used at this time only, and then rolled up and kept in the house, never to be used again. The bride is then taken inside the house and seated in a corner, decorated with bamboo shavings and feathers.¹

The Pailibos have also a kind of fraternal polyandry. In a joint Pailibo family, two brothers having a common wife with the children born to each of them live together ... The Pailibos arrange marriages in many different forms including both the polyandrous and the polygynous types of polygamy but clan exogamy is the rule. Although the practice of polygamy is there, yet due to economic exigencies, monogamous marriages are predominantly prevalent. Both the widow and widower marriages are also in vogue ...²

The Pailibos have a preference for cross cousin marriages and also marriage with mother's sister's daughter (Parallal cousin).³

The Ramos, it is stated, make matrimonial relationship with the Pailibos and Bokars.⁴ Polygyny is popular among the rich section of the Ramos, the main reason being economic. More wives may mean more helping hands in cultivation fields. Levirate and sororate marriages are permissible but not binding on either of the couple. Cross-cousins and parallel cousins (mother's sister's daughter only) can be married. There are other uncommon forms of marriages. Marriage through negotiations is the most common procedure of marrying. The negotiations are conducted by go-betweens called *gindos*. The payment of bride-price is a very important matter to be settled in a marriage negotiation among the Ramos. The bride-price for a girl from a rich family is

1. L.R.N. Srivastava, *The Gallongs* (Shillong, 1962), pp. 73, 76-81.

2. K. Kumar, *The Pailibos*, (Shillong, 1979) pp. 198, 246-247.

3. *op. cit.*, p. 258.

4. M.M. Dhasmana, *The Ramos of Arunachal*, (New Delhi, 1979), pp. 93, 94.

higher. Marriage by exchange of two girls to equalise the cost of bride-price and marriage by service rendered by the boy to the father-in-law are also recognised by the Ramos.

Padam-Minyong : Monogamy is the most common form of marriage. A second wife is taken only rarely before the first has died or been divorced. There are other less common forms of marriages, which are held with social sanction. One of these forms is marriage by exchange in which 'a boy desirous of marrying a girl undertakes to fill the gap in her family by giving a suitable girl for a marriageable boy in exchange. By this method, the difficulty sometimes felt in paying the bride-price called *are* is solved.'

Elopements are not uncommon. Marriages by abduction are also known to have taken place.

The dormitories - the *moshup* and the *rasheng*, as already described, are the two very important institutions through which pre-marital relationship between the young boys and girls in love develops. When a pair desires to unite in matrimony, the boy makes it known to his parents. In case the parents agree, or as among the Minyongs the parents consult the elders of their clan and if the elders agree, negotiation for marriage is initiated and a formal proposal made with presents of *apong*, meat and other edibles. The elaborate procedure of negotiations through parents varies from one tribal group to another. The boy and the girl get formally engaged if the marriage proposal is accepted by the girls' side. Among the Padams, 'the girl from that day starts wearing a cane appendage on her neck.' Among the Minyongs, the engaged pair is declared as a formally married couple on the completion of a ceremony held on the day fixed for *reying-apon* (final decision). Among the Tangams, a period from the day of engagement follows in which the boy visits the girl's house and serves his would-be parents -in-law.

It is to be noticed that the society is liberal enough to allow the young boys and girls to choose freely their partners in life. The pre-marital love of young couples transforms into formal negotiated marriages which are solemnized with the consent of the parents and the sanction of the society as a whole. "Within the family, the supreme authority rests with the father. This continues unchallenged till the children have reached the dormitory-going age. After that, the responsibility of training with growing age is divided between the community and the father, the community being represented by the dormitories. As soon as the son gets engaged, the family loses a further claim on him because thenceforward his shares of games killed individually or as a member of organized hunts, go to his parents-in-law. All claims on him cease to exist when he starts his own household or becomes a *magbo* attached to the family of his father-in-law. As long as the father is alive, the family can

only claim his labour in the field. In the case of a girl, after the dormitory-going age, the family surrenders its control over her nights but her whole day she devotes to household duties. In the early morning, she helps her mother in cooking food and feeding the swine and the fowls; then she accompanies her to the field and there sows, weeds, or reaps according to the season and comes back in the evening with loads of harvest, or fuel or of water. On reaching home, she pounds and winnows rice and puts rice to boil. The evening meal over, she is free to visit the *rasheng*. She is now considered as one of the senior members of the house and is often consulted in household affairs. There she waits in her father's family till the time when her husband builds his house for their independent family life.¹

A girl after marriage may continue to stay with her parents if her husband is yet to build a house of his own. He is expected to take his wife to his own house with the coming of the first child. Residence for both men and women is patrilocal in the beginning and nuolocal subsequently. Normally, the residence is changed from patrilocal to nuolocal when the first child is born. The husband is known as *magbo* during the period of his wife's residence in her father's house. In course of time he settles down in his own house with his wife and children and leads an independent life as the head of a full-fledged family. "His children grow up in their turn and gradually transfer their allegiance to the dormitories and finally to their own families. In this way, an Adi family rarely develops into a joint family with two or three generations and lateral descendants living under the same roof and the supreme authority of a patriarch or matriarch. As soon as the elementary family reaches its fullest development, it splits itself into independent units. During the life-time of the father, however, the joint property holds the different units together in an economic bond."²

The economic aspect of matrimony has a very important part to play in marriage relations. The rich father of a girl is naturally reluctant to give consent to a union with a poor family and so is the rich father of a boy. The well-to-do parents, therefore, sometimes turn a deaf ear to the wishes of the girl or the boy for marriage involving a relationship between two families of unequal status and wealth.

A girl is considered an asset of the family to which she belongs. Hence, it implies a loss to the family when she is given in marriage. This is compensated by payment of *are* or bride-price commensurate with the status of the family and the personal belongings of the girl, which she may carry to her husband's house. The bride-price is not a fixed lump sum payment settled at the

1. Sachin Roy, *Aspects of Padam - Minyong Culture*, (Shillong, 1966), pp. 204-205.
2. Sachin Roy, *op. cit.*, p. 204.

time of making proposal for marriage or functions of marriage, and which is to be made either in cash, household property or domestic animals. It takes the form of a continued supply of meat by the husband and his relatives to the parents of the wife.

The Boris, like other tribal groups, adhere to the rules of clan exogamy. Marriage with cousins (children of mother's sister) is preferred. According to sororate and levirate forms of marriages, both generally of junior type, practised by the Boris, one can marry one's wife's younger sister as also one's husband's younger brother. Sororal marriage is not favoured so long as the wife is alive. Cases of senior levirate are rare. Marriage with cousins (children of mother's brother and those of father's sister) is, however, prohibited as it is considered incestuous.

The common forms of marriages held among the Boris are the following:

- (1) marriage through negotiation whether preceded by courtship or not,
- (2) marriage by exchange as described earlier,
- (3) marriage by abduction of the girl or her elopement, and
- (4) marriage by service in which the boy goes to live in the house of his would-be father-in-law and helps him in the fields and other works, or in which the father of a girl who has no son wants a certain boy, generally the son of a friend, to live in his house as his would-be son-in-law.

Among the Tangams, a second wife is taken if the first turns out to be barren. Instances of polygyny are few. Marriage by exchange is also occasionally performed by the Tangams. They do it by exchanging a boy or a girl of a family in marriage with a girl or a boy of another family. The consent of the concerned families in this form of marriage is essential because it involves the payment of bride-price and adjustment of relations between the two families. Elopement is a rare occurrence.

Divorce

Among the Gallongs, the girl after marriage 'loses the identity of her clan and merges herself with her husband's clan.' Adultery and barrenness of the wife are the main causes of divorce. The conjugal life is impaired when the wife is involved or indulges in adultery. The husband is entitled to get back the bride-price he paid if the wife is divorced on this ground. Barrenness of the wife may also lead to divorce, for the wife is held responsible if she goes barren. In this case also, the husband has a claim to get his bride-price returned. On the other hand, ill treatment of the wife by the husband may compel her to break the union. The husband forfeits his claim to the bride-price if he is found guilty. In all cases of divorce, the children born of a

wedlock belong to the father.

The reasons for divorce among the Pailibos are generally barrenness of the wife, adultery suspected or detected and refusal of the wife to live with her husband. The divorce comes into effect only when the decisions taken mutually or pronounced by the village council known as *dolu-keba* are fully executed. These decisions entail payment of compensation, fines and return of the bride-price.

Among the Ramos, divorce is a rare occurrence. A wife is considered an asset. Besides other services rendered by her, she is a giver of children. The family spends a heavy amount on her in terms of bride-price. There is no refund of the bride-price even if she remains barren. Her presence does not debar the husband from remarriage.

Divorce among the Adi groups of the Padam-Minyong section has been described in Chapter X.

"In principle divorce does not seem to exist among the Boris because the requisite amount of bride price has been paid for the wife. However, some situations warrant a divorce.

"Conditions differ in the case of a man seeking divorce from those in the case of a woman doing it. Barrenness, adultery, extra-marital relations are some of the grounds on which a man seeks divorce, whereas sexual infidelity on the part of the man, mutual quarrels and harsh treatment are main reasons for which a woman seeks the divorce. Apart from effecting separation of the couple, the cases are dealt with as per customary laws dealing with breach of marriage and adultery".¹

When a divorce takes place among the Tangams, the mother takes with her the girl child and the father the boy if the child is grown up. There can be no question of returning the bride-price if divorce is sought mutually, but if it is unilateral on the part of the wife, the husband is entitled to get compensation either from her parents or from her new husband if she marries again. On the other hand, if the husband deserts the wife, she has a right to claim compensation which is known as *aninitak*.

Death and Funeral

The eschatological beliefs of the Adis have been described earlier in this chapter. Their mortuary rites are based on a belief that life in some form continues to exist after death, which leads to an idea of the soul. It is commonly believed that a separation between the body and the soul takes place at death. The disembodied soul goes to the other world where the departed in his continued existence beyond the grave leads a life same as that

1. K. Kumar, *The Boris*, (Shillong, 1979), pp. 228-229.

on earth. It is, therefore, customary for them to offer the necessities of life to the departed at his funeral. Burial is the common method of disposal of the dead.

Gallong : It is natural for a man to grow old and pass away. So, to the Gallongs, a death in old age is normal. But, all cases of death are not alike. Sickness and death, as they believe, may be due to malignant spirits. These spirits may bring illness or even cause death if they do not get their due shares of offerings or if their abodes are demolished. They are, therefore, to be appeased to avert evil. Incestuous relations and violation of marriage rules, it is believed, are offences so serious as to invite the severest of the supernatural wrath and punishments not only on the offenders, but also on the whole clan and the village, which may lead to death. Murder of a clan member may also incite the spirits to inflict punishment by causing disease to the offender.

The Gallongs bury the dead. When one dies the dead body wrapped in a large sheet of cloth is carried outside the house by the back door. A new ladder of bamboo is made for carrying down the corpse from the house. Care is taken to see that nobody goes ahead of the corpse. "The grave is dug just on the outskirts of the village, in or near a bamboo grove. It is dug nearly three feet in length with grooves inside. The bamboo rope used for tying the ropes with the matting are cut and the body is placed inside with the assistance of two persons, with the head towards the west. The whole body still remains covered with the clothes and after placing it in the grave, the face is uncovered. Two or three pieces of clothes used by the deceased are placed below the head as a pillow. An egg is kept in the right hand of the deceased and one of the nails of the right hand is cut and thrown outside. Both the hands are joined and placed against the mouth. Wooden sticks are placed one beside the other over the groove, so that only the inner groove of the grave is covered first. Over the wooden sticks banana leaves are placed which are nailed to the earth with bamboo pegs, to be removed when the earth is put on them. All the banana leaves are carefully tied. Earth, dug out from the grave, is slowly thrown over the banana leaves and then beaten solid by two persons with their legs. With every new phase in the process of burial, all the women standing near the grave, start weeping. Weeping is, however, spontaneous and not ceremonial. Over the earth, stone slabs are placed and at both the ends of the grave vertical sticks are fixed over which again two horizontal sticks are tied with cane ropes. On these sticks brass bowls, cups, bamboo containers and other articles of every day use of the deceased are hung. Bamboo shavings, made into different shapes and dedicated to the spirits, are hung over the grave. Newly made bow and arrow, transfixed over the sticks and pointing towards the sky, forbid the spirits from descending down and disturbing the deceased. Spirits, however, cannot be ignored and sacrifice of a

mithun or a pig, according to the status of the family is made. Everything finished, the persons who attend the burial go back to the house through the same door and then the newly made ladder is thrown away. The house becomes taboo and nobody except the clan members can enter it for some days."¹

Thus ends the earthly life of a Gallong. He now goes to the other world to begin the same cycle of a new life as he passed through when he lived in this world.

It may be noted that the corpse of a still-born child is not interred by the Gallongs. They put the corpse into a big scopped-out pumpkin and leave it at a less frequented place in the jungle.

Padam-Minyong: The Adis, like many other tribes, make a clear distinction between the natural death and premature death due to disease and accident. It is not a calamity when a man dies after having lived a long span of life. The death at the old age is natural, it is considered a boon. They tell a tale that in the days of yore 'there was no death and there was overcrowding and then the gods in mercy sent death to men to keep down the number to the level of sufficiency of food'. But, when a man or a woman of old age passes away, the whole village mourns the death and pays its last homage to the departed soul.

Death sometimes comes suddenly or prematurely. Propitiatory and expiatory rites are performed to keep the evil of premature death away. A baby born dead receives aerial burial. The dead body is packed in a covered gourd and hung high from a tree. Accidental deaths whether in infancy or in the wilds or by drowning in a river evoke a sense of awe, and longer *gennas* are observed.

"Usually the burial takes place a few days after the death. This gap is perhaps due to the idea of allowing relatives living away from the village to come and be present at the funeral. The body is wrapped in a sheet of cloth and is made to lie on one side with its knees touching the chin. In that position, it is laid down in the grave. The grave is lined in the inside with leaves and branches and the floor is covered with a low bamboo platform. Over the body are placed planks so as to cover it and then the hole is filled up with earth. Cheap beads and necklaces to serve the purpose of the real ones and a brass vessel are buried along with the body. On the ground above the grave, a small hut-like structure is built in which rice and rice-beer are kept. These are changed daily for a week or so and then only the rice is left there for as long as it will last. A fire is also kindled inside the hut and kept burning for a very long period which may be as long as one year in ordinary cases and a few days

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), pp. 85-86.

more for men of importance. But for a child the prescribed period is only for three months. Personal belongings of the deceased such as hats, weapons and trophies are hung on the structure and left there.

"From the date of the death, a few days are observed as taboo. During these, they abstain from certain items of food which differ from place to place. The persons who actively participate in carrying the corpse and in digging the grave, refrain from entering the house for 6 to 7 days. The funeral rites end with a feast to the persons who helped at the burial. There is no special rite, only an animal is killed in the usual way. It depends on the financial ability of the heir as to what should be offered as sacrifice. Chickens do for the poorest; a full grown pig is offered by persons of ordinary circumstances, but a man of prominence should receive a mithun as a funeral gift. A portion of the sacrificed animal is offered to the soul of the dead man to whom the soul of the sacrificed animal is requested to go. The responsibility of the burial and funeral rites lies with the heir and near relatives and finally, with the clansmen. If they fail in this duty they are brought before the village council and fined.

"As men have their land of the dead, so have the domestic animals too. Souls of animals offered in sacrifices are supposed to go and enrich the herd of the spirits to whom they have been offered. If killed for funeral feasts, they go to the owners but if they meet accidental death while roaming in the forests, they are taken possession of by the spirits that kill them.

"In this way, when men and his domestic animals conclude their allotted days on this earth, they go to their destined residences in the other world and they continue their existence there in shadowy forms. While men are of the earth, they depend on the land of the shadow and when they belong to the shadow they depend on the land of the living for their possessions and sustenance. In this way, the life circle of man and animal lies half in the shadow of death and half in the light of life, just as the world of ours is divided into two hemispheres of day and night."¹

Village and House

Almost the whole population of Siang lives in villages, which lie scatteredly over the hills and in the valleys. The villages are of different categories ranging from diminutive to large. According to the 1971 Census, the villages in Siang comprising the East Siang and West Siang Districts as classified by population are the following :

1. Sachin Roy, *Aspects of Padam - Minyong Culture*, (Shillong, 1966), pp. 251 - 253.

Total number of inhabited villages ¹	589
Number of villages	
(1) With population less than 200	426
(2) With population 200-499	124
(3) With population 500-999	28
(4) With population 1000-1999	10
(5) With population 2000-4999	1
Total	589

The percentage of rural population of Siang living in the villages of various population ranges in 1971 is shown in the following table:

Categories of Villages with population	Percentage of rural population	percentage of villages
Diminutive villages: population less than 200	35.33	72.33
Very small villages: Population 200-499	33.76	21.05
Small villages: Population 500-999	17.20	4.75
Medium villages: Population 1000-1999	11.89	1.70
Large villages: Population 2000-4999	2.41	0.17

The census tables of 1971 indicate that nearly all the villages were either diminutive or very small which together constituted 93.38 per cent of the total number of villages where 69.09 per cent of the rural population lived. Evidently, a large section of people live in hamlets. A village of the Gallongs usually consists of a single clan, but the Minyongs live in comparatively big villages which may contain as many as 400 houses and grouped according to clans in separate divisions.

Gallong : The Gallongs prefer to site their villages on the high spurs of hills, which may provide the villages a congenial living as well as security. Some of their villages are also situated on the lower side of the hills or at the foothills. Existence of water-source in the near vicinity is an important point of consideration for a site to be selected. Sometimes, water is brought to the

1. This is inclusive of 142 inhabited villages of a part of the erstwhile Daporijo Sub-division of the former Siang District as shown in the Census of India 1971, Arunachal Pradesh, Part II-A, pp. 18, 48.

village through bamboo pipes from a considerable distance. The general lay-out of the village depends upon the gradient of land, and accordingly it may be square or rectangular in shape. Houses perched on hill-sides at some places resemble the rungs of a ladder. The Gallong villages are generally small. It was noted about two decades ago that the villages were having 20 to 30 houses an average.

The house of the Gallong are built on stilts of bamboo or wood and raised about 1.20 to 3.60 metres above the ground depending on the fall of the slope. As the land is uneven stilts are used for obtaining the level for the floor. The floor and the walls are made of split bamboo tied with cane strings. Planks are also used. There are few doors in a house, but hardly any window. The roof is thatched with leaves mainly palms and it slants considerably low to cover a good part of the wall. Houses are generally substantial, but sparsely situated unlike the cluster of houses in the Minyong areas.

In some contrast to the neighbouring Minyong houses, the shape of the houses of the Gallongs may be square rather than rectangular. The main part of the house is a big hall which serves as the bed-room, living-room and also dining room. The space beside the fireplace is used by the inmates for sleeping. Normally, there are two doorways, one is in the front and the other on the side of the house, which are approached by two notched ladders. The doorways are meant separately for men and women who go in or come out of the house by the two different ladders. The women use the side ladder and the men the front one.

The fireplace is in the middle portion of the house. There may be more fireplaces if the house is large. The outer open platform in front of men's entrance, which is generally used for guests and visitors, is also commonly furnished with a fireplace. Over the fireplace in the inner part of the house, three trays are suspended one above the other. The lowest tray is used for smoking fish and meat. The next higher one of bigger size has a mat on it, where paddy and other grains are dried. The topmost tray of still bigger size is used for keeping utensils and other household articles. Shelves are also used for this purpose.

A Gallong house is decorated with horns and hides of the animals killed in hunting. Skulls and mandibles of beasts especially mithuns with massive horns are displayed as trophies. Weapons such as bows and arrows and spears with red tufts of hair are kept attached to the walls or hung from the roof.

A pigsty is often found attached to one of the two side-walls of the house below the latrine. The houses have no drainage.

The Gallongs build their granaries at some distance from the house, preferably on the outskirts of the village. The granary is square or rectangular

structure raised on poles. Wooden discs are sometimes fixed at the top of each pole to prevent entry of rats in the granary. The floor is usually made of planks, the walls are of bamboo or planks and the roof is thatched. The wooden door of the granary is narrow, which can be tightly bolted with sticks and canes. Locks are also now being used for this purpose.

A Pailibo house on a slant is a single storey rectangular structure built on very high stilts. The house is made of bamboo, bamboo-splits and logs with thatched roof. The houses are all of the same type. The length of the house is extended if it is to accommodate more than one family. A house for one family is usually 12 to 15 metres in length and 7 to 8 metres in breadth.

"Entrance to the house is from the front where a door of bamboo frame is provided. A ladder is placed near the left hand corner to reach the platform which is in level with the floor of the house. This platform runs to the right upto the end of the line of the front falling under the main roof and serves as a balcony. After the entrance, to the left a mortar is fixed for husking corn. A little beyond the mortar is the space for the water containers. The space from the entrance right upto the opposite wall, where there is the back door of the house, is meant for the accommodation of guests. Towards the right wall in the rear is the place for performing propitiation ceremonies. All the trophies, such as, skulls of the monkeys, bears, mithuns and of other animals killed or sacrificed, are hung for display."¹

Fireplace or hearth is at the centre of the house. Normally, there are two hearths. The main hearth for the family is in the rear half portion of the house and the other one near the entrance is meant for guests.

The space under the floor of a Pailibo house is used as a pigsty and also for storing of firewood. There is often a separate cattle-shed adjacent to the balcony.

The Ramo houses are built with the support of wooden logs. The materials for construction of a Ramo house are mainly bamboos, logs and planks. The floor is raised high above the ground. Generally, a Ramo house has one wooden door and front verandah without side walls which is reached by a ladder. Back door is seldom found, but there is no window. It is dark and smoky inside the house because of the lack of ventilation and constantly burning fireplace. The Ramo houses may be small with one fireplace or big with three or more fireplaces. The common type of houses has two fireplaces, one for the family and the other for relatives and guests. The house consists of one single hall with no division or partition. The entrance is through the front door which is fixed always on one side of the house. There is, as usual, a

1. K. Kumar, *The Pailibos*, (Shillong, 1979-90, p. 21)

pigsty below the floor.

The granary, a small structure, is built by the Ramos a little away from the house so that it is not gutted in the event of a fire accident. The structural pattern of a granary is the same as that of a dwelling house. It is raised on logs, and the floor is made of bamboo matting. Round stones are fixed on the logs just below the floor-mat to prevent rats from entering the granary.

Padam-Minyong : The Adis of the Padam-Minyong section found their villages not in a haphazard manner, but with a foresight and a well thought out plan according to their ideas, experiences and mode of living. Prospect of water and sunlight to be available at a village-site are always carefully studied and considered. To a casual visitor, an Adi village may appear to be a jumble of huts perched on the hillsides. But a close observation would reveal that the lay-out of their villages follows a definite pattern. "The village *moshup* for instance, is located in the middle of the village, overlooking the entire village and the entire stretch of the land around it. The houses always face the hill-side with the backs away from it. This is because the *regum* or the latrine is generally situated at one side of the house towards the back and the incline of the hill-side facilitates better drainage. The houses are arranged more or less in rows ranging round the hill-side from the top downwards. This is because the village starts from the top and extends downwards as the population increases. ...It has been also noticed in the Padam and Minyong areas that there is a central road with steps from the top to the bottom of the village with houses on either side facing each other. There are also paths between the rows leading away from the central path. This arrangement is as of the ribs radiating from the back bone".¹

In some parent villages of the Padams and Minyongs, clanwise arrangement of houses exists. This was possible in the old days when groups of people came and settled in a village on clan basis."

"Adi houses are bamboo structures, strengthened with wood wherever available and secured with cane strings. No metal is used. The level for the floor is obtained by driving stilts, wooden or bamboo, in the hill-side varying in length with the fall of the slope. The shortest stilts are those nearest to the hill-side and the longest away from it. On this stilts are tied wooden beams and battens, leaving small square gaps between where they cross one another. On these solid framework are placed mats of thick bamboo splits to form the floor. This raised platform of the floor is approximately rectangular in shape and varies in length with the different sections of the Adis. Another rectangle of smaller dimensions, extends outwards from the main platform on one side

in the front. The larger platform forms the main house. It is walled on all sides with rough hewn wooden planks or matting of split bamboo. There is no window. There are only two doors—one in the front and another at the back. The front door has a ladder leading from it to the ground. In the Padam, Minyong and Panggi areas there are no partitions into rooms or cubicles within the house which is simple one large hall. The most important feature within this hall is the fire-place. These fire-places are constructed by fixing wooden trays in gaps in the matting of the floor and covering them with earth. Over the hearth hangs a three-tiered bamboo shelf, square in shape, which is used to dry meat, fish and fuel. Every corner of this hall has its definite use and purpose, and every side of the hearth is reserved for different categories of persons. On the left hand, outside the room, separated by a small platform is the *regum*, latrine. The roof is of the *dochala* type with thatches of leaves or grass or straw supported on framework of bamboo or wooden rafters, cross-beams and purlins, held on posts and triangles of wood preferably. Inside, it is always pitch dark as there is no arrangement for letting in light. The hearth is always ablaze emitting smoke circling round the room, and finally finding escape through the thatch of the roof. A thick coating of soot covers the walls and the ceiling, thus preserving them from insect pests and keeping away mosquitos and *dam dims*. The smaller adjoining platform is partially covered leaving the outer side open. The open portion is used for drying grains and sitting out while weaving. The covered portion is used for the same purposes when there is no sunshine and during rains. The space between the floor and the ground is used to keep domestic animals; specially the *regum* is enclosed below with logs and used as a pigsty."¹

"The Shimong houses are constructed in a rectangular shape. The width of the house is 15ft to 20ft and length 20 ft to 25 ft. Supported on strong poles a platform or split bamboo is raised. This is the floor. The walls are made with wooden planks roughly split from trees. The roof is made with the fronds of the tara, a species of cane. Inside the house generally there is only one fireplace but two may be seen if there are more than one family. Over the hearth there are four to five racks, one above the other. On the side of the hearth, close to the wall, cooking utensils and water vessels are kept.

"The house is a one-room compartment. There is an extension known as *tungo* in front of the room. The *tungo* has no wall. The construction of the house is done by people belonging to the same clan, free of cost, and generally takes 1 to 3 days. After the construction the people are invited to a

1. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), p. 52.

1. Sachin Roy, *op. cit.* pp. 54-55.

feast of meat and *apong*."¹

A Bori house is a single storey rectangular structure built high above the ground on a slope. The height of the floor from the ground varies with the descent of the slope. The entrance to the house is by a gate in the front. The facade of the house has a projected platform or balcony, which is reached by a ladder. There is another platform inside the house, which serves the purpose of a storeroom. The fireplace or hearth, square in shape, is centrally situated. There are two such hearths, the main one is known as *romdang*.

The Bori house rests on a structure of wooden poles. An average house is 9 to 10 metres in length and 6 to 7 metres in breadth. The length of the house is extended if it is to accommodate more than one family, but the breadth usually remains constant. The walls are made of split bamboo and the roof is a framework of long bamboos covered with leaves and thatch. The space under the floor is used as pens for pigs and goats as well as a store of firewood, canes and bamboos.

Tangam houses resemble the common Adi type of dwellings made of bamboo, cane and wood. Their houses are comparatively small structures, the average size being 7.50 x 4.50 metres raised on wooden stilts planted on the slant of hills. A Tangam house has two doors, one in the front and the other a side door, but has no window except for a small opening on the back wall for ventilation. The walls are of wooden planks and there is an open space in the front to provide for a verandah. A notched log leading up to the front-door serves as a stair from the ground. The house has only one room, but in some places there may be an additional compartment as the Khambas have in their dwellings. The roof is thatched. A Tangam house made mainly of wood is a stronger structure than the general local type of houses.

The Mishings (Miris) build their houses on piles. The floor is raised about 1.20 to 1.80 metres above the ground. The Mishing houses of bamboo, wood and thatch may extend from 13.50 metres to sometimes even 36 metres in length, the breadth being usually 3 to 4.80 metres. A house may have two doors, one in the front and the other at the back or just one in the middle. Casually there may also be windows. The Mishing house with a verandah in front generally consists of a large room where a whole family having several fireplaces lives. The number of fireplaces vary with the size of the family. The space beneath the floor of the house is an enclosure for pigs and fowls.

Dresses and Ornaments

A tribal people are in a way known by the dress and ornaments they put

1. Tarun Bhattacharya, *The Myths of the Shimongs of the Upper Siang*, (Shillong, 1965), pp. XXIV-XXV.

on. The Adi tribes have retained their manner of dressing more or less in pristine form, which identify as well as distinguish them. With the cultural and economic developments in this region, the traditional tribal dress is nowadays undergoing some obvious changes, although these changes have not yet gone as far beyond the circles of the educated elite as to affect the masses of the people. It is also noticeable that men much more than woman are being drawn towards adopting modern style of dress.

Dr. Elwin wrote in 1958 "Adi art is almost entirely confined to the decoration of their own persons, that is to say it is expressed in the weaving of fabrics, the making of hats and the forging ornaments. The Adis have an extraordinary interest in cloth... They are very sensitive to fashions and quickly adopt new ones ..."¹

The female dress distinguishes the Gallongs from the Padam-Minyongs. The traditional Gallong skirt is white with a band of simple rectangular design across the centre, which is divided into panels of thin black lines. The most popular Padam-Minyong skirt is crimson or yellow with a vertical band running down the centre which accommodates a variety of designs.

The Gallongs also differ from the Padam-Minyongs in hairdressing. The Gallongs keep their hair long and so do the Ashings, Tangams, Boris and Bokars. But the Minyongs, Padams and Shimongs, both men and women crop their hair round the head. The Gallong men either let it grow long or cut it on the nape, and the Gallong women part the long hair in the middle and secure it in a bun behind the head. The Ramos both men and women cut the hair in front and allow it grow at the back.

Gallong : The male dress of the Gallongs is simple. It consists of a shirt called *lalik* with or without sleeves open in front, and a piece of loin-cloth to cover the lower portion of the body. The shirt is locally woven and decorated with floral designs. The Mishmi shirts, which are of the same type but more elaborately designed and woven in mixed cotton and wool, are also used. These shirts are imported through the Padam-Minyong area. Formerly, long woollen coats were brought from Tibet through the Boris. These coats were very costly and worn by a few rich.

The skirt, or *jesek* as it is called, of the grown-up Gallong girls and women is usually a white cloth locally woven, with black geometrical designs as already mentioned. The skirt about a square metre in size, is woven in two pieces and sewn together. The Gallongs have also taken to the Minyong pattern having two or three horizontal lines in each of the two pieces and a broad flower-design on the backside. Unlike the Minyong and Padam, the

1. Verrie Elwin, *The Art of the North-East Frontier of India*, (Shillong, 1959), p. 112.

Gallong women do not weave any upper garments for themselves.' This may be due to the fact that the art of weaving had largely died out among them.' But, fortunately the art has survived and some of their beautiful traditional patterns were being revived. Besides their own textiles, the Gallongs, both men and women, use clothes of various designs and colours, which they get from outside.

That hats of the Gallongs are fine artistic works in cane. The hat commonly worn by men is so hard that it may be called a helmet. It is a conical hat with wide rims, made of strips and fibres of cane and a creeper which are closely interwoven. The hat is waterproof and strong enough to protect the head from the sun, rain and storm. The war helmet of the Gallongs decorated with tusks of wild boar and tufts of hair, dyed red as well as beaks of hornbills fixed at the conical top is a majestic head-dress. Besides canes, hides of bear and mithun are also used for making helmets with or without rim. These are very strong helmets used in the cold northern areas.

"Not many ornaments are to be seen on the person of a Gallong of either sex. The only ornament above the neck is the earplug or the earring used by women. Plugs are generally of leaf, wood or bamboo, while the rings, which are very heavy-sometimes as heavy as half a pound in each ear are made of iron. The rings are coiled in several turns, and are specially used by the Karka Gallong women. Due to heavy weights, very often the ear-lobes get slashed. Even then, women do not stop putting them on. In such cases, the rings are not worn in the lobes but are suspended with the help of a string below the ear-lobes. Bead necklaces are put on by men and women alike. Every bead has its own value, according to its colour and lustre and, very often, it is considered as the family heirloom. Sometimes, the bead necklaces are so numerous and heavy that, even if there is no cloth over the breasts, these bead necklaces easily cover them. Piercing of the alae or the septum of the nose for putting on ornaments is not known to them. Brass wristlets are common and three to eight wristlets with increasing circumference from wrist to elbow, are worn by the women. Finger rings were not worn, but now finger rings made of brass and of plastics, purchased from markets are being worn. Around the waist, men wear several cane strips, which with constant use attain a shine and smoothness. Iron or brass discs, varying in number and fastened together with a cane string or thread, are worn by women around their waist. The largest disc is in the middle, hanging in front and the succeeding ones gradually diminish in size and are on both sides of the largest one towards the thighs. Women use it till their first child is born, after which it is taken out, and handed over to the daughters of the family. Women generally use cane anklets. A thin strip of cane work is woven on the legs between the ankle and the knee. This becomes inconvenient in the beginning but gradually women

become accustomed to it and do not show reluctance in putting it on. Necklaces made of metal coins are much favoured by the Gallong women. Such necklaces generally contain one-rupee, eight-anna, and four-anna coins. Hooks are made on the coins and these are suspended with thread. These necklaces are purchased from the plains silversmiths. A few other silver ornaments like chain in the neck, are also worn by the Gallong women. Men put on a limited number of ornaments. Like women, they also put on bead necklaces, but only on occasions. Cane girdles around the waist are probably universally worn by the Gallongs, which also serve the purpose of suspending the loin-cloth. Waist-band of leather, studded with stones, is another costly item of their ornaments, which it is said, formerly used to be imported from Tibet, but now the Boris have gained experience in making it, and they barter or sale it to other neighbouring people. The stones are bigger in front and smaller towards the two ends. One such band generally contains from 100 to 150 stones."¹

The male dress of the Pailibos consists normally of a coat without sleeves and buttons, a piece of loin-cloth, a belt and a cane hat. A woolen coat and a hat with a rim of bear skin are also worn during the winter. The women wear a skirt of cotton woven by them in mixed colours or stripes, a woolen blouse used in the winter, a belt made of yarn with artistic patterns used on festive occasion, a cane waist-belt fastened with nine bunches of cowries hanging in front and cane leggings.

The Pailibos are fond of ornaments. The women commonly wear various kinds of bead necklaces, anklets and bracelets. They also adorn them with more costly necklaces and other ornaments on some ceremonial or special occasions. Among other things, ear-rings of costly metal with a turquoise setting, and bangles of silver, copper or brass are worn by them. A girdle with metal discs hung from a cane string is worn by women till the birth of the first child and thereafter another such belt is put on. A metallic helmet covered with finely matted cane is worn by brides.

The Ramos seem to have come under the influence of the Boris, Gallongs, Tagins and Membas in their manner of dressing. An upper garment commonly used by men is made of wool and it covers the body from the neck to knees on both sides. It is called *namu*. At the waist it is tied with a cane belt. Stitched on both sides, it is worn like a coat. A *namu* is black in colour. Very few rich men among the Ramos wear a costly Mamba coat, called *chuba*, as an inner garment. It is made of wool in red, black or white. A deer skin is worn on the back. As for the lower garment, the Ramos, who formerly used a small cloth piece, have recently taken to half pants. They put on various types of

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), pp. 31-34.

hats or head-dress. A type of cane hat resembles that of the Gallongs, but it has a skin appendage to cover the nape.

The female dress of the Ramos is largely a borrowing from their neighbours - the upper garments from the Membas and the lower garments from the Tagins and Gallongs. *Omekedung* of the Ramo women is a small coat-like half-sleeved garment made of wool with red and blue stripes. It covers the body from the neck to the waist and is open in the front. It is worn on marriage and ceremonial occasions. For daily use, the women now wear a cotton garment resembling *omekedung*. A Cotton wrapper called *japong* woven locally covers the lower part of the body from waist to knees or reaching a little lower. The *japong* is now gradually going out of use and being replaced by a sort of skirt called *galle*, which the young girls of today are fond of. The old ladies however, still wear *japong*. The Ramo women do not put on any headdress. But, a metal cap is worn by a girl in marriage.

The Ramos wear a variety of ornaments. The young girls are donned with earrings of a thin metal wire which is pierced through the ears when they are five to ten years old. The girls keep on wearing these rings till they get married. The earrings of aged men and women are made of gold or brass and precious stones. The women have a liking for necklaces of multicoloured beads. They also wear bangles of brass or aluminium and a kind of bracelet made of a strap of leather overlaid with a material resembling ivory. Some women have a fancy for iron rings round the ankles.

Padam-Minyong : An elaborate description of the traditional dress and ornaments of various groups of the Adis and transformation of their costume has been given by Sachin Roy in his book entitled 'Aspects of Padam-Minyong Culture'. We prefer to quote at length some of its relevant passages, which read as follows:

"The common Ashing, Bori, Bokars and Pailibo coat is long and blue and is secured at the waist with a cane or leather belt, set with bones or white stones. Sometimes woollen coats, made of serge-like material and open in front are worn instead. Often a long piece of black coarse woollen cloth, with a hole in the middle for passing the head through is used in the manner of a stole especially during the rains or hunting. Closefitting brimless cane hats and strips of cloth tied putteefashion protect the head and the legs respectively.

"Ashing woman's costume consists of a maroon skirt, either plain or with horizontal bars in light chocolate, reaching down the ankles, a blue cotton pelisse over a short bodice and cane ferret round the crown of the head.

"Shimong and Karko men wear short white sleeveless coats open in front having a band with zigzag designs in red across the back over the shoulder and close-fitting cane hats with the rim strengthened with a ring of stout cane.

The women wear short blouses made of local cotton, white or blue, and open in front and skirts, either with stripes in chocolate on white ground or black with brown stripes which are worn far below the navel.

"Panggi fashion dictates short and white coats with black borders for men and chocolate-coloured jackets with short sleeves and vertical stripes and skirts reaching down the knees for the women. Men use hats of the same pattern as that of the Shimongs and women carry rough white shawls with chocolate borders."

"Three types of coats are seen among the Padams, Minyongs, and Pasis : one is long, blue with full-length sleeves, and dotted with circular designs in white and chocolate; another is what is generally known as the Mishmi typek short-sleeved, black with bands of a triangular motif across the waist and lower ends. The third type now used by the Pasi-Minyongs is shorter in length, full-sleeved, green in colour, with narrow bands of designs round the cuff-ends of the sleeves.

"Padam, Minyong and Pasi women of the upper region usually wear full-sleeved black blouses with yellow bands of designs at the cuff, and skirts with free ends either pinkish red with a number of yellow horizontal lines or yellow with black horizontal lines running across the middle. There are vertical ornamentation in zigzag and triangular patterns also in the centre by bands embroidered across the breadth of the cloth at right angles to the horizontal woven pattern in yellow, green and red wool.

"In the lower region girls have started using full-sleeved blouses both of velvet and mill-made cloth, and tailored in the styles obtaining in the plains.

"A skirt folded so as to form a cone or flat padding at the top is worn as a kerchief on the head...

"Ashing women as well as men wear large ear-rings with three stones set on a base in the front. From this base hang strings of beads down the sides of the neck ending in a pair of tassels of red cotton wool. In the case of women, the rings are secured with a silver chain, joining the two and passing over the head.

"The ear-rings of the Shimong, Panggi and Karko men and women and those worn by the Padam, Minyong and Pasi men are small with single-coloured stones which pass through bamboo tube plugs stuck in slits in the lobe of the ear.

"The northern Padam and Minyong women have an elaborate type of ear ornament. It is a spiral of six to seven coils of silver wire which is inserted into a hole in the lobe and stretches it wide. Through the spiral passes a cane string, holding a number of beads and small bells suspended below the spiral. There is another type which is simply a bamboo plug with a hole in the centre,

stuck into the perforation of the ear-lobe.

"The lower Padam, Pasi and Minyong women use besides the simple wooden plug, decorated silver plugs with a front shaped to resemble a flower and a screwing device to hold it in position at the back.

"The neck and the chest of Ashing men and women are loaded with a mass of strings of beads of various colours, the blue beads, imported from the north, predominating. The Karkos prefer simple small brass chains with a *dudap* or two as pendants. While Panggi men are satisfied with a few strings of multicoloured beads, the women like to display a neck-band or white discs of bone in addition. A similar fashion prevails among their sisters in the higher Padam-Minyong and Pasi regions. But in the lower regions, the women have five types of neck ornament.

- (1) a necklace of two lines of beads between which is set a row of four-anna bits(*galpatang*)
- (2) a short necklace of beads with a drum-shaped amulet as pendant. It is worn on certain occasions.
- (3) a flat square Tibetan charm-box (*nok*) with a pair of tiger's claws fixed at the bottom, hanging from a double-stringed necklace longer than above, and with a number of silver chains hanging as tassels.
- (4) a still longer double-strained bead necklace with rupee-coins attached at the lower end by means of silver loops fixed to them.
- (5) the longest necklace of two strings of a silver or brass chain reaching down the diaphragm, with a boar's tusk as pendant.

"Padam, Minyong and Pasi men wear a double-stringed bead chain which goes round the neck three or four times, forming a sort of neck-band with two white bone discs looking like clasps in front under the chain. It then hangs in a wider loop on the chest with a pendant. The pendant is composed of three horizontal bars of bone with seven vertical cylinders resting on white beads between the upper two bars, and seven rows of three beads, black, blue and white in a vertical order, between the second and the third bars. The whole ends in a number of tassels of red wool. Over this double stringed chain three other strings, two of large green and white and the third of smaller white beads, reaching down to the chest are worn. One of these holds a pendant of a boar's tusk.

"All the sections of the Adis, both men and women, wear a brass bracelet, sometimes two, made locally, with geometrical patterns and about an inch in width. Padam men have a special variety with spikes along the outer rim.

"The Ashings have waist-bands of plaited cane set with white stones or bones, worn belt-fashion over the dress. Only the women among the Shimongs, the Karkos, the Upper Minyong, the upper Padams and the Panggis

wear similar bands which in their case are leather straps tufted with brass discs from one to one inch and a half in diameter, or an intricately plaited cane band with zigzag patterns in black. The wellknown *bayop* is a girdle of locally made brass discs with concentric embossed designs with two diameters crossing at right angles on the front side only. The largest disc is worn in the centre in front, with smaller ones hanging on either side. All these discs have loops at the top formed by smaller *bayop* discs., folded and soldered on the two sides of the main disc which are secured by a cane ring passing through the loops.

"In the lower regions, the *bayops* are slowly going out of fashion and are generally worn under the skirt.

"Plaited cane bands, mostly black or dark blue about 6" in width, are worn on the small of the leg by the Karko Shimong and Panggi women...

"*Tattooing* : Although it is not common among all sections of the Adis, a considerable portion of the tribes practise tattooing even today and there is ample proof to show that it was formerly almost universal. Today however, the fashion is gradually disappearing among the Adis who are in constant contact with the plains. The Padams have given up the practice altogether, but among the women of the Minyong, Shimong, Karko and Panggi Adis, it is still in vogue. The available information does not give any evidence as to any totem object being tattooed on certain parts of the body, neither does the information collected give any clue that tattooing among them is practised with the idea of terrifying their enemies during the wars.

"The most probable motive behind tattooing appears to be a sense of beauty, to ornament or improve the appearance. The custom of tattooing grows more common as one moves north."¹

The male attire of the Boris is normally a simple set of a coat of different colours without sleeves and buttons, a loin-cloth and a cane head-gear. The costume of the women comprises a skirt of mixed colours with red and black stripes, a white or black blouse, a head-dress and cane leggings. The men wear earrings of brass and sometimes a metal bracelet. The women adorn themselves with earrings of blue stone, anklets of brass and a belt of cane or leather. Young women love to put on costly necklaces of blue and green beads on festive occasions. Some of them also wear metal bracelets.

The Tangam men wear a long blue full-sleeved coat reaching to the knee, which is usually wollen in the cold season. A very small piece of loin-cloth serves as the under garment. Their hats with or without rims are of cane, strong and finely woven. A cane belt set with costly shells is tied round the waist.

1. Sachin Roy, *op. cit.*, pp. 77-79, 95.

The legs from the knees to the ankles are covered with stripes of cotton to get protection against insect bites. The women clothe themselves with a blue coarse wrapper of cotton or wool held in place by a cane string passing over the head, a moroon skirt either plain or with light chocolate horizontal stripes reaching up to the knees and a blue or white woollen coat. A piece of cloth is put on like a waist belt. *Ginchaks* or white cylindrical shells are worn round the waist over the skirt.

The Tangams, both men and women, wear earrings of blue beads, bead necklaces and wristlets. The women keep their hair long and dress it into plaits, which are passed over the head and tied into a fine knot. Beads are used to beautify the hair style.

Food and Drink

The food habit of a tribal people develops in close relation to ecological and climatic conditions-availability of vegetable and non-vegetable food within their area of settlement. Depending largely on nature for provision of food, the Adis by and large make their living by a subsistence cultivation called *jhum*, which is practised on rain-fed slopes of the hills. The items of food they live on are mainly rice, maize, finger and fox-tail millets, vegetables, meat, fish and rice-beer (*apong*).

Rice is the staple food, particularly in areas where wet rice or terrace-rice cultivation is practised. Husked rice is boiled in water. The gruel is not wasted, it gets soaked into the cooked rice. A meal of the Adis usually includes cooked rice, vegetables - either mixed with rice or as a curry flavoured with salt and chillies. Ginger and chilli are favourite condiments. Use of garlic is also known.

Meat of mithun, pig, deer etc. and fowl are relished. Squirrel and frog supplement the requirement of meat in some areas. The people are also fond of fish. But meat and fish are not everyday items of food. They are rather occasional delicacies - fish when a catch is successful or a supply is made and meat when a sacrifice, or community feast or festival is held. Meat and fish are boiled or roasted over fire and taken with salt and chilli. Both meat and fish are often smoked or dried and preserved for future consumption.

Rice with vegetables and beer is the normal diet of the Minyongs, Padams, Gallongs and some other groups of the Adis. The diet is sometimes enriched with meat or fish.

Maize and millets are next to rice as important cereals. The Ramos, Pailibos and Bokars cultivate maize extensively. Maize is the staple food of the Pailibos and Ramos. Finger millet is also a main item of food of the Pailibos.

Namdung (*Perilla ocimoides*), a kind of oil seeds, is the chief item of food

in the upper regions of Siang. These seeds are eaten whole or ground, but are never used for extraction of oil.

The method of preparation of food may vary with various tribal groups, but 'the Adis rarely practise any process of cooking, other than boiling. Frying is absolutely unknown'. But, in recent years the people are getting used to oil or ghee in cooking.

The Pailibos prepare ghee from milk. The Ramos and Bokars also make milk products. The Ramos learnt the use of milk from the Membas and produce ghee and curd.

The Gallongs and the Ramos take tea. Tea with milk and sugar is now becoming popular, though it is still not a common or regular drink among all sections of the tribal people.

The beer of the Adis, familiarly known as *apong*, brewed mainly from rice and also from millet or maize, is the most favourite and delicious drink of the people. It is an indispensable nutritive item of food taken regularly. It holds an important place in the esteem of all the tribal groups. The *apong* is offered to guests as a gesture of hospitality, which is an admirable tribal virtue. It is an essential element in religious and social functions. But the people seldom drink to excess and a drunken man is rarely seen.¹

Dances and Festivities

The Adis are a lively people and have a fame for their love of dance and song. Their ballads or *ponungs*, as they are called, are delightful performances. The *ponungs* are a group of dances held for ceremonial as well as recreational purposes. The *ponung* dances are artistic compositions of varying steps and rhythmic movements. The traditional epics of the tribe are sung when a *ponung* is performed ceremonially. In Arunachal Pradesh, the Adis excel in the art of dance, which is a reflex of their strong zest for life, their emotions and exuberance. Their enthusiastic devotion to this art is expressed through a colourful variety of dances, and these may be broadly classified as ritual, festive and recreational. The ceremonial pantomimes and dance-dramas of the Membas and Khambas, the two northern tribes who are Buddhist by religion, are a different type of dances. They have parties of dancers, who are given training. Among the Adi tribes, the dancers do not usually get any formal training. The young boys and girls learn dancing by imitation of their elders' and spontaneously. The Buddhist tribes play musical instruments to the accompaniment of the pantomimes, while the dances of the Padams, Minyongs and Gallong are generally performed with songs but without such

1. For food and drink see also Chapter IV under the head 'Main and Subsidiary Crops' and Chapter XIV under the head 'Nutrition'.

accompanying instruments. Some of the important dances are described as follows :²

Padam Dances

Delong Dances : This dance is performed by the Padams in the Solung Etor festival in March-April after the construction of a big circular fence around the village, so that mithuns and cows cannot get into the cultivated field and damage the crops. The purpose of this festival is to ensure that the mithuns and cows, kept inside the fenced area, keep well free from disease and death and give birth to many calves. The festival lasts three days. The dance takes place in the bachelor's dormitory and continues for the whole of the second and third nights. This dance is called Delong and it is a dance for men. The dancers are young men though aged men also sometimes join. If there are not enough male dancers or if some women feel tempted to participate in the dance, then women may also join. The dance is led by Miri (rhapsodist). The male dancers wear no special costumes but the usual dress. In addition to the usual dress, which is a loin-cloth and a coat, the dancers take a fan made of the tail of the hornbill in their right hand. The Miri also wears the same dress.

The dancers stand one behind another in a circle or semi-circle. The Miri stands in the centre of the circle. They fan the hornbill's tail in front of the mouth and dance forward in a circle. They put the right foot forward, immediately bring the left foot beside the right one and flex the knees. They dance repeating this sequence of movements, sometimes slowly and sometimes briskly. The Miri also dances repeating the same steps-sometimes in one place and sometimes moving slowly hither and thither-and sings the *abang*. After each passage of the *abang* sung by the Miri, the dancers sing the refrain in chorus.

Sloung Ponung Festival and Dance : This dance is performed in the Solung Ponung festival in August-September after the last weeding and before harvesting. The purpose of this festival is to ensure a good harvest as well as the welfare of the villagers. This is a dance for women. Generally girls take part but young married women also may sometimes join. If there are not enough female dancers, adult men may also join. This dance is also led by a man called Miri or more specifically the Ponung Miri. The Miri is a man who must know and be able to sing the mythical songs about the origin of paddy and other crops. The female dancer wears the usual dress - a skirt, a long-sleeved blouse, a wrapper to cover the head, a silver chain-necklace, a silver necklace with pendants or a bead necklace. The Miri, in addition to his

1. The description of the dances given here is mainly a reproduction of some selected passages from the book entitled 'Dances of Arunachal Pradesh, (Shillong, 1974) by Niranjan Sarkar, published by Arunachal Pradesh Administration.

usual dress wears a skirt of generally red colour, two bunches of tiny bells hung on two sides of his chest, a *dumling* on the back of his head and he carries an open long sword in his right hand and the sheath in the left. The *dumling* is an ornament which looks like a flower and it is made of shavings of the *ridin* creeper with beads inside it.

The dance is performed in the courtyard of a house. If there is rain it is performed in the bachelor's dormitory. The dancers stand in a circle or semicircle surrounding the Miri. If there are many dancers then the circle is completed or otherwise a semicircle is formed. They stand side by side and hold the left hand of the second dancer on the right and the right hand of the second dancer on the left. C holds the right hand of A and the left hand of E and the hands are clasped behind B and D. After each line of a mythical song, sung by the Miri, the dancers sing the refrain in chorus and dance taking a step with the right foot to the right and bringing the left foot beside the right one. The Miri sings the mythical song, line by line while rattling the iron discs loosely fitted to the hilt of his sword by shaking it and dances - sometimes flexing the knees at the same place, sometimes repeatedly raising both the heels at a time and in the same place, sometimes with very short and low tripping steps and sometimes with simple walking steps.

Elong Dances : This is a group of dances performed by girls for amusement. It has no fixed occasion of performance. It is generally performed on merry occasions like marriage, house warming ceremony, feast, etc. Even if there is no occasion, but the girls have leisure and are in jubilant mood, they may perform these dances. Young men also sometimes join in the dance. These dances are performed inside a house or on a level ground inside the village and can be performed by day or after dusk. These dances are also led by a Miri, who can be a man or a girl. The Miri must be a person, who knows and who can lead the singing. The dancers wear the usual dress. The Miri also wears the usual dress, but if the Miri is a man, then he wears a skirt in addition to his usual dress. The Miri takes an open sword in the right hand and the sheath in the left and hangs two clusters of tiny bells from his shoulders on both sides of his chest. The Miri stands in the centre of the circle of dancers and dances as in the Solung Ponung dance. After each line of a song sung by the Miri, the dancers sing the refrain in chorus.

Minyong Dances

Delong Dance : The Minyongs constructed an extensive fencing for confining the mithuns inside it so that these can not get into the cultivated field and damage the crops. Just after the construction of the fence, they perform the Etor festival in March-April. The dance, performed in this festival, is called the Delong. It is a dance for men. The dancers are generally

bachelors though men of other age-groups also join in the dance. Women join if there are not enough male dancers. The dancers wear no special costumes but the usual dress. This dance is also conducted by a Miri, who wears the usual dress and does not carry a sword in his hand.

This dance is performed for four consecutive nights in the council house. It starts after dusk and continues throughout the night. The Miri stands in the centre of the circle or semi-circle of dancers, sings *abangs* standing in the same spot with flexing of knees or lifting of both the heels at a time or with tripping steps back and forth. The dancers stand one behind another and dance forward with short steps with flexing of knees when the Miri sings a line of an *abang*. After each line of song sung by the Miri, the dancers sing the refrain in chorus and thrice flex the knees sharply at the same place. This movement is repeated in clockwise direction with the Miri's song and the refrain alternating.

Solung Dance : The Minyongs perform the Solung dance for five nights in the council house. The dance starts at about 9 A.M. and continues throughout the night. It is a dance for women, though young men also sometimes join. The dancers wear the usual dress. The female dancers wear a skirt, a long-sleeved blouse, earrings, and a few bead necklaces and brass bracelets. The male dancer, if any, wears a loin-cloth and a sleeveless coat. The man, who leads the dancers, is called the Miri. The Miri must be versed with the *abangs* (mythical song) about the origin of man, mithun, paddy, fowl, etc. The girls invite the Miri of their choice to lead them in their dancing. In addition to his usual dress the Miri wears a red skirt over his loin-cloth. The girls decorate the back of the Miri's head with a *dumling*, which is an ornament with beads inside it. The Miri holds an open sword in his right hand and the sheath in the left and sings the *abangs*. In the last night he sings the *Taktor abang* to prevent the entry of evil spirits inside the village. As he sings the *abangs*, the Miri dances-sometimes flexing the knees at the same place, sometimes repeatedly raising both the heels at a time and in the same place, sometimes with tripping steps and sometimes with simple walking steps while rattling the iron discs loosely fitted to the hilt of his sword by shaking it. The dancers stand in a circle or semicircle surrounding the Miri. If there are many dancers, then the circle is completed or otherwise a semicircle is formed. The dancers stand side by side and hold the left hand of the second dancer on the right and the right hand of the second dancer on the left. After the Miri sings a line of an *abang*, the dancers sing the refrain in chorus and dance taking a step with the right foot to the right and bringing the left foot beside the right one. This same movement is repeated. The dancers are generally girls. If there are not many girls to take part in the dance, then young men and married as well as aged women take part in the dance.

Luman Ponung Dances : The Luman Ponung dances are performed for merriment on jubilant occasions such as house - warming ceremony, marriage, festival or a feast. But these dances are performed without an occasion also. The girls, when in merry mood may perform these dances just for joy. These dances are performed in the council house or failing that, in any private house or even a suitable level spot inside the village. There is no special costumes for the dancers. These dances are led by a leader called the Ponung Miri, who may be of either sex. Any dancer, who knows the Ponung songs, can act as the Ponung Miri. If the Miri is a man, he may put on a red skirt over his loin-cloth. These dances are generally performed by girls, though married women and even young men sometimes join in the dance. The Miri takes a long sword, stands in the centre of the circle of dancers and dances as in the Solung dance. After each line of Miri's song, the dancers sing the refrain in chorus. They profess to have learnt these dances from the Padams.

Koyning Ceremony and Dance : When a person falls ill, they call the priest or priestess. The priest or priestess is called the Ayit Miri. Each Ayit Miri has a guardian spirit. The Ayit Miri performs a dance at night inside the house near the bed of the patient and sings an invocatory song soliciting the guardian spirit to help in identifying the evil spirit responsible for the sickness of the patient. The evil spirit, found to be responsible for the sickness, is propitiated by appropriate rites on the following day for the recovery of the patient.

Gallong dances : The Gallongs perform the ponung and *amisenom* dances on joyful occasion. The *amisenom* dances are their own while the *ponung* dances have been adopted from the Minyongs. But as the name *ponung* has become more widely known, so these *amisenom* dances also go by that name these days. The *tanununam* dance is performed in the marriage ceremony. There is another dance which is part of a ceremony performed after killing a tiger. The same was performed in the past for killing an enemy in war. But as there is not longer any warfare, so this dance is performed nowadays only for killing a tiger.

Tanununam Dance: This dance is performed in the marriage ceremony on the day of arrival of the bride to the bridegroom's house. The bride's party arrives in the afternoon in the groom's house when the members of the party are entertained with rice-beer and snack. The groom's relatives arrange mithuns to be slaughtered by the bride's relatives. The meat is cooked and all enjoy the feast. The girls and adult men of the groom's village dance in the groom's house after dusk for merriment. They have no dancing costumes. The dancers wear the usual dress. They stand in a circle, shoulder to shoulder, holding the hands of the dancers on either side. They take one short step with the right foot

to the right, gently flex the knees and bring the left foot beside the right one. They dance for some time with these steps moving round the hearth and maintaining a slow but rhythmical swaying of the hips. They place the hands on the shoulders of the dancers on either side and dance with hopping steps to the right. They sing out for some time in chorus long-drawn-out 'hoi. hoah ! hum ! hoah !'. Then one dancer sings aloud one word at a time and others repeat it in chorus.

Aminenom Dances : It is a group of dances performed by girls whenever they are in merry mood. There is no particular occasion for these dances. They start the dance after dusk around a bonfire on some suitable level ground generally beside the council house and continue it as long as they like. There is no special costumes but they wear the usual dress. In most of these dances, the girls stand in a circle shoulder to shoulder each holding the hand or upper arm of the other. The dances are performed with accompanying songs sung by the leader of the dancing group and the refrain by others in chorus.

Ponung Dances: The *ponung* dances of the Gallongs have no particular occasion for performance. The girls perform these dances whenever they are in merry mood. They wear the usual dress. A girl puts on a half sleeved blouse of deep green colour, several strings of beads and a white skirt with a thick black line passing horizontally by its middle and intersected by many short and thin black lines.

These dances are conducted by a leader, who is generally a young man. The leader is called the *Ponung Nyibo*, who must know the songs and be capable of leading the dancers in singing. In addition to his usual dress, he sometimes puts on a skirt over his loin cloth and the same type of necklace as the dancer. The dance movement of the leader is same in all the dances. The first line of a song is the refrain, which the dancers sing in chorus after each line of the song sung by the leader. To the accompaniment of the song, the leader dances with tripping steps to and fro and shakes the sword, held upside down in the right hand, rattling the iron discs loosely fitted to its hilt.

Mopin Dance: All Adi festivals are rendered gay, joyous and colourful by dances. The Mopin is one such great festival of the Gallongs. During the celebrations of Mopin, a group of girls dance in a circle around the *Nyibo* to the tune of the mythical songs called *abangs*.

Memba and Khamba Pantomimes

The Membas and the Khambas have a large repertory of ceremonial pantomimes or dance-dramas, which the numbers perform in gorgeous and ornate dresses and finely carved and painted masks, some of which represent birds and animals, while some others look almost like real human faces. The pantomimes held during the chief festivals Buddhist year in front of the local

gompa or Buddhist monastery are accompanied by a band of drummers and trumpeters and the Lamas playing big cymbals. These pantomimes generally tell a mythical story or point a moral. There are clowns to provide refreshing humorous interludes to make a show entertaining. But the pantomimes are too elaborate and expensive to be performed often. Boys and girls have simpler dances for recreation.

Among the Khambas of the Yang Sang Chhu Valley, the Lamas perform every year various dances at the week-long festivals of *Drubachuk* for prosperity, happiness and wealth. The dancers wear masks of deer, bird or pig. Other pantomimes depict kings and queens, demons and clowns. The highly entertaining *Arakacho-Chham* originated, it is said, when the Lord Buddha saw how gloomy people were: he sent the clown *Arakacho* and his wife to cheer them up, and they began to laugh. The Membas of Gelling and elsewhere also perform similar dances.

Games and Amusements

A great variety of indigenous games played by the boys and girls of Siang are so original and delightful that others may be tempted to imitate them. They are surprisingly simple and ingenious but enjoyable, and free for all young people, for they are inexpensive. They afford a good deal of entertainment and recreation to both young and old. The following description of some of these games is from the book entitled 'Games of NEFA'¹.

Hand-Wrestling : It is a competition between two young men or boys. Each player grasps a hand of the other and tries to force his opponent's hand backwards. The successful player is he who succeeds in forcing back the other's hand or who manages to bend the other's hand sideways. This game is popular in Siang where it is called *Yatbom* and is generally played during the Eran and Etor festivals.

Dragon's Tail : Dragon's Tail is thoroughly enjoyed by most children because it is a simple and an invigorating game that gives plenty of scope to expend a great deal of energy in movement.

A long row is formed by any number of players, usually boys. The tallest player heads the row, and the others fall in behind and tightly grasp each other at the waist. At the word, 'Go', the one who heads the line, and is 'It', tries to catch the player at the end of the line by quick manoeuvres. The others all try to dodge out of reach and thus help to prevent the last one from being caught. If caught, however, he must drop out of the game. The game continues until everyone has been caught and all are out. Usually, however, the players weary of the game long before this.

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

In Siang the game is known as *Ao Nyatkom Dllinge*, and is generally played during the Solung festival, which is performed to celebrate the end of the planting season.

Mimic Warfare : Pretending to fight battles or individual duels, while all decked out in war dress, shields, swords, and all the rest of the paraphernalia, is an extremely popular recreation among many tribes in Arunachal Pradesh. In Siang, where this form of recreation is enjoyed after the *Etor* festival, the boys do their best to simulate a real fight. With the progression of the fight, the excitement of the contestants is egged on by the loud cheers and shouts of fellow supporters. The children of Siang differentiate between a battle, which they call *Modu*, such as the one described above, and a sword-fight, which they call *Madu Mimak*. The sword fight is usually a contest between two individuals, who use palm leaves for shields, feathers for head-gear, and a sword of bamboo-though this latter only if they cannot manage to get a real sword.

Tabong : *Tabong*, also called *Bobon*, is usually played during the *Aran* festival to celebrate the harvest and also when there is an epidemic of dysentery. It is an exhilarating game which consists mainly swinging on a stout cane rope. Two posts, a strong tall one decorated at the top with a wooden horn-bill head and a short one about one foot high, are very firmly fixed in the ground at a distance of 20 or more feet apart from another. One end of a cane rope or creeper is tied to the top of the tall post, and the other end is tied to the top of the short post such as to allow a certain resilience to the slung rope. One at a time boys and girls swing on this rope, using any ingenious method to do so. As the players swing, the horn-bill head also sways in the breeze and resembles a live bird gaily bobbing in the heights.

This game is also played by the Buddhist Khambas in the Yang Sang Chu Valley, and closely resembles the Bobo of the Apa Tanis.

Red Ants : 'Red Ants', or *Rukkung* as it is locally known, is an Adi game played by a number of boys in imitation of red-ant behavior. The boys stand side by side in a line feet apart, knees bent, and with palms of the hand either on their own knees or on each other's knees. Chanting '*Rukkung*', *Rukkung*, they move sideways, taking springy side steps, supposedly carrying food to their nest. Suddenly one player calls out, *Kameape* instead of '*Rukkung*', thereby informing all that he has no food to take to the nest. At this, the leader (the one at the head of the line) tries to push him out by giving a hard push to the whole crowd by pushing his neighbour with his shoulder. Any unwary ants who fall down are out.

Bees : 'Bees', or *Tangut* is an Adi game played by a number of boys who represent bees making honey. The 'bees' surround a 'Queen Bee' and buzz

around her, holding on to each other's coats. One boy, supposedly a man in search of honey, pretends to collect dry leaves and comes and sets fires to the 'bee hive' (by touching the bees) to drive away the bees. But the bees fly at him and sting him by closing round him, while he madly tries to rush away by getting out of the tightly knit ball of bees who get closer and closer and seem to 'sting' his very breath away from him. Finally the man writhes with pain, the bees fly away, and the game ends.

The Ugly Thief Bird : *Hottot*, Which may be translated 'Thief Bird', is an ugly bird that is suspected of theiving. A number of boys playing 'birds' hold hands to form a big circle facing inwards. The ugly bird calls out to the others from a far, saying, 'whose fruits, whose crops, and whose fruits are these ?' The other birds answer, 'This questions are but a ruse to steal our lands and our property. The ugly bird asks again, 'Whose fruit, whose grains, whose lands are these ?' The others answer, 'These are our lands and our fruits.' The ugly bird, however, enters their territory, and the others say that if he is innocent he ought to be able to get away safely. Once the thief bird has broken through the chain of hands to get in, the others do not allow him to get out again, whereas he strives his hardest to break out to freedom. If he cannot do so he is guilty and condemned.

The Hawk Game : The 'Hawk Game', or *Tapa Papa Ri* as it is familiarly known in Siang, is an Adi game.

Eight or ten boys who pretend to be little birds, sit legs apart and one behind the other, holding each other round the waist. The leader, the one who is first in line, grips a pole fixed in the ground. One boy, playing the part of 'hawk', tries to pick off the birds, one by one and beginning with the last in line. He detaches the individuals from the row of birds, while the latter cling on to each other for dear life. The game continues until the last bird has been carried off by the hawk.

The Fox and the Chicken : The 'Fox and the Chicken' is an Adi game which is called *Perok Kagna*. It is usually played by ten or more boys. One boy plays the 'fox', another the 'mother hen', and the rest represent 'chickens'. The fox asks, and thereby must make believe that he is trying to discover where the chickens are. Mother hen and her brood sit in a line facing forward, and the fox sits slightly apart. The fox then asks each chicken whether it is a 'hen' or a 'cock'. One by one as the chickens answer this question, the fox goes up to the individual chicken and if it answers it's a hen, he makes it sit with the hens, but if the answers that it is a cocks, then he makes it sit with the group of cocks. If a chicken answers that it is a hen, it clucks like a hen as it is taken away, but if it says that it is a cock, then it crows proudly as it is taken away. When all the chickens have been taken away, that is, made to sit in two

groups of cocks and hens, the fox tries to carry off mother hen too, but, at this, all the chickens attack the fox, they kill him by surrounding him and closing in on him tightly.

A Tiger Hunt : A 'Tiger Hunt', or *kiruk*, is a game very much enjoyed by Adi children. It is usually played with great imagination.

First there is the invitation to the hunt, glad yells full of life and vigour, as the hunters gathers with their dogs (boys on all fours.) Then one boy, acting the 'tiger', hides himself among some bushes. The 'hunters', armed with *daos*, bows and arrows, and aided by their 'dogs', beat around the trees and bushes in search of the tiger, and then from all directions cautiously surround the tiger's probable hiding place. The dogs in the lead sniff around for the tiger scent, as they get closer and closer to his lair, the hunters, with great suppressed excitement, finally drive out the tiger. A fight ensues between the tiger and the dogs in which they pretend to bite each other; the hunters rain down real arrows on the tiger at close range, and ultimately finish him off with *dao* blows. Of course, as this is a make-believe hunt, the boys do all they can to make it realistic, but take care not to hurt the tiger either with arrows or *daos*. After the final death throes of the tiger, it is hacked to pieces and carried home by the hunters amid shouts of joy.

Mother Hen : 'Mother Hen', or what is known as *Pekung* by the Adis, is a delightfully simple game and very appropriate for young children.

Ten to Twelve children form a row, standing one behind the other, holding on to each other's coats. The mother, known as *pekung*, stands at the head of the row. When all is ready she, with chest puffed out, struts among her brood, winding under, and out, from under the arms of the little 'chickens'. To the accompaniment of gleeful chirps from her young ones, the mother hen pretends to drop food as she proceeds in this way with the chickens in her wake.

Achi Rari : (A Singing Game) : *Achi Rari* is a typically feminine Adi game. It is best played by seven to ten girls. The players join outstretched hands and form a big circle, facing inwards. To the accompaniment of a song, the girls take dainty little running steps first towards the centre of the circle and then back to form a large open circle again. The process of dancing towards the centre and out again is repeated until the end of the song.

Another game noted by Sachin Roy is as follows :

Kapom Amannam : A wooden disc is rolled down the hillside between two rows of boys standing on either side with bows and arrows. They try to hit it while on the move, with arrows. This game is usually played by boys from 5 to 10 years of age.

CHAPTER - IV

AGRICULTURE

Modes of Agriculture

Siang, except the two towns of Along and Pasighat, is entirely a rural area. Cultivation is the chief occupation of the people in the villages, and the economy is agrarian characterised mainly by a form of shifting cultivation called *jhum*. According to the Census of 1981, the number of cultivators in the total population and their percentage to the 'main workers' engaged in different economically productive activities are as follows :

District	Total Population	Total Number of workers	Cultivators	Percentage of cultivators to total workers
East Siang	70,451	32,471	23,029	70.92
West Siang	74,164	35,661	27,895	78.22
Total(Siang)	1,44,615	68,132	50,924	74.74

According to the Census of 1991, the number of cultivators among the total population and their percentage to the 'main workers' engaged in different economically productive activities are as follows :-

District	Total Population	Total Number of workers	Cultivators	Percentage of cultivators to total workers
East Siang	99,985	46,224	23,781	55.43
West Siang	89,778	39,404	24,337	64.25

It is, therefore, seen that a high percentage of the working people is engaged in cultivation. Agriculture is evidently the mainstay of the people, and it determine their socio-economic relations and cultural life. The origin of most of the important ceremonies and festivals of the tribal people of Siang can be traced back to the agricultural practices and rituals, which are performed in various seasons corresponding to the different phases of crop cultivation.

Jhum or shifting cultivation is the most common method of agriculture followed widely by the Adis throughout Siang. *Jhuming* is a form of co-operative venture in which the villagers do their respective work together and assist one another in felling the trees, fencing etc. Various agricultural operations, such as clearing the forest, burning the *jhum*, sowing or dibbling the seed, weeding and reaping are done by all at the same time with religious rites and ceremonies. In *jhuming*, shrubs and trees on the slopes of hills are cut during the dry season, and they are burnt along with the organic deposits

accumulated during a long period of leaf-fall. In fact, *jhum* is a 'slash and burn' type of agriculture being practised by the tribal groups of this area from early times with the aid of simple tools, such as *dao*, hoe and dibble. A sharp tool like pen-knife is used for harvest of grains. The whole fabric of tribal society; the custom, religion and culture, in short, the ways of life of the people, is interwoven with *jhuming*, and the economy based on this method of agricultural production has determined the course of their social development.

An author has described *jhuming* as 'an economy of which the main characteristics are rotation of fields rather than crops; clearing by means of fire; absence of draught animals and manuring; use of human labour only; employment of dibble stick or hoe; short period of occupancy alternating with long fallow periods.' A plot of land under *jhum* is used only periodically, generally for two years, and then abandoned to allow the natural recuperation of soil-fertility so as to use it again after a lapse of years. The intervening period for which a *jhum* land is abandoned is known as the *jhum-cycle*, which varies according to population density, availability of cultivable land and other ecological factors and which may be anything between 7 to 20 years. Clearing of jungle on the hill-sides is generally done during the months of February - April. A second such clearing operation is carried out in some areas in July - August for winter crops. Seeds are dibbled after the jungle is burnt down to ashes. *Jhuming* is a kind of subsistence cultivation. It has been observed that it leaves no surface soil after the land is abandoned and as a result *jhum* - land is exposed to erosion. The fertility of a *jhum* - land tends to decrease rapidly, and the yield is relatively low.

Siang is almost entirely a rugged mountainous area with thick forests and of heavy rainfall in the south-eastern region and in the valleys. From time immemorial, the people of this area have taken to *jhuming* as a practical and viable method of cultivation, whereby they have utilised the land on the steep hill-slopes for food production. Fruitful utilisation of land for cultivation in this area can be maximised if, in *jhuming*, fertility of the soil is retained and erosion and deforestation are checked. In fact, abundant rainfall and climatic conditions are so favourable that no *jhum*-clearing in this area remains without a vegetal cover for any length of time. The vegetative growth is thick and quick, which prevents erosion and the run-off of rain-water. In view, therefore, of the nature of the terrain, which does not offer scope for complete replacement of the shifting cultivation (*jhum*) by settled cultivation, it seems neither possible nor desirable to abolish *jhuming* altogether. Society is susceptible to change, but a traditional method of cultivation conditioned and restricted by ecology is not easily changeable. The solution, therefore, lies in eliminating the disadvantages of *jhuming* by introducing scientific methods in the shifting cultivation and by a gradual transition to permanent cultivation

as far as feasible.

The villagers are induced to cultivate fast - growing leguminous crops in their *jhum*-fields during the *jhum* cycle. The legumes spread out quickly in a matted growth over the soil and check soil erosion. They also prevent the growth of weeds and other plants and help maintain the fertility of soil. Ashes of burnt debris accumulated in the *jhum* field can also serve as manure.

Contour-bunding or log-bunding and sowing of *kachu* along the border of the *jhum*-fields are also some of the simple methods adopted by the cultivators to prevent soil erosion. For this purpose, they use the large trunks and branches of trees felled in the *jhum* clearing.

It has been the persistent effort of the government to encourage the *jhum* cultivators to undertake permanent cultivation in as many areas as possible where it may prove to be more productive than the old agricultural practice. The transition is to take place as a gradual process. Permanent cultivation is done in two ways, wet-rice cultivation and terrace-rice cultivation. The available areas suitable for wet-rice cultivation are, however, limited to some tracts of plain land as in Pasighat, Along and Basar, and a few broad valleys, such as the Siyom river valley. Some of the level areas along the foothills also afford opportunities for wet-rice cultivation. This type of cultivation was initially introduced in the Pangin and Balek villages of the Pasighat Sub-division. In the Basar area, where the wet-rice cultivation has gained popularity, the yield is encouraging. The Gallongs and the Minyongs have made considerable progress towards the development of wet-rice cultivation in their areas.

Terracing is done on the more gentle slopes of hills as in the areas around Karko, Damro and Tuting. In the high and steep hills inhabited by the Boris and in the Mechuka-Manigong areas, rain-fed cropping is practised. Farmers are persuaded to do terrace-rice cultivation where the gradient of hill-sides is favourable for it and irrigation facilities exist, so that food production is augmented.

The land tenure system generally followed is that plots of village or communal land under *jhum* cultivation are allotted to individual families, who have a customary right to cultivate such land by means of shifting cultivation, while land under permanent cultivation is privately owned.¹

Land Reclamation and Utilisation

According to the Agricultural Census 1976-77, the net cultivated area in Siang was 37,283.467 hectares and the uncultivated land was as follows² :

1. See Chapter IX for land tenure under the heading Revenue Administration - land.
2. State Report on Agricultural Census 1976-77 by the Directorate of Agriculture and Rural Development, Government of Arunachal Pradesh, Part II, p. 193.

1. Uncultivated land excluding fallow land	-	21,813.159 Hectares
2. Fallow land	-	27,799.486 "
3. Culturable waste land	-	28,279.216 "
Total Uncultivated land	-	77,891.861 Hectares

Districtwise land under different uses during 1985-86

(In Hect.)							
District	Total holding No. of Area (Hect)	Net area sown	Current fallow (Hect)	Net cultivated area (Hect)	Uncultivated land (Hect)	Area not available for cultivation (Hect)	
East Siang	9111 5817	26,879	3554	30433	9902	18282	
West Siang	8828 45814	21,158	2545	23703	17013	5098	

Barring the riverain tracts and some stretches of scatteredly lying flat land, particularly the plains of Pasighat, the whole of Siang is a tangle of hills and mountains, crammed and jagged, as already stated. The elevation of the terrain generally varies from 150 metres in the low-lands to 3,050 metres or above in the Mechuka-Manigong and northern regions, and also in the area lying between the Siang and Dibang rivers. Most of the cultivable land of this mountainous country used for *jhum*. The land for *jhum* in the hills is selected annually by the village council and divided among the farmers of the village. Permanent cultivations, wet-rice and terrace-rice, are also practised in less hilly areas and flat patches of land, where water resources are available for irrigation. Improved methods of permanent cultivation have been introduced in this area to promote agriculture on a scientific basis, and for this purpose the progressive farmers are given government subsidies. The area of land brought under permanent cultivation in Siang during the period of five years from 1974-75 to 1978-79 is as follows²:

1974-75	-	635 hectares
1975-76	-	624 hectares
1976-77	-	1556 hectares
1977-78	-	1496 hectares
1978-79	-	1566 hectares

Land development for permanent cultivation is continuing unabated.

1. Source : Report on Agricultural Census, 1985-86, Directorate of Agriculture, Arunachal Pradesh, p. 36.
2. Source : Statistical Hand Book of Siang District, 1978-79.

During the year 1983-84, an area of 2003 hectares of land was developed under permanent cultivation.

Some of the marshes and swamps, low-lying areas, land situated far away from the village and land in the high hills constitute the culturable waste land measuring about 28,280 hectares. Gradual reclamation of these lands according to available resources is being done under the programme for extension and development of permanent cultivation.

Irrigation

Irrigation of agricultural fields in this mountainous region is relevant only to sedentary cultivation. *Jhuming* is done periodically on the slant of hills by means of shifting cultivation and the *jhum* fields are rain-fed. The fields under wet-rice or terrace-rice cultivation are irrigated usually by gravitational and diversion channels. An area of 2,946 hectares was irrigated by channels during 1981-82. The other means of irrigation are water resources from dams and manual or power operated water-lifting. In 1983-84, the area brought under irrigation by other sources was 3442 hectares. The Siang region is watered by innumerable rivulets and streams besides the major rivers - Siang and Siyom, which provide the water sources for irrigation.

A number of minor irrigation projects have been implemented in Siang for development of agriculture. The annual progress of implementation is indicated in the following table¹:

Year	Number of Minor Irrigation Projects		Command area (in hectare)
	Implemented	Work in progress	
1974-75	6	15	120
1975-76	11	25	695
1976-77	15	21	517
1977-78	13	48	510
1978-79	-	-	-
1979-80	26	62	2780
1980-81	38	38	2607

In 1983-84, there were 116 minor irrigation projects in Siang.

The Agricultural Census of 1976-77 reveals the following facts relating to the year 1976-77².

1. Source : Statistical Hand Books of Arunachal Pradesh, 1974-75 to 1976-77 and 1978-79 to 1980-81.
2. State report on Agricultural Census, 1976-77 by the Directorate of Agriculture and Rural Development, Government of Arunachal Pradesh, Part II, p. 196.

	<u>Number of Holding</u>	<u>Area</u>
Wholly Irrigated	3343	4887.770
Partly Irrigated	8399	21369.606
Wholly Unirrigated	3746	6875.969
Total	15488	33133.345

The total number of holdings with area receiving irrigation is as follows :

	<u>Number</u>	<u>Irrigated Area (in hectare)</u>
Wholly Irrigated Holdings	3343	4887.770
Partly Irrigated Holdings	8399	9233.857
Total	11742	14121.627

The district East Siang claims 68.94% of total holdings receiving irrigation either wholly or partly which is the highest among all. With 65.93% holdings West Siang claims the second highest position in the state¹.

Districtwise holding s and area receiving irrigation alongwith percentage of to total.

Sl.No.	Category	East Siang	West Siang
1.	Total holdings	9111	8828
2.	Holding receiving irrigation	6218	5820
3.	Net area sown	26879	21158
4.	Net irrigated area	10758	6415
5.	Percentage of holdings receiving irrigation to total number of holdings.	68.94%	65.93%
6.	Percentage of net irrigated area to net area sown.	40.02%	30.32%

According to the Agricultural Census of 1976-77 the irrigated and unirrigated area in Siang under different crops is as follows².

Crops	Area (in hectare)	
	Irrigated	Unirrigated
Rice	14121.627	10546.565

1. Source : Report on Agricultural Census, 1985-86, Directorate of Agriculture, Arunachal Pradesh, p. 39.

2. State Report on Agricultural Census, 1976-77 by the Directorate of Agriculture and Rural Development, Government of Arunachal Pradesh, Part II, pp. 201-204.

Maize	-	2072.745
Millets	-	2534.602
Sugarcane	-	219.654
Fruits	-	1667.088
Vegetables	-	819.166
Other food crops	-	403.871
Wheat	-	37.945
Oil seeds	-	488.023
Other non-food crops	-	464.995
Fibre	-	65.282
Total	14121.627	19319.936

According to Agricultural Census, 1985-86, the irrigated and unirrigated area under different crops in East Siang and West Siang is as follows¹.

(Area in Hect.)

Crops	East Siang		West Siang	
	Irrigated	Unirrigated	Irrigated	Unirrigated
Rice	1,0580	7,662	6,651	7,823
Maize	-	2,005	-	2,563
Millet	-	2,286	-	2,235
Sugarcane	NA	NA	-	39
Other fruits	-	3,484	-	1,171
Vegetables	229	1,483	-	224
Other food crops	-	114	-	141
Wheat	-	72	-	29
Oil Seeds	-	2,720	-	667
Other non- food crops	-	44	NA	NA
Fibre	NA	NA	NA	NA

Soil

Soil in this area is yet to be properly surveyed and analysed. Findings of preliminary analyses of some soil samples obtained casually from different altitudinal zones indicate that the soil contains a high proportion of humus and nitrogen. In the Mechuka and Pangin areas, and in the Bori country, the soil is mixed acidic. The soil in Arunachal Pradesh generally varies from sandy loam to clayey mixed with heterogeneous matrix.

1. Source : Report on Agricultural Census 1985-86, Directorate of Agriculture, Arunachal Pradesh, pp. 275 to 297.

In the upper regions of Siang the soil is usually stony, brown and reddish in colour, while that of the middle portion of the slopes is loamy and better developed. In the lower regions and in the valleys the soil is alluvial and fertile, rich in organic matter and in the foothills it is sedimentary in character.

The arable land is mostly available on the hill-slopes. The top soil is thin. The soil of the river valleys of the Siang and Siyom, though rich in humus on the surface, is composed mainly of sand and gravel lying below the top soil. In this soil water percolates quickly, for which manuring is necessary for cultivation of deep-rooted crops. The common agricultural soil is porous, for it contains a high percentage of sand.

"It is known that the red soil on the hill slopes is quite suitable for the cultivation of maize, fruits, vegetable, pulses, etc. Similarly the soil mixed with sand is suitable for the cultivation of oil seeds and other rabi crops. The alluvial soil is good and suitable for the cultivation of paddy. It may also be mentioned that the alluvial soil requires heavy irrigation at a comparatively longer intervals. The red soil mixed with stone requires light irrigation at shorter intervals. This holds good with respect to soil mixed with sand. The sedimentary soil also requires heavy irrigation at short intervals in the foothills."¹

Major and Subsidiary Crops

According to the Agricultural Census of 1976-77 the total cropped area in Saing is about 33,442 hectares comprising both irrigated and unirrigated fields. The major crops cultivated are rice, millets, maize and Job's tears (*Coix Lachryma*). Of these kharif crops, rice is the most important. The paddy grown are mainly of upland variety. Other crops are fruits, vegetables, sugarcane, wheat, oil seeds etc. Nearly the whole of agricultural products is food crops.

While sowing of seeds of *ahu* paddy, Job's tears and maize are done by dribbling, finger millet and fox-tail millet are sown broadcast in between the former. The time for sowing of various crops may vary from area to area according to climatic and ecological conditions.

The following table² indicates the crop-wise area and production in Siang during the year 1978-79.

Crops	Area (Hectare)	Production (Ton)
Paddy	22304	39883
Millets	5778	3982

1. State Report on Agricultural Census, 1976-77 by the Directorate of Agriculture and Rural Development, Government of Arunachal Pradesh, Part I, p. 18.

2. Source : Statistical Hand Book of Arunachal Pradesh, 1978-79.

Maize	3847	3670
Wheat	140	232
Mustard	1076	570
Pulses	80	43
Potato	160	569
Ginger	50	54
Sugarcane	331	754
Turmeric	30	52
Chillies	160	45
Vegetables	625	712

The area under crops and total production of crops in the year 1983-84 were as follows :¹

District	Area under crops (in hectare)		Production of crops (in metric tonnes)	
	Food grains	Oil seeds	Food grains	Oil seeds
East Siang	24985	2120	25206	1581
West Sing	22321	250	23132	220
Total	47306	2370	48338	1801

1. Source : Basic Statistics of Arunachal Pradesh, 1983-84.

The area under production and yield rate per hectare of important crops in West Siang and East Siang districts is as follows.¹

Sl. District No. (Yearwise)			RICE		MAIZE		MILLETS		WHEAT		PULSES		OIL SEEDS						
			Area	Production Yield	Area	Production Yield	Area	Production Yield	Area	Production Yield	Area	Production Yield	Area	Production Yield					
1	1984-85																		
	West Siang	19075	20704	109	1890	2203	1.17	2180	1588	0.73	-	53	32	0.60	393	287	0.73		
	East Siang	16555	18329	111	3438	4048	1.19	5213	3864	0.74	240	438	183	95	0.60	2621	2124	0.81	
2	1985-86																		
	West Siang	19112	20542	107	1935	1800	0.93	2208	1206	0.70	9	14	156	96	0.64	500	375	0.75	
	East Siang	18476	21650	117	2559	3826	1.50	6164	4293	0.29	247	486	197	224	0.64	2700	2025	0.75	
3	1986-87																		
	West Siang	11950	12580	105	2470	2620	1.06	30	60	2	30	60	200	95	0.91	600	396	0.66	
	East Siang	18750	19840	105	3830	4020	1.04	420	500	1.19	420	500	1.19	287	310	1.08	3757	3757	1
4	1987-88																		
	West Siang	11980	14980	125	2500	3040	1.21	2775	1420	0.51	60	105	1.75	615	469	0.76	-	-	-
	East Siang	18775	21560	115	3920	4539	1.16	6650	3435	0.52	475	675	1.42	3755	3640	0.97	-	-	-
5	1989-90																		
	West Siang	17550	19950	11.39	3200	3840	12.00	2360	2000	8.47	44.5	110	14.10	110	61	5.55	-	-	-
	East Siang	16000	18950	11.43	45000	5400	12.00	2330	6650	10.51	0.75	550	12.36	326	152	4.66	-	-	-
6	1990-91																		
	West Siang	17760	20244	11.00	3245	3900	12.02	2362	2980	9.65	78	117	15.00	430	380	8.84	1507	1210	8.03
	East Siang	16080	19452	12.00	4508	5330	12.27	6380	6722	10.54	44.8	565	12.61	740	550	7.43	4195	3878	9.24

Source : Statistical Abstract/Pocket Book of Arunachal Pradesh, 1985 to 1991.

Rice

Rice, the principal crop cultivated extensively, is the staple food. There are mainly two varieties of paddy - *ahu* and *sali*.

The *ahu*, is cultivated in the *jhum* fields. It has several varieties, locally known as *yapa*, *bali ringnea*, *adi rike*, *yamuk*, *anker* and *patu*. The seeds are sown by dibbling from the later part of January to mid-April. The crop starts flowering towards the end of April and the harvest takes place during the months of June to August.

The *sali* is grown in flat patches of land developed for wet-rice cultivation. Land is prepared by hoeing and ploughing. Seeds are sown in May-June and seedlings are transplanted towards the end of July. The crop is harvested in November.

Millets

A variety of finger millets (*Eleusine coracana*) are grown by *jhuming* in all parts of Siang. Millets are important grain crops, providing chief items of food to the people besides rice. Early varieties of finger millet are sown in March, while late varieties in May-June. The crops mature in about five to six months before they are harvested during the months of October to January.

Sowing, broadcasting and harvesting of fox-tail millet (*Setaria italica*) are the same as of finger millet. Fox-tail millet is also cultivated in the *jhum* fields together with other crops. It is a dependable item of food for the people before the main rice crop is reaped.

Job's tears

Job's tears (*Coix Lachryma*), an important mixed crop, are grown in the *jhum* fields. The cereals are of several varieties. Job's tears are sown in May and June and harvested during the months of December and January.

Maize

Maize (*Zea Mays*), a major food crop is grown in the *jhum* fields. Seeds are dibbled, normally two or three grains in a hole, in the months of March and April. Cultivated as a mixed crop, maize is harvested in June and July. It provides food to the people during the lean period.

Garden Crops

The green vegetables are of two kinds as they are grown in the summer and in the winter. The summer vegetables are brinjal, french-bean, bitter gourd etc, while the winter vegetables include pumpkin, country bean, flat bean, soya bean, white gourd, mustard, small onion etc. Potatoes and tomatoes, introduced in this area, have become popular. In the Mechuka and Manigong areas, however, the potato cultivation is being practised for long in the summer while in Along, Basar, Pasighat, Karko and Tuting it is done in the winter.

The spice crops are chillies and ginger. They are sown mixed with other crops in the *jhum*-field in March and April and harvested in October and November.

The main fruits are Jack-fruit (*Artocarpus integrifolia*) and citrus fruits including oranges. Jack-fruit, grown in large numbers, is a characteristic feature of some areas. Oranges of soft skin grow mainly in the lower valleys. Papaya and banana are other common fruits. Of late, pine-apple cultivation is developing. Pears, peach, guava, pomegranate and litchi are also grown.

Sugar-cane

The cultivation of sugar-cane in northern Siang is very old and the Adis there recognize three varieties. It has been introduced in other areas as well for production of gur or *molasses*. Sown in the months of March and April, the crop is harvested in December and January.

Non-Food Crops

In addition to the food crops, the Adis raise some fibre crops, of which the most valuable is cotton grown in the *jhum*-fields. Other fibre plants grow wild in the jungle, which are locally known as *ridin*, *repung* and *sajok*. Fibres obtained from these plants are normally used in making bags and nets.

Tobacco (*Nicotiana Rustica*) is cultivated along with the cotton in the *jhum* fields of many villages. The plant is allowed to grow without tapping or suckering till the colour of leaves turns yellow. The matured leaves are only collected by cutting or plucking. The leaves are kept for about three or four days in baskets before they are rolled by hand. Thereafter the rolls are laid exposed in the sun for a few days till they are dried enough for sucking. The tobacco is grown by the people for their own consumption.

Horticulture

The climatic and ecological conditions in Siang, as in the other parts of Arunachal Pradesh, are congenial to the growth of temperate fruits in the higher regions and citrus and other tropical and sub-tropical fruits in the lower regions. In fact, this mountainous region holds out a bright prospect for development of horticulture, and to materialise it various schemes as follows have been taken up under the Five Years Plans :

- (1) Supply of fruit grafts/plants of improved varieties at subsidised cost to the cultivators,
- (2) Opening of People's Horticulture Gardens on subsidy,
- (3) Provision of horticultural hand-tools on subsidy,
- (4) Demonstrations on planting and maintenance of fruit trees, imparting of technical know-how etc., and
- (5) Raising of nurseries for fruit plants.

Besides the deciduous fruit seedlings, such as pears, peach, plum and

apricot planted in the Mechuka and Tuting areas, and guava, banana, pine-apple, citrus fruits including oranges planted on a large scale in Along, Basar, Tuting, Pasighat, Karko areas and in the Bori country, thousands of apple grafts have been distributed to the farmers and an area of 89 hectares of land has been brought under apple plantation till the year 1978-79. The area under other fruit plantations as in the month of March 1979 were as follows :

Pomegranate, nuts and other temperate fruits	- 77 hectares
Tropical and sub-tropical fruits	- 2210 "

Compact horticulture gardens were opened at Along, Kambang, Tuting and Mechuka on village basis, where the initial expenditure on purchases of seedlings, manure and equipments was borne by the government. The number of Horticultural Gardens opened till the month of March 1984 was 180, of which 100 gardens were in the West Siang District and 80 in the East Siang District.

PROGRESS OF SCIENTIFIC AGRICULTURE

Every effort is being made to promote agriculture in this region on a scientific basis. Effective steps have been taken towards self-sufficiency in food by introducing improved methods of cultivation. The programmes drawn up to achieve this objective include, among other things, the following :

- (1) Development of land under permanent cultivation,
- (2) Distribution of improved agricultural implements and machines amongst the progressive farmers,
- (3) Irrigation by channels and construction of Minor Irrigation Projects,
- (4) Implementation of 'Rural Water Supply' schemes,
- (5) Supply of fertilizers and improved seeds,
- (6) Agricultural demonstrations,
- (7) Multiple cropping,
- (8) Farmer's training and
- (9) Training to personnel in specialised branches of agricultural science, soil conservation etc.

Practical demonstration on improved methods of cultivation are organised for selected groups of progressive farmers. In 1958-59, eight demonstration centres were opened in different places, namely Pangin, Shimong, Kaying, Sib, Yapuik, Mechuka, Molom and Manigong. Land for these centres were provided by the cultivators, while seeds and implements were supplied by the government in the first year. The achievements of these centres were encouraging.

The Gramsevak Training Centre near Pasighat opened in 1950 under the name of Agricultural Training Institute has been playing a very important role

in training the local young people in the methods of rural development including agriculture. The Village Level Workers trained up in this centre have been helping the cultivators to learn the techniques of scientific agriculture for gainful and increased food production.

Besides this institution, another allied organisation namely the Farmer's Training Centre, was set up at Pasighat in 1972. The object of this centre is to provide vocational support to the farmers through need based production - oriented training courses. For this purpose, various training programmes relating particularly to production-cum-demonstration are carried out in the fields of the farmers so as to bring home to them the utility and value of new agricultural and home science technologies. The training is imparted through work experiences, that is 'teaching and learning by doing', so that a sense of confidence and competency develops among the farmers as regards the new scientific methods.

The achievements of the centre during the year 1981-82 are as follows :

Course	Number of Camps organised/conducted	Number of Farmers (male and female) attended
1. Institutional Training	27	430
2. Production-cum-demonstration	19	325
3. One day Training on Plant Protection (Specialised)	30	477
Total	76	1232

There are two Government Agricultural Farms, one at Along and the other at Tuting. These farms were opened in 1957-58 as production-cum-demonstration farms. Vegetables, potatoes, fruits and cereals are grown in these farms. There is also one Government Seed Farm at Jomlo.

A Multiple Cropping Project under the charge of a Project Officer with headquarters at Basar has been taken up since 1973-74. The project is under way in the areas around Basar, Along, Kamba and Bagra in the West Siang District. The project includes programmes for two-three crop sequences in cultivation fields, minikit demonstration, adaptive trials on different crops and similar activities.

The Indian Council of Agricultural Research has a functional unit at Basar. The unit has a Research Wing as well as a Krishi Bigyan Kendra. Through the Research Wing training in improved methods of cultivation is imparted to the local farmers. In the Krishi Bigyan Kendra the farmers are trained in scientific agriculture, horticulture, home science, animal husbandry and agricultural engineering.

Agricultural Tools and Implements

The indigenous tools used by the farmers for tillage are antiquated and of simple types, such as *dao* or machete, dibble or digging stick, wooden or of bamboo, weeding tools also of bamboo etc. *Dao* and a type of hoe were the only iron tools used by them before the introduction of modern agricultural implements. Felling-axes used by a few rich cultivators were brought from outside. The *dao* is an all-purposive and indispensable instrument for clearance of jungle, felling of trees, construction of houses, cane and bamboo works, killing of animals etc. A sharp bamboo instrument, U-shaped at the top and called *yeek*, is a popular tool, light and handy, which is used for weeding. For sowing paddy in the *jhum*-fields, a slick jungle wood is sharpened for making holes. The women dibbling with one hand and dropping seeds in the holes with the other is a common sight. The seeds are covered with splitted bamboo. A small knife is used for harvesting and a bambóo basket for carrying the harvest. In the Mechuka and Manigong areas, the people also use a type of country plough driven by bullocks for tillage.

In recognition of the fact that an improvement in the use of tools is essential for development of agriculture in this region, some modern agricultural implements, which could be easily handled and also serve as a labour-saving device, were introduced initially. The progressive farmers were provided with hoe, felling-axe, pick-axe, spade, shovel, jumper, rake, sickle etc. free of cost till the year 1955-56 and there after on 50% government subsidy. The improved agricultural implements distributed to the farmers in Siang (as on 31 March 1979) were as follows¹ :

Type of Implements	Number of Implements Distributed	
	East Siang	West Siang
(1)	(2)	(3)
1. Hoe	6000	2500
2. Felling - Axe	300	75
3. Jumper	2290	965
4. Wheel Barrow	45	30
5. Sugar-cane Crusher	6	3
6. Tata Shove Round	950	931
7. Garden Rack	100	-
8. Pick - Axe	740	75
9. Rake (<i>Khurpi</i>)	450	-

1. Source : Statistical Hand Book of Arunachal Pradesh, 1978-79.

10. Sickle	50	-
11. Shovel (<i>Khari Kudal</i>)	200	-
12. Boiling Pan	35	-
13. Hammer	200	-
14. Plough	450	-
15. Gross Cut - Saw with files	10	-
16. Fit and with files	10	-
17. Field - Rake	250	-
18. Paddy Dehusker	-	-
19. Cane	-	30
20. Felling - Axe (country made)	50	-
Total :	12136	4610

The distribution of these instruments has brought about a remarkable change in the use of agricultural tools, and the farmers by and large have not only learnt to operate them, but they have also shown a clear liking for the modern implements in preference of the old outdated tools.

Special effort is also made to develop agricultural farming by means of modern machines. The following table indicates the distribution of such machines to the farmers (as on 31 March 1978)¹.

Type of Machines	Number
1. Bulldozer	3
2. Tractor	22
3. Power Tiller	39
4. Pumping set	41
5. Power Sprayer	18
Total:	123

Seeds and Manure

Seeds of healthy plants are usually preserved by the progressive cultivators for future use. Improved seeds suitable to the local soil are procured from government seed farms, nurseries and various other outside sources. These seeds are introduced into the agricultural fields through demonstrations and adaptive trials. Cultivation of *sali* paddy in the Basar area with seeds brought from Assam has been quite successful in that the output is fairly high. Supply of improved and high-yielding varieties of seeds to the cultivators consists mainly of paddy (*sali* and *ahu*), maize, potato, sugar - cane, wheat, vegetables etc.

1. Source : Statistical Hand Book of Arunachal Pradesh, 1978-79.

The following table shows the area in Siang brought annually under improved and high-yielding varieties of seeds¹ :

Year	Area brought under improved seeds (in hectare)	Area brought under high-yielding varieties of seeds (in hectare)
1976-77	2504	2554
1977-78	1225	2682
1978-79	3824	2952
1979-80	4093	2921
1980-81	-	2304
1981-82	-	4554

The indigenous tribes have their own methods of manuring the cultivation fields, although systematic use of artificial manure as soil fertilising agent was probably not known to them. Agricultural land in this area is on the whole fertile. The soil is rich in nitrogen, potash and organic matter. Jungles burnt for jhumming from a layer of ash on the top soil on which seeds are dribbled or overcast. The soil mixed with the ash serves as manure. The *jhum*-fields are left fallow for a couple of years for recuperation of soil fertility by natural processes. The use of cow-dung as manure is known. For example, in the Mechuka area the people use compost cow-dung and burn decomposed leaves collected from jungle to fertilise their cultivation fields.

Under the programmes for agricultural development the importance of manures is stressed through trials and demonstrations organised in the Community Development Blocks, and the cultivators are persuaded to make compost pits and use manures and fertilisers for better crop. For this purpose, bonemeal and oil cakes were at first supplied to selected farmers. The result was encouraging. The fields where these were used not only gave an increased yield, but also retained the fertility of soil for years. It was later seen that plenty of organic manures was available in this area, which could be used well as fertilisers instead of imported artificial manures. Efforts were, therefore, made by the agricultural staff to develop the local methods of preparing manure and to impress upon the cultivators to use compost, farm-yard and green manures.

With the development of agriculture, especially the progress made in the field of permanent cultivation, there has been a growing demand for artificial manures and chemical fertilisers. Effective steps have been taken by the government to meet this demand. The following table indicates the cultivated

1. Source : Statistical Hand Books of Arunachal Pradesh, 1976-77 to 1981-82.

area in Siang brought annually under fertilisers¹ :

Year	Area (in hectare)
1976-77	226
1977-78	200
1978-79	200
1979-80	1250
1980-81	101
1981-82	170

The following table indicates the consumption of chemical fertilisers in East Siang and West Siang Districts during the years 1988-89 to 1990-91.²

Year	East Siang	West Siang
1988-89	46.90 M.T.	23.00 M.T.
1989-90	46.90 M.T.	23.50 M.T.
1990-91	52.00 M.T.	27.00 M.T.
TOTAL : 145.80 M.T.		73.50 M.T.

Agricultural Diseases and Pests

There is no recent report of any major destruction of crops due to agricultural diseases or by pests except some sporadic attack of insect pests on cultivated plants. The measure commonly taken by the people against pest attack is scorching the soil by fire and thorough weeding and cutting of shrubs and jungles. To drive away birds which damage the crops they tie empty tins to bamboo posts all over the field. These tins when shaken or pulled produce sounds, which scare the birds off. Besides these, the cultivation fields are fenced to protect the crops from destructions by wild cattle.

Some of the common agricultural diseases injuring the crops and the remedial measures taken are as follows :

Crops	Diseases	Remedies Applied
1. Paddy	Paddy Blast	Agro-mercurial compound @ 1.400 by weight with 10% active material.
	Bacterial Blight	Seed treatment with streptocycline @ 0.5 gms per 10 kg seeds.
	Root-Knot	Seed treatment with 1% active

1. Source: (a) Statistical Hand Books of Arunachal Pradesh, 1976-77 to 1980-81.

(b) Statistical Hand Book of Siang District, 1978-79.

2. Statistical Abstract, Arunachal Pradesh 1989 to 1991.

material 1.400 by weight of any organic mercurial compound before sowing.

2. Potato	Early and Late Blights	Copper fungicide, Blitox 52.
3. Wheat	Smut	Copper fungicide, Blitox 52.
4. Citrus Crops	Canker	Streptocycline.
5. Peas	Powdery Mildew	Fungicides.

The common insect pests causing damages to crops are the following :

Crops	Pests
1. Paddy	Grasshoppers, leaf-hoppers, rice-beetles, rice-bugs, case-worms, stemborers, rice- hispa etc.
2. Citrus Crops	Stemborers.
3. Mustard	Aphids and saw-fly.
4. Winter vegetables	Cut-worms.
5. Maize	Caterpillar.
6. Beans	Hairy caterpillar.

Field rats also do a considerable harm to the young crops. They appear in large numbers, particularly during the bamboo flowering season and destroy the crops. Bamboo traps are used by the people to combat the rat menace. Traps with baits of zinc phosphide are also used.

As early as in the fifties ten plant protection units were formed to save crops from diseases and ravages of pests, and they were stationed at different headquarters of the Agriculture Inspectors and at important villages. The Village Level Workers were also associated with the units. Simple equipments and medicines were distributed, and the field staff were engaged in the work for plant protection.

The plant protection service, rendered free to the cultivators, includes application of various insecticides and fungicides, spraying and dusting with chemicals and other protective measures.

The area in Siang brought under plant protection annually from 1976-77 to 1980-81 is as follows¹ :

1976-77	:	2,900 Hectares
1977-78	:	3,333 "

1. Source: (a) Statistical Hand Books of Arunachal Pradesh, 1976-77 to 1980-81.

(b) Statistical Hand Book of Siang District, 1978-79.

1978-79	:	3,315	"
1979-80	:	4,200	"
1980-81	:	3,800	"

In 1983-84, an area of 4,500 hectares was brought under plant protection.

Animal Husbandry and Veterinary

The livestock of the people of Siang consists mainly of mithuns, cattle, pigs and goats, which are reared for food as well as social and religious purposes. The mithun, in particular, has a very important place in the life of the Adis. It is an animal of the bovine species, heavy and clumsy-looking, somewhat of a mixture of cow and buffalo in appearance. It has a large massive head with a pair of huge horns, a hump and pale blue eyes. The front legs are larger than the hind ones. Its hide is very thick and the colour of the coat varies from coffee brown to blackish brown. The mithun is held in such high esteem that there are Adi myths and folklores eulogising the importance of the animal. The mithun symbolises power and wealth. A man's social status is often determined by the number of mithuns owned by him. Mithuns are usually allowed to roam freely in nearby jungles, but they are kept under watch. The cattle including mithuns are sometimes kept confined within fenced pastures and moved to other grazing grounds when fodder is exhausted. The pigs, in numbers, roam about house premises. They are kept in pigsty, which is placed generally under the floor of the house.

The cattle are not normally reared by the people for milk. The Adis usually do not take milk. The art of milking is a new development in this area. With the opening of cattle farms and dairy units, milk is now becoming popular. The people are getting fond of tea with milk. Dairy farming has enough scope for development in this area having good stretches of grasslands and pastures. A number of farms and centres for upgrading and development of livestock and poultry has been opened as follows¹:

		Number (as on March 31, 1981)	
		West Siang	East Siang
Cattle Breeding Farm	—	2	1
Cattle Upgrading Centre	—	13	2
Fodder Farm	—	1	1
Poultry Farm	—	1	-
Chick Rearing Centre	—	1	1
Sheep and Wool	—	1	-
Extension Centre			

1. Source: Statistical Hand Book of Arunachal Pradesh, 1980-81.

Milk Collection and Marketing Centre

1

The number of cattle upgrading centres in Siang rose to 18 in 1983. Thirty key village sub-centres, one goat farm and one small pig farm have also been set up in the East Siang District. Milk marketing system is being introduced in that district as well.

The development programme aims at, among other things, upgrading of the indigenous livestock and poultry, which are comparatively poor yielders of milk, meat, wool and egg. The cattle farms and upgrading centres have been established for production and multiplication of cross-bred cattle to be distributed to farmers and villagers for improvement of their livestock. The programme envisages free distribution of breeding bulls to the villagers and grant of subsidy to the dairy units. Besides these, poultry, pig and goat units are distributed annually to the farmers at subsidised rates. Under the animal husbandry programme, steps are also taken for development of pastures, training of farmers on improved methods of animal husbandry, conducted tour of farmers, livestock exhibition etc.

Sponsored by the North-Eastern Council, a Regional Hill Cattle Breeding-cum-Demonstration Centre was established at Kamki, 26 km from Along, in 1973-74 for cattle development. The project has two components - cattle breeding-cum-demonstration and fodder seeds production-cum-demonstration.

The objectives of the project are :

- (1) a planned cross-breeding of mithuns with brown-swiss and red-dane to obtain and develop an uniform bovine population of cross-bred stock of the respective groups with a definite level of exotic mithun inheritance;
- (2) distribution of the cross-bred products of the centre for breeding the cross-bred produced in the cattle development areas for a planned *inter se* mating ;
- (3) training of farmers and field staff in the management of cross-bred cattle ;
- (4) supply of milk from the centre to the neighbouring consumption centres, and
- (5) extension of the facilities available at the centre to its vicinity.

An inventory of livestock and poultry in the two districts of Siang owned during the year 1980-81 is as follows¹ :

Cattle and Buffalo

Livestock	Males over 3 years	Females over 3 years	Young Stock	Total
Cattle	23,550	17,345	7,555	48,450
Buffalo	793	227	1,066	2,086

Other Livestock and Poultry

Sheep	—	562
Goat	—	15,638
Horse and Pony	—	264
Pig	—	73,591
Poultry	—	3,02,729

Among all the livestock the number of pigs is the highest. Indeed, pigs are the most common domesticated animal of the people. Pigs can rapidly multiply their number. A sow may deliver nine or more piglets at a time. The pig is no doubt a valuable asset of the people, but the method of rearing pigs in the villages is very crude. They are kept in unhygienic conditions and in the house they do the job of scavengers. Better type of cross-bred pigs are distributed to the people to upgrade their stock. Next to pig are cattle and goat in number. Poultry birds, mainly fowls, are kept in almost every house.

Animal Diseases and Veterinary Aids

Some of the common diseases, parasitic and contagious, which afflict and ail animals and birds are the following :

- (1) foot and mouth disease among cattle including mithuns, pigs and goats;
- (2) haemorrhagic septicaemia;
- (3) anthrax and black quarter diseases;
- (4) round-worm and fluke-worm among cattle, pigs, buffaloes and elephants;
- (5) mange among dogs and goats;
- (6) ranikhet diseases, fowl cholera and fowl pox in poultry birds, and
- (7) rinderpest among mithuns and cattle.

Veterinary aids are provided through various institutions as follows :

(Position as in 1982-83)

District	Vetrinary Dispensary		Veterinary Aid Centre	
	Number	Location	Number	Location
1	2	3	4	5
East Siang	8	Pasighat	9	Karko,
		Mariyang,		Mirem,
		Pangin,		Telem,
		Mebo,		Koyu,
		Boleng,		Riga,
		Yingkiong,		Geku,
		Koyu,		Borguli,
		Nari.		Katan,
				Detak.
West Siang	10	Along,	12	Rumgong
		Basar,		Manigong,
		Gensi,		Payum,
		Tirbin,		Kaying,
		Liromoba,		Nikte,
		Tuting,		Gelling,
		Tato,		Daring,
		Mechuka,		Bali,
		Kaying,		Sibe,
		Baririjo.		Bagra,
				Kambo,
				Hime.

Besides the above institutions, there are two mobile veterinary dispensaries, one each at Pasighat and Along. A district diagnostic laboratory has also been set up at Pasighat.

The veterinary staff (as in March 1981) is as follows :

Particulars	Number	
	East Siang	West Siang
Veterinary	11	13
Assistant Surgeon		
Veterinary Field	54	48
Assistant/Supervisor		

1. Source: Statistical Hand Book of Arunachal Pradesh, 1980-81.

The following table shows the number of animals and birds in Siang, which were provided with veterinary treatment during the period 1974-75 to 1981-82¹.

Year	General Case	Innoculation/ Vaccination	Castration	Total
1974-75	22600	39410	3200	65210
1975-76	18130	32060	2009	52199
1976-77	33469	69485	2771	105725
1977-78	34089	95612	2476	132177
1978-79	9930	69686	682	80298*
1979-80	23987	34779	2408	61174
1980-81	29069	35802	2487	67355
1981-82	29054	48031	1992	79077

*N.B: Figures relating to East Siang not included.

The following table shows the number of animals and birds in East Siang and West Siang which were provided with veterinary treatment during the period 1987-88 to 1989-1990.²

CASES TREATED	EAST SIANG		
	YEAR		
	1987-88	1988-89	1989-90
1. General case	28,251	29,773	32,335
2. Castration	8,851	3,995	45,694
3. Innoculation/Vaccination	12,080	19,148	28,602

CASES TREATED	WEST SIANG		
	YEAR		
	1987-88	1988-89	1989-90
1. General case	44,118	1,00,693	29,374
2. Castration	984	3,846	3,968
3. Innoculation/Vaccination	19,718	1,02,282	80,903

1. Source: (a) Statistical Hand. Books of Arunachal Pradesh, 1974-75 to 1978-79.
(b) The Directorate of Animal Husbandary and Veterinary, Government of Arunachal Pradesh.

2. Source: Statistical Abstract of Arunachal Pradesh, 1988 to 1990.

Fishery

Fish is important to the people as an item of diet. Fishing as well as hunting is often a commercial enterprise undertaken by the whole village. It is something more than a search for food. It has a religious import involving taboos. A good or bad harvest, it is believed, depends on the success or failure of a ceremonial hunt.

The methods followed by the tribal people to catch fish by poisoning or harpooning were destructive. Fish culture was unknown to them, and fishing is not an exclusive trade or occupation for any section of the people. There is no class or caste of fisherman. Persuasive measures were, therefore, to be taken to make the people aware of the harmfulness of indiscriminate fishing by poisons or other destructive means. In doing this, extreme caution was needed to ensure that the administrative measures did in no way hurt the feelings of the tribal people about their rights of fishing, which was not only an important source of their food, but also connected with their religious beliefs. Besides this, every tribe has its territorial jurisdiction, sanctioned traditionally by custom and usage, over which it asserts a claim for free hunting and fishing. Some clans have established exclusive fishing rights over certain areas along the streams where other clans are not allowed to fish.

Various types of bamboo traps, usually conical in shape with or without valve, are used by the tribal people for fishing. A conical net called *subjang* is used for fishing on stony bed of streams. *Edil* is a cylindrical valved fish trap. Cast net and fishing-rod are also in use.

Pisciculture is a new development in this area. The fishery development programme was initiated in Arunachal Pradesh in 1958-59 on a very modest scale. It has now extended to many villages in Siang. The programme includes the following schemes:

1. Intensive Fish Farming,
2. Expansion and Improvement of the existing Fish Seed Farms,
3. Paddy-cum-Fish Culture,
4. Reclamation of Swamps and Natural Lakes,
5. Trout Culture,
6. Supply of Fishing Gear and Tackles on 50% subsidy,
7. Marketing, and
8. Education and Training.

In Siang, there were (as in the month of March 1980) two fish farms, one in Pasighat and the other at Yingkiong, and 740 village fish ponds with an area of 50 hectares under pisciculture. Fingerlings are distributed every year. Apart from the financial assistance given by the government for development of pisciculture, the people have also taken up the construction of fish ponds in

villages on self-help basis. In 1981, the number of fish farms rose to nine, of which five were in West Siang and four in East Siang.

FORESTRY

Forest Area

The total forest area in East Siang and West Siang is approximately as on 31.3.91 as follows :

East Siang District	-	5,125 sq.km.
West Siang District	-	10,487 sq.km.
Total	-	12,257 sq.km.

The forest area contains a wealth of flora and fauna, valuable plants and trees and rare species of animals. The vegetation varies from tropical evergreen to sub-temperate.

Reserved Forests and Forest Divisions

East Siang District

The Pasighat Forest Division is the only territorial forest division in the district. Under the jurisdiction of this division there are six reserved forests comprising an area of 388.89 sq.km. as follows :

Name of the Reserved Forests	Area (in hectare)
1. Gali	— 1657.64
2. Gutin	— 11218.00
3. Poba	— 2279.24
4. Pasighat	— 4573.38
5. Pasighat Station Reserve	— 161.06
6. Lali	— 19000.00
Total	38889.32

The district has two wild life divisions, namely the Lali Wild Life Sanctuary Division and the Central Wild Life Division with headquarters at Pasighat.

Pasighat is also the headquarters of the Conservator of Forests, Central Forest Circle covering all the forest divisions in East Siang and West Siang districts.

West Siang District

In July 1963, the Sadiya Forest Division was bifurcated into Siang Forest Division and Lohit Forest Division. The former was further divided into Along Forest Division and Pasighat Forest Division with headquarters at Along and Pasighat respectively. The Along Forest Division, the only territorial forest

division in the district, has within its jurisdiction seven reserved forests extending over an area of 214.71 sq.km. as follows :

Name of Reserved Forests	Area(in hectare)
1. Dipa	— 7770.13
2. Likabali	— 4531.14
3. Libar Hills	— 800.00
4. Echi	— 4000.00
5. Bahadur Hills	— 160.00
6. Mechuka S. R.	— 160.00
7. Ragge	— 4000.00
Total	21471.27

Importance of Forestry in the Economy of the Districts

The mode of life and village economy of the tribal people are vitally linked with the forests in this mountainous region. The forest provides them the much-needed materials for handicrafts and house-building as well as items of food. In short, it is a source of their wealth.

The economic importance of forestry lies in the fact that forest is the most appreciable source of revenue that it is derived from the districts of siang. The forest resources of Siang are rich enough to feed a number of wood-based industries. Establishment of seven saw mills and two match-splint factories in the East Siang District is under way. There are three saw mills in the West Siang District. The districts may have more forest-based industries in course of development of forestry. In fact, the economic development in this area, particularly in the industrial sector, depends largely on forests.

Under the Arunachal Pradesh Anchal Forest Reserve (Constitution and Maintenance) Act, 1975 (Act No.1 of 1976) as ammended under Act No. 3 of 1981, the Anchal Samity shall utilise fifty per cent of their share of forest revenue for rural developments.

Forest Products and their Value

Forest products are many and valuable. These are classified under two categories - major and minor. The major products consists of timber and allied items like firewood including charcoal, posts, poles etc. which contributed about Rs.11.35 lakhs towards the revenue collected from the West Siang District during the year 1981-82. The minor products include, among other things, cane, bamboo, thatch, agarwood, shingles and gravels, *coptis teeta* (Mishmi teeta - a medicinal plant) etc. An amount of Rs. 4.21 lakhs was earned during the year 1981-82 through marketing of minor forest products from the West Siang District. In the same year, a total revenue of Rs. 23.39 lakhs was

earned from the forests of the East Siang District.

Timber, cane, bamboo, thatch etc. extracted from the forests are essential items for construction of dwelling houses of the people, for making of tools and implements, basketry and for various other purposes. The forests also provide fuel. *Coptis teeta* is renowned for its medicinal value.

Timber is supplied to the Indian Railways to meet the requirement for sleepers. The following table indicates the number of sleepers (in pieces) supplied from the forests of Siang for some years past.

Year	Broad Gauge	Metre Gauge	Total
1977-78	310	510	820
1978-79	1822	3847	5869
1979-80	2752	4132	6884
1980-81	1799	3720	5519

Forest Revenue

The forest revenue earned from the two territorial forest divisions of Siang during a period of five years from 1974-75 to 1978-79 amounted to a total of Rs. 66,96,120¹.

The total gross forest revenue earned in East Siang and West Siang Districts during the period from 1987-88 to 1990-91².

Year	(Rs. in lakhs)	
	East Siang	West Siang
1987-88	99.84	28.81
1988-89	100.19	31.10
1989-90	151.57	4.51
1990-91	97.70	10.65

Measures to Secure Scientific Exploitation and Development of Forests

Working plans are executed for scientific management of the forests. The plans are directed towards upgrading of the undeveloped forests and bringing of more forests under reservation. Special emphasis is laid on aided natural regeneration and plantation of indigenous species without disturbing the existing forests as well as decking of denuded areas with trees. Efforts are made to raise plantations of various timber species and cash crops in areas under *jhum* and Unclassed State Forests.

1. See Chapter IX for details under the sub-head Forest.

2. Source : Statistical Abstract of Arunachal Pradesh, 1988 to 1991.

The Forest Department has been taking effective measures for improvement and development of forests on a scientific basis through execution of various schemes, such as afforestation, social forestry, aided natural regeneration, raising of valuable plantations, construction of forest roads, forest research etc., and implementation of National Rural Employment Programme.

It was difficult in the pre-independence days to have access to the interior areas of the present West Siang and East Siang Districts due mainly to lack of road communications. The people lived there in their scattered hill abodes in insolation for generations, depending primarily on a subsistence nature of cultivation called *jhum*. They exchanged their bare necessities of life through barter trade. Money was seldom used in business transactions, monetisation of the economy was effected in the whole of this territory only after independence. With the help of available resources they had, however, developed their arts of weaving, basketry and fine work in cane and bamboo to the point of excellence. The people by and large are still attached to their traditional methods of agriculture and cottage industry.

COTTAGE INDUSTRIES

Forty household industries were enumerated in 1971 Census¹. The following is an account of some of the important cottage industries and indigenous crafts.

Weaving

Weaving is widely practised by the Adis. The importance of weaving to the tribal people lies in the fact that it meets their vital requirement of dress. Indeed, weaving is an indispensable part of their pattern of life. As among other tribes of Arunachal, weaving is an exclusive preserve of women in the Adi society as well. Girls from their teens learn ginning, spinning and weaving and they become experts at that as they grow. Their looms are small and simple, a single-heddle tension or loin-loom, which can be easily operated.

Cotton is grown on a very limited scale in certain areas, as in the neighbourhood of Pasighat and throughout northern Siang, and also by the Gallongs in West Siang. But now most of the cotton yarn as also wool is bought from the market or co-operative societies. Wool is spun into yarn on hand-spindles. Some of the tribal groups procured cotton and wool from their neighbours or from outside.

The women are fond of bright attractive colours. A number of natural dyes are known-black, yellow, dark blue, green, scarlet and madder, which are obtained from plants.

"Weaving designs in the hills are almost exclusively of an angular geometrical type, though they vary from a formal arrangement of lines and

bands to elaborate patterns of diamonds and lozenges, enhanced by internal repetition, hachure and other decorations.

"It has been suggested that the 'primitive' pre-occupation with geometric order may reflect the intricate, systematic structure of social and religious concepts among the tribes and it is perhaps significant that the highly disciplined Adis and Apa Tanis concentrate on simple straight lines, while the strongly individualistic Mishmis go in for great elaboration of pattern. It may also not be without significance that, with the gradual break-up of tribal authority and tradition, some of the designs are becoming a little fussy, their simplicity disturbed by the addition of pretty-pretty flowers, animals and other ornaments.

"But even now simple and straightforward lines, stripes and bands are the most common motifs, the effect being gained by varying their size, colour and arrangement. Contrasts and combinations of colour are often made very expertly. On most skirts and shawls the bands are horizontal; on coats and certain skirts vertical bands are also included.

"The Adis have a great variety of such patterns : there are arrangements of red and black stripes on a white ground; white and yellow stripes on a black ground; alternate bands of red and black or of olive-green and brown; broad border-bands of brown with a central narrow stripe of black and white, the body of the cloth being black with brown, black and white stripes at three-inch intervals...

"Today the Adi weavers are producing a great variety of fabrics, mostly of pure cotton yarn, but sometimes of wool and cotton mixed, and in the far north of goat's hair. The most popular Minyong and Padam skirt is a lovely red with a number of horizontal yellow stripes and a vertical band of an elaborate and frequently varied pattern of lines, dots and triangles in orange, black and green. Also popular is a yellow shawl with a few very thin green and red stripes and a similar vertical band of triangles in pink, green and white. But there are a great many other styles; colours vary and the placing of the stripes and bands creates much diversity of fashion.

"The most common coat for men is black ... with simple designs of lines and triangles, but red and green coats are also made. Beyond Damroh, there are white coats bordered in black and with a small band of red and black triangles. In the north the Ashings, Boris, Bokars, Pailibos, Ramos and other isolated groups wear a black or dark-blue woollen coat and a slip of cloth made of coarse wool or goat's hair, through which the head is passed and which hangs down to the knees before and behind. The women have a short skirt, usually dark red or white in colour, a dark blue jacket and a dark blue, red or white cloak which is hung over the shoulders by a string passed across the head; it may be

1. *Census of India, Arunachal Pradesh, Part III-A&B, p. 52.*

decorated with cowries and little bunches of bear's teeth. The cloth made by the northern weavers is warm, well adapted to the hard and hostile climate; it can stand up to the rain; its dark colours do not show the dirt.

"The Gallongs, among whom the art of weaving had greatly declined and is only now being revived, have a beautiful traditional skirt- white with a black geometrical design - and are also experimenting in many different arrangements of coloured stripes and bonds, all horizontal.

"The Miris round Pasighat, who are an offshoot of the Minyongs, do some excellent weaving with cotton of a very fine count; their cloth is often of a red, yellow, or green plaid design with striking triangles and chevrons on broad vertical bands, which seem to be a development of the common Minyong pattern."¹

Cane and Bamboo Work and Basketry

The artistic and inventive skill and ingenuity of the Adis find a brilliant expression in their work in cane and bamboo. Their products of this industry are many and varied, and they are of high utility value.

The cane suspension bridges constructed by the Adis to cross the rumbling streams in the hills are simply wonderful 'marvels of untutored engineering skill', remarked Dr. Elwin; "The skill as well as the labour shown in the construction of these bridges is really surprising, and is such as would not do discredit to more civilized nations", observed W. Robinson.

"The Adis make cantilever bridges of bamboo, suspension bridges with rigid bamboo footways, trestle bridges, and combination of both types. Their ingenuity and skill, however, come out prominently in the construction of cane suspension bridges. When constructed, such a bridge would look like a tube of cane work secured to strong frames of logs of wood, growing trees, bamboo clumps or rocks on either side of a river. Foot-rests of about ten to twelve inches width, attached to the bottom of elliptical coils of cane, run from end to end. We are told that the length of a bridge can at times be as great as 786 feet across."²

The Adis wear beautiful cane hats of various types and styles. "The best Adi cane-work is seen in the making of a variety of hats. The typical Adi hat was formerly a sort of crash helmet for use in war and this has meant that on the whole it is rather too heavy for the days of peace. Experiments are now being made to make the hat lighter while preserving the general shape. 'When divested of its trappings', says Dunbar, 'it can best be described as an almost

brimless and distinctly oval bowler. Made of successive rings of thin cane it is built up and bound together with strips of fine cane woven vertically and so closely as to entirely cover the ring foundation. The basketry is so fine that some of the helmets will hold water, and they are all so strongly made as to be sword-proof.'

"At ordinary times, the hats are worn as they are, but for dances and special occasions, they are still decorated very much in the manner described by Krick and Dalton long ago. They are often magnificent with the tusks of boars, the feathers and beaks of the Great Indian Hornbill, serow horns, tufts of goat's hair dyed red and stiff palm-fibres coloured black. In this ceremonial hat the Adi expresses his sense of colour and design".¹

A variety of essential household and other articles, such as carrying-cum-storing baskets, winnowing fans, haversacks, mats, sheaths of daos and knives, hunting and fishing traps, bows and arrows; water tubes etc, are made of cane and bamboo. Besides these, they make ferrets, anklets, belts, rings and waist bands of cane as items of their costume.

Basketry of the Adis shows their expert workmanship in making useful articles of cane and bamboo. Baskets of various pattern shapes and sizes are made according to necessity, and they have different names for them, for example, *narang* is a basket woven in twill pattern with a square base and four legs, which is used for carrying paddy from the field.

Houses of the Gallongs, Minyongs, Padams and other Adi groups are structures also of bamboo and cane, which are occasionally supported with wood. Indeed, right from the construction of dwelling houses to the storing of food grains and water, cane and bamboo are indispensable.

The Membas living in Siang make caps, hats, coats, carpets and blankets from compressed wool and goat hair. their houses are of wood and stones. They do not do fine work in cane and bamboo as the Adis do.

Smithery

Blacksmithy is another traditional craft being practised by the Adis — the Gallongs, Minyongs, Padams and others. The Adi blacksmiths are expert - makers of iron tools - daos, knives, spear-heads, arrow-heads etc. "The Adis manufacture most of their weapons themselves; almost in every village, there is a smith who is an expert in metal work. These smiths are not of a separate clan, but the profession is generally inherited from father to son or by the nearest male relative. Once a man takes up this profession in a village,

1. Verrier Elwin, *The Art of the North-East Frontier of India*, (Shillong, 1959), pp. 36-38, 119-120.

2. J.N. Choudhury, *Arunachal Panorama*, (Shillong, 1973), p. 178.

1. Verrier Elwin, *The Art of the North-East Frontier of India*, (Shillong, 1959), pp. 120-122.

nobody competes with him. The Adi smith is not distinguished from other villagers in any way, and leads the same kind of life as the other villagers excepting that he, by this profession, adds a little to his income. His charges are paid either in cash or in kind. Generally the smithy, a small structure of stone walls and thatched roof on mud plinth, stands in a corner of the village. Between the walls and the roof, some space is left open for light and air to pass¹. Round discs of iron worn by girls around the waist are forged by the Gallongs.

The Membas are advanced blacksmiths. They largely meet the requirements of the neighbouring Adi tribes of the Ramos and others by making and repairing tools as required and supplying them with metal ornaments as well as weapons like swords.

A traditional craft of casting in brass among the Adis seems to have largely disappeared. There was in the village of Komsing on the bank of the Siang a flourishing blacksmith industry, which produced small knives, daos, swords, spears and arrow-heads, metal pipes, charms, brass bracelets, girdle discs and *beyop* plates. The finest swords and bracelets were, however, made in villages along the Siyom and the middle reaches of the Siang river. The most interesting ornament of the Adi metal-workers is the *beyop* disc. This 'singular article' was first described by Dalton :

"All females with pretensions to youth wear suspended in front from a string round the loins a row of from three to a dozen sheel-shaped embossed plates of bell-metal from about six to three inches in diameter, the largest in the middle, the others gradually diminishing in size as they approach the hips. These plates rattle and chink as they move..."².

Karko was formerly well known for the manufacture of these articles. Many Adi girls still wear the *beyop* - girdles covered by a skirt.

Wood-Carving and Pottery

Wood-carving in Siang is a craft exclusively of the Membas and Khambas, who are Buddhist by religion. They carve wooden masks. Images of Lord Buddha and certain mythological characters are carved out of wood. These apart, they also make decorative pieces of wood, such as candlestand, flower vase etc.

Wooden masks are worn by the Khambas and Membas for performance of dances on religious and ceremonial occasions. Beautiful masks depicting birds and animals are also used for the purpose of various dances.

1. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), pp. 117.

2. E.T. Dalton, *Tribal History of Eastern India*, (Descriptive Ethnology of B. Delhi, 1973), p. 27.

Pottery is a rare craft in this region. The purpose of pottery is greatly served by the very large and fine bamboos, which the people have been using for drawing water, cooking etc. There is of course a little pottery, though the wheel is not known. Formerly, the villages Komsing and Riu, on the banks of the Siang and Kaking, were 'Centre of a brisk pottery trade'. The Gallong women worked in a grey and the Minyongs in a red clay, kneading and beating it out with stone and stick. The Gallong potters make 'a few hand made rudimentary bowls and pots, which are not much in use'. The Membas and Khambas of the extreme north produce beautiful images of the Lord Buddha out of clay.

DEVELOPMENT OF INDUSTRIES

There was until recently no large industries. Lack of infrastructural facilities, such as power, roads, entrepreneurial and technical knowledge and skilled labour were some of the factors responsible for the absence of modern industries. The development programme for building up an infrastructure in this territory has been drawn up with a view to, *inter alia*, establishing new industries larger than indigenous cottage crafts so as to initiate the process of industrialisation of the area.

Power

The area comprising West Siang and East Siang Districts is rich in hydel power resources which are being profitably harnessed. Five micro-hydel schemes have been commissioned till March 1983, and their combined installed capacity by that date rose to a total of 850 kw.

Power is also available from the diesel generating sets, and their total installed capacity was 583.5 kw in March 1983.

Rural electrification has been in progress. Sixty eight villages, 36 in West Siang and 32 in East Siang were electrified till the month of March 1983.

The total number of villages electrified in East Siang and West Siang districts as on 31 st March during the period from 1987 to 1991 are as follows:¹

Year	East Siang	West Siang
1987	68	45
1988	80	50
1989	94	63
1990	108	83
1991	120	202

Craft Centres

It has been the avowed policy of the government to revive and revitalise

1. Statistical Abstract, Arunachal Pradesh, 1987 to 1991.

the traditional arts and crafts of the tribal people of Arunachal Pradesh in order to promote the cottage industries. With this aim in view, a number of craft centres and weaving units have been set up at different places in the districts. These craft centres have two functional wings in them, namely training unit and production unit which are concerned with various crafts, such as weaving, cane and bamboo works, smithery, wood-carving, tailoring, carpet-making, carpentry etc. Training in improved methods is imparted to the local artisans, both men and women, so that their crafts are not only preserved but also developed. The total number of trainees passed out in different crafts are engaged in production activities. The tribal cottage industries, weaving in particular, have been facing problems arising from the current economic and industrial developments. The mill-made cloths are becoming increasingly popular. It, therefore, needs to be seen that the tribal crafts do not die out and their beautiful products are not lost. The object of the production units is to manufacture articles primarily to meet local requirements and provide adequate jobs to the passed out trainees.

Articles produced in the craft centres are displayed in the emporium for sale. Yarn is procured in bulk and distributed through emporiums to the local people for weaving.

The following tables show the craft centres in the districts of Siang and their achievements for the period 1975-76 to 1979-80.¹

Annual Outturn of Craft Centres						(Rs. in thousand)
No.	Name of Craft Centres	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7
1.	Along	59.24	66.56	67.00 *	86.98 *	114.65
2.	Payum	-	-	-	-	2.05
3.	Liromoba	-	-	-	-	1.94
4.	Mechuka	27.12	23.52	23.63	15.55	11.22
5.	Tuting	5.49	5.28	12.16	9.43	8.64
6.	Pasighat	58.59	33.65	20.00	4.50	NA
7.	Yingkiong	3.00	4.15	1.50	4.50	NA

* Includes figures of Payum and Liromoba

NA = Not Available.

1. Source: Statistical Hand Books of

(a) Arunachal Pradesh, 1975-76 and 1976-77,

(b) Siang District, 1977-78 and 1978-79,

(c) West Siang District, 1979-80 and

(d) Pasighat Sub-division, 1978-79.

Annual sale proceeds of Emporiums and Show Rooms (Rs. in thousand)

No.	Name of Craft Centres	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7
1.	Along	64.66	61.88	58.00 *	121.2 *	104.20
2.	Payum	-	-	-	-	0.61
3.	Liromoba	-	-	-	-	0.12
4.	Mechuka	22.68	34.44	13.71	26.61	7.05
5.	Tuting	8.50	7.25	8.28	13.72	6.30
6.	Pasighat	54.58	32.69	35.00	34.30	NA
7.	Yingkiong	2.74	2.92	NA	NA	NA

* Includes figures of Payum and Liromoba

NA = Not Available.

The craft centres at Payum and Liromoba were functioning as mobile units. Besides these, there are four weaving units as functioning in March 1981. Also see Appendix - I at the end of the Chapter.

Small and Medium Industries

In the development plans of the state, enough stress has been laid on the growth of industries in phases. A considerable progress towards establishment of small-scale industrial units has been achieved. The small industries include, among others, rice and saw mills besides furniture, handloom, soap and candle manufacturing units. In 1983-84, there were altogether 260 registered village and small-scale industrial units in the districts of West Siang and East Siang.

In order to co-ordinate, guide and assist the industrial activities and ventures, the Arunachal Pradesh Industrial Development and Financial Corporation Limited, Itanagar was formed in 1978. The corporation has taken up the following schemes :

1. Procurement of raw-materials,
2. Assistance to entrepreneurs and services to the existing small-scale industrial units,
3. Grant of industrial loans and-subsidised loans, and
4. Training to be imparted to the artisans and entrepreneurs.

The corporation is to bring all small and medium industries under its control and provide them necessary assistance. It was also decided to place all production units of the craft centres under its guidance.

A preliminary study of the resources available for utilisation by various industries has been made. This may well serve as a basis for industrial

planning. The area occupied by the West Siang and East Siang Districts is rich in forest and mineral wealth. Its natural resources also include fruits, cash crops etc. Steps are being taken towards development of industries in this area by planned utilisation of the resources.

A Light Roofing Sheet Factory has been established recently at Pasighat in collaboration with the Regional Research Laboratory (RRL), Jorhat. The production capacity of the factory is estimated at 50 corrugated sheets per day.

A Fruit Processing Plant with a capacity of five metric tonnes of processed fruits per day has been set up at Nigmoi (Doji) village in the West Siang District with the consultative and technical assistance of the Central Food Technological Research Institute (CFTRI), Mysore. A company subsidiary to Arunachal Pradesh Industrial Development and Financial Corporation Ltd has been formed for management of the plant and marketing of its products. The plant is expected to be geared into production by 1983.

Technical education and training facilities in various crafts are imparted in the Industrial Training Institute at Roing in the Dibang Valley District. An industrial estate has been established at Pasighat. District Industries Centres have been opened at Along and Pasighat to provide necessary assistance and guidance for development of village and small-scale industries.

The Arunachal Pradesh Industrial Development and Financial Corporation offers enough incentives to industrial enterprises to help them grow. The incentives are, among other things, the following :

1. No registration fee is charged for small-scale industrial units.
2. Sheds in the industrial estates are allotted to the local entrepreneurs at concessional rent.
3. Government land for establishment of industries is allotted to industrial units on lease at nominal rent.
4. Facilities for training in management and other subjects in different institutions are provided to the entrepreneurs at government expense.
5. Stipend and hostel facilities are granted to enterprising local youths for training in the craft centres as well as the Industrial Training Institute at Roing.
6. 25 percent central investment subsidy and 75 percent transport subsidy are provided to the industrial units.
7. Under the IDBI Refinance Scheme, industrial loan is granted to the deserving industrialists for setting up small-scale and other industrial units.
8. Financial aid by way of margin/seed money to the entrepreneurs is granted to enable them to obtain assistance from banks and financial institutions to set up industries.

9. Scarce and indigenous raw materials are procured to feed the village and small-scale industrial units.

In addition to the above facilities and concessions, the industrial units are given liberal subsidies on the cost of power supply, purchase of captive diesel sets, construction of residential quarters for workers and staff, preparation of feasibility report etc. No sales tax is levied.

Sericulture

The ecological conditions in Arunachal Pradesh are generally favourable for the growth of silk worms. A good number of people living in the lower regions are silk worm rearers. Sericulture is practised by the people, particularly the Padams, of the East Siang District. The Mishings of the Mebo and Sille areas of the Pasighat Sub-division are silk worm rearers.

There are four sericulture demonstration centres in the East Siang District. The following is a brief account of the sericultural activities.¹

The Eri seed production farm at Pasighat was established in 1953. Seeds produced and supplied by this farm are as follows :

Year	Seed	
	Production (laying)	Supply (laying)
1978-79	25,600	25,400
1979-80	26,200	26,000
1980-81	23,360	23,150

The Eri Silk Extension Centre at Sille, established in 1976-77, has the following achievements :

Year	Seed	
	Production (laying)	Supply (laying)
1978-79	2,200	2,000
1979-80	3,000	3,000
1980-81	4,250	4,100

The demonstration centre at Mebo has been functioning for introduction and development of silk worm rearing industry amongst the villagers.

The progress of sericulture in the East Siang District is indicated in the following table.² Also see Appendix - II at the end of the Chapter.

1. Source : The Superintendent of Sericulture, Industries Department Government of Arunachal Pradesh.
2. Source : Statistical Hand Book of Pasighat Sub-Division, Arunachal Pradesh, 1978-79.

Details of Cottage Industries in West Siang and East Siang Districts during 1986-87 to 1990-91

Particulars	Unit	1986 - 87		1987 - 88		1988 - 89		1989 - 90		1990 - 91	
		West Siang	East Siang	West Siang	East Siang	West Siang	East Siang	West Siang	East Siang	West Siang	East Siang
1. Craft Centre/ Weaving Unit/ Knitting unit	In Nos.	9	6	9	6	9	6	9	6	9	7
2. Annual Out turn of different craft centres	1000Rs.	310	126	238	75	262	75	248	102	-	-
3. Annual Sale Proceed of Emporium and Showroom	1000Rs.	NA	NA	282	63	273	72	303	120	225	243
4. Sericulture Demonstra- tion Centre	In Nos.	-	5	1	6	1	6	1	6	1	6
5. Medium Industries	- do -	-	-	-	-	-	-	-	-	-	-
6. Village and small- scale Industries	- do -	242	101	168	259	307	217	310	226	288	252
7. Rural Industries Project/District Industries Centre	- do -	1	1	1	1	1	1	1	1	1	1

Source :- Statistical Abstract of Arunachal Pradesh 1987 to 1991.

EAST SIANG AND WEST SIANG DISTRICT GAZETTEER

Year	No. of Rearers		Seeds supplied		Eri empty cocoons harvested by village rearers	Pat raw silk obtained (in kg)	Eri chaddar produced (in nos)
	Eri	Pat	Eri	Pat			
1	2	3	4	5	6	7	8
1974-75	537	46	24336	906	-	-	-
1975-76	-	512	41020	247	62704	-	204
1976-77	560	50	18275	540	77037	-	173
1977-78	610	-	11266	-	90530	27421	107
1978-79	550	-	17450	-	12259	16250	72

Appendix II

The achievement made in the field of Sericulture in East Siang and West Siang Districts during 1989-90 to 1990-91 are shown in the following table.

Year	District	No. of Sericulture villages	No. of families engaged in Sericulture		Total area under worm food plants		Yield of cocoons Eri (kg)		Production of Silk yarns (in kg.)	
			Eri	Pat	Eri	Pat	Eri	Pat	Eri	Pat
1989-90	East Siang	20	750	100	-	-	1500	2500	800	200
	West Siang	-	-	-	-	-	-	-	-	-
1990-91	East Siang	35	1448	400	14	11	NA	NA	NA	NA
	West Siang	4	20	-	-	-	-	-	-	-

Source :- Statistical Abstract, Arunachal Pradesh, 1990-91.

CHAPTER VI

BANKING, TRADE AND COMMERCE

Formerly, there was no banking system in Siang, trade relations were determined through exchange of goods by barter. Money as the medium of exchange was seldom used in business transactions. The monetisation of local economy is a post-independence development. Therefore, in the tribal barter economy, the people had hardly any necessity for banking.

Today, under the impact of administrative and developmental activities, conditions favourable for the growth of banking have been created. The local people are now closely associated with Government services, development projects, industrial and commercial enterprises and other works, whereby they are earning money. As a result they have the incentives to make savings and investment.

The State Bank of India has opened its branches at Along and Pasighat. The working of this bank in Siang is indicated as follows¹ :

(Rupees in lakh)

	1977-78	1978-79	1980-81
Bank Deposits	97.43	122.88	204.00
Total Advances/Loans granted	4.54	5.52	11.93

Banking facilities have been extended also to sub-divisional headquarters. Besides this, a number of Post Offices provide bank facilities for small savings. There has been a progressive trend in the postal saving deposits and postal remittances. Incidentally, it may be mentioned that the whole of Arunachal Pradesh is treated as a rural area for the purpose of bank activities. Banking is a comparatively recent development in this tribal area, and it is yet to have a wide local base. A branch of the Arunachal Pradesh State Co-operative Apex Bank Limited was opened at Pasighat recently on December 23, 1982. The bank provides agricultural loan to farmers. The number of banks in Siang increased to six by March 1984, three banks in each of the two districts of East Siang and West Siang have been set up.

The total bank deposits in March 1984 was Rs. 499 lakhs and the total loan granted was 80 lakhs.

During 1987-88 there were three branches of State Bank of India and eight branches of Regional Rural Bank in East Siang and three branches of State Bank of India and one branch of Regional Rural Bank in West Siang District.

1. Source : Statistical Hand Books of Arunachal Pradesh, 1977-78 to 1980-81.

The total bank deposits was Rs. 646 and Rs. 636 lakhs and total credit was Rs. 1.36 and 1.92 lakhs respectively¹.

Early Trade Relations

The history of trade relations of the people of Siang dates from the remote past. The traders from various tribal groups have traditionally bartered their goods with their counterparts, and for this purpose they traversed great distances along different trade routes to get in exchange the necessities of life required by individuals, families or villages. When we look back over centuries and ponder over the hard realities of life in this mountainous region, the ventures of these traders appear to us to be as great as those great explorers. The journeys undertaken by them without aids of transport and road communications and often at enormous risks are admirable indeed. These trading ventures also paved the way for cultural intercourse between different groups of people.

"Previously, the Adis of the region below Pangin used to come down as far as Sadiya to barter whatever little they had.

"Due to the proximity of their area to Tibet, the Boris mainly have trade relations across the border and pass through Gastreng, Paying, Komtheng, Dobong Niging, Mangu, Dele, Tungkur Lego Pass and Elling to a market in Tibet, called Nayi Lube. Their main articles of barter are raw hides, chillies and in exchange, they bring down rock salt, woollen cloth, raw wool, Tibetan swords, Tibetan vessels, ear-rings, and brass bangles. They also bring down specially salt, iron and utensils in exchange and barter these with the other groups of the Adis. Like the Boris, the Bokars have trade relations beyond the border. They find a market for their surplus chillies, butter, hides and *tamen*, (a creeper used for dying), and in exchange, bring down cattle (*zomos*), sheep and goats, swords and woollen goods.

"With the opening of Administrative centres all over the Division, the Adis from both the upper and lower regions have started to come down at Along, Pasighat and Pangin, and barter or sell and purchase from shops, salt, yarn, raw wool and cotton, blankets, and little luxuries, such as hurricane lanterns, electric torches, thermos flasks, beads, and tin boxes.

"The Pailibos carry on their trade through intermediaries who happen to be the Ramos, the Bokars and the Membas. The Ramos have long been in contact with the Bokars and the Membas and from them they get cattle by barter against their local dye known as *tamen*, raw hides and chillies.

"The Shimongs export cotton to their neighbours. Both the Shimongs and the Ashings produce a surplus of cloth; they take these warm, durable and

dignified cloth to Tibet and exchange for salt, beads and other articles.

"There is a relatively less important trade route through the Mishmi country, coming down the Aborka Pass to as far as Karko. The main items of merchandise are Mishmi coats, in which the Adis are trading for hundreds of years. These they sell or barter for mithuns or different varieties of rice.

"From January to July, the Tibetans beyond Gelling come down through Kepang La Pass with rock salt, iron, warm durable, aesthetically pleasing hand-woven cloth, swords, musk, imitation turquoise necklaces, blue porcelain beads yarn of different colours, snuff, small quantities of China, silver and wooden bowls, and metal pots, and start exchanging their merchandise from the Ashing area and come down as far as Pasighat. In exchange, they carry back mithuns, raw hides, deer horns, white and red rice".¹

The early trade relations of the people of Siang may be broadly classified under three headings : 1) trade with Tibet, 2) trade with the plains of Assam, and 3) inter-tribal trade.

Trade with Tibet

A regular trade relation on barter basis between the Adi tribal groups and the Tibetans was in existence until the international border was sealed in 1961-62. The barter trade with Tibet has already been described in some detail.

The Gallongs traded with the Tibetans. They obtained from them salt, beads, brass bowls and coats and in exchange they gave them cattle, spears and chillies.

The transborder trade was carried on mainly by the Boris, Bokars, Pailibos, Shimongs and Ashings living near the Indo-Tibetan border. Some of the traders amongst them also acted as intermediaries for other tribal groups of Siang. The Boris and the Bokars bartered their goods, chiefly raw hides and chillies, and obtained from the Tibetans beads, ear-rings, brass bangles, bells, *daos*, rock salt, raw wool, woollen cloth, metal dishes, vessels, swords, cattle, sheep and goats. The Pailibos brought from Tibet salt, wool, woollen garments, butter and weapons. The Shimongs and Ashings, as stated earlier, exchanged their cloth for salt and other necessities. The Tibetans in their turn, as already mentioned, came from across the border to lower Siang up to Pasighat to barter their goods.

Trade with the Plains of Assam

There had been a long intercourse of trade between the Adis and the people living in the adjacent plains of Assam. Sadiya and Saikhowa in Assam were the two great trade centres where the people of the plains and the hills met

1. Source : Statistical Abstract of Arunachal Pradesh, 1988.

1. Sachin Roy, *Aspects of Padam-Minyong Culture* (Shillong, 1966), pp. 32-33.

together. "The Sadiya bazar during the cold weather months teems with hillmen who come down to sell their produce... The chief imports are cloths, yarn, salt, utensils and agricultural implements. The exports in addition to the hill produce of 'teeta', musk and wax are *gur* and potatoes and Abor rugs (*gadus*)"¹. The Adis brought to the Assam markets musk, musk deer skins, wax, *manjeet* (madder), ginger, white cotton cloth, ivory, and also a few copper pots, which they obtained from the Tibetans. They exchanged their goods for salt, iron, brass cooking pots, glass beads, silver ornaments, eri cloths etc. The Adis are also said to have frequented the markets at North Lakhimpur, Tinsukia and Dibrugarh.

During the British period, an agreement was made with the Minyong group of the Adis in 1862 to the effect, *inter alia*, that :

"The communication across the frontier will be free, both for the Moyong Abors and for any persons, British subjects, going to the Moyong villages for the purpose of trading, or other friendly dealings.

"The Moyong Abors shall have access to markets and places of trade which they think fit to resort to, and on such occasions they engage not to come armed with their spears and bows and arrows, but merely to carry their *daos*"².

The old trade relations do not exist today as they were, but the tradition has not died out through the passage of time. We may still find that the Adi villagers bringing down their agricultural produce and other articles to the nearby markets in Assam and buying things which they do not have.

Inter-Tribal Trade

Normally, the tribal groups of this region had a mutual economic dependence on each other for certain essential commodities. Although the tribal economy has been monetised, it may still be found in some remote areas that they barter their goods between themselves.

The Gallongs had trade relations with the Boris, who often acted for them as intermediaries. There was a considerable trade between the Adis and the Miris. The Adis obtained from the Miris salt, cloths of Assamese manufacture or any articles imported by the Miris from Assam. The Miris, in return, procured from the Adis *manjeet* (madder), beads, *daos*, cooking utensils of metal etc which save the *manjeet*, the Adis brought from Tibet.

The Boris were keen traders. "Geographical position of the territory assigned to them the role of an intermediary and therefore they acted as a link between the tribes populating the areas to their north, east and south. By

1. Assam District Gazetteers (Vol XI), The Sadiya and Balipara Frontier Tract Gazetteer, Part I & II (Shillong, 1928), p. 33 f.

2. Captain St. John F. Michell, The North-East Frontier of India (Reprint, Delhi, 1973), pp. 57-59.

virtue of this the Boris have come to be known as traders only by the other tribes to whom they had been supplying goods. There have been, probably, very few occasions when the Bori traders went across the border, otherwise they exchanged their goods with commodities in demand and which were available with the Bokars. It was natural that the Bokars, premier traders as they had been did not tolerate other traders carrying on direct transactions with those across the border. They appeared to be determined to discourage the Boris from establishing direct trade relations with them because it would have amounted to depriving them of the benefits they were getting from the trade, especially when the Boris had to pass through their territory. It was with this aim in view that the Bokars collected heavy taxes from the Bori traders in the form of tribute on whatever occasion they attempted to do so. In fact, towards payment of this tribute, the Boris had to part with every valuable article which the Bokars could discover in their loads. This leads to the presumption that apart from a few excursions, they never went beyond Bokar territory and exchanged goods with them only. These goods they brought back to be exchanged with the tribes in the east and the south. In actual practice in the past, the traders had established their relations with traders from other tribes and it was through or in their company that they could travel through the territory of other tribes and bargained. These persons also did not spare them from the payment of heavy tributes.

Bowls, Mamba coats, goat hair, salt and bit *daos* were the principal commodities in exchange for which the people had to part with heavy quantities of valuable products like rice, skins and hides and good quality cloth (*endi chadar*) obtained from the plains of Assam, because the rate of exchange was of their own choosing"¹.

The following is an interesting account of trade carried on by another tribe, the Pailibos, living in the far north-western corner of the West Siang District :

"The Pailibos had trade links with their neighbouring tribes, Bokars in the north as well as Ramos, Boris to their east and Gallongs and Minyongs to their south. They traded with the people across the border also, because in those days, they had no contacts with the areas to their further south, simply because the distance was too long and hazards of journey over the hill tracks were too great. Moreover the Gallongs could not manage such articles which they needed for their use like salt, woolen coats, metallic bowls, beads and *daos* etc. hence they felt the need and urgency to get these articles from the sources their neighbours were getting. They had surplus of cane, *tamin* (creeper

1. K. Kumar, The Boris, (Shillong 1979) pp. 103-104.

which gives a local dye), skins and hides in which commodities almost all the neighbourers were surplus and therefore there was no way out except to sell them to people who were demanding them in exchange for their manufactured goods. Salt being of prime need for food had to be obtained, woollen garments were equally essential in view of the extremely cold weather in the area, bowls and beads and necklaces formed their properties and *daos* apart from being indispensable were purchased for the purpose of dignity and decorum.

- a) Articles which the Pailibos gave in barter to their neighbours the Membas and to other tribes :
 - i) Hides and Skins
 - ii) Tamin
 - iii) Chillies
 - iv) Good quality cane
 - v) Cheese
 - vi) Bamboo containers with lids
 - vii) Tiger skins
 - viii) Small quantities of rice.
- b) Articles which the Pailibos procured from the Ramos, Bokars and the Membas are :-
 - i) JELI - SUBE - a woollen coat of red colour.
 - ii) JEMU - SUBE - a wollen coat of maroon colour.
JEPU - SUBE - a white woollen coat.
 - iii) Beads and necklaces.
 - iv) Ornaments, such as ear- rings, lockets, anklets and wristlets, metallic discs for ladies belts, etc.
 - v) Metallic bells.
 - vi) Metallic bowls of different sizes.
 - vii) Daggers and *daos* and felling axes.
 - viii) JEPU - SUBE - white woollen coat.
 - ix) Sheep.
 - x) Balang (an animal resembling cow).
 - xi) Raw wool.
 - xii) Salt.
- c) Articles which the Pailibos procured from the neighbouring tribes, mainly Gallongs and Boris :
 - i) Endi Chaddar - shawls from Assam.
 - ii) Tiger-skins.
 - iii) Hides and skins.

- iv) Bamboo containers with lids.
- v) Spindles.

Rates of exchange for the barter trade :

- | | |
|---|---|
| i) One load of Tamen (Sapo full) was exchanged for | One woollen coat of maroon colour. |
| ii) Two loads of Tamen (Sapo full) were exchanged for | i) Two measures of salt.
ii) One Balang. |
| iii) Two loads of chillies were exchanged for | iii) Two sheep or goats.
i) One Balang. |
| iv) One load of chillies was exchanged for | i) One Sheep.
ii) One white woollen coat. |
| v) One tiger-skin was exchanged for | i) Two to four Balangs.
ii) One Dasi or big bowl. |
| vi) One load of fine cane exchanged for | i) One maroon woollen coat.
ii) Two white woollen coats. |
| vii) One bamboo container exchanged for | i) Two chickens worth of salt
ii) One measure of salt. |
| viii) One measure of rice for | One measure of salt. |

These barter rates gave the parties full satisfaction because there were no changes of errors in passing on the loads and receiving the quantities in numbers or measures. In the absence of any common currency or the knowledge of the rate of exchange of currencies of two different areas, there was no way out. These rates, once agreed to and followed, seldom changed. Articles obtained from across the border were brought by the traders for the sake of earning profits and consequently as those articles did not make any standards by baskets, except salt, they were sold in exchange for goods as it suited the occasion. For instance, the Pailibos purchased the tiger-skin for one mithun and for this tiger-skin they obtained a metallic bowl (dasi) from the Membas which they sold to the sellers of the skin for two to three mithuns. Clearly in this case, they made profit ranging from two times to three times at the expense of labour and tedium of going to and coming back from the Memba area".¹

The Ramos live neighbourly with the Pailibos and the Bokars with whom they had cordial trade relations. They also traded with other neighbouring tribes, the Boris and the Tagins.

The Ramos, however, were reluctant to allow the Boris to have a direct

1. K. Kumar, *The Pailibos*, (Shillong, 1979), pp. 95-99.

trade link with the Tibetans or the Membas. The Bori traders brought merchandise from the Gallongs for barter in Tibet. The Ramos being an intermediary tribe resented it, for they wanted to have the transactions done through them so that they had a share of profit. Sometimes disputes arose between them, leading to capture and punishment. Some of the Boris were, however, occasionally permitted to go to Tibet after restoration of friendly ties.

The following chart¹ is indicative of the items of trade exchanged between the Ramos and their neighbours :

Name of Tribe	Exports from Ramo	Imports to Ramo Areas
Memba	Chillies, Maize, domestic cattle, Colour, Bamboo products, skin of wild animals, Silk cloth, Musk.	Salt, Yokse(Sword), Woollen Clothes, Ornaments, Domestic Cattle, Ghee, Cheese.
Tibet	Chillies, Rice Colour, Skin of wild animals, Musk, Otter skin, Silk, etc.	Salt, Yokse(Sword), Woollen clothes, Danchi, Ornaments, Axe, Ghee, Cheese, Domestic animals like Ballang, Dumu, Yak(For meat eating purpose only).
Bokar	Cane, Cane products, Chillies, Colour, Hides/Skins, Rice, Silk Clothes.	Salt, Clothes, Chicken, Fowls, Ghee, Cheese.
Pailibo	Salt, Woollen clothes, Ghee, Cheese.	Skins, Rice, Silk, Earthen utensils, Aluminium utensils.
Tagins	Salt, Woollen clothing, Ghee.	Silk clothes, Larang (Basket), Hides, Skins, Smoking pipes etc.
Bori	Danchi, Woollen clothes, Salt, Yokse(Sword), Ghee.	Mithun, Otter skin, Silk clothes, Monkey / Tiger and other skins.

Trade Centres

The important trade centres in Assam which formerly provided marketing facilities to the traders from Siang were, as indicated earlier, Sadiya, Saikhowa, North Lakhimpur, Tinsukia and Dibrugarh. Besides these, there were small marts in the foothill areas where business transactions between the traders of the hills and the plains took place.

Among the flourishing trade centres in the interior of Saing are Pasighat

1. Source : *The Ramos of Arunachal*, (New Delhi), 1979) by M.M. Dhasmana, p. 170.

and Along were busy and large markets with permanent and modern shops owned by tribesmen have sprung up. As a result of the development of transport and communications the people from far and near now come to these markets for purchase of goods. Silapathar in Assam close to Likabali is another important market centre visited by the Gallongs of the adjacent hills.

Development of Trade

In the olden days, the various tribal groups of this region lived in their hills away from each other in utter seclusion. They had their well-defined territorial limits, beyond which they did not usually go except under compelling circumstances. Apart from the fact that movement in these hills was restricted due to the rough terrain and lack of roads, the tribal customary restrictions on the journeys for trade were also a limiting factor. The tribal economy was not monetised before 1947, and there was no medium of exchange or fixed barter rate commonly acceptable to all the tribal groups. Under these constraints, scope for expansion and development of trade beyond bartering the bare necessities of life was minimal.

According to the barter system, price of an article for exchange was usually determined by its immediate necessity rather than value. An article of higher value was at times exchanged for that of lower value. Questions of profit and loss were often ignored in barter transactions. The economic inter-dependence between one group of people and the other provided the incentive to exchange their articles at some conventional barter rates, but these rates were not all worth the values of articles.

The monetisation of tribal economy has of late brought about important changes and developments in trade relations. The tribal people and hitherto no clear idea of prices of commodities when they were in monetary ratings. It was difficult to market indigenous articles in the absence of fixed prices. The people are now well acquainted with monetary transactions, and have opportunities for investments of money for commercial and productive purposes. The trade divides have ended with the coming up of roads linking the interior parts of this region. Facilities for marketing and transportation of goods are now available. The introduction of metric system of weights and measures has also greatly facilitated trade and commercial relations.

The Government has taken various welfare and economic measures to raise the living standard of the tribal people and meet their essential needs. Licences and permits are issued to the local enterprising tribal businessmen. Loans and other assistance are also provided to them liberally. They do not have to face hard business competitions from outside. Enough protections have been given them under the provisions of the Regulations I of 1873. The Inner Line restrictions enforced under this regulation are to the effect that

commercial investments in Arunachal Pradesh by traders from outside are not normally permissible except on a very limited scale. The intention of these restriction is to protect the tribal people from explotations.

Private shops of various descriptions, namely grocery, stationery, cloth etc, owned by tribal bussinessmen can now be found at the sprawling markets at Pasighat, Along, Pangin, Basar, Likabali and other places. Besides these, they also run restaurants, hotels, cinema halls, photo studio, bakery and small-scale industries, such as saw and rice mill, wooden furniture, steel fabrication, auto works, printing press, fruit preservation etc. There are 21 fair price shops, one each at Along, Basar, Likabali, Pasighat, Boleng, Mebo and Yingkiong, and other places. Eight of these shops are in the co-operative sector and the rest in private sector.

Trade and Business Establishments

According to the 1971 Census, there were 623 trade or business establishments in Siang. "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"¹. The following tables show the number and type of establishments in Siang as enumerated in the 1971 Census².

	<u>Number</u>	<u>Percentage</u>
Government or Quasi Government	615	37.9
Private	987	60.9
Co-operative	20	1.2
Total :	1622	100.0

BANKING, TRADE AND COMMERCE

	Manufacturing, Processing or Servicing Establishments	Trade or Business Establishments.	Other Establishments.	Total
Govt or Quasi-Govt.	9	45	561	615
Private	50	558	379	987
Co-operative	-	20	-	20
Total	59	623	940	1622

The 'trade or business establishments' were categorised as follows :

	Wholesale	Retail	Others	Total	Percentage
Govt or Quasi-Govt.	1	20	24	45	7.2
Private	-	425	133	558	89.6
Co-operative	-	20	-	20	3.2
Total	1	465	157	623	100.0

The above table shows that out of the total number of 623 'trade or business establishments' in 1971, retail trade was carried on by 465 establishments, which were situated at different administrative centres and other places. These establishments cater to the needs of the local people. The retail traders usually procure goods from the wholesale markets in Assam and through other trading agencies.

Retail trade is carried on through shops, which may be broadly classified as follows : i) grocery and stationery shops selling, among other things, cereals, pulses, spices, salt, sugar, mustard oil, kerosene, vegetable ghee, tea, beverages, perfumes and cosmetics, utensils, torch etc. Some shops keep footwears and leather goods as well ; ii) Cloth and hosiery shops storing all kinds of textiles - cotton, woollen, silk, nylon, etc ; iii) *Pan-biri* and cigarette shops, which are generally one-man establishments selling *pan* (betel-leaf), betel-nuts, biri, cigarettes, match boxes etc ; iv) medical stores ; v) fruit and vegetable shops and ; vi) bakery and vii) restaurant.

Central Purchase Organisation

The Central Purchase Organisation, C.P.O., in short, is a Government undertaking for supply of essential foodstuffs to government employees posted to near air-fed stations which have no road link or transport facilities. It also supplies ration items to labourers engaged in construction and

1. *Census of India, 1971, Arunachal Pradesh, Part III A & B, p. 3.*

2. *Ibid, pp. 11, 12, 52.*

developmental works. In the event of natural calamities and food shortage, rice is supplied from the C.P.O. to the local people as well. The articles are sold at Government rates and the stock includes rice, atta, salt, pulses, sugar, tea leaves, mustard oil, kerosene, vegetable ghee etc. The C.P.O. centres are Tuting, Mechuka, Manigong, Gelling, Liromoba, Payum, Singa, Tato, Gensi and Mariyang.

The C.P.O. centres are now coming gradually under the Public Distribution System which has a population coverage of 70,092 persons in Siang 20,672 in East Siang and 49,420 in West Siang.

Co-operation

Tribes are generally organised in cohesive society based on kinship, where collective efforts are essential for survival and progress. Mutual help in primary needs, which is largely absent in urban societies, is a moral obligation for them. The corporate village life of the Adis of Siang, in particular, is an expression of these principles of co-operation. Their socio-political institutions are democratic in the truest sense of this term. Their *jhum* cultivation is very much of a co-operative enterprise. Their house building, hunting and fishing expeditions are co-operative endeavours.

The co-operative movement sponsored by the Government, has therefore, evoked a wide response from the people of this area. Indeed, the tribal people have come forward to associate themselves with the co-operative societies working in various fields of development so that vital needs which cannot be satisfied by their individual enterprises can be met through the co-operatives.

The co-operative movement in this region has a vital role to play in improving the socio-economic conditions. Its primary aim in the beginning was supply of consumer goods at cheaper rates and thus help the consumers. Consumer co-operative societies were at first established at different administrative centres. By the end of March, 1981, twenty three co-operative societies were established in Siang in various sectors, such as consumer, bank, transport, industry, school etc. These societies have been making important contributions to commercial and economic developments. They also give facilities to the people for investment and loans for common beneficial and productive purposes.

The types of the co-operative societies functioning in Siang and their number as on March 31, 1981 were as follows :

Types	Number	
	West Siang	East Siang
1. Consumers Co-operative	10	2
2. Transport Co-operative	1	-

3. Multipurpose Co-operative	1	-
4. School Co-operative	1	2
5. Apex Bank Co-operative	-	1
6. Industrial Co-operative	1	1
7. 'LAMP' Co-operative	1	1
8. Farming Co-operative	1	-
Total	16	7

The 'LAMP' and multipurpose co-operative societies procure surplus agricultural produce from farmers on payment from marketing.

The co-operative movement has successfully secured people's participation in the government endeavours to promote economic growth and development.

The following table indicates the particulars of the co-operative societies functioning in the year 1983-84 :¹

Particulars	East Siang	West Siang	Total
1. Number of societies	13	16	29
2. Members	2,913	6,139	9,052
3. Working capital ⁴ (Rupees in thousand)	6443	5991	12434
4. Share capital (Rupees in thousand)	1168	642	1810
5. Loans/Advances (Rupees in thousand)	1081	432	1513

The total number of various co-operative societies functioning in East Siang and West Siang districts as on 31.3.91 are 23 and 22 respectively.²

Weights and Measures

Old time practice : Formerly, business transactions in this area were carried out through barter or exchange of articles according to the needs of the people, as described earlier in detail, and for this purpose there were some conventional barter rates. The trade relations remained virtually unchanged until about 1947. After independence a wind of change began to blow over the whole area leading to many-sided developments and monetisation of tribal economy. The barter rates were gradually replaced by standard values in terms of money. The tribal people living near the plains were generally familiar

Source: 1. Basic Statistics of Arunachal Pradesh, 1983-84.
2. Statistical Abstract of Arunachal Pradesh, 1991.

with the systems of weights and measures followed in Assam. But the situation was different in the interior areas, where barter trade was carried on until recently, and may be in some remote isolated pockets and in inter-village trade it is still being practised.

Metric System: The metric system of weights and measures has been introduced in India in accordance with the Standards of Weights and Measures Act, 1956. By this Act the old, diverse and bewildering methods and practices of weights and measures, which were in vogue, were sought to be replaced by a legal metrology to maintain uniformity and discipline in business and economic relations. In 1964, an unit of Weights and Measures was created in the Industries Department for implementation of the metric system as provided in the Act of 1956. On March 18, 1975, this unit became a full fledged department. In 1976, another Act was enforced to extend the application of the standards of weights and measures to cover a wide range of economic activities so as to regulate the inter-state trade and commerce as well as sale or distribution of goods by weights, measures or numbers; or any matter connected therewith or incidental thereto. The Packaged Commodities Rules of 1977 have also been brought into force in Arunachal Pradesh.

In pursuance of the Arunachal Pradesh Weights and Measures (Enforcement) Act, 1979 and the Rules framed under the provisions of this Act, the Weights and Measures Department was renamed as the Department of Legal Metrology on Sept 21, 1982.

The enforcement of the metric system in the districts has been successful and beneficial in many ways. It has not only simplified the business transactions and facilitated fixation of the prices of commodities, but also secured consumers' protection to a great extent.

CHAPTER VII

COMMUNICATIONS

Old-time Trade Routes

In the olden days, trade between the tribes of Siang and their neighbours in Tibet and the plains of Assam as also amongst themselves was based on a system of barter as described in the preceeding chapter. There were several important routes by which the barter trade was carried on.

Some routes used by the Gallongs and the Tibetans for trade between them passed through the areas of other people inhabiting the upper regions. "These trading expeditions often led to inter-tribal feuds, as the people, who were living between the Gallongs and the Tibetans, did not want the traders to go via their country, as, in that case, their trade would have sustained losses. They acted as a sort of broker between the two. This brought them a little benefit. To avoid such extra burden, the Gallongs used to go to Tibet by rivers and streams, unnoticed by other villagers, but were at times detected and thus trouble ensued. Since 1947, there has been considerable retardation in such barter trades with the Tibetans"¹.

There existed two principal trade routes from Tibet to the Bokar and Bori countries via Gelling. A brisk trade from the north was current in the areas beyond Riga on the right bank of the river Siang and beyond Damro on the left bank of the Yamne. Below this region, the Adis came down to Along, Pangin or Pasighat for trade. The Adis living further below went as far as the market at Sadiya in Assam which was not only a great trade-centre, but also a meeting place of various groups of the Adis for their journey to and fro Sadiya to barter their goods.

The trade routes of the Pailibos across the northern border passed through the country of Bokars. Their other trade routes led to places in the west and the south over high mountains, and along the river Siyom. Some of the trade routes were²:

- 1) from Yapik to Lipo and across the Jomyi-Ego range to Herong in the Bokar area on to Lungte,
- 2) from Yapik, Irgo, Lipo, Tadogito, Yapu, Tagur across the Mobuk-Ego to Taliha in Daporijo area,
- 3) from Tato and Tagur (over the Kina-Siyam bridge) to Herong and further,

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962), p. 10.

2. See *The Pailibos* (Shillong, 1979) by K. Kumar, pp. 14-15.

- 4) from Irgo/Yapu across the Jomyi-Ego range to Herong,
- 5) from Tato across Rutu-Ego to Doyi in Daporijo area,
- 6) from Tato/Yapik via Kaying to Doke, Gaddi, Yomsa, Yonggam, Raksap, Liromoba, Poyom and Gensi, and
- 7) from Tato across Mobuk-Ego to Doyi, Moso, Singkom, Singiyom, Ebba and Ningno in Daporijo area.

The Ramos living close to the Indo-Tibetan border visited Tibet formerly for barter trade. They had trade relations also with the neighbouring tribes of the Bokars, Pailibos, Tagins and Boris. They at times went up to the Liromoba village in the Gallong country following the Tato-Yapuik-Shikar route through the Bier hills.

The Boris had trade relations across the border. They used to go to a market in Tibet called Nayi Lube. Some important routes used by the Boris for trade with their near and distant neighbours are as follows¹:

- 1) Gasheng - Miging - Tuting route was used for trading with the upper Ashings, Tangams and Shimongs.
- 2) Tumbin - Kaying - Keak route was used for trading with the Gallongs.
- 3) Gameng - Lising route was used for trade with the Minyongs.
- 4) Along the left bank of Syiom they reached the Minyong area through Mega via Bogne.
- 5) Traders are known to have gone far to the south right upto Bame, Basar, Liromoba and still farther to Gusar in the Daporijo area for trade with the Gallongs.

Communications

During the British days, there was no motorable road in Siang and no attempt was made to develop road communications in this region. There were routes and tracks used by the people from fairly early times for trade, inter-village or inter-tribal communications and for hunting or fishing. The British officers and explorers followed the existing tracks when they undertook journeys into the deep interior areas. They sometimes discovered new paths. Indeed, some of them be regarded as pathfinders. Their adventurous expeditions in the hills had brought to light a wealth of information about the tribal people of this region, their ways of living and the mode of transport and communications of those days which were hitherto unknown. Some old routes from Pasighat used in the British days were described by Michell.²

1. See *The Boris*, (Shillong, 1979) by K. Kumar, p. 20.

2. Captain St. John F. Michell, *The North-East Frontier of India*, (Delhi, Reprinted, 1973), p. 75 ff.

Travelling in Siang in the pre-independence days was, as already indicated, done by the foot-tracks. A description of the means of communications in the fifties given in the book 'Aspects of Padam-Minyong Culture' is as follows:¹

"Adi foot-tracks from village to village are narrow, and are maintained and repaired by the villagers, each village being responsible for the maintenance of those parts that fall within its boundary. The shortest routes are usually selected, even if one has to pass over high mountains. They are never, as a rule, tortuous. For steep climbs over clay or muddy slopes, they construct steps of stone slabs. Logs of wood are placed across swampy parts. Sometimes they prefer paths along the river and usually depend upon big slabs of stone strewn there. Ladders of wood are in common use for climbing and descending steep rocks. These ladders are without hand-rests, and during rainy season they become slippery and dangerous, as the foot-rests are very narrow. Foot-tracks outside the villages run through the *jhum* cultivations.

"Shallow rivers are usually waded across except during rainy seasons, when the current is too swift and water is too deep to be so forded. The Adis are expert in constructing different types of bridges. The skill, as well as the labour shown in the construction of these bridges is really surprising, and is such as would do no discredit to more civilized nations².

"Cane hanging bridges are common over the larger streams and in several places, over the Siang and Yamne. Other types of bridges are also found all over the region. The simplest device of crossing a shallow river is by placing large boulders across it, each boulder placed at a distance of two feet from the other.

"When the current is strong and water deep, the usual way of spanning a river is by erecting two stone abutments, one on each side of the river, facing each other, and by placing a long log of wood across, on these abutments. The upper surface of the log is planed flat and smooth with 'dao', but the under surface remains round.

"There are then the cantilever bridges of bamboo weighed with piles of boulders, suspension bridges with rigid bamboo footways, trestle bridges and combinations of these types.

"The cane suspension bridges display the Adi engineering at its best. At one end, the canes forming the main support of a suspension bridge are partly thrown across beams supported on a triangle of strong timber, and are partly stretched and fastened to groups of trees, conveniently situated. The other ends of the main supporting canes are then floated across the river and secured in the same way, on the other bank. Once the two main suspenders are secured,

1. Sachin Roy, *Aspects of Padam-Minyong Culture*. (Shillong, 1966), pp. 20-23.

2. W. Robinson, *Descriptive Account of Assam* (1841), pp. 359-362.

they attach to these some minor suspenders. On these are hung elliptical coils of the same material at an interval of few yards. Foot-rests of about ten to twelve inches are then woven with cane strips. Lastly below the main suspension cane, the rings are further strengthened with additional canes, which also serve as handrests in crossing. Now this structure including the foot-rest and hand-rest are interlaced with cane strips which add to the stability of the suspension strings. These bridges sway considerably during crossing, but are safe and have never been known to break or fail otherwise. It is repaired part by part every year, so that after three or four years, the entire bridge gets renewed all over.

"The length of such bridges depends on the width of the river. A very valuable and detailed description, with measurements of one of the longer cane-bridges, by J.O.Neil, is given in Dunbar's book.

"The length of bridge-work measured along the foot-way from entrance to entrance was 717 feet, and the approaches were about 34 feet in length giving a total of 786 feet. The supports (on the bank) were 8-10 logs about 21 feet long and from 5 1/2 in. to 9 in. in diameter, with 10 feet buttress posts. The bridge was anchored on either side by about 30 strands of split cane attached to growing trees, living bamboos and rock. The open tube of cane-work of which the bridge was made consisted of a frame-work of 30 ropes of split cane varying from 20 feet to 50 feet in length, and from $\frac{3}{4}$ to 1 foot apart, the lengths of cane being tied together with what Mr. Kemp tells me is known as 'an ordinary knot'. Fifty-nine interlacing strands at varying intervals of from 3 to 23 feet along the bridge made of 4 strands of whole cane twisted together formed the hoops of the cage. The suspension cables were made of 6 strands of split cane twisted together; these cables varied in height from 4 ft. 6 in to 6 ft. 6 in. from that precarious structure the foot-way; 10 struts of bamboo, at various intervals, were placed transversely to separate the suspension cables. The height of the bridge above winter river level was found to be 50 feet at the centre and 130 feet at the entrances. As might be expected, the give of this kind of foot-way is appreciable (in places over a foot), and it is necessary to put a considerable amount of weight on the upper cables, that are grasped in either hand. Moreover the sway of these bridges is considerable at the centre; in windy weather it is so great as to make crossing such a bridge impossible'.¹

"Sometimes rafts are also used to cross rivers. Bamboo rafts used by the Adis to cross rivers have been described by Bentinck :

"The Adi raft is built up of bamboos of a special kind, very large and light; it is some 20 feet long and 5 feet wide, carries a small platform for passengers

1. G.D.S. Dunbar, *op. cit.*, p. 21.

and baggage, and is worked by three or four men with sticks, of whom the man in the bow does such steering as is possible. The only crossing places are where the river widens out, and the current in shore is, therefore, very slack. The raft is towed up the bank as far as the steepness of the rocks allows, and is cast off with the head well upstream. Then follows an exciting period of furious paddling, during which the raft goes slowly across the stream and rapidly down it until, if successful, it strikes and slack water on the far side. Bad steering results in its being carried far down; and there is no saying where it may stop".¹

The major rivers Siang and Siyom are not navigable, except in some places, because of their innumerable rapids, strong currents and cross-currents. Small boats and bamboo rafts are used only for crossing rivers from one bank to another.

Development of Road Communications

An infrastructure of communications is vital for development of any area. As stated earlier, there was no motorable road in Siang prior to 1947. In fact, lack of regular road communications was primarily responsible for the economic stagnancy in this region and the isolation and distress of its people. After independence it was keenly felt that no all-round development of this tribal area was possible without building up a network of roads good enough for vehicular traffic. Scuh roads were also essential for an effective and efficient administration. With the expansion of administrative activities, the need for transportation of goods to the interior areas also assumed a great importance. The magnitude of the problems of supply and transport in a mountainous terrain where great distances were traversed on foot can well be imagined. To meet these problems, food and other necessities were supplied to the government servants by means of air-drops. A system of portage and animal transport for carrying of load and provisions was also introduced. But, it was not possible to meet the growing requirements of the administration and develop the area without road communications. Air-dropping of supplies besides being extremely expensive had its limitations. It was, therefore, obvious that the problems could be solved only by constructing roads, a fact which received increasing emphasis under the development programmes taken up by the government in different phases since independence. As a matter of fact, high priority has been laid on roads in all the Five Year Plans of the territory since 1951.

But construction of roads in this rugged mountainous terrain having primeval forests, torrential rivers and heavy rainfall was not an easy task. It

1. A. Bentinck, 'The Adi Expedition: Geographical Results'. *The Geographical Journal*, Vol. XLI, No. 2.

posed a great challenge to the engineers. The available man power and material resources were far from being sufficient for the purpose. Initial endeavours were, therefore, directed towards construction of bridle-paths and porter tracks.

Formerly, there was hardly any regular road communications between the region now called East Siang and West Siang Districts and the plains of Assam. Indeed, it was extremely difficult to build roads through the formidable hills and mountains and bridges over uncrossable rivers. The rugged terrain shut this region from the outside world. The existing tracks and bridges were often effaced during monsoon when the rivers rise in spate and river-banks are eroded in areas where the soil is soft and unstable.

Despite all these difficulties and natural obstacles, the task of road building in this region was undertaken in the fifties with great zeal and determination. A considerable length of porter tracks and bridle-paths connecting one village with another was constructed. Remarkable achievements were also made in the execution of major road projects and construction of lateral roads. The Along-Majorbari road, constructed in the sixties, has been a vital link between this region and the rest of the country. The road connects important communication lines in Assam.

As a matter of policy, tribal labour and skill available locally in this territory are being utilised for road works. The tribal people, who were not hitherto used to work with implements like spade, shovel, pick-axe etc, came forward to undertake earthwork even in the most difficult terrains. With necessary technical guidance afforded to them, they were trained also in the use of blasting materials for road construction. Such works were executed by the local people mostly on *bango* (inter-village tribal council) basis, each village having its own share in the construction of roads, on a flat rate of Rs. 2,000 /- per mile for eight feet wide jeepable roads excluding the blasting of rocks and jungle wood-log bridges across the rivers. This rate was fixed in view of the voluntary self-help contributed by the villages.

Late D. Ering, the then Union Deputy Minister, who was from Siang, wrote on this phase of road construction in the erstwhile NEFA as follows :

"Road building in NEFA has made commendable progress in the last six years. All the five district headquarters are connected by black-top roads, so also three sub-divisional headquarters. One is connected presently by a rail-cum-road link with Assam on the north bank of Brahmaputra. A number of lateral roads have been completed and more are under construction. A lion's share of this contribution to NEFA is of the Border Roads Organisation. The CPWD too with their small resources has contributed to the development of roads. They have very rightly given priority to road building over building

construction in their plan of work in NEFA. Communication with the rest of the country will go a long way in the development of this strategic border area, where the pace of development in the present situation has to be fast enough".¹

A major breakthrough in the work for connecting the remote and interior areas by construction of good roads was achieved after 1962. This has been mainly due to the sustained efforts of the Border Roads Development Board (BRDB).

Apart from the road-linked district headquarters of Along and Pasighat, most of the sub-divisional and circle headquarters of the East Siang and West Siang Districts put together have already been connected by roads. The names of these headquarters are Basar, Mariyong, Yomcha, Liromoba, Tirbin, Kaying Gensi, Likabali, Pangin, Boleng-Dosing, Mabo and Yingkiong.

The total length of roads in Siang, as in March 1979 was as follows :²

Roads	-	1141.00 km
Forest Roads	-	162.38 km.
Total	-	1303.38 km.

The following is the type-wise length of roads excluding forest roads :

Type of Roads				Total length of roads
Black topped	Gravelled	Kutch	Station Colony Road	
351	195	547	48	1141

Of the forest roads, a length of 28 km is surfaced and 134.38 km unsurfaced. A total length of 1089 km of unsurfaced roads in the Community Development Blocks was constructed till the month of March 1975, of which 59 km was motorable.

According to an enumeration, 58 villages (35 in West Siang and 23 in East Siang) are linked by metalled roads, and 104 villages (65 in West Siang and 39 in East Siang) are within a distance of 1 to 10 km from the metalled roads.¹

1. Dr. Ering, *The North-East Frontier Agency, published in Tribal Situation in India* edited by K. Suresh Singh, (Simla, 1972), pp. 67-68.

2. Source : *Statistical Hand Book of Arunachal Pradesh, 1978-79.*

As on 31.3.88, the total length of roads in East and West Siang excluding forest roads was 1613.55 Km.²

There is no national highway nor railway in Siang. A plan for extending railway up to Pasighat from the nearest railhead at Murkong Selek in Assam - is being envisaged. Silapathar in Assam in the vicinity of Likabali is the nearest railway station from Along.

Vehicle and Conveyances

Most of the vehicular traffic plying on the roads of Siang belongs to the government. The State Transport Department runs regular bus services for passengers on the following routes :

1. Along - Likabali
2. Along - Kaying
3. Daporijo - Likabali via Basar
4. Pasighat - Sonarighat
5. Pasighat - Murkong Selek
6. Pasighat - Yingkiong
7. Itanagar - Silapathar - Likabali
8. Itanagar - Along

The Transport Co-operative Societies, Panchayat Samities and Private Companies also operate carriages on the following routes :

1. Pasighat - Murkong Selek
2. Pasighat - Oriamghat.

The ferry services across the Brahmaputra from Dibrugarh to Oriamghat and Sonarighat in Assam, operated by the Inland Water Transport Corporation, can be availed from nearby places in Siang, such as Pasighat and Likabali.

Air Transport

Some administrative centres have no regular road communications. These and some other remote places depend largely on air dropping of food and essential articles. There are a number of landing grounds and dropping zones for the air-fed stations.

Travel Facilities

The whole of Siang comprising East Siang and West Siang District lies beyond the Inner Line. Under the Regulation I of 1873, as revised from time to time, travelling beyond this line without an Inner Line pass is not

permissible. One can, however, obtain the pass from the Government on application.

Most of the important places in Siang can now be reached by roads and bus service are available on some specified routes. Travel from one place to another in this area is not so difficult as it was before.

Accommodation facilities for touring officers and travellers are available at the Circuit houses at Along and Pasighat, and also at the Inspection bungalows at the sub-divisional headquarters and other important places. There are rest houses or staging huts placed along the roads and tracks which can also be used as shelters during journeys. Porters are available for travelling on foot.

Posts, Telegraphs and Telephones

Prior to the opening of Post Offices in the early fifties, the mail service was operated by Dak Runners working as couriers between some places. The runner system is still at work in areas which are away from the lines of road and other means of communications.

In 1971, only three Post Offices with telegraph facilities and fifteen Post Offices without telegraph facilities were functioning in Siang comprising the East and West Siang Districts. By the month of March 1979, there were forty four Post Offices, of which four Post Offices stationed at Along, Basar, Tuting and Pasighat had telegraph facilities. Along and Pasighat have telephone exchanges and the telecommunication services have been extended to Pangin. By March 1991, the number of Post Offices increased to sixty-two of which five were with telegraph facilities as follows:¹

Post Offices	West Siang	East Siang	Total
With telegraph facilities	4	1	5
Without telegraph facilities	31	26	57
Total	35	27	62

A list of Post Offices is appended to this chapter. A wireless transmission system which was functioning before the extension of postal services to the territory is still operating for the purpose of government communications.

1. Source : *Economic Review*, 1981, p. 70, by the Directorate of Economics and Statistics, Government of Arunachal Pradesh.
2. *Statistical Abstract of A.P.*, 1988.

1. Source : *Basic Statistics of Arunachal Pradesh*, 1983-84.

Appendix
POST OFFICES IN EAST SIANG AND WEST SIANG DISTRICTS
 (as on March 31, 1979)

Type of Post Office	Location	
Sub-Post Office with telegraph facilities	(1) Along	(2) Basar
	(3) Pasighat	(4) Tuting
Branch Post Office without Telegraph facilities	(1) Jinning	(21) Mariyang
	(2) Kambang	(22) Hill Top
	(3) Liromoba	(23) Rukxing
	(4) Tuting	(24) Namsing
	(5) Rumgong	(25) Borguli
	(6) Kaying	(26) Koyu (Koyumonku)
	(7) R.K. Mission	(27) Silluk
	(8) Karko	(28) Ayeng
	(9) Kombo	(29) Damro
	(10) Bagra	(30) Pangin
	(11) Daring	(31) Boleng
	(12) Gensi	(32) Yingkiong
	(13) Likabali	(33) Geku
	(14) Tirbin	(34) Rani
	(15) Riga	(35) Yagrung
	(16) Sille	(36) Singa
	(17) Billat	(37) Gelling
	(18) Balek	(38) Mechuka
	(19) Gramsevak Training Centre	(39) Manigong
	(20) Mebo	(40) Tato

Source : Statistical Hand Book of Arunachal Pradesh, 1978-79.

MISCELLANEOUS OCCUPATIONS AND ECONOMIC TRENDS

Livelihood Pattern

The mountainous terrain of Siang comprising the East Siang and West Siang Districts is rural except for the two towns of Pasighat and Along. Over 88 per cent of its population lives in villages. The villagers by and large follow a method of shifting cultivation of crops, called *jhum*, to make their living. The cultivators numbering 50,924 constitute 35.20 per cent of the total population and 74.74 per cent of the total number of workers engaged in different economic activities including agriculture. In fact, the socio-economic life of the people moves round agriculture as their mainstay, and other occupations, such as weaving, cane and bamboo work, hunting, fishing etc., as supplementary to it. Their social organisations, cultural heritage, religious beliefs and practices are interwoven with their agricultural pursuits. The livelihood pattern of the people is essentially a reflex of the economic activities primarily of the *jhum* cultivation, by which they subsist.

The pattern of life is changing, slowly and gradually. In the recent decades, considerable progress has been achieved towards development of agriculture by improved and scientific methods. Land has been brought under more productive methods of settled cultivation, wet-rice and terrace-rice, aided by irrigation wherever possible. The progressive tribal farmers are now using better agricultural implements, even machines, and fertilizers. This and developments in other sectors, such as communications, trade and commerce, industries, rural electrification, education, public health etc., have brought about a remarkable change in the ways of living of the people.

The shifting cultivation practised in this area with the aid of simple tools is of subsistence nature. Productivity of *jhum*-land per hectare is comparatively low. The villagers are still attached to their traditional system of shifting cultivation and this system evolved through centuries in relation to the ecological factors is not easily changeable or replaceable. Under the prevailing system of agriculture, the tribal economy remained changelessly localised and backward. But, while the rural population is still rooted in their traditional past and maintaining a poor living standard, the impact of material and cultural developments taking place since independence has produced ripples of far reaching changes in the tribal life and society.

An important result of the change is the emergence of a new generation of energetic tribal youths, educated and ambitious. Although the number of highly educated persons is still not appreciably large, the literacy percentage

of the total population of Siang being 23.63 according to the 1981 Census,¹ the growth of literacy compared to all India rates is significant enough. It is the avowed policy of the government to open employment avenues for the trained and educated local tribal youths and induct them into various cadres of administrative and technical services. They are now to be found in all categories of government services, holding positions up to the top level. A good number of officers from Siang belong to the Indian Administrative Service. In the co-operative and private sectors, there are quite a number of enterprising tribal businessmen and entrepreneurs, who are recognised as retail traders or owners of small industrial units. There are also amongst them contractors, dealers, agency-holders, drivers, technician, mechanic etc. Learned and distinguished professions like doctors, engineers and lawyers are, however, yet to get prominence.

A low level of technical development and lack of economic specialisation are the general characteristics of the tribal societies organised on the basis of small social groupings, such as clan, sub-tribes or village. These societies do not normally admit of any hereditary occupations or rigid craft or trade exclusiveness. They make their living by collective and co-operative efforts. It may be noted that there are no castes, nor any exclusive professional group like weaver, barbar, washerman, cobbler etc.

Prices of Commodities

There is no wholesale market in Arunachal Pradesh. Essential food items are procured from the neighbouring State of Assam. Rise in prices of commodities in the wholesale market in Assam affects the retail prices of goods sold in Arunachal Pradesh. The index of wholesale prices of food and non-food items in Assam is shown in the following table :²

(Base year 1953-100)

Articles	1976	1977	1978	
			January	February
Food	384.4	438.8	407.5	411.7
Non-food	296.3	350.1	373.2	364.0
All articles	355.3	409.3	396.1	395.8

The table indicates that there was an increasing trend of price-rise over 1976.

The rise in retail prices of food items in the market is somewhat controlled

1. See Chapter XIII for details.

2. Source : Economic Review 1979-80 by the Directorate of Economics and Statistics, Government of Arunachal Pradesh, p. 39.

in Arunachal Pradesh by public distribution of essential commodities through the Central Purchase Organisation, fair price shops and consumer co-operative societies at subsidised rates. The following table¹ shows the average retail price of some essential commodities in all centres of Arunachal Pradesh during the years 1976 to 1978 :

Sl. No.	Commodity	Unit	Annual Average Prices in Rs.			Percentage increase or decrease over 1976
			1976	1977	1978	
1	2	3	4	5	6	7
1.	Rice (coarse)	Kg	1.88	1.88	1.98	(+) 5.3
2.	Rice (local)	"	1.77	1.79	1.99	(+) 12.4
3.	Wheat (atta)	"	1.74	1.71	1.71	(-) 1.7
4.	Maize	"	1.78	1.08	1.27	(-) 29.0
5.	Masurdal	"	2.50	3.53	4.41	(+) 76.4
6.	Mugdal (moong)	"	2.86	3.40	4.37	(+) 52.8
7.	Arhardal	"	2.63	3.76	5.51	(+) 109.5
8.	Sugar	"	3.69	3.60	3.25	(-) 12.0
9.	Salt	"	0.59	0.54	0.74	(+) 25.0
10.	Potato	"	1.45	1.75	1.67	(+) 15.2
11.	Fish (common)	"	9.20	10.91	10.47	(+) 13.8
12.	Meat (goat)	"	11.24	12.19	12.98	(+) 15.5
13.	Egg (duck)	Pair	1.17	1.21	1.26	(+) 7.7
14.	Egg (chicken)	"	1.10	1.18	1.22	(+) 10.9
15.	Kerosine (white)	litre	1.57	1.55	1.57	-
16.	Mustard Oil	"	6.95	11.31	10.87	(+) 56.4

In the years following 1978, there has been an upward trend of prices corresponding to all India price level, resulting in the rise of cost of living. Effective measures have been taken by the Central Government to ensure regular flow of essential commodities to this area and to control prices. There are ten Central Purchase Organisation centres and twenty one fair price shops in Siang, which are sponsored by the government. In order to implement a public distribution system, the Civil Supply Department has been coordinating the activities of various organisations for procurement and supply of food and other necessities. The role of the co-operative societies to

1. Source : Economic Review 1979-80 by the Directorate of Economics and Statistics, Government of Arunachal Pradesh, pp. 39-40.

regulate prices has also been very helpful. There are fourteen consumer co-operative societies in Siang which are meeting essential needs of the people.

The retail price of some of the essential commodities in the markets at Along and Pasighat during the month of July 1985 is indicated as follows¹ :

Sl. No.	Commodity	Unit	Retail Price in Rupees	
			Along	Pasighat
1	2	3	4	5
1.	Rice (local)	Kg	4.00	3.10
2.	Rice (<i>mota</i> imported)	"	3.33	2.85
3.	Rice (<i>lahi</i> imported)	"	5.00	
4.	Wheat	"	3.38	2.55
5.	Maize	"	-	3.50
6.	Masur	"	6.50	6.50
7.	Moong	"	9.25	9.20
8.	Arhar	"	6.75	6.90
9.	Sugar	"	6.40	7.98
10.	Salt	"	1.58	1.16
11.	Potato	"	3.00	2.30
12.	Fish	"	28.00	19.00
13.	Meat (goat)	"	30.00	26.00
14.	Egg	Pair	2.00	2.00
15.	Kerosine	Litre	2.00	2.28
16.	Mustard Oil	"	16.75	14.00
17.	Match	Box	0.28	0.28

Wages

By an order of the Government of Arunachal Pradesh² coming into effect from Sept. 1, 1986 the rates of wages for workers have been revised. According to the terms of this order, no worker is required to work for more than nine hours a day with a break of one hour, but if he is engaged for more than five hours and less than nine hours he shall be deemed to have worked for a full day. A paid day of rest every week, overtime wages and paid holidays

1. Source : Monthly Price Bulletin of Arunachal Pradesh, July 1985 by the Directorate of Economics and Statistics, Government of Arunachal Pradesh.

2. Vide Government of Arunachal Pradesh order no. LAB-49/83 dated 28.9.86.

have also been provided.

For the purpose of various rates of wages payable to different categories of workers including agricultural labourers, three areas have been defined as follows :

Area I - the places outside Arunachal Pradesh where workers are employed under the Government of Arunachal Pradesh.

Area II - the places in Arunachal Pradesh where special compensatory allowance at 25 % is payable.

Area III - the places in Arunachal Pradesh where special compensatory allowance at 35% is admissible.

The revised rates of wages are indicated in the following table.

Category of workers	(in rupees)					
	Area I		Area II		Area III	
	Daily	Monthly	Daily	Monthly	Daily	Monthly
1	2	3	4	5	6	7
Unskilled	15.00	450.00	16.00	480.00	18.00	540.00
Semi-skilled	21.00	630.00	22.00	660.00	24.00	720.00
Skilled	24.00	720.00	25.00	750.00	27.00	810.00

Employment in Different Occupations

In the 1981 Census, the population has been classified into two broad divisions, workers and non-workers. Work is defined as participation in any economically productive activity. A person participating in such work either physically or mentally is termed as a worker. The workers are further divided into main workers, marginal workers and main workers having secondary work. A marginal worker is one who has worked for less than 183 days during the year preceding the date of enumeration.

According to the 1981 Census, the workers engaged in various economic activities are indicated in the following categories and numbers :

East Siang

	Persons	Males	Females
Main Workers	32,471	20,850	11,621
Marginal Workers	2,809	704	2,105
Non-Workers	34,994	16,432	18,562

Categories of Main Workers

1. Cultivators	23,029	12,227	10,802
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2. Agricultural Labourers	1,790	1,386	404
3. Household industry, manufacturing, processing, servicing and repairs	224	211	13
4. Other Workers	7,428	7,026	402
Total	32,471	20,850	11,621

West Siang

	<u>Persons</u>	<u>Males</u>	<u>Females</u>
Main Workers	35,661	20,404	15,257
Marginal Workers	369	141	228
Non-Workers	38,121	18,238	19,883

Categories of Main Workers

1. Cultivators	27,895	13,175	14,720
2. Agricultural Labourers	450	314	136
3. Household industry, manufacturing, processing, servicing and repairs	201	175	26
4. Other Workers	7,115	6,740	375
Total	35,661	20,404	15,257

According to the 1991 Census, the workers engaged in various economic activities are indicated in the following categories and numbers.

East Siang

	<u>Persons</u>	<u>Males</u>	<u>Females</u>
Main Workers	42,901	27,828	15,073
Marginal Workers	3,323	798	2,525

Categories of Main Workers

1. Cultivators	23,781	12,031	11,750
2. Agricultural Labourers	4,367	2,832	1,535
3. Household Industry,	434	386	48
4. Other Workers	14,319	12,579	1,740

West Siang

	<u>Persons</u>	<u>Males</u>	<u>Females</u>
Main Workers	37,881	23,862	14,019
Marginal Workers	1,523	157	1,366

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Categories of Main Workers

1. Cultivators	24,337	11,807	12,503
2. Agricultural Labourers	806	619	187
3. Household Industry,	134	95	39
4. Other Workers	12,604	11,341	1,263

The Census figures reveal clearly that agriculture is the means of living of the overwhelming majority of the workers. Among the total number of main workers, the cultivators are 70.92 per cent in the Siang district and 78.22 per cent in the West Siang District. A notable feature of the occupational pattern is that the number of female cultivators is almost matched with that of male cultivators. It is even higher in the West Siang District. But, shifting or *jhum* cultivation, which is mainly practised is seasonal, and normally this occupation cannot keep all the cultivators engaged in the field throughout the year. A section of the cultivators may therefore, take up other work as secondary or supplementary to their main occupation. The agricultural labourers, who are wage earners and whose number in the East Siang District is comparatively far greater than in the West Siang District, are on the whole a small section of the workers. Various occupations of the people have been described in detail in the foregoing chapters relating to agriculture, industries and trade. It may be noted that the role of women as a working force in this area is of utmost importance. They not only form one half of the total number of cultivators, but are also engaged in other productive activities. Weaving is exclusively done by them.

According to an economic census conducted in 1980 the number of enterprises and persons working in different enterprises are as shown in the following table.¹ An enterprise in this context is defined as an undertaking engaged in production and / or distribution of goods and/or services not for the sole purpose of own consumption. An agricultural enterprise is defined as one engaged in livestock production, agricultural services, hunting, trapping and game propagation, forestry and logging and fishing. Enterprises engaged in activities pertaining to agricultural production and plantation were not covered in the census. Enterprises concerning all other activities are termed as non-agricultural enterprises.

1. Source : Economic Census - 1980 by the Directorate of Economics and Statistics, Government of Arunachal Pradesh.

District	Number of Enterprises		Persons usually working	
	Agricultural	Non-Agricultural	Agricultural Enterprises	Non-Agricultural Enterprises
East Siang	90	987	257	5388
West Siang	62	1538	345	5563

The number of government employees as on January 1, 1980 is as follows:¹

District	Class				Total
	I	II	III	IV	
East Siang	13	115	1439	704	2271
West Siang	18	90	1259	795	2160
Total	29	205	2698	1499	4431

TREND OF CHANGES IN ECONOMY

A change in the tribal economy, it may be said, began with the independence. Before the forties of the present century this region had no regular road; no town or large and permanent market centre; no departmental organisation, bank or financial institution to assist the farmers for improvement of agriculture; no forestry development; no industry other than cottage - handicrafts and handloom, and hardly any school or health centre. Indeed, the economic development of the region was started from the scratch. This point is important for an assessment of the economic changes that have taken place.

The people of Arunachal Pradesh lived more or less isolatedly in the confines of their hills for a long period of time. The isolation was due mainly to geographical barriers formed by hills and mountains, which shut out the region from the outside world and did not allow an easy access. The British Government was primarily concerned with the maintenance of law and order in this frontier and was generally indifferent to economic development of the area and welfare of the people. As a result, the people continued to live in a state of seclusion, negligence and poverty throughout the British rule in India. No human society, much less a backward economy can promote itself in complete isolation and lack of cultural intercourse. And, therefore, the life of the people in Siang moved on in its old form veering round a stagnant economy based essentially on *jhum* cultivation.

1. Source : Government Employees of Arunachal Pradesh - location wise - As on 1.1.1980, P. 85, by the Directorate of Economics and Statistics, Government of Arunachal Pradesh.

The economic activities of the people before 1947 were limited to production through elementary methods. Agriculture was of subsistence nature. There was no organised system of trade and commerce, nor any regular big market. The internal and external trade were localised, and they were based on barter. Price of a commodity, under the barter system was determined by its immediate necessity instead of value. Commodities of higher value were sometimes exchanged for lower ones. The barter was, therefore, detrimental to the growth of economy. Interplay of the factors of demand and supply exerted very little influence on the tribal economy. No wonder, the living standard of the people under these conditions would be miserably low.

With the attainment of independence came a wave of changes and developments in all spheres of life of the tribal people. The barriers were crossed, and the isolation and stagnation broken. Good things of the modern world were carried to the hitherto neglected people in order to help them develop according to their own genius. Initial cautions were, however, taken to ensure that development programmes were carried out 'in carefully measured phases' so as not to upset the tribal ways of life and the tribal institutions. This apart, it was hardly possible to implement development projects in the hills as speedily as in the plains. The difficult terrain, dearth of man power and absence of road communications were some of the major impediments.

Planning

Arunachal Pradesh is gifted with an abundance of natural resources - forests, mineral and hydel power. But what it lacked was an infrastructure, the prerequisite for a long term development to be achieved through scientific exploration and utilisation of the resources. In fact, planning and developmental activities in Arunachal Pradesh were started from the scratch and executed under phased programmes keeping in view the peculiar problems, immediate needs and available resources. The measures taken at the initial stage were aimed at improving the existing methods of production for attainment of a higher standard of living, and also bringing about progressive 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 programme at 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.
- 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. During the Second, Third and Fourth Plans, priorities were laid on agriculture for increased production. Highest priorities were given to construction of roads and buildings followed by social services including education and medical. Agriculture was raised to second priority level in the Fourth Plan (1969-70 to 1973-74).

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, persistent efforts were made to introduce improved and scientific methods in crop cultivation. The old system of agricultural production by means of *jhuming* or shifting method cultivation with the aid of antiquated tools is most elementary and not conducive to more productivity and economic growth. And since this old agricultural system pursued through the ages still continues to be the basic factor of tribal economy, there had been no amelioration of the economic conditions. As a result, the pattern and standard of living of the people remained at the poverty level without any basic change. The *jhum* cultivation by which almost the entire population subsisted can hardly meet the present growing needs for more food. The productivity of *jhum* fields, used for repeated and intensive cultivations, may diminish to a point below the subsistence level of a growing population, and this probability may in turn retard the growth of economy unless agriculture is developed on scientific lines. It is the method of production that determines the stage of social development. We have seen in the chapter on agriculture that *jhuming*, a practical form of agriculture practised in the hills, cannot be wholly replaced by any type of sedentary or permanent cultivation, wet-rice or terrace-rice. What is needed is scientific development of agriculture for more food production. With the extension of the area brought under permanent cultivation and introduction of improved devices in agriculture, the method of *jhum* cultivation may undergo a progressive change. The stagnation in agricultural production has been one of the main constraints on the local economy and removal of the constraint is

essential for raising the standard of living of the people and their social progress. Although pressure on land in this area does not pose any serious threat as yet, the population density per sq.km. being a low 6 in West Siang and 11 in East Siang, the diminishing return of the limited arable *jhum*-lands in the hills may manifest itself in course of time. It is, therefore, imperative that the methods of cultivation are improved for more food production above the subsistence level, and hence the need for a gradual change from shifting (*jhum*) to settled cultivation, wherever feasible and suitable to local conditions, is emphasised for agricultural development.

Keeping in view the national objectives and the special features of Arunachal Pradesh's economy, the following broad objectives were laid down for this territory's Fifth Plan :

- a) to maximise food production through intensive cultivation ;
- b) to develop the means of communications as an infrastructure-the road coverage of 6.6 km 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 introducing 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.

During the Fifth Plan period (1974-75 to 1978-79), the important sectors of development, among others, were roads and bridges, agriculture and forests, social services, irrigation and power, cooperation and community development, and industries and mining. The top priority was laid on transport and communications followed by agriculture including forests, and this pattern of priorities continued under the Annual Plan for 1979-80 and the Sixth Plan (1980-81 to 1984-85).

Results and Achievements

The welfare and developmental schemes executed under the Plans with the support of a growing infrastructure have had a considerable resultant effect on tribal economy. With the construction of a network of roads, scientific progress of agriculture and irrigation, generation of hydel power and extension of rural electrification, establishment of industries, spread of modern education to remote villages and achievements in other sectors, a process of change towards an all-round progress and a better standard of living the tribal people has been set in motion. The change is too obvious to be ignored when compared to the conditions obtaining prior to 1947. Under the impact of material and cultural developments, the tribal societies have been

undergoing a phase of socio-economic transformation from small and secluded village groups to formation of larger and advanced communities, from a backward economy based on elementary methods of production and a barter system towards a modern economic system. The old time barriers have disappeared, and the needs of life, ever growing under the impact of developments, have created new values.

The participation of the people in the developmental activities is most encouraging. They have shown remarkable adaptability to the fast-changing socio-economic conditions. The sphere of economic activities of the people is far more wider today than ever before. The whole area has been brought under the economic system of the country. Money, seldom used earlier in economic transactions, is now the accepted medium of exchange. The monetisation of local economy has paved the way for trade and commerce, savings and productive investments. It may also be noted that money income of the people has brought about a relative change in the consumption pattern due to rise of wants and the living standard. Money is a necessary precondition for economic growth and the monetised economy has given rise to a group of tribal people who have been earning money through their association with the administrative and developmental activities as traders, suppliers and also as private owners of land, business enterprises and small industrial units. Formation of private capital may lead to the advent of a commercial class. The Inner Line restrictions enforced under the Regulation I of 1873 prohibiting commercial investments in Arunachal Pradesh by businessmen from outside except on a very limited scale are intended to protect the indigenous tribal people from exploitation. The tribal interests are well protected and the economic activities at local levels are virtually free from outside competitions. The economic development of the area, however, depends basically on government assistance and public investments.

The progress achieved in various sectors of development have been discussed at length in the relevant chapters of this volume. These may be summed up in this context.

A total length of over 1303 km of roads was constructed by the month of March 1979. These roads form the necessary infrastructure of a communication system in the interior areas and link up most of the administrative headquarters of Siang. Besides other benefits, the roads have facilitated marketing and opened the ways for development of trade and commerce. Regular markets have sprung up at various places.

Special efforts are being made for scientific development of agriculture. The total annual coverage of area under permanent cultivation and irrigation facilities is extending. Financial assistance is provided to the farmers in the

form of government subsidies for purchase of improved agricultural tools and implements, fertilizers and improved seeds and for development of horticulture and pisciculture. Besides this, the State Bank and the State Co-operative Apex Bank advance agricultural loans to farmers. To augment food production, methods of multiple cropping and sowing of high yielding varieties of seeds have been adopted.

The total installed capacity of micro-hydel schemes was 750 kw in March 1982. Utilisation of the rich potentiality of hydel power would no doubt boost the industrial development of the area and the progress of rural electrification. By March 1983, sixty eight villages in Siang had been electrified.

Besides the cottage industries and craft centres, a large number of small-scale industries and two major industries have been set up. In 1980, there were 2,525 non-agricultural enterprises, 987 in East Siang and 1,538 in West Siang, functioning for production and distribution of goods and services¹. The total number of persons working in these enterprises were 10,951. The Arunachal Pradesh Industrial Development and Financial Corporation Ltd. formed in 1978, provides industrial and subsidised loans to the small-scale industries and centrally procures raw materials to feed them. District Industries Centre opened at Along and Pasighat offer help and assistance to small industries.

A high amount of revenue is derived annually from the forests. In fact, forest is the major source of revenue. The importance of forest products contributing to the growth of the local economy can hardly be emphasised. A number of wood-based industries in this area is fed by the forests. Scientific exploitation of the vast forest resources and the role of the recently formed Anchal Forest Reserves for rural development would no doubt go a long way in improving the economic conditions of the people and promoting agricultural and industrial developments.

In the field of social services a great deal of achievements have been made. The total number of educational institutions opened by the month of March 1984 rose to 353. According to the 1981 Census, the percentage of literacy is 25.09 in the East Siang District and 22.24 in the West Siang District indicating a growth rate of 80.50 per cent and 52.53 per cent respectively from 1971 to 1981.

The total number of hospitals, health units and dispensaries established till March 1984 was 31 having 911 authorised beds. Moreover, seventeen medical teams were working in this area in 1983-84.

Community Development

1. Source : *Economic Census - 1980* by the Directorate of Economics and Statistics, Government of Arunachal Pradesh, p. 1.

Appendix

Community Development Blocks in Siang
(as on March 31, 1982)

Sl. No.	Name of Blocks	Block Headquarters	Year of Opening	Number of villages covered	Population (in '000)	Type of Blocks
1.	Pasighat CD Block	Pasighat	1952-53	53	18	A
2.	Basar CD Block	Basar	1956-57	49	11	A
3.	Along CD Block	Along	1957-58	48	23	A
4.	Mariyang CD Block	Mariyang	1957-58	16	10	A
5.	Liromoba CD Block	Liromoba	1959-60	72	10	A
6.	Pangin CD Block	Pangin	1959-60	36	9	A
7.	Mechuka CD Block	Mechuka	1960-61	75	6	A
8.	Ramle-Bango CD Block	Lampo (Nari)	1961-62	19	2	B
9.	Tuing CD Block	Tuing	1961-62	33	5	B
10.	Gensi CD Block	Gensi	1961-62	45	4	B
11.	Yingkiong CD Block	Yingkiong	1964-65	10	4	B
Total				456	102	

MISCELLANEOUS OCCUPATIONS AND ECONOMIC TRENDS

N.B. - Blocks having a population above 5,000 are categorised as type A and those with a population of 5,000 or below as type B.

Source : Statistical Hand Book of Arunachal Pradesh, 1981-82.

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The Community Development Programme, undertaken in Siang since the fifties, is being executed through eleven blocks, six in West Siang and five in East Siang, covering 456 villages having a population of 1,02,000 souls. All these blocks are at the Post Stage II phase, that is they are to continue indefinitely.

The particulars of the community development blocks are shown at the appendix to this chapter.

The schemes taken up under this programme for development of villages are mainly land development for permanent cultivation, minor irrigation, distribution of improved seeds, seedlings, fruit grafts, fertilizers, poultry birds and cattle, construction of village roads and bridges etc.

Administrative Set-up of the Government

Under the provisions of the North Eastern Areas (Reorganisation) Act of 1971 the erstwhile North-East Frontier Agency administered by the Governor of Assam as the agent of the President of India was reconstituted as an Union Territory on January 21, 1972, the date from which the Agency came to be known as Arunachal Pradesh. The Union Territory was administered by the Chief Commissioner for the period from January 21, 1972, to August 14, 1975. 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 Arunachal Pradesh has been designated as Lieutenant Governor appointed by the President of India under Clause (1) of Article 239 of the Constitution of India. 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 the 15th August, 1975.

The Chief Minister and the other Ministers of his cabinet are in charge of the various Government departments 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 in the pattern of what is called the 'Single Line Administration' 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 co-ordination 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

concerning the directorates and other departments is, however, maintained in the Secretariat.

The Deputy Commissioner, as the head of a district, is in overall charge of the district establishments of various departments. He supervises and controls all aspects of administrative and developmental activities that are carried on by the departments in the district under his administrative jurisdiction. The development departments in the district are in fact the integral parts of the office of the Deputy Commissioner. The important departmental heads who are under the administrative control of the Deputy Commissioner at the district level are, among others, 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 Rural Development Officer and also the Executive Engineers belonging to the Central Public Works Department (Now APWD) and Rural Works Department. These officers are responsible to the Deputy Commissioner for all developmental works done and implementation of schemes, and also to the respective heads of the departments for technical matters. They work under the 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 importance of Arunachal Pradesh bounded by international borders can hardly be emphasised. The territory is inhabited by a large number of scheduled tribes who are at a low level of economic development. The whole area is ruggedly mountainous where communication difficulties are a veritable problem. All these factors 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* between the various government organs working for a common purpose of development and welfare.

"The functions of the Circle Officers, Extra Assistant Commissioners etc. embraced a multi-purpose list in that they acted as local heads for all subjects affecting their jurisdictions such as development work, maintenance of law and order, revenue work, community development schemes, socio-cultural affairs of the people and the exercise of authority over the various installations and schemes of various technical departments such as schools,

hospitals, roads, agriculture and so on. This last function enables the executive functionaries to maintain an overall integrated outlook in their jurisdictions in various spheres. It also suits the convenience of the people in that they can appeal to a single authority on any subject. The prime position accorded to the Circle Officers, Extra Assistant Commissioners etc., in respect of their jurisdictions has come to be known as the Single Line Administration. This pattern has been in existence for a number of years and it has proved suitable both for the people and the Administration. It enables the simple folk to take their complaints and difficulties to the highest authority in their area in an attitude of trust and inner certitude that they would be heard. From the Administration point of view, the overall head provides a single authority to help resolve inter-departmental differences, to co-ordinate inter-departmental plans for the area and generally to develop an overall integrated approach in each administrative jurisdiction."¹

For administrative purposes, each of the districts of East Siang and West Siang are divided into a number of sub-divisions, which are further divided into circles. The East Siang District has two sub-divisions consisting of eight circles, while the West Siang District has five sub-divisions comprising seventeen circles as shown in the following deployment chart.¹

District	Sub-division	Circle	Position of Administrative Officers		
			(provisional)		
			Deputy Commissioner	Extra Assistant Commissioner	Circle Officer
1	2	3	4	5	6
East Siang	Pasighat (Sadar)	(1) Pasighat	1	4	4
		(2) Pangin	-	-	1
		(3) Boleng/Dosing	-	1	1
		(4) Mebo	-	-	1
		(5) Nari	-	-	1
		(6) Ruskin	-	-	1
		Mariyang (1) Mariyang	-	1	1

1. P.N. Luthra, *Constitutional and Administrative Growth of the North-East Frontier Agency*, (Shillong, 1971), pp. 21-22.

2. Also see Chapter I - Sub-divisions and Circles.

West Siang		(2) Yingkiong	-	-	1
		(3) Karko	-	-	1
		(4) Geku	-	-	1
		(1) Along	1	3	7
	(Sadar)	(2) Payum	-	-	1
		(3) Rumgong	-	-	1
		(4) Kaying	-	-	1
	Yomcha	(1) Tirbin	-	-	1
		(2) Liromoba	-	-	1
		(3) Darak	-	-	1
		(4) Kadai and Lego-Gamlin villages of Along Sadar Circle	-	-	1
	Basar	— Yomcha	-	-	1
		(1) Basar	-	1	1
		(2) Gensi	-	-	1
	Mechuka	(3) Likabali	-	1	1
		(1) Mechuka	-	1	1
		(2) Manigong	-	-	1
	Tuting	(3) Tato	-	-	1
		(1) Tuting	-	1	1
		(2) Gelling	-	-	1
		(3) Singa	-	-	1

Local Self-Government

The village or tribal councils of the Adis are self-governing institutions exercising authority at the village level. These councils consist of village elders, and they traditionally enjoy a good deal of autonomy in judicial, administrative and developmental matters. All these councils work within the general framework of the Assam Frontier (Administration of Justice) Regulation, 1945 (Regulation I of 1945). The Gaon Burah or the village elder, who is also normally by virtue of his position the head of the village council, acts usually 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 confers powers on the statutory 'village authorities' in civil and criminal matters.¹

Panchayat Raj

In consistence 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. These bodies 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 erstwhile North-East Frontier Agency.²

Revenue Administration

Revenue from the districts of East Siang and West Siang is earned mostly from forests. State excise, stamps and registration, sales tax, taxes on vehicles, public works, agriculture and minor irrigation, animal husbandry, industries, power, road and water transport are among the other important sources of revenue. A small amount of land revenue is also collected.

Land

The net cultivated area in Siang comprising East Siang and West Siang Districts was estimated at 37,283.47 hectares.³ *Jhum* or shifting cultivation is widely practised by the people in the hill slopes. They have also taken to permanent or sedentary cultivation to some extent in the level areas. Corresponding to the nature of terrain and methods of cultivation, land is held generally by the people under three broad categories of ownership, namely village or community, clan and individual. The right of ownership implies use and management of land. Under the provisions of the Sadiya Frontier Tract *Jhum* Land Regulation, 1947 (Regulation 4 of 1947), the customary right of any member or members of a village or a community to cultivate *jhum* land is

respected, and individual ownership over land under permanent or semi-permanent cultivation and land attached to a dwelling house is recognised.

The Regulation 4 of 1947 defines the *jhum* land as follows :

"*Jhum* Land means and includes 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 utilise by clearing jungle or grazing livestock, provided that such village or community is in a permanent location, but does not include :

- (i) any land which has been or is under process of being terraced for the purpose of a permanent or semi-permanent cultivation whether by means of irrigation or not, or
- (ii) any land attached or appurtenant to a dwelling house and used for the purpose of permanent cultivation, or
- (iii) any land which in the opinion of the Political Officer is subject to permanent cultivation.

Explanations: (1) Any land which is otherwise *jhum* land according to the above definition shall be deemed to be so notwithstanding the fact that a part or the whole thereof may have been planted with fruit trees, bamboos or tung, or reserved for growing firewood. (2) A village or community shall be held to be in 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.

'Community' includes the residents of a village as a whole, the clan, sub-clan, phratry or kindred".

It may be noted that the shifting cultivation does not usually mean shifting homesteads, for many villages in Siang and in other parts of Arunachal Pradesh are old and permanent settlements.

In regard to accrual of customary rights, the Regulation lays down the following :

- (1) "A customary right to *jhum* land shall be deemed to be established in favour of a village or a community when such village or community has enjoyed the right to cultivate or utilize such *jhum* land for not less than 5 years prior to the making of this Regulation.
- (2) A customary right to *jhum* land shall be deemed to be established in favour of an individual cultivator.

- (a) if he has inherited the land in accordance with a local custom, or
- (b) if he has purchased the land prior to the making of this Regulation and such purchase was not contrary to local custom, or

1. See Chapter X and XII for detailed accounts of the tribal self-governing installations.

2. The Panchayat Raj has been described in detail in Chapter XII.

3. Source : State Report on Agricultural Census, 1976-77 by the Directorate of Agriculture and Rural Development, Government of Arunachal Pradesh, Part I, p. 59.

(c) if he has purchased the land at any date subsequent to the making of the Regulation, provided such purchase was not contrary to any local custom or any of the provisions of this Regulation, or

(d) if, being a resident of a permanent village, he has brought the land under cultivation, and the land has not been cultivated at any time within 30 years preceding his bringing the same into cultivation, provided that such land is within cultivable reach of his own village.

In actual application of the Regulation, local customs and traditions are, however, respected and given due recognition.

The Regulation also provides, "The Government may acquire any *jhum* land required for a public purpose. No formal acquisition proceedings shall be necessary but an opportunity shall be given to those having rights in the land to show cause against such acquisition. Reasonable compensation shall be paid for all land acquired under this section. Land so acquired shall, if relinquished by the Government at any time, be returned to the village, community or individual from whom it was acquired on refund, if any, of such compensation to the Government as the latter may decide."

Ownership of land varies from tribe to tribe but, as stated earlier, it can be broadly classified under three common categories of village-land, clan-land and individual-land. Although in early times, village-land in different parts of Arunachal Pradesh was usually co-extensive with the settlement of a single clan, there are more than one clan living in large villages at present. An Adi village has its own extent of territory, well demarcated by rivers, hills or other natural features. The village boundaries are commonly recognised and respected. The plots of land under *jhum* or shifting cultivation falling within these boundaries are owned by different families forming the village community. "There may be clanwise groupings of holdings in some ancient villages such as Damroh and Riga, but division is not generally made according to clans but according to families. Every inch of soil has its owner and his right to it is absolute though this right concerns cultivation only as by theory land belongs to the village as a whole."¹

Each family has, therefore, a right over plots of village-land, which it has cleared or reclaimed for cultivation. The right descends through the male line, all sons sharing the landed property of the father. Land is not rented out, nor is hired labour usually engaged. A landowner having no son can transfer his right to any male member of his relative within the village, on whom he may depend in his old age. Individual right of possession and cultivation of land is thus recognised and adjusted within the framework of village or communal

1. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), pp. 122-123. Also see R.N. Srivastava, *The Gallongs*, (Shillong, 1962), pp. 49-53.

land. The individual right stands good through all the phases of agricultural operation, and remains suspended only during fallow periods. Cases of land-disputes, which are rare are submitted to the *kebang* or village council for decision. The system of individual possession of land, where communal ownership is the rule, may also vary from tribe to tribe according to their customs and traditions.

If a person belonging to another clan comes to a village for settlement, he may be allowed by the village council to cultivate a plot of land as allotted to him. "There is a sense in which all subsequent settlers, especially those of other clans and in the smaller villages, are tenants, though in practice they act as full members of the village community. What usually happens is that when a member of another clan is given permission by the council to settle in a village, he is allowed to clear and reclaim a tract of forest which has never been used or has fallen into disuse, or he may borrow land from a family which has more than it wants. Such unutilized land is the property of the village which gives a right of ownership to the family which clears it. Where land is borrowed, however, and particularly when the new settler is not of the founder-clan, he is entitled only to use the land so long as he resides on the spot; he cannot transfer his holding even to his own descendants without the permission of the council; and should he go elsewhere his land reverts to the village as a whole".¹

It should be mentioned in this context that in the absence of land legislation, except the *Jhum* Land Regulation of 1947, the land tenure system followed by different tribal groups is based on their different customary laws. No cadastral survey of the agricultural land in Arunachal Pradesh has been carried out. Land records prepared on the basis of such survey are necessary for collection of any land revenue. The general pattern of land tenures, however, is that the *jhum* land 'which any member or members of a village or community have a customary right to cultivate' is divided into plots for allotment to families, while land under permanent or sedentary cultivation is usually held under individual or private ownership. It may be noted in this context that agriculture in this tribal area is still comparatively free from the problems of land ceilings, landless labour and rural indebtedness.

Jhuming is very much of a co-operative farming. Pertinently, Dr. Elwin made an important observation on the tribal idea of land tenure thus: "... the system of *jhum* cultivation provides an excellent foundation for the co-operative communal farming towards which many parts of the world are moving. The introduction of permanent cultivation, however, is turning the minds of the people more and more to the idea of private ownership. We

1. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), p. 64

should be on our guard that the new individualism does not lead ultimately to fragmentation and litigation about land. It might be possible to develop wet rice cultivation and terracing on a communal basis through the tribal councils."¹

Jhum land for public purposes is acquired by negotiation with those having rights in the land on payment of reasonable compensation wherever necessary. Procedures laid down in the Land Acquisition Act, 1894 (Act No. 1 of 1894) are also followed in respect of lands to be acquired by the Government for public purpose. Transfer or sale of land is strictly restricted, admissible to the indigenous tribal people only. The whole area is beyond the 'Inner Line' where outsiders are not normally permitted to settle or make commercial investments, and where no tribesman can sell his land to a non-tribesman. The tribal land in this area is well-protected from exploitation by outsiders.

The *jhum* Land Regulation enjoins that all customary rights in *jhum* shall be subject to the payment by the persons entitled thereto of such rent, taxes, or any other dues as may be lawfully imposed from time to time by competent authority.

Collection of land revenue, as indicated earlier, is nominal. Although no cadastral survey of the whole of this area has been made, the town of Pasighat was surveyed as far back as 1931-32. Its land was classified, and some 28 temporary annual *pattas* covering an area of 102.52 acres of land were issued for cultivation and residential purposes.

Poll Tax

Although no land revenue was collected formerly, a Poll Tax was levied on each adult male member of a village in Pasighat area at the rate of Rs. 3/- per annum. During the year 1960-61, Poll Tax amounting to a total of Rs. 5,286/- was collected from 1,762 persons and deposited as government revenue.

House Tax

Under the North - Eastern Frontier Agency (Abolition of Poll Tax and Levy of House Tax) Regulation, 1959, which came into force with effect from January 1, 1965, House Tax was levied from the erstwhile Pasighat Sub-division excluding the Pangin, Damro and Yingkiong areas at the rate of Rs. 2/- per house per annum, where Poll Tax was collected prior to implementation of the aforesaid Regulation. House Tax has been collected from this area in pursuance of a decision that the House Tax should not be introduced in the areas where neither House Tax nor Poll Tax was in force at the time of the promulgation of the aforesaid Regulation.

1. Verrier Elwin, *A Philosophy for NEFA* (Shillong - 1964), pp. 86-87.

Under the provisions of this Regulations, 'house' includes an outhouse, a stable, latrine, shed, hut and any other such structure whether of masonry, bricks, wood, leaves, grass, thatch or any other material whatsoever, but does not include any portable shelter.

It has also been provided in the Regulation that the House Tax shall, subject to prior payment of land revenue, if any, due to the Government in respect of the site of the house, be a first charge upon the house and upon the movable property, if any, found within or upon the same and belonging to the person liable to such tax.

"House Tax shall be levied in the manner hereinafter specified:

- (a) on every house in areas, other than urban areas, belonging to such family units as are pursuing the vocation of agriculture @ Rs. 2/- per annum per house;
- (b) on every house in urban areas-
 - (i) in trade site, @ Rs. 120/- per annum per bigha in area,
 - (ii) in other site, @ Rs. 60/- per annum per bigha in area"¹

Forest

In was envisaged in an official directive on forest policy issued in April 1958 that the policy in regard to the question of forest rules and the payment of forest royalties in the erstwhile NEFA should be at least not less liberal than that operating in the Autonomous Hill Districts of Assam.² It was further declared that it 'must be conditioned by the direct interests of the people and not by our desire to increase revenue by launching upon a policy of exploitation of forests identical with that in other parts of the country.'³ The Government policy regarding tribal rights in forests has been formulated in the *Jhum* Land Regulations of 1947. Besides these, the basic principles of the National Forest Policy of 1952, with some minor modification to suit the local conditions, are followed for the purpose of utilisation and management of the forest resources. Various forest codes, regulations and rules operating in Assam are also applicable.⁴ Moreover, relevant Central Rules are abided by.

•The Sadiya Frontier Tract *Jhum* Land Regulation, 1947 provides that "Subject to any orders that may be made under this Regulation, persons having customary rights to any *jhum* land shall be entitled to forest produce from such land for their own use or for the use of members of their own village or community but shall not, without the permission of the Land Conservator, be

1. Government Notification No. REV-2/59/141 dated 17.5.1972.

2. Dr. Verrier Elwin, B. Shastri and I. Simon (ed), *Important Directives on Administration of NEFA*, (Shillong, 1967), p. 14.

3. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), pp. 67-68.

4. Vide the Assam Gazette Notification No. FOR 4/48/7 of May, 1, 1948.

entitled to sell or transfer otherwise such produce to any other person." The Regulation further stipulates that "Where a Tribal Council approved by the Governor in this behalf has been set up in any area, any or all of the powers granted to the Land Conservator under the provisions of this Regulation may be vested by the Governor in that Tribal Council in respect of such area and the Land Conservator shall not exercise any powers so vested."

According to the North-East Frontier Agency Panchayat Raj Regulation, 1967 (Regulation 3 of 1967), preservation of forests is a matter assigned to the jurisdiction of Anchal Samities. Under the provisions of the Arunachal Pradesh Anchal Forest Reserve (Constitution and Maintenance) Act, 1975. (Act No 1 of 1976) as amended under act No. 3 of 1981¹, an Anchal Forest Reserve constituted with an area of an Anchal Samiti shall be managed by the State Government for the purpose of improving the quality of timber by raising valuable plantations so as to bring progressively increasing returns from the forest produce for the welfare of the local people. The State Government shall retain every year fifty percent of the net revenue of the year derived from the Anchal Forest Reserve, and the other fifty percent of the net revenue of the year in equal share be transferred to the concerned Anchal Samiti and Village (Village as defined under clause (XII) of Section 2 of the NEFA Panchayat Raj Regulation, 1967) every year after annual recovery of ten per cent of the capital expenditure borne initially by the State Government until it is fully recovered. The Anchal Samiti shall utilise fifty percent of their share of revenue for the developmental activities of the village concerned.

Revenue

Most of the revenue, as already stated, is derived from forests. There are two territorial forest divisions, namely the Along Forest Division in the West Siang District and the Pasighat Forest Division in the East Siang District. The revenue earned from these two forest divisions for a period of five years is as follows:²

Year	Revenue (Rs. in thousand)		
	Along Forest Division	Pasighat Forest Division	Total
1974-75	100.23	425.98	526.21
1975-76	197.07	479.63	676.70
1976-77	494.28	760.45	1254.73
1977-78	588.61	1157.57	1746.18
1978-79	651.94	1840.36	2492.30
Total	2032.13	4663.99	6696.12

In 1980-81, the forest revenue earned from the districts of East Siang and West Siang was Rs. 1295 thousand and Rs. 1021 thousand respectively, and in 1983-84 it was 3355 thousand and 516 thousand respectively. (Also see Chapter IV, sub-head 'Forestry')

The forest revenue is collected from different sources of forest produce, which is of two categories - major and minor. The major forest produce comprises timber, industrial wood (posts and poles) and firewood including charcoal. The minor forest produce includes cane, bamboo, agarwood, boulder, shingle, gravel, thatch, fodder etc.

1. Vide the Arunachal Pradesh Gazette, Extraordinary Issue No. 161 dated September 28, 1981 and No. 168 dated November 23, 1981.

2. Source : Statistical Hand Books of Arunachal Pradesh, 1974-75 to 1978-79.

LAW AND ORDER AND JUSTICE

Administration of Justice

According to the provisions of the Assam Frontier (Administration of Justice) Regulation, 1945 (Regulation I of 1945) and the Code of Criminal Procedure, 1973 (Act 2 of 1974), the criminal and civil justice are administered by the Deputy Commissioners, Assistant Commissioners, and the village Authorities. The Deputy Commissioners also exercise powers analogous to those of a Session Judge. The Assistant Commissioners are vested with powers not exceeding those of a Judicial Magistrate of First Class as defined in the Code of Criminal Procedure. The Extra Assistant Commissioners and the Circle Officers are appointed as Ex-officio Assistant Commissioners for the purposes of administration of civil and criminal justice only and are invested with powers of a Judicial Magistrate of the First Class or the Second Class.

Chapters VIII, X and XI of the Code of Criminal Procedure, 1973 have been brought into force in the Union Territory of Arunachal Pradesh together with the provisions of Sections 2,3,5, 20 to 23 (both inclusive), 373 and Chapter V so much of this chapter as applied to the arrest of any person belonging to one or more categories of persons specified in Sections of 109 or 110 (with certain modifications) with effect from the 1st April, 1974. Subsequently Chapters IV, V, XII of the Code of Criminal Procedure, 1973 have also been extended by the administrator of Arunachal Pradesh in exercise of the powers conferred by the Government of India under Notification No. U-11030/1/78-UTL dated 8.11.1978. These Chapters have not been extended to the whole of the State of Arunachal Pradesh, but only to certain areas within a radial distance of 5 km from the district headquarters and 500 yds on both sides of the roads leading from Assam to the district headquarters. In other procedural matters, the spirit of the Code of Criminal Procedure are the guiding principles. While administering civil and criminal justice, the Indian Evidence Act, 1872 is not applicable, but the authorities administering justice are to be guided by the general principles of the Indian Evidence Act. Judiciary and the Executive have not been separated. In accordance with sub-section (1) of Section 20 of the Code of Criminal Procedure, 1973, various officers were appointed as Executive Magistrates and also under sub-section (2) of Section 20 of the same Code, the Deputy Commissioners are appointed as District Magistrates. Some of the Executive Magistrates are also appointed as Ex-officio Assistant Commissioners for the purpose of administration of

Civil and Criminal Justice only, 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 the provisions of 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 (2 of 1974). The 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 Regulation 1 of 1945 provides conferment of powers on village authority to try any case involving any of the undermentioned criminal offences in which the person or persons accused is or are resident within their jurisdiction.

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 statutory village authorities have also powers to impose a fine for any offence which they are competent to try and may 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 in which both the parties are indigenous to the State 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 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

The law and order situation in both East and West Siang Districts had been on the whole normal. The following tables are indicative of the fact that the crime incidences in Siang were not such as to pose a threat to peaceful life. Cases of murders were few.

The nature and number of crimes recorded by the police authorities during a period of three years from 1976 to 1978 are as follows:¹

SL.No	Nature of Crimes	Number of Crimes		
		1976	1977	1978
1	2	3	4	5

1. Source : Office of the Inspector General of Police, Government of Arunachal Pradesh.

1. Murder	5	1	2
2. Culpable homicide	1	-	-
3. Rape	1	-	-
4. Kidnapping and abduction	4	3	5
5. Dacoity	-	-	2
6. Robbery	2	-	4
7. Burglary	18	17	18
8. Theft	58	58	49
9. Rioting	5	1	4
10. Criminal breach of trust	4	4	1
11. Cheating	1	-	-
12. Violation of Arms Act	-	9	1
13. Violation of Opium Act	-	4	2
14. Violation of Excise Act	-	6	14
15. Violation of Explosive Act	-	6	1
16. Other offences under local and special Act.	-	17	3
17. Cognisable crimes			
(a) Under IPC	162	156	126
(b) Under local and special act	-	42	13
Total	261	324	246

The following table shows the crime statistics during the year 1980-81.¹
(Also see Appendix - I at the end of the Chapter)

Sl.No	Offences	East Siang		West Siang	
		Reported	Convicted	Reported	Convicted
1.	Murder	1	-	2	-
2.	Dacoity	1	1	1	-
3.	Cattle theft	1	1	2	-
4.	Property theft	-	-	2	-
5.	Ordinary theft	36	19	31	2
6.	House trespass	6	1	13	2
7.	Other offences	92	34	59	6
	Total	137	56	110	10

1. Source : Statistical Hand Book of Arunachal Pradesh, 1980-81.

Organisation of police force

The Assam Frontier (Administration of Justice) Regulation, 1945 (Regulation 1 of 1945) extended to the frontier tracts now known as Arunachal Pradesh provides the following for police.

"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."¹

There was no regular civil police force in Arunachal Pradesh before 1971-72. The duties of police were performed by the Central Reserve Police Force and other reserved police forces, and also by the Assam Rifles. With the enforcement of the Police Act, 1861 in Arunachal Pradesh from 1972, the Police Department of the Government of Arunachal Pradesh has been set up for organisation of the police force. The department is headed by an Inspector General of Police with his headquarters at Itanagar. He is assisted at the headquarters by an Assistant Inspector General of Police.

In 1978-79, there were four Police Stations established at Along, Pasighat, Basar and Likabali.

During the year 1978, the police force in the erstwhile district of Siang consisted of one Deputy Superintendent of Police, two Inspectors, eleven Sub-Inspectors, two Assistant Sub-Inspectors, thirteen Head Constables and 117 Constables.

The position of police organisation in the year 1980-81 is indicated in the following table:²

1. See P.N. Luthra, *Constitutional and Administrative Growth of the North-East Frontier Agency (Shillong, 1971)*, p. 85.

2. Source : Statistical Hand Book of Arunachal Pradesh, 1980-81.

Particulars	East Siang	West Siang
Police Station	1	3
Inspector	1	1
Sub-Inspector	3	5
Assistant Sub-Inspector	2	2
Head Constable	1	6
Constable	14	34
Police Outpost	1	1

The position of police organisation as on 30 November, 1993 is indicated below¹ :

Particulars	East Siang	West Siang
Police Station	6	10
Police Out Post	2	1
Check Post	2	-
W.T. Out Post	1	-

Rankwise Deployment

1. Superintendent of Police	1	1
2. Deputy Superintendent of Police	2	2
3. Inspectors	1	3
4. Sub-Inspectors	21	21
5. Lady Sub-Inspector	-	1
6. Asstt. Sub-Inspectors	4	12
7. Head Constable	40	40
8. Lady Head Constable	2	1
9. Constables	108	144
10. Lady Constables	4	6
11. L/Naik	3	-
12. Naik	1	-
13. Fireman	6	6
14. Leading Fireman	1	2
Total	194	239

Jails and Lock-ups.

There is no jail in the districts. Lock-ups are parts of the Police Stations wherever they exist. There are Police lock-ups at Along, Pasighat, Likabali and Basar.

1. (a) Dispol. Pasighat W/T Message No. Psg (P)/22/93-94.

(b) Dispol. Along WT Message No. ALG (R)MB/33/93 Dt. 26.11.93.

Organisation of Civil and Criminal Courts

There are 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), the executive officers empowered for the purpose are vested with judicial powers 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 Commissioners. 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 Association

At present, Lawyers drawn from the neighbouring district bars 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 districts. A few lawyers from the tribal people of the State have entered the legal profession.

Customary Law and Justice in Tribal Societies

As a result of the establishment of regular administration over the whole area covering East and West Siang Districts, 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.

Apart from the Government, justice is also administered by the village or inter-village councils of various tribal groups in accordance with their traditional practices and customary laws. These councils have been described in detail in Chapter XII relating to Local Self-Government. A system of compensation or restitution is commonly followed by the councils for settlement of disputes and award of punishments. In pursuance of the tribal customs and traditions, serious crimes, even a case of murder, as already stated, can be compromised by payment of suitable compensation or fine instead of inflicting corporal punishment. It would be worthwhile to quote here at length the passages on the customary laws and justice in Adi societies from the studies of research scholars published by the Government.

GALLONG

"A Gallong follows the same mode of behaviour, social and political customs and treads the same path in religion, as his father and forefathers did. He never stops to think why and how he does all these things. There is no place for logic in his beliefs and customs. Most of the social customs are obeyed 'automatically', because infringement will bring supernatural punishment on the offender.... There is no codified law in Gallong society. The social customs themselves embody the legal rules. From the very childhood, one learns them and the consequent punishment which follows

their transgression. By the time he attains maturity he is expected to know all these rules.

"Of all the crimes, adultery is the most common. Girls are generally married in childhood and sometimes do not go to their husbands' houses even long after attaining puberty. Normally they do not settle there before the birth of the first child. This intervening period is the most critical one for them, for, if we would compute the instances of adultery among the Gallongs statistically, we will find the major percentage of such cases falling in this age group. The unawareness of the husband of the whereabouts of his wife, and the unrestricted movement of the wife combined with freedom in sexual matters permitted by the society conspire together to make approaches easy. Physical violence may take place if the couple are caught in *flagranti delicto*. The seducer is brought before the *kebang* and, his guilt having been established, the *kebang* inflicts a fine of a mithun or a heavy amount of cash money. The husband may also divorce the wife on this ground, and, if the offender likes to marry her, he would have then only to pay back the bride-wealth and to take the woman. The amount of fine may vary according to the status of the husband. The fine, if any, exacted from the woman, which she pays from her own purse or which is paid by her brother and father as it is their sister or daughter who has brought disgrace on the husband's family, goes towards a feast to village elders or to the *bango* fund. In olden days, seduction of woman of another clan usually led to clan-vengeance, but now the tension has relaxed and satisfaction is achieved by the payment of a fine, as in ordinary circumstances. The frequency of adultery has led to three types of psychological reaction among the Gallongs. Some think that the wives of other persons but their own, are unfaithful, and often feel themselves proud of it. Others become eternally suspicious of their wives and go on brooding over it, while the rest think that, even if their wives are not faithful to them, they can do nothing about it without definite proof or unless their wives confess the guilt of their own accord.

"Another sexual crime, less common but more abhorrent, is incest. The horror of incest is ingrained in them, and the offenders become the subject of public ridicule, shame and sometimes ostracism. A heavy deterrent fine is imposed, and the cattle received from the offender is killed as an expiatory measure and buried in the jungle or outside the village. Nobody eats this meat. The whole village is considered defiled, and this sacrifice is meant to lift the taboo on the village. Supernatural punishment is bound to befall the offender, and he cannot escape without an adequate sacrifice to the spirits.

"Cases of theft do occur in the villages. Bead necklaces, brass bowls and cattle only are worth stealing. The thief, when caught, is subjected to public

indignation. He is forced to return the stolen article and to pay a fine over and above. The members of his clan, unless there is a definite proof against him, try to defend him. The guilt having been established and fine imposed, they try to contribute towards the fine money, if he is not in a position to pay. Stealing of crops from the field or from the granary is not common. Taking grain or fruits or sugar-cane from the fields of a member of one's own clan is not considered a theft.

"Homicides and infliction of bodily injury often led in the past to blood feuds and the aggrieved party retaliated by taking a head or inflicting injury on the body of the offender or one of the members of his clan. Nowadays such cases are not coming to notice. For such crimes, social as well as supernatural punishments are in store for the culprit. The spirit of the murdered man will trouble him and offerings are to be made to his spirit. For bodily injuries, a fine-the usual form of punishment - is imposed. A portion of the fine goes to the sufferer, and the rest to the village elders or the *bango*. Inflicting injury on cattle is also considered wrong and is punished. As a matter of fact, all the offences, civil and criminal, though not well defined in the Gallong society, have to be punished in terms of fine now. Taking life, shedding blood, committing adultery and stealing, all can be requitted by payment of fines in varying measures. We have to keep a watchful eye on whether this leads to actual increase in the frequency of the crimes at the hands of those who are economically better off and so can afford to commit them...

"Oaths are taken in the event of disputes and accusation for theft or infliction of injury or sexual crime. Oaths taken in the name of Doini-Polo-Sun-Moon are the most sacred and binding. Oaths are taken in the presence of the village elders in a *kebang*. The two parties involved in a dispute call their own *nyibo*. The members of the parties raise their left hand and take oath by biting the tooth of a tiger. If both the parties agree to take oath in this manner, decision becomes difficult, and then ordeals are resorted to. For the administration of oath, the *nyibo* gets his fee.

"*Ordeal*. Ordeal is resorted to testify the innocence or the guilt of the person taking it. Dipping hand in hot water and putting fire on the palm were once the most common method of ordeal, though they have become obsolete now. A person getting his hand burnt is acclaimed guilty. Another method of ordeal is by biting the tooth of a tiger. After biting, a date and disease are announced. Whoever suffers from the proclaimed disease within the stipulated time is proved guilty, and then the customary fines are imposed on him. If he escapes the disease, he is pronounced innocent and congratulated for his coming out unscathed from the ordeal.¹

1. L.R.N. Srivastava, *the Gallongs (Shillong, 1962) pp. 89-93.*

PADAM-MINYONG

"Customary Law: Law is an institution which enforces faithful observance of rules of conduct approved by a state, society or community. In primitive associations, for which territory does not constitute an essential factor, it is the society that acts as the enforcing agent. The rules of conduct that it enjoins on its members are mainly based on the ethical principles that have grown out of historical and economic circumstances which have conditioned the development of the society. These go to form the conscience of the members of the society individually and the group as a whole and so a simple standard is set up to which the society and individuals subscribe without any question and reservation. Naturally, carefully defined codes are not necessary and subtle distinctions such as between crime and tort are not made. Any violation of one of these laws is taken up by society through the *kebang*, to which individuals come for redress of their wrongs, when they are directly concerned.

"Some of these laws are meant for the maintenance of social order and harmony. These are grouped here under 'Social Laws'.

"1. Social Law-Matrimonial (General):

Marriage is a state sanctioned by society into which a man and a woman enter, with the approval of their respective families and their own consent, to beget children and start a household of their own.

"No man or woman may enter into such a state if both of them belong to the same sub-clan.

"A man may enter, if he so chooses, into such a relation with more than one woman, one after another, even during the lifetime of the wife or wives married earlier.

"A woman once declared and accepted as a wife of one man, may not, without a proper and recognised separation, marry another man, in the life-time of her first husband.

"No free man or woman may establish matrimonial or sexual relations with any one considered as a slave or *mipak* by the society. Cases of proved and established sexual relations between a free man or woman with a slave or *mipak* woman or man, may be recognized as a marriage, only with the degradation of the free partner into a slave or *mipak* category.

"2. Marriage (performance):

The accepted rules of procedure laid down by the society for selection, proposal, negotiation, and performance of functions that have to be gone through before a man may claim a woman as his wife, have already been described in detail in the chapter on marriage.

(i) Once married, husband and wife are expected to observe sexual fidelity to each other except when:

(a) A husband is driven by conjugal unhappiness to temporary extra-marital relations.

(b) A wife is compelled to seek solace in *rasheng* partners by a feeling of repugnance that she feels against her husband.

(ii) A husband is considered to be repugnant to his wife-

(a) if she declares her dislike for him-for (i) ill treatment, (ii) habitual conjugal infidelity, (iii) inability to perform marital act to her satisfaction.

(b) If she withholds her consent to the marriage arranged by her parents - and refuses and succeeds in avoiding consummation or registers her dissent when unable to avoid it.

(iii) But these relations are strictly to be confined to the premises and members of the *rasheng*. Outside, they amount to a breach of social custom and conjugal fidelity.

"4. Divorce:

(i) When both the husband and the wife agree, they may separate with the approval of the *kebang*. In such cases neither of the two may prefer any claim for compensation.

(ii) A wife may not sever her matrimonial relation with her husband, if the husband does not agree to such a separation.

(iii) A wife may secure a divorce if she gets another man to pay a compensation to the husband and marry her thereafter.

(iv) A husband may divorce a wife, if he so desires, before there is any issue born of their union, but he forfeits thereby his claim to the personal ornaments belonging to the wife.

(v) In cases other than as noted in (iv) above, the husband will have to pay a heavy compensation in cash or in kind which is known as *aning-mitek* for the disgrace he is supposed to have brought on her by his act.

(vi) If a wife desires to have her marriage tie severed she may have her separation without any right for future claim on the husband, and need not pay any compensation to the husband, until and unless she takes a second husband, who, before he claims her as his wife, shall pay to the divorced husband-*adum*-equal in value to the bride-price as fixed and already paid by the divorced husband. *Adum* is usually heavier than *aning-mitek*.

(vii) In some cases, the *adum* is paid by the parents of the women seeking divorce instead of by the second husband.

"5. Parent and Child:

(i) Children born in wedlock belong to the sub-clan of the father.

(ii) A child born as a result of casual relations prior to formal marriage shall belong to the man who marries the mother. A child born of temporary *rasheng* relation to an unmarried girl may be finally accepted by the father, if he agrees to do so. But if he prefers to take advantage of the benefit of doubt allowed by the society, he may do so without any opprobrium and the child goes to the man who later marries the mother.

(iii) A child begotten by a man on the wife of another man, in the course of relations with her within the *rasheng*, shall belong the legal husband.

(iv) The natural father of a child born of a married woman out of wedlock may not have to pay any compensation to the legal father, unless he takes the mother away from the legal husband and marries her after obtaining proper divorce. In that case, the amount of compensation will be heavier than if the woman were without the child.

"6. Widows:

(i) In case of the death of a husband, his immediately younger brother shall have prior claim on the widow. If he forgoes his right, the remaining brothers shall have preference in order of age.

(ii) If none of the surviving brothers of the deceased husband agree to marry the widow, she may continue a widow or marry any other man from the sub-clan of her husband.

(iii) The father, brother of the father and the son of the deceased may not take his widow as a wife.

(iv) A widow who is not married by any of the surviving brothers of her deceased husband has no claim on the property left by the deceased.

(v) A man who marries a widow, ignoring the prior and superior claims of a brother of the deceased husband and thereby infringing on the latter's right of first preference, shall pay compensation to the aggrieved brother to such extent as may be decided by the *kebang*.

(vi) A widow, who finds no one to marry her, after the death of her husband-among the brothers and the fellow sub-clans-men of the deceased, may go back to her parents, if she so likes.

(vii) A widower may not prefer any claim to the personal belongings of his deceased wife or any part thereof.

"I have so far attempted to present some of the more important customary laws which aim at the preservation of the traditional structure of the Adi society. There is another set of laws which guard against discord, conflict and ill-feeling amongst members of the society, which may lead ultimately to social disruption, if allowed to continue unremedied and unredressed. These may be described as laws of security. Cases which come under the jurisdiction of these laws arise from dishonesty, and wilful or inadvertent negligence,

omissions and commissions.

Theft, assault, causing hurt and homicide are the most common acts of commission and there is a series of laws governing such cases.

"7. Theft :

(i) Taking away dishonestly any movable property out of the possession of its rightful owner, without the owner's consent, is considered as theft. In cases where the property stolen can be traced and located, it must be restored to the rightful owner and the person guilty of theft has to pay an amount not exceeding the prevailing market value of a pig in cash to the aggrieved person by way of compensation.

(ii) In cases of theft, where the property taken away cannot be traced and located, the person guilty of theft must make good the amount of the stolen article in addition to the amount paid as compensation as noted in para (i) above. The value of the stolen article will be decided by the *kebang*.

(iii) Theft of food by one in period of starvation for the sole purpose of satisfying his hunger is not considered as an offence.

"8. Assault and Battery:

Assaulting and causing hurt, grievous or otherwise, to a person with or without provocation is an offence and the offender has to pay a compensation to the person or the family of the person in case of such hurt ultimately causes death. The compensation is usually commensurate with the injury inflicted. In case of an injury to finger, ear, teeth, and eye, the compensation is a pig. Injury to the entire arm and leg, causing disability to that limb, is compensated with a graded scale of payments proportionate to the degree of the injury not exceeding the current value of a mithun. Culpable homicide involves a compensation to the maximum amount of ten mithuns which shall be paid to the lawful heir(s) to the deceased.

"Murder is compensated with the heaviest amount possible and considered just by the *kebang*. In former days, inability to pay the compensation resulted in the selling of the person guilty of murder as a slave and the money derived from the sale was paid to the family of the deceased by way of compensation.

"Among the acts of omission and commission, and negligence, violation of a taboo is punished with a fine of a number of tubes of *apong*, the number depending on the seriousness of the offence.

"Default in community work decided upon in a *kebang* is fined with *apong* and edibles.

"Clansmen failing to help in the burial of a deceased member of the clan may be fined up to the maximum of one mithun.

"If one refuses to pay the fine so imposed, a pig or a mithun may be taken away from him, even by force, if it is found necessary to apply it, or his

granary may be destroyed depending on the seriousness of the case.

"Escape of fire is not an offence if it can be proved that it has not been due to wilful act of negligence on the part of the person from whose custody it has spread. In intentional incendiarism, however, the damage has to be compensated by a payment of an amount equal in value to the property so damaged.

"One of the most common causes of conflict among the Adis is a dispute regarding ownership of property. So there are a number of laws fixing the ownership of movable or immovable property and safeguarding hunting and fishing rights from encroachments and for regulating the processes of inheritance".¹

PAILIBO

The customary laws of the Pailibos consists in precedences and conventions recognised traditionally for maintenance of peace, unity and harmony in the society and preservation of their social and religious rites and practices. It is in the main an unwritten code of ethics to be followed by all members of the society, and breach of which is liable to punishment by way of compensation. For example, if a man is murdered, the loss of the aggrieved party is determined on an assessment of the working capacity of the murdered person and the murderer is to supply the man-power to make good the loss.

The village council of the Pailibos called *dolu-keba* does not only deliver justice in cases of disputes arising in the village, but it can also enforces its judgement. It is obligatory for all members of the village society to obey the decision of the *dolu-keba* and implement it fully.

The following is a brief account of some typical cases concerning the Pailibos and the nature of punishments inflicted on the culprits :

Land Disputes: Cases of disputes over land are referred to the village council. If the council fails to take a decision, the case is settled through ritualistic methods.

Theft: Restitution of stolen articles and payment of a fine are the punishments awarded. In case of stealing of grains, the culprit is to return double the quantity of grain and also give a mithun as penalty - A theft of mithuns or domestic animals can be compromised by the thief returning the animals or replacing them. Besides these, he is to give one mithun as fine.

Desertion, Divorce, Breaking of Betrothal Ties: These cases are settled by return of the bride price the amount of which varies according to the nature of cases.

Rape: Cases of rape on a betrothed girl or married woman can be

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compromised by payment of compensation amounting from Rs. 200/- to Rs. 300/- and in the form of a mithun or Rs. 1000/- being its value as may be determined according to the nature of a case.

Adultery: If a person is found guilty of adultery with a betrothed girl or a married woman, he is to compensate the betrothed boy or the husband by giving him one mithun or a Memba bowl worth Rs. 1000/-. A girl or woman involved in adultery is never held guilty, for according to the Pailibos guilt in such case lies with the man only.

Murder: In the old days, cases of murder were settled by heavy compensations paid in cash and kind.

RAMO

Cases of disputes among the Ramo are settled by a *ad-hoc* councils of elders convened by a leading man called the *gembu*. The council gives its verdict in conformity with the customs and conventions of the tribe. It also follows the same system of compensation in awarding punishments.

Murder: Heavy compensation worth about fifteen mithuns or property equal in value has to be paid by the murderer.

Theft: Theft of any kind is considered a crime. Children are taught not to steal things. Punishment for theft is that double the cost of the article stolen is to be paid.

Breach of marriage contract: A fine has to be paid by the person responsible for the breach.

TANGAM

Among the Tangams, everybody knows of their unwritten code of customary laws which govern their socio-political relations and which they obey conscientiously. Violation or transgression of these laws are referred to the *kebang* for decision.

The customary laws enjoin that stolen articles shall be restored to whom they belong, failing which mithun or articles equal in value have to be given in lieu thereof.

In the event of a death resulting from assault, the person responsible for it is to pay a compensation of ten mithuns or their equivalent to the aggrieved party.

Causing grievous hurt is a serious offence, and the offender has to redress it by giving a small mithun as compensation.

Decisions of the *kebang* are binding. The *kebang* can enforce its decision and compel one to pay necessary compensation for settlement of a case. No punishment is awarded in case of offence committed unintentionally.

1. Sachin Roy, *Aspects of Padam-Minyong Culture*, (Shillong, 1966), pp. 223-228.

BORI

The object of the customary laws of the Boris is to maintain internal peace and security and preserve their traditional rites and practices. These unwritten laws transmitted orally from generation to generation are adhered to by the people as these provide the necessary basis on which justice can be delivered without distinction or discrimination to all members of the society to redress their grievances or compensate their losses.

Some common typical cases disposed of by the village council of the Boris is called *dolung kebang* are described in the following passage:

Theft: When a theft of grains or livestock or any valuable item of property takes place, attempts are made at first to settle the case through an intermediary known as *gundo*. If the suspect makes confession of his guilt, the case becomes simple to the customary laws. But, if the suspected person denies these charge, the case is taken up by the *dolung kebang* for a hearing. The statements of the complainant and the defendant or of the *gundos* pleading on their behalf, result of the examination of omens and all the circumstantial evidences are taken into consideration. The suspect, if found guilty, is directed to compensate the losses by returning the stolen property. A fine is also imposed on him.

Rape: Decision on a case of rape is normally taken by *dolung kebang* in the light of their customs and practices and the circumstances in which the offence has been committed. The accused, if his guilt is proved, is to pay a fine as determined by the *dolung kebang*. Moreover, he has to compensate the aggrieved person by a payment in kind.

Adultery/Elopement: A person charged with elopement of another person's wife is brought before the *dolung kebang*. In case the family of the eloped women does not take her back the accused, as directed by the kebang is to keep her with him and pay double the amount of the bride price paid by her husband, failing which he is to pay a heavy fine including four mithuns.

Abduction: The procedure of dealing with cases of abduction or seduction and the punishment awarded are the same as of adultery or elopement. It may, however, be noted that according to the Bori customary law, there is theoretically nothing like abduction or seduction of an unmarried girl. The parents may agree to give their girl in marriage to the abductor on payment of requisite bride price.

Murder: A case of murder can be settled if the murderer pays a very heavy compensation to the victim's family as demanded of him.

Oath and Ordeal: Oath and ordeal are important aspects of the Adi administration of justice. When it becomes impossible for the kebang to take decision on a case for want of conclusive evidence or proof, it is considered

expedient to seek supernatural guidance to find out the truth. The person who is charged with an offence is subjected to undergo a complex process of ordeal.

There are many kinds of ordeal observed by different groups. Besides this, the defendant and other persons involved in a case are required to undertake an oath by making a solemn affirmation that he or she will speak the truth.

The nature and the number of crimes reported to the police authorities in East Siang and West Siang Districts during the period from 1984 to 1991.

District	Murder	Dacoity	Burglary	Theft	Robbery	Kidnapping	Riots	Culpable Homicide	Counter-fies coinng	Miscellaneous	Total Crimes
1	2	3	4	5	6	7	8	9	10	11	12
1984											
East Siang	4	-	23	25	3	2	-	-	-	52	109
West Siang	4	-	9	28	1	6	1	-	-	80	129
1985											
East Siang	5	1	16	19	1	2	-	-	-	71	115
West Siang	-	1	7	23	-	1	1	-	-	58	91
1986											
East Siang	4	-	17	29	1	1	2	-	-	72	128
West Siang	1	-	6	31	1	1	2	-	-	78	120
1987-88											
East Siang	1	3	18	27	3	4	2	1	-	104	163
West Siang	3	1	7	28	5	2	4	1	-	44	95
1989											
East Siang	4	9	29	45	3	3	1	-	-	133	227
West Siang	3	4	18	53	11	5	2	-	-	131	227
1991											
East Siang	5	4	24	48	16	3	6	5	-	146	257
West Siang	3	1	18	33	7	3	3	1	-	122	191

Source : Statistical Abstract of Arunachal Pradesh 1984 to 1991.

CHAPTER XI

OTHER DEPARTMENTS

Deputy Commissioner is the administrative head of a 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 functioning as the co-ordinating authority. The technical officers of the development departments are under the general 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 in the district, and to the departmental heads concerned 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 development side.

The organic set-up of the government departments in the districts has been shown in some detail in Chapters I and IX. Besides the establishments of the Deputy Commissioner, Extra Assistant Commissioners and Circle Officers, the following development and technical departments are functioning in the districts of East Siang and West Siang.

Agriculture Department

The Agriculture Department is headed by a Director at the State level. The district organisations of this department in East Siang and West Siang are each in charge of a District Agriculture Officer with their headquarters at Pasighat and Along respectively. The District Agriculture Officers in their jurisdictions are assisted by Agriculture Inspectors stationed at various places, Farm Managers, Statistical Inspectors and Agricultural Census Inspectors.

The two training institutes of the Agriculture Department in the East Siang District, namely the Gramsevak Training Centre, Pasighat and the Farmers Training Centre, Pasighat are under the control and supervision of a Deputy Director and a District Training Officer respectively. A team of Village Level Workers trained in the Gramsevak Training Centre works in each of the district under the direction of the District Agriculture Officer.

The Agriculture Department in the districts is responsible for implementation of development programmes and Plan schemes concerning development of agriculture including horticulture by improved and scientific methods; extension of permanent cultivation of wet-rice and terrace-rice; the Multiple Cropping Projects; irrigation by diversion channels; supply of

fertilizers, modern agricultural implements and machinery and seeds including high yielding varieties; plant protection; training and demonstrations, agricultural census etc. A District Horticulture Officer assisted by Horticulture Inspectors has been stationed at Along.

Animal Husbandry and Veterinary Department

The Department of Animal Husbandry and Veterinary consists of a Director and two Deputy Directors besides others at the headquarters at Itanagar. The department at the district level is in charge of a District Veterinary Officer, who is assisted by a number of Veterinary Assistant Surgeons, Supervisory Veterinary Field Assistants and Assistant Farm Managers deployed at different places.

The activities of the department relate to upgrading of cattle and pigs, protection of livestock and poultry against diseases, establishment and management of veterinary dispensaries and aid centres for treatment of sick animals and birds, dairy farming and milk supply.

Co-operative Department

The Co-operative Department is headed at the State level by the Registrar of Co-operative Societies, who guides and directs the co-operative activities in the districts. The district organisation of the department is in charge of an Assistant Registrar of Co-operative Societies working under the administrative control of the Deputy Commissioner. He is assisted by auditors, accountants and inspectors in the discharge of his duties and responsibilities.

The object of the department is to promote co-operative enterprises so as to meet the essential needs of the people and contribute to the growth of economy and commerce through savings and investment. A good number of co-operative societies have been functioning in Siang in various sectors of development, such as consumer, transport, industry etc.

Education Department

A District Education Officer is in charge of the Education Department in each of the districts of East Siang and West Siang with their headquarters at Pasighat and Along respectively. Acting under the guidance and direction of the Director of Public Instruction being the departmental head at the State level, he is responsible for promotion of education and proper functioning of the schools under his jurisdiction. The Primary, Middle and Secondary Schools are supervised by him with the assistance of Assistant District Education Officers, who are posted to districts and sub-divisional headquarters. The Secondary Schools are conducted by the Headmasters. The management of the Higher Secondary Schools is the direct responsibility of the Principals.

The Jawaharlal Nehru College at Pasighat, affiliated to the University of

Punjab, Chandigarh, is headed by a Principal.

Economics and Statistics Department

The activities of the department of Economics and Statistics are guided by a Director at the State level. The district set-up of the department is under the charge of a District Statistical Officer, who in the discharge of his duties and responsibilities is assisted by some Inspectors and Sub-Inspectors of Statistics and Field Investigators stationed at district and sub-divisional headquarters. The job assigned to him and the subordinate officers are, among other things, collection and processing of basic statistics, publication of district and sub-divisional statistical hand books, and statistical abstracts matters relating to economic and statistical surveys and studies, economic census, manpower planning etc. The reports sent by them to the directorate are evaluated and compiled for the purpose of various statistical publications in consolidated form.

The District Statistical Officer also acts as a technical adviser to the Deputy Commissioner in economic and statistical matters.

Engineering Department

The Engineering Department of Arunachal Pradesh is a wing of the Central Public Works Department. It is now an independent organisation under Arunachal Pradesh Public Works Department (P.W.D.). The Chief Engineer with his headquarters at Itanagar is the head of the department in Arunachal Pradesh. There are altogether five 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 Basar PWD Circle with headquarters at Basar is concerned with the engineering activities in Siang.

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, and maintenance of helipads and landing grounds.

Forest Department

The departmental head of the Forest Department at the State level is the

Chief Conservator of Forests, now Principal Chief Conservator of Forests, who is also the ex-officio Secretary (Forests). He is assisted at his headquarters at Itanagar by an Additional Chief Conservator of Forests, a Chief Wild Life Warden, a Conservator of Forests (Working Plan) and two Deputy Chief Conservator of Forests for administration and planning respectively.

Under the jurisdiction of the Conservator of Forests, Central Forest Circle, headquartered at Pasighat, there are two territorial forest divisions in Siang, namely the Pasighat Forest Division and the Along Forest Division with headquarters at Pasighat and Along respectively. Besides these, there are two wild life divisions, namely the Lali Wild Life Sanctuary Division and Central Wild Life Division with headquarters at Pasighat. The divisions are each in charge of a Deputy Conservator of Forests.

The number of forest ranges and beats are as follows:

(as in August 1982): Also see Appendix I at the end of the Chapter.

Forest Divisions	Ranges	Beats
1. Pasighat Forest Division	4	5
2. Along Forest Division	4	9
3. Lali Wild Life Sanctuary Division	-	-
4. Central Wild Life Division	4	13
Total	12	27

The Forest Department is striving for development of forests in these areas through execution of various schemes, such as aided natural regeneration, raising of valuable plantations, conservation of forests, afforestation etc. Besides the management of forests, special efforts are made by the department for preservation of wild life.

Industries Department

The activities of the Industries Department are guided and supervised by a Director, who is the departmental head at the State level. The district heads of the department in East Siang and West Siang are an Assistant Director of Industries and a Deputy Director of Industries respectively. They are assisted in their spheres of work by different grades of Officers, namely Extension Officers, Supervisors of Crafts, Instructors, Demonstrators etc.

The Industries Department at the district level is concerned with cottage industries and management of craft centres to promote tribal arts and crafts, establishment and development of modern industries and sericulture. Industrial and financial assistance to industries, marketing and emporiums are also the business of the department. With the establishment of many small scale industrial units and a factory for production of light roofing sheets at Pasighat

a process of industrial growth in the districts of Siang has been set in motion. A fruit processing plant is also being set up near Along.

Information and Public Relations Department

The department has its district officer at Pasighat and Along with a District Information and Public Relations Officer for each. Under the control of the Deputy Commissioner concerned and the technical guidance of the Director of Information and Public Relations, who is the departmental head at the State level, he deals with matters relating to dissemination of information, government publicity and mass-communication with the assistance of a number of staff – Radio Mechanic, Operators of film projection units and others. Many community listening sets have been distributed by the department.

Medical and Public Health Department

The Director of Health Services is the departmental head at the State level. The district organisation of the department is in charge of a District Medical Officer. Working under the guidance and direction of the Director, the District Medical Officer assisted by the subordinate Medical Officers in his jurisdiction is responsible for execution of all health schemes taken up by the department for providing medical care to the people and extension of medical facilities to wider areas. He also supervises the management of hospitals, dispensaries and health units. Moreover, he acts as a technical advisor to the Deputy Commissioner in all matters relating to medical and public health comprising curative, preventive and promotive services. The organisation chart of the department is shown in Chapter XIV. Various medical teams connected with NSEP, NMEP etc. work under the general guidance of the District Medical Officer. The department is also concerned with sanitation and vital statistics.

Research Department

The district organisation of the Research Department is headed by an Assistant Director of Research (Philology) in the East Siang District and a District Research Officer in the West Siang District. They have their headquarters at Pasighat and Along respectively, where they are assisted, among others, by the following officials:

Pasighat	(1) Language Officer	- one
	(2) Keeper, District Museum	- one
Along	(1) Assistant Research Officer	- one
	(2) Keeper, District Museum	- one

Arunachal Pradesh is a vast field for research in anthropology, philology, archaeology or history and allied social sciences. Research work in the districts is carried out by the research officers of different disciplines under the general guidance of the Director of Research, who is the departmental head at

the State level. The district heads of the department also act as advisors to the Deputy Commissioners concerned on the questions of tribal culture and welfare.

Rural Development Department

The Rural Development Department has been newly formed with a Director as its head at the State level. He is assisted at his headquarters by a Joint Director, a Research Officer, a Programme Officer and an Economic Investigator. The following subjects have been allocated to the department :

- (1) Integrated Rural Development Programme,
- (2) Training of Rural Youth for Self Employment,
- (3) National Rural Employment Programme,
- (4) Community Development Programme,
- (5) Integrated Child Development Services,
- (6) Functional Literacy for Adult Women, and
- (7) Special Nutrition Programme.

A District Rural Development Officer holds the charge of the district organisation of the department. He performs his duties and responsibilities with the assistance of Assistant Project Officers and a staff of other subordinate officials.

For planning, implementation, monitoring and evaluation of the various poverty alleviation block level programmes as indicated in the foregoing passage, which also includes (i) assistance to small and marginal farmers, and (ii) rural landless employment guarantee programme, a District Rural Development Agency (DRDA) with the District Rural Development Officer as Member-Secretary and the Deputy Commissioner as Chairman has been set up in each of the two districts of East Siang and West Siang with their headquarters at Pasighat and Along respectively.

Rural Works Department

Headed by a Chief Engineer at the state level, the Rural Works Department has a division in each of the districts of Siang with headquarters at Pasighat and Along respectively. The divisions have the following sub-divisions (as in August 1982):

East Siang District

Division	Sub-division
Pasighat	(1) Pasighat
	(2) Yingkiong
	(3) Tuting

West Siang District

Along	(1) Along
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- (2) Kaying
- (3) Tato (with headquarters at Mechuka)
- (4) Basar
- (5) Workshop-Along

The Chief Engineer is assisted at the headquarters by two Surveyor of Works, one Engineering Officer, One Executive Engineer (Mechanical) and one Accounts Officer. There are four Assistant Engineers under each Surveyor of Works.

While a division is under the charge of an Executive Engineer, who is assisted by an Assistant Surveyor of Works and a staff of Junior Engineers, Technical Assistants and others, the sub-divisional organisation consists of Assistant Engineers, Junior Engineers and other technical personnel.

The Rural Works Department has been functioning in the districts for implementation of various developmental schemes pertaining to land development and minor irrigation, integrated soil and water conservation, rural water supply, rural housing and link road, watershed management, *jhum* control as well as matters relating to fishery and various other schemes under grants-in-aid.

Appendix- I

Number of Forest Divisions, Ranges, and Beat Offices in East Siang and West Siang Districts

District	Number of Forest Circles	Number of Forest Divisions	Number of Ranges	B E A T		O F F I C E S		Total
				Account Beats	Non-Account Beats			
1	2	3	4	5	6	7		
1984-85								
East Siang	-	3	11	4	16	20		
West Siang	-	1	4	-	10	10		
1985-86								
East Siang	-	3	12	4	16	20		
West Siang	-	1	4	-	10	10		
1986-87								
East Siang	1	3	12	4	17	21		
West Siang	-	1	4	-	10	10		
1987-88								
East Siang	1	3	12	4	17	21		
West Siang	-	1	4	-	10	10		
1988-89								
East Siang	1	4	12	4	18	22		
West Siang	-	1	4	-	10	10		
1989-90								
East Siang	1	4	12	4	18	22		
West Siang	-	1	4	-	10	10		
1990-91								
East Siang	1	4	12	4	18	22		
West Siang	-	1	4	-	10	10		

Source : Statistical Abstract of Arunachal Pradesh, 1986 to 1991.

CHAPTER XII

LOCAL SELF-GOVERNMENT

History of Local Self-Government

The traditional village or tribal councils of the people constitute a system of local self-government in Arunachal Pradesh. These councils may vary from tribe to tribe in composition, powers and privileges, but they have certain features in common. They are all time-honoured political institutions deriving their authority from traditions. They function as village governments, expressing the will and power of all members of the society. All the councils are informal in character, and they are constituted by elderly, influential and respected persons who are the accepted leaders of a village. But all the villagers may take part in the deliberations of the council. Every participating villager is regarded as a member of the council in session, and he is at liberty to speak out his mind before the general assembly, even though the final say is the prerogative of the village leaders. The village council is a democratic institution in the modern sense, where all vital problems concerning a 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. Each village selects its headman, who is the chief or 'gam' responsible for the welfare of the village.

The functions of the village council are three fold – judicial, administrative and developmental. On the judicial side which is in effect the most important function, the councils settle all disputes arising in the village, and give verdicts on even serious crimes committed against the tribal society (but not against the government).

The legal procedure of the council is not burdened with cumbersome formalities, and does not entail any amount of expenses. It is 'free of cost' for everybody, and, therefore, nobody is denied justice for his inability to bear the cost as is otherwise necessary for such proceedings. 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 a careful consideration of the divergent statements.

The administrative jurisdiction of the council extends to the maintenance of paths and bridges, supervision of water-supply and sanitation of the 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.

The function of the council on the developmental side is a new aspect of work and it depends largely upon the calibre of the leaders and the local officials, upon their efforts and initiative, for development at the village level.

The Kebangs of Siang

Of all the tribal councils in Arunachal Pradesh, the kebang or village council of the Adis of Siang is the most remarkable in many ways. It is a highly organised and powerful self-governing body, exercising effective control and authority over the residents of a village. Sanctioned by centuries of tradition of the people, the kebang is essentially a democratic institution in its character, composition and functions. In fact, the socio-political life of the Adis is inconceivable without their kebang.

Early writers and explorers have left some valuable accounts of the kebang as it functioned over a hundred years ago. R. Wilcox in his report (1825-28) made mention of the village council of the people of Membo (Mebo), where everyone had equal voting rights. Father N.M. Krick, the French missionary and explorer, who attended a Kebang meeting of the Padams at Membo (Mebo) in 1853, wrote as follows :

"Each village is self-governing and independent. It has its own administration, both legislative and executive. Women have no share in the government; they cannot even set foot in the council-room.

"Every male, reaching the age of reason, is by right active member of any assembly. Each commune is ruled by five or six Chiefs elected for life by the people; they control all affairs of greater importance. If any of them dies, his son, if capable, succeeds to his office; else, he remains a common citizen, and another election supplies the vacancy.

"Laws are framed by the people, sanctioned by the council, and promulgated by the president. Every decision is supposed to come from the people; the Chiefs have no right but to approve and enforce it. Hence, the people propose, the council sanctions, and the president promulgates.

"Every evening, all the men gather in the spacious council - room to discuss the topics of the day, which means: (1) to inform one another of what has been seen or heard; (2) to discuss the political questions put forth by one of the Chiefs; (3) to settle what the village will do on the next day, for it is understood that no one is free to dispose of his time as he thinks fit; his daily work is cut out, discussed and officially decreed by the majority of the council. Hence, every evening, between 10 and 11 o'clock, boys are sent about the village shouting at the top of their voices: 'Tomorrow, tiger hunt. Tomorrow fishing. Tomorrow, field labour. Tomorrow, genna.' i.e. obligatory holiday.

"The council-house is also used for extraordinary gatherings convoked to deal with a sudden emergency, such as was my arrival; sometimes, especially on rainy days, it is turned into a rendezvous of gossip and handiwork. Everybody takes his tools and passes the time as pleasantly and as usefully as he can."¹

In 1855, E.T. Dalton, the renowned author of the *Descriptive Ethnology of Bengal* (published first in 1872), visited the same Membo village and described the proceedings of a kebang held in what he called the *moorung* and what today would be called the *moshup*, the men's dormitory and meeting-hall.²

About sixty years later D.S. Dunbar wrote on the village government of the Adis.

"The headman (*gam*) is chosen by the voice of the community. In this election experience to guide such affairs as policy and the selection and division of fresh sites for "*jhums*", and wealth to entertain strangers when necessary in the name of the village, all weigh. Age is also a factor, for the *gam* is the village Nestor. An unusual young *gam* connotes exceptional force of character. But the most important plank in the candidates platform is the measure in which his orders and ideas convey the "sense" of the village, for he as *gam* must represent the *senior pars* of the councils periodically held in the *moshup*. If he does not, the opinion of another man is listened to, and here the road to supersession begins. It is personality and a persuasive tongue that rule. The several *gams* to be found in almost every village may thus be accounted for. It has been observed that only the word of the leading *gam* carries real weight in the community. No form of voting appears to exist. The moot-like method of shouting down any dissentient and so obtaining unanimity in the council is, presumably, adopted. Doubtful matters are, however, settled by the casting of lots. When the common interests of a group of villages are likely to be affected, the *gams* of the communities concerned meet and held a council together. But the village is the true unit, not the sept or the clan, still less the entire tribe although, of course, blood relationship creates a certain amount of sympathy. A community has been known, as a matter of policy, to elect a *gam* from another village; an instance of this is to be found in the election during 1911 of a leading Komsing man as *gam* of kebang, after the deposition of Takot."³

The kebang as it has come down through the passage of time is a living

1. See *India's North-East Frontier in the Nineteenth Century* (London, 1962) by Verrier Elwin, pp. 245-246.
2. See *ibid*, pp. 261-263.
3. See *Democracy in NEFA* (Shillong, 1965) by Verrier Elwin, pp. 106-107.

institution, exercising considerable legal and judicial powers. The following lucid passages from the book entitled *Aspects of Padam-Minyong Culture* by Sachin Roy are quotable.¹

"The administrative structure of the Adis is essentially democratic; autocracy in any form has not been known to them and in the absence of a distinct class of nobility, oligarchy has remained equally unknown. Their's is, in a true sense a government by the people and for the people. The structure is very simple and effective. Every village is an independent unit by itself, and knows no extraneous authority. It has a council of Elders which exercises the highest legal and judicial powers. This is known as the *kebang* and all social and political control of the village rests with it. The members are known as *Kebang-Abus* and are chosen from within the village on the merit of their personal influence and ability to present a case in the traditional manner. Some of them are *Gams* who represent particular clans. There are others who do not represent any particular clan but are selected for their personal influence and oratorical powers. *Kebang-Abus* are usually senior men with long experience and wide and deep knowledge of the tribal lore, but younger *Kebang-Abus* are not rare. Usually each clan has one *Gam* of its own but cases of clans having more than one or none are also not uncommon.

"The *kebang* directs all village activities according to their traditional laws and customs of which it is supposed to be a repository and it punishes those who deviate from the right path in any way and watches over of the welfare and well-being of the village community. All matters of common interest are placed before it and nothing can be done without its approval and sanction. The opening of agricultural plots, building of new houses, settling of new-comers, punishing wrong-doers and whatever else that concerns the village either individually or communally are discussed and decided in it. And it is the chief judiciary in the village; all cases of dispute are brought before it for judgement. The contending parties backed by their fellow clansmen and supporters appear before it and try to convince it of the justness of their cause in long speeches cast in a traditional form and delivered in a loud voice with bold gesticulations. Every speech begins with a preamble narrating the ancient history and glory of *Adi race* and exhortation on the bench for conformity to the traditional laws and for impartial justice.

"... The carrying out of the *kebang* decision and verdict is automatic and few ever challenge it. So, there is no necessity for any special executive body for the enforcement of it injunctions. The *moshup* boys are there for whatever has to be done in this matter. It is they who announce the verdicts of the

1. Sachin Roy, *Aspects of Padam-Minyong Culture* (Shillong, 1966), pp. 218-223.

council and communicate them to persons concerned, help in enforcing the findings and verdicts in cases of disputes and undertake development work. The *moshup* boys divide and distribute the work among themselves. For this purpose, *moshups* are divided into a number of *merums* or fireplaces. The boys who sit round the same *merums* in the *moshups* are taken to form single groups. Every boy is free to choose his *merum* as he likes and there is no restriction of clan or neighbourhood. Each *merum* group is, therefore, a body of young men united of their own free will and closely bound by a bond of friendship and fellow-feeling. When a task is to be performed, it is divided among the *moshup* boys *merum*-wise; that is to say, each *merum* is entrusted with a particular part of the work to be done. This division of work is clearly noticed in development undertakings such as construction of roads, clearing of jungle and mounting guard against attacks. One boy from each *merum* conveys the *kebang* decision to all the members of his group and in this way, *kebang* decisions relating to community work for the whole village is communicated in a very short time.

"At the time when a *kebang* is in session, a special kind of *apong* has to be distributed and mithuns and pigs have to be sacrificed to prevent failure of cultivation. The *kebang* in its turn has to maintain a strict impartiality toward both the contending parties before it can accept the entertainment with a clean conscience. Women generally do not take an active part in the *kebang*, but every man may.

"... A *kebang* has jurisdiction over its own village. Inter-village disputes are settled by the Inter-village Councils. For this purpose, villages are grouped together into what are known as *Bangos*.

"All the *Gams* of the villages within the jurisdiction of the same group and a few other influential villagers constitute a *Bango Council*, which has a Secretary, who is in charge of the 'office'. Fine money collected from the inter-village disputes go to the *Bango fund* and is spent for the welfare of the whole area under the *Bango*.

"... Decisions of the *kebangs* are supposed to come from the people. The *Gams* or Headmen help only to enforce it. The injunctions are obeyed to the letter, for these people are respectful of their ancient customs and traditional laws."

Among the *Gallongs*, disputes arising in a village are brought before the *kebang*, where they are thoroughly discussed, examined and adjudicated. The *kabang* is vested with judicial powers, conferred to it by the society itself, to which every member owes allegiance. They have the *bango* or inter-village council as well, comprising a few villages and consisting of head *gams* of the constituent villages besides a few other members.

Some Adi groups are too small to evolve regular and powerful kebangs as the other large groups of the Adis have done. But all of them have some form of village council or self-governing body through which they settle their cases according to their customary laws. The Shimongs and the Ashings, living along the banks of the northern reaches of the Siang river, administer justice in much the same way as do the Minyongs and Padams.

The village council of the Pailibos known as *dolu-keba* consists of all adult persons in a village. An elder member the council is addressed as *dolu-genbo*. The council has the authority to hear and decide disputes and cases, civil or criminal, referred to it by the *gindos* (intermediaries or go-betweens). Its decisions are final and binding on the contending parties. Each session of the *dolu-keba* begins with a solemn pledge that justice shall be done to all in conformity with the customary law and social and religious practices of people. The Pailibos have also a council called *libo-keba* for settlement of all inter-tribal or inter-village matters. The *libo-keba* consists of influential and experienced persons drawn from the tribe as a whole, who enjoy the confidence of the people of different villages and are regarded as men of integrity. A member of the council is called *keba-abo*. Normally, a *libo-keba* pronounces judgement in a case according to the opinion of the majority members. Women are allowed to attend the council in session and defend themselves. A session may continue for a number of days till a final decision is arrived at.

The Ramos settle their disputes through the arbitration of a leading wise man, whom they call the *gembu*. He derives his authority from the character and knowledge of local custom he possesses. Whenever a dispute is referred to him, he generally summons an ad hoc *keba* of influential elders, and decides the case with their help. The decision of the *gembu* is respected. The Ramos have also the institution of *gembu* for settlement of inter-village disputes.

The Boris have two self-governing institutions - *Dolung Kebang* or village council and *Bori-Bane Kebang* which represents the whole tribe. These institutions are truly democratic in their composition and function.

The *Dolung Kebang* or village council consists of members designated *kebang abo*, who are elderly persons reputed for their abilities and knowledge of customary laws. All villagers are entitled to attend the meetings of the council. But, normally one adult male member represents a family or household as its spokesman. Everybody present in a meeting has the right to speak and be heard. As a rule, matters are to be decided by majority opinion, but decisions are generally unanimous. Discussions continue till an unanimity is reached.

Bori-Bane Kebang or the tribal council is constituted by members drawn

from the village councils. Meetings of the council are held in cases of emergency and also for settlement of intra or inter-tribal disputes.

The Tangams have also their village council called kebang for regulation of social conduct, maintenance of law and order and administration of justice in accordance with their unwritten customary law. The council is led by elderly persons who have knowledge of the laws and customs of the tribe and are regarded as competent to interpret them and award proper judgements. No formal election is held. The learned elders become members of the council automatically.

Every adult man is free to attend the kebang in session and deliberate on its proceedings. Women do not normally take part in the deliberations, but they have the same freedom of speech as enjoyed by men if they are involved in a case under consideration of the kebang. A case is pleaded and debated until a consensus is reached, failing which decision is taken by majority. The decision of the kebang is binding on both the contending parties. In extreme cases of disagreement, supernatural guidance is sought through ordeals.

Panchayat Raj

The village or tribal councils, as we have seen, are self-governing institutions in character and functions, and they are recognised by the Government accordingly. 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 (Regulation 4 of 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 as the Deputy Commissioner may specify." 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 said before¹, 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 (mentioned in Chapter IX) which was functioning immediately before the

1. See Chapter IX.

commencement of this Regulation. But with the enforcement of the Constitution-37th Amendment Act, 1975 and the Government of Union Territories (Amendment) Act, 1975, the Pradesh Council has been replaced by the Legislative Assembly functioning in the Union Territory of Arunachal Pradesh from August 15, 1975.

The introduction of the Panchayat Raj was based on the report of the Ering Committee appointed by the Government of India. The Committee was headed by late Daying Ering, formerly Union Deputy Minister for Food and Agriculture, whose contributions and special efforts for implementation of panchayat system in Arunachal Pradesh merit particular mention in this context.

There are (as in March 1984) 177 Gram Panchayats, 14 Anchal Samitis and two Zilla Parishads in Siang comprising both East and West Siang Districts as follows :

<u>District</u>	<u>Gram Panchayat</u>	<u>Anchal Samiti</u>	<u>Zilla Parishad</u>
East Siang	78	5	1
West Siang	99	9	1

The implementation of the Panchayat Raj in this area is an important step towards realisation of the principles of self-government and democracy.

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 about twenty five Gram Panchayats ;
- (2) One representative from the co-operative societies situated within the block, as ex-officio member ;
- (3) Not more than 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 as may be deemed necessary provided that they shall not be entitled to vote.

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. Infact, 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 hospital 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) Constructions, 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, marriage 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 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, cess and surcharge levied under this Regulation ;
- (ii) the collection charge of tax or revenue due to Government ;
- (iii) any grants and contributions 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 or, 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 ;
- (viii) any other sums 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 districts 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 ;
- (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 advises on such other matters as may be referred to it by the Governor.

EDUCATION AND CULTURE

Historical Background

In the olden days, home was the only centre of learning for the tribal children of this region. It was the home where the myths and legends about the origin, migration and settlement of a tribe were transmitted orally from generation to generation. It was the home again where the children were taught the traditional ways of tribal life and crafts by their parents. But they had no scripts, and they were illiterate in that sense.

The history of institutional or formal education in this area dates only from about the middle of the last century, when a Baptist Mission had opened a Lower Primary School at Sadiya to impart education to the local people including those of the adjacent hills of the present Arunachal Pradesh. A few books in the Roman script were published by the mission. Some Padam, Minyong and Gallong children were sent to this school, where they were given free hostel accommodation and rice at concessional rate. These students earned their pocket-money by doing some part-time jobs. The school was, however, closed down before long.

The British Government was primarily concerned with the maintenance of law and order in this frontier region. As for welfare of the people and development, they preferred to leave the tribes more or less to themselves. The need for education of the tribal people was, therefore, ignored. Nevertheless, four Lower Primary Schools were established by the Government in Siang prior to 1947, of which one school was subsequently closed for want of a teacher.

The foreign rule came to an end in 1947 and the independence ushered a new era of significant changes and developments in all spheres of tribal life. The Directive Principles of State Policy embodied in the Constitution of India indicate a fundamental change in the approach to tribal problems. Article 46 of the Constitution directs, "The State shall promote with special care the educational and economic interests of weaker sections of the people, and in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation." There can, therefore, be no question of leaving the tribes in a state of isolation and neglect in a free Welfare State.

The problems facing the new administration to introduce modern education in this region were, however, manifold. The people, in general, were at first reluctant to accept the ideas of modern education, which were quite new and unintelligible to them. They hesitated to send their children to schools. There

was also a general aversion to female education. Most of the villagers were poor and ignorant, and the living standard was very low. At the initial stage, therefore, the people were to be convinced of the value and importance of education, and for that matter a good deal of persuasions and campaigns were carried out to attract them to educational institutions. These apart, there were other problems to be tackled. It was a hard life in the deep interior areas, which were not easily accessible due mainly to lack of regular road communications. Administrative centres were yet to be opened in many places. Moreover, there was a dearth of competent teachers, ready to go to the remote and difficult areas and offer their services.

In spite of these initial problems and difficulties, the task was undertaken by a group of dedicated teachers with great zeal. They went to a number of places in Siang to open schools. These teachers were the pioneers of education in Arunachal Pradesh, and their ventures paved the way for establishment of regular administration in some parts of the territory.

In the month of September 1947, the Department of Education was constituted under the charge of an Education Officer with headquarters at Sadiya which was at that time the 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 administration of the 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 and for spread of education in the interior areas. The trained teachers from this institute were sent for opening of new schools. The flood of 1952 came in the wake of the great earthquake of 1950 caused serious damages to the town of Sadiya with the result that the Education Department and the Teachers' Training Institute were shifted to Margherita in Assam in 1952 and the latter was finally shifted to Changlang in the Tirap District in 1957. The Teachers' Training Institute was later renamed as Buniadi Siksha Bhavan.

Educational Institutions

In 1948, a number of Lower Primary Schools were opened as a result of the vigorous steps taken by the administration to establish as many new schools as possible in the deep interior areas. During the years 1948-50, there were altogether twentyfive Lower Primary Schools in the area comprising the present East Siang and West Siang Districts. One of these schools at Pasighat was later upgraded to Middle School. These schools were having a total of 1040 students and 34 teachers. Four schools were, however, to be closed down subsequently for various reasons, such as death of teachers, bad communications and declining number of students as a result of the great

earthquake of 1950.

The consequences of the 1950 earthquake were alarming. Lines of communications were seriously disrupted, crops damaged and all developmental activities suffered a setback. The existing roads at many places were destroyed by the unprecedented floods, erosions and landslides following the earthquake. Fears and anxieties gripped the minds of people who reeled under the impact of the natural calamities playing havoc all around. This gave a jolt to the expansion programmes of the Education Department. Children were not sent to schools for fear of tremors occurring frequently for over a year. Some schools remained understaffed or temporarily closed for want of teachers.

In 1952, a new school was opened at Mechuka. In the following years up to 1956, nine new schools were opened at different places. The total number of schools rose to thirty. Besides these, the four schools which were closed earlier were reopened. Towards the end of the First Five Year Plan period (1951-1956), thirtyfive schools were functioning as follows :

High School	-	1
Middle School	-	1
Lower Primary School	-	33

Twentytwo out of these thirtyfive schools were in the erstwhile Pasighat Sub-division.

The initial apathy of the tribal people towards education disappeared with the passage of time. It was gradually realised by them that the schools were for their own interest and welfare, and they came forward to have more schools in their respective areas. And what is remarkable is that they established by their own initiative some schools at Along, Daring, Tirbin and Tabasora. The first two schools were later taken over by the administration.

During the Second Five Year Plan period (1956-1961), three new Lower Primary Schools were opened besides establishment of inter-village residential schools at Along, Basar and Mechuka. According to the 1981 Census, the entire Siang region except the two towns, Along and Pasighat, is rural. Most of the villages are diminutive or very small. It was, therefore, envisaged that instead of having many scattered schools, it would better to have a few centrally situated inter-village residential schools. The students admitted into these schools were given free educational and boarding facilities.

As the number of schools increased and higher classes were opened in these schools, requirement of trained teachers was keenly felt. It was decided that the Lower Primary Schools would be gradually converted into Basic Schools. In order to implement this decision, steps were taken to depute the

existing teachers to the Buniadi Siksha Bhavan at Changlang for basic training. Additional teachers including local youngmen trained in Junior Basic Course were also recruited to strengthen the position of teaching staff in different schools. One of the major problems faced by the teachers at the initial stages of educational activities in this region is that they could not converse with the local students freely for they did not have any knowledge of the tribal dialects. This problem was gradually solved as more and more veteran and trained teachers learned the dialects.

The following programme was included in the Third Five Year Plan (1961-66) :

- (1) opening of ten Lower Primary Schools in border areas,
- (2) conversion of six Lower Primary Schools into basic pattern schools,
- (3) upgrading of two Lower Primary Schools to High Schools,
- (4) conversion of some Lower Primary Schools into inter-village residential schools, and
- (5) upgrading of the High School at Along to Higher Secondary School.

In 1965, a college, the first of its kind in Arunachal Pradesh was established at Pasighat. The college has been named after the former Prime Minister Jawaharlal Nehru.

During the subsequent Five Year Plan periods, all out measures were taken to consolidate the achievements already made and extend educational facilities to greater sections of the people through opening of new schools. By the month of March 1979, there were altogether 283 educational institutions in Siang.

The following table shows the number of educational institutions and students in Siang including East and West Siang Districts during the years 1974-75 to 1980-81.¹ [Also see Appendix I and II at the end of the Chapter].

1. Source : Statistical Hand Books of Arunachal Pradesh, 1974-75 to 1980-81.

Year	Number of Educational Institutions						Number of Students		
	College	Higher Secondary School/Secondary School	Middle School	Junior Basic/Primary School	Nursery/Pre-Primary School	Total	Boys	Girls	Total
1974-75	1	6	22	167	2	198	10998	3880	14878
1975-76	1	7	31	181	2	222	9573	3940	13513
1976-77	1	7	33	198	1	240	11335	5021	16356
1977-78	1	10	35	213	4	263	12094	5998	18092
1978-79	1	10	37	227	8	283	12716	6504	19220
1979-80	1	10	39	237	10	297	—	—	21000
1980-81	1	12	38	242	10	303	15397	8297	23694

The distribution of educational institutions between the two districts of Siang is as follows:¹

Institutions	Number (as in March 1984)		
	East Siang	West Siang	Total
1. College	1	-	1
2. Higher Secondary School	3	3	6
3. Secondary School	7	5	12
4. Middle School	15	24	39
5. Junior Basic/Primary School	102	139	241
6. Pre-Primary School	28	20	48
7. Ramkrishna Mission School	-	1	1
8. Vivekananda Kendra Primary/Middle School	1	1	2
9. Assam Rifles School	-	1	1
10. Other Schools	1	1	2
Total	158	195	353

The number of students and teachers in the schools as in 1983-84 was as follows :-

	Students	Teachers
East Siang District	14,270	936
West Siang District	14,730	574
Total	29,000	1,510

Organisation and Management

In 1956, a Director of Education was appointed for efficient management of the increasing work of the Education Department and execution of the expansion programmes. The newly formed directorate was stationed at Shillong under close supervision of the then Adviser to the Governor of Assam. The post of Director of Education was later converted into that of Director of Public Instruction, and appointment to the new post was made in 1977. From then on, the Director of Public Instruction guides and directs the activities of the Directorate of Education under the administrative control of a Secretary (Education). The Education Department in the districts is placed under the control of the concerned Deputy Commissioners, who in their respective jurisdictions are assisted by a District Education Officer and Principals for management of the educational institutions and implementations of schemes and programmes to promote education among the tribal people.

The schools in the districts are organised on the models of Central Schools and the Central Board of Secondary Education, New Delhi. The duration of school education is from Class I to Class XII. Some of the schools are having 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 the age-group 3 to 5
Primary	-	Classes I to V
Middle	-	Classes VI to VIII
Secondary	-	Classes IX and X
Higher Secondary	-	Classes XI and XII

Each of the districts of East Siang and West Siang has a District Education Officer, who is in charge of all Primary, Middle and Secondary Schools in his district. They have their headquarters at Pasighat and Along respectively. The District Education Officers are assisted in their respective jurisdiction by the Assistant District Education Officers posted to district and sub-divisional headquarters. The Secondary Schools are looked after by Headmasters.

The JN College at Pasighat, headed by a Principal, is affiliated to the Punjab University, Chandigarh. The Higher Secondary Schools are in charge

¹ Source : Basic Statistics of Arunachal Pradesh, 1983-84.

of the Principals acting under the control of the Deputy Commissioner concerned and guidance of the Director of Public Instruction. The Assistant District Education Officers stationed at various places are concerned with inspection and supervision of the educational institutions.

All educational institutions in the districts, except a few run by the social service organisations, are managed and financed by the government. School education for Arunachal Pradesh tribal students is free. Various facilities are given to them as follows :

1. Text books and exercise books are supplied free of cost up to Class VIII stage, and only 25% of the total cost of such books is borne by them from Class IX to Class XII.
2. Mid-day meal is provided to children of primary section.
3. Stipends in lieu of food are given to the boarders at all stages of school education.
4. Free supply of uniform to the students is being made from the year 1982-83.
5. Merit scholarship is awarded to the deserving students at the secondary and higher secondary stages of school education.

Stipends are also awarded to the Arunachal Pradesh tribal students studying in colleges and universities. The stipendiaries also get grants for books.

Special care is taken to see that the educational institutions in this territory are run in the best interest of the tribal people and facilities are provided to the students to the fullest extent possible in order to promote education among them.

Literacy and Educational Standards

The percentage and growth of literacy in the erstwhile Siang District as enumerated in the 1971 Census Report ¹ are indicated as follows :-

Population	Number of persons		Number of Literate and Educated Persons		Literacy Percentage		Growth Rate of Literacy Percentage
	1961	1971	1961	1971	1961	1971	
Total Population	95509	121936*	6914	15818	7.24	12.97(+)	79.14

1. Census of India 1971, Arunachal Pradesh, Part II A, p. XI-XIV.

* The figure includes the population of 13,689 persons living in a part of the Daporijo Sub-division which was later transferred to the Subansiri District.

Scheduled Tribe Population	89556	105833	3306	8163	3.69	7.71(+)	108.94
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According to the Census of 1981, literacy rates are shown in the following tables :

District	Total Population (1981)	Number of Literate Persons	Literacy Percentage		Growth Rate of Literacy Percentage 1971-1981
			1971	1981	
East Siang	70,451	17,677	13.90	25.09(+)	80.50
West Siang	74,164	16,501	14.58	22.24(+)	52.53

District	Scheduled Tribe Population (1981)	Number of Literate Persons	Literacy Percentage
East Siang	50,728	11,690	23.04
West Siang	62,323	11,532	18.50

The male and female literates and their percentage in relation to their total population as recorded in the 1981 Census are as follows :

District	Number of Literate Persons		Literacy Percentage			
			Male		Female	
	Male	Female	1971	1981	1971	1981
East Siang	12,825	4,852	21.38	33.76	5.31	15.03
West Siang	11,812	4,689	23.18	30.46	4.47	13.26

The following table indicates the male and female literacy rates in the Scheduled Tribe population according to the 1981 Census : [Also see Appendix-III at the end of the Chapter]

District	Scheduled Tribe Population		Number of Literate Persons		Literacy Percentage	
	Male	Female	Male	Female	Male	Female
East Siang	25,515	25,213	8,190	3,500	32.09	13.88
West Siang	30,922	31,401	8,309	3,223	26.87	10.26

The above tables indicate that according to the 1981 Census, the

percentage of literacy in respect of the East Siang and West Siang Districts are 25.09 and 22.24 respectively compared to Arunachal Pradesh rate of 20.09 per cent and the all-India rate of 36.23 per cent. The literacy rate has increased in East Siang by 80.50 per cent and in West Siang by 52.53 per cent as against the figures of 1971. The Census of 1981 further reveals a very significant rise in the female literacy percentage - the growth rate from 1971 to 1981 being 183.05 per cent in East Siang and 196.64 per cent in West Siang.

In the month of March 1984, the total number of students in 353 educational institutions in the undivided Siang rose to 29,000 as earlier indicated. During the year 1982-83, there were about 400 students on the roll of the JN College, Pasighat. Besides them, a number of students from Siang prosecute their higher studies in different colleges and universities outside Arunachal Pradesh.

GENERAL EDUCATION

Basic and Primary Education

The primary education consists in Class I to Class V. The Primary Schools are under the charge and supervision of the District Education Officers. These schools are co-educational institutions. Examinations at the primary stage are conducted by the Arunachal Pradesh Examination Board.

The following directive was issued in November 1955 by the NEFA Administration for introduction of Basic Education in NEFA:

"The educational system which developed in India during the last century was intended mainly to supply the manpower needed for a vast and complex administrative machinery. It was never designed to meet the needs of the vast majority of the nation who live in villages. The necessity for replacing it by a truly national system has been keenly felt for some time and Basic Schools at present existing in India are the fruit of an educational experiment inspired by Mahatma Gandhi and directed by a group of experienced and able teachers. It is considered that the Basic Education programmes, using the medium of productive activity and correlating it to academic needs through craft and social environments will, when fully developed, go a long way to satisfy the educational needs of India in the light of conditions in our country.

"The objectives of the Basic pattern of Education to be introduced in the schools of NEFA are as follows :

- (a) The children of NEFA should grow along with the children of the rest of India as citizens of a new social order based on the principles of a socialistic pattern of life and with an understanding of their rights, responsibilities and obligation in such a society.
- (b) Every individual child should have full opportunity for complete personality development.

- (c) The tribal children should develop, as a result of the educational process, a sense of pride and a deep love for whatever is good in their own culture: in all that is beautiful in their dress, folk dances, songs and in their handicrafts; in their own youth organizations and in their institutions of village self-government. It has to be kept in view that the tribal people have essentially a basic mode of life inasmuch as they depend the least on the outside world for meeting their fundamental human needs of food, cloth and shelter, and a sound educational system for them must reflect all those healthy features of their life. The Basic Education Programme in NEFA will centre round the following activities :

- (i) The practice of clean and healthy living
- (ii) The practice of self-reliance
- (iii) The practice of productive basic crafts
- (iv) The practice of citizenship in a community and
- (v) The practice of recreational and cultural activities

"Cleanliness and health have been given the first place as these problems are of the greatest importance in the life of the tribal people living in NEFA."¹

Towards the end of the First Five Year Plan (1951-1956) it was therefore, envisaged that the Primary Schools should be organised on the pattern of Basic Education. For this purpose, batches of education officers and teachers were deputed to the Titabar Basic Training Centre, Asam, Hindustani Tamili Sangh, Sevagram, the Jamia Millia Islamia, Delhi and also to the Buniadi Siksha Bhavan, Changlang for training in the Basic System of education. A number of Lower primary Schools were converted into Junior Basic Schools in course of time. The lower Primary sections of the Middle and High Schools were also similarly converted. It may be incidentally mentioned that a school for orphans has recently been opened at Pangin.

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,

1. Dr. Verrier Elwin, B. Shastri and I. Simon (ed), *Important Directives on Administration of NEFA*, (Shillong, 1967), pp. 132-133.

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.

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 from IX to XII. All the High Schools in the district have been upgraded to Higher Secondary Schools. A system of co-education is followed in all these schools, for no separate institution exists for the girls. However, separate classes are 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.

All the Higher Secondary Schools are residential for Arunachal tribal students living beyond 6 km distance from the school.

Higher Education

The first college in Arunachal Pradesh known as the Jawaharlal Nehru College, as already mentioned, was established at Pasighat in 1965 with only 42 students and 8 lecturers. The college at present provides higher education in thirteen subjects of Arts and Science up to degree and honours level. Commerce has also been introduced recently up to undergraduate level (B.Com. Part I). Post-graduate classes in Political Science and History have also been opened since August 20, 1981. It was the only college in Arunachal Pradesh till the establishment of another college at New Itanagar in 1979-80. The college is provided with hostel facilities for boys and girls.

The JN College at Pasighat initially affiliated to the Punjab University, Chandigarh is now under Arunachal University has developed into an important educational institution of the north-eastern region for higher studies especially for the tribal students of Arunachal Pradesh. During the year 1982-83, there were about 400 students on its rolls with 45 lecturers in various disciplines.

It merits special mention in this context that an arts graduate of the JN College, Pasighat Shri Talem Tapok, hailing from the Ledum village of East Siang District, stood First Class First in the final examination of the

University of Gauhati held in 1981 for Master of Arts degree in Political Science. He is the first Arunachali student to secure such highest position in any University examination in the country. Shri Tapok joined the JN College, Pasighat as a lecturer.

The first graduates from Siang are Shri Toyi Dai from Balek village of Pasighat Sub-division in science and Shri Matin Dai also from the same village in arts. They obtained their degrees in 1958 and 1959 respectively. The first woman graduate is Smti Bormati Dai, who obtained her degree in Arts.

The first doctor and the first engineer from Siang are Dr Ati Moyong, M.B.B.S. and Shri Ogam Apum, B.E. respectively.

A batch of ten Arunachali boys passed out in 1968 as the first graduates from the JN College, Pasighat. The first woman graduate from this College is Smti Kumutra Namchoom, who obtained her degree in 1972.

Technical Education

There are two technical training institutions in Siang. The Industrial Training Institute at Roing in the Dibang Valley District of Arunachal Pradesh also offers opportunities to the Arunachali students to undergo training in some technical courses, such as electrical, motor mechanics, carpentry, etc. The students having aptitude for higher studies in engineering, medical, agriculture, veterinary, forestry etc. are sent to the reputable institutions in different parts of the country. Meritorious students are given scholarships.

School for Cultivation of Fine Arts

The district of East Siang and West Siang have no Government institution established for the purpose of cultivation of fine arts. All possible assistance and encouragements are, however, given to promote tribal art and culture, the beauty of which finds a vivid expression through their fine work in cane and bamboo, weaving and other crafts as well as their dance and music. The Craft Centres have separate units for training of tribal boys and girls in their traditional arts and crafts. Dance and musical performances are also held in the educational institutions. The societies for cultural development at Pasighat, Along and other places receive grant-in-aid from the Government. The Directorate of Information and Public Relations of the Government has a Songs and Drama Unit consisting of staff artists drawn mainly from the young people of Arunachal Pradesh.

Medium of Instruction

A vexed problem facing the Education Department for a long time is the question of medium of instruction to be introduced in school education. The districts of East Siang and West Siang are inhabited by a number of tribal groups speaking in different dialects. None of them has a script of their own,

but generally they have a conversational knowledge of the Assamese language. During the initial phase of the spread of education in these areas, text books written in Assamese and used in the schools in Assam were prescribed for the tribal students, for they had no text books written in their own dialects. Assamese was initially adopted as the medium of instruction in the school. It was later decided to teach the students at the Primary stage through their mother-tongue, i.e. the tribal languages. For this purpose, text books in local dialects in Devanagari script were written by some selected dialect-knowing teachers. Meanwhile, Hindi was introduced as the medium of instruction in the Primary, Middle and High Schools. Science and Mathematics were, however, taught in English from Class VII to Class X. English was subsequently taken up as the medium in the Higher Secondary Schools for Classes VIII to XI.

As for the Borders Area Schools, the following media of instruction was prescribed :

- The mother-tongue of the children (tribal language written in Devanagari script) as the medium of instruction throughout the Primary stage ;
- Hindi as a compulsory subject from Class I onwards (i.e. third schooling year) ;
- After the students have appeared in the Lower Primary examination through Hindi medium (till such time as Hindi is replaced by the tribal language text books), they should be brought to a school being run through the Hindi medium.

There are, therefore, various media of instruction-tribal languages, Hindi and English, adopted for different educational stages and standards of schools. The system of education thus introduced was not only complex in itself, but it also became burdensome for the students. The question of medium was important, and a simplification of the multi-media system was necessary. Eventually, after long deliberations English has been accepted as the medium of instruction at all stages of school education since 1972. 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.

Adult Education

The National Adult Education Programme was first introduced in Arunachal Pradesh in 1966-67. The programme is now being carried out in two sectors, namely Central Sector and State Sector.

The centrally sponsored scheme of adult education, which was known as the Farmer Functional Literacy Project (FFLP), was taken up for implementation in the erstwhile undivided Siang District first in 1975-76.

Sixty centres were opened under this project. In addition to these, seventyone centres were set up in 1976-77 in the Central Sector under the scheme of Non-Formal Education Programme (NFEP). In 1978, the two schemes were amalgamated and renamed as Rural Functional Literacy Project.

The following table shows the achievements made under the Rural Functional Literacy Project (RFLP) and the State Adult Education Project (SAEP) during the year 1982-83:

District	National Adult Education Programme					
	RFLP			SAEP		
	Number of Centres	Enrolment		Number of Centres	Enrolment	
		Male	Female		Male	Female
East Siang	70	325	317	16	109	181
West Siang	40	629	395	30	545	407
Total	110	954	712	46	654	588

Teachers' Training

As early as 1947 a Teachers' Training Institute was established, which was, as already mentioned, renamed as Buniadi Siksha Bhavan. In fact, teachers' training forms an integral part of educational activities in this territory. The Buniadi Siksha Bhavan, situated at Changlang in the Changlang District of Arunachal Pradesh, provides training facilities to matric teachers, who are sent there annually. Refresher courses are also held in this institutions for the teachers. Matric teachers are also deputed for senior basic training at Titabar in Assam. A few arts graduate teachers and arts senior teachers are deputed every year to the Guwahati University for a course in Bachelor of Teaching (B.T.). The science graduate teachers and science senior teachers are deputed annually to Bhubaneswar in Orissa for training in the course of Bachelor of Education (B.Ed.)

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 organise 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 tribal 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 the territory.

Extra-Curricular Activities

With a view to creating a spirit of self-help and dignity of labour among the students, vocational training in some of the indigenous crafts, such as work in cane and bamboo or basketry, weaving, agricultural gardening etc., is included in the schools curriculum. Music and dance, which are essential features of the cultural life of the tribal people, are also given due importance in school education. Apart from these, the students are encouraged and helped to stage cultural performances and dramas and to bring out souvenirs and school magazines. Amenities for modern games and sports are provided to all Primary, Middle and Higher Secondary Schools with a stress on the indigenous games of the tribal people. A book entitled 'Games of NEFA' in English, Hindi and Assamese has been published.

"In order to inculcate the spirit of discipline and also to broaden the mental outlook, the students should be engaged in healthy activities, such as participation in tournaments, dramatics, debating, scouting, excursions, cooperation in the community life of the village etc. These should be considered to be normal features of the school, as essential as other subjects of the school curriculum. Such character-building activities should therefore be considered as co-curricular activities of schools."¹ This directive contains the guiding principles which are followed.

Inter-district school tournaments are organised annually in a district headquarters. Competitions in a number of items 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 the distinguished teams and winning participants. Besides this, educational excursions of batches 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 also help the students to develop a sense of belonging to the vast country, that is India as a whole.

The National Cadet Corps (N.C.C.) training was introduced in the High

1. Dr. Verrier Elwin, B. Shastri and I. Simon (ed) *Important Directives on Administration of NEFA, (Shillong 1967)*, p. 132.

School at Pasighat in 1961-62 and subsequently in other High Schools. Between the years 1966 and 1971 N.C.C. units were formed in twelve Middle Schools. The JN College, Pasighat has also a regular N.C.C. unit with a senior division girls' wing. Selected cadets and teachers are sent out for training in various N.C.C. camps.

The National Service Scheme wing of the Jawaharlal Nehru College was raised in 1975. Placed under the direct supervision and guidance of the Union Ministry of Education and Social Welfare, the wing has been working for adult education, development of health and hygiene, rural reconstruction, development of nearby settlement as model villages, preservation of monuments of national importance etc.

The authorised strength of the College N.S.S. wing (as in 1982-83) is 50 volunteers and one Programme Officer.

Literary Society

The Adi Folk Literature Research Centre at Along was established in 1974 for the purpose of promoting the cultural heritage of the Adis. The centre has been striving to bring to light the rich literary tradition of the people handed down orally through myths, folk-tales, songs, poems, proverbs and beliefs, and to preserve them in written forms for the posterity. Compilations containing sacred hymns, collected from the *nyibos* - the shamans or priests, and pieces of folk literature are brought out with necessary annotations for studies.

The Honorary Director of the centre is Shri B. Das Shastri who was formerly the Director of Research, Government of Arunachal Pradesh. The centre has published a number of books edited by Shri Tumpak Ete, who is a Member of the Legislative Assembly of Arunachal Pradesh, elected from the Along South constituency in January 1980. Among the important publications are the following :

- (1) Urom Paknam,
- (2) Pume Dada Hoi Dada and Oyo Hei Ya (a book of poems),
- (3) Nyibo Kebang and
- (4) Gomko Agom (a collection of proverbs).

The centre gets financial assistance from the Government for its works.

Libraries

Eight public libraries have been functioning in Siang. The district and sub-divisional headquarters at Along, Pasighat, Tuting, Mechuka, Basar and Mariyang are each having a library. Besides them, there are two more public libraries at Likabali and Mebo each.

The JN College at Pasighat has a library of its own. It has a stock of about 14,000 books (as in 1982-83) besides various journals and magazines. Some

of the schools have also student libraries.

The stock of books in the public libraries is shown at appendix-IV to this chapter.

Museums

The District Museums at Along and Pasighat, established for preservation of the rare and valuable specimens of tribal arts and crafts, have the following exhibits:

District Museum, Along

Type of Specimens	Number (as in January 1980)
(1) Cane and bamboo	116
(2) Wood-carving	13
(3) Wood-crafts	36
(4) Textile/dress	106
(5) Ornaments	79
(6) Leather/skin	21
(7) Iron/metal	49
(8) Other specimens.	97
Total	517

District Museum, Pasighat

Type of Specimens	Number (as in November 1982)
(1) Cane and bamboo	93
(2) Wood-carving	15
(3) Wood-crafts	48
(4) Textile	115
(5) Ornaments	111
(6) Other specimens	140
Total	522

The specimens in the museums, preserved and exhibited in a scientific manner, bear eloquent testimony to the rich cultural heritage of the people of Siang.

The District Museums at Along and Pasighat are each looked after by a Keeper working under the direct supervision of the District Research Officer, Along and the Assistant Director of Research, Pasighat respectively.

APPENDIX - I

Number of Educational Institutions in East Siang and West Siang Districts during the period from 1983-84 to 1989-90.

Year and District	Number of educational Institution		Pre-Primary/ J.B. Schools	Total Number of Schools
	High/Higher Secondary Schools	Middle/Senior Basic Schools		
1	2	3	4	5
1983-84				
East Siang	10	15	132	157
West Siang	9	24	168	201
1984-85				
East Siang	10	16	144	170
West Siang	9	25	176	210
1985-86				
East Siang	10	17	145	172
West Siang	10	26	176	212
1986-87				
East Siang	12	21	147	180
West Siang	11	31	179	221
1987-88				
East Siang	14	24	146	184
West Siang	12	36	179	227
1988-89				
East Siang	15	25	148	188
West Siang	13	37	185	235
1989-90				
East Siang	17	27	168	212
West Siang	13	36	172	221
1990-91				
East Siang	17	28	170	205
West Siang	15	39	173	227

Source : Statistical Abstract of Arunachal Pradesh 1984 to 1991.

APPENDIX - II

Number of Students by Department in East Siang and West Siang Districts.

Year and District	Primary/Primary Basic	Middle/Senior Basic Dept./Stage.	High/Higher Secondary	Graduation	Post Graduation	Total Students
1	2	3	4	5	6	7
<u>1985-86</u>						
East Siang	8,443	3,254	4,022	644	38	16,401
West Siang	10,957	4,706	5,253	-	-	20,916
<u>1990-91</u>						
East Siang	16,279	5,057	2,892	750	-	24,978
West Siang	18,900	3,307	2,255	-	-	24,462

Source : Statistical Abstract of Arunachal Pradesh, 1986 and 1991.

APPENDIX - III

Total literates in East Siang and West Siang as per 1991 Census.

(Provisional figures)

Districts	Total Population 1991			Literate Population 1991*		
	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7
East Siang	99,985	53,730	46,255	35,782	23,576	12,206
West Siang	89,778	41,954	41,824	32,292	20,951	11,341

Note : * Literates exclude children in the age group 0-6 who are treated as illiterates in the 1991 Census.

Source : Census of India, 1991, Series - 3 Arunachal Pradesh, Paper I of 1991 Provisional Population total (Supplement).

APPENDIX- IV

LIBRARIES
As on March 31, 1979

Sl. No.	Name of Library	Number of Books					Total
		English	Hindi	Bengali	Assamese	Malayalam	
1.	District Library, Along	6,012	4,324	6,968	6,984	1,028	25,316
2.	District Library, Pasighat	6,732	4,828	5,982	7,028	874	25,444
3.	Sub-divisional Library, Tuting	370	40	300	150	-	860
4.	Sub-divisional Library, Mechuka	378	50	300	100	-	828
5.	Sub-divisional Library, Basar	200	35	200	150	-	585
6.	Sub-divisional Library, Mariyang	250	45	200	150	-	645
7.	Circle Library, Likabali	200	50	200	150	-	600
8.	Circle Library, Mebo	205	45	215	150	-	615
Total		14,347	9,417	14,365	14,862	1,902	54,893

Source : Statistical Hand Book of Arunachal Pradesh, 1978-79.

CHAPTER XIV

MEDICAL AND PUBLIC HEALTH SERVICES

Old Beliefs and Practices

The belief that disease and death are caused by evil spirits is primitive, but it persists even today, particularly among people living in seclusion and misery without medical aids and without education. The people of Siang as of other parts of Arunachal Pradesh have a traditional belief that an illness can be remedied by appeasement of the malevolent spirit which is responsible for it. Hence, they sacrifice birds and animals for propitiation of the spirit, and observe a system of rituals conducted by the priest or tribal medicine-man.

Taboos, which vary according to various ailments, are observed in regard to food, drink and work. For example, severe labour-pain of a woman at the time of delivery is attributed to a spirit called *nipong*. Women do not pluck plantains from deserted fields, nor do they gather nettles from there for food, because *nipong* is believed to reside in that plant and feed on the large stinging nettles growing in the abandoned *jhum* fields. A big pig, a black hen and dog are sacrificed to the *nipong* for propitiation.

The following is an account of beliefs and practices of the Gallongs concerning illness.

"Divination and Remedy. The causes of disease and death are diagnosed by divination. The *nyibo* is also a conjurer and a diviner. He divines with the help of the spirit whom he has pleased with his power inherent in him. The most common method of divination is by reading into the heart and the liver of a fowl. The fowl is killed, its stomach slit open and the membranes are removed from the heart and the liver. The different folds, holes, size and colour of the heart and the liver signify different causes. Before the *nyibo* begins his divination, he starts chanting incantations and prayers, requesting the spirit to be in communion with him. After he finishes his incantations, the spirit helps him in his divination. He then starts singing and dancing and falls into a trance and, when he is fully possessed, he starts telling the cause of the disease which is later confirmed by reading the heart or the liver of the fowl. Divination with a pig was also seen only at one place, in the north-west, among the Topo-Ichis.

"After the cause of the disease is established, and the spirit responsible identified, the next step is to know the particular sacrifice to be made and this too is ascertained by the same process of divination over the same fowl or a fresh one. Sacrifices are to be made strictly in the way revealed in divination. The *nyibo* gets a fee varying from two to twenty rupees, depending upon the nature of divination and the consequent sacrifice. He also gets a share of the

sacrificed animal. Success in feuds or agricultural activities is divined by another method. Before proceeding to a raid a cock is killed by cutting off its throat and thrown at a distance of about three to four feet. A bamboo basket is placed nearby. If the head, when chopped, falls into the basket, the expedition would be a grand success. Before beginning the cultivation, beer is prepared and the beer together with rice dough is then sprinkled along the path leading to the field or over it. If by that time the beer turns sour, the cultivation would not be fruitful.

"*Omen*. Omens can either be approval or warning given by the spirits. One of the most common omens is a snake entering a hole, which signifies the death of one of the villagers.

"We thus see that social customs and the magico-religious beliefs and practices are inextricably intertwined together and one has its bearing on the other. And the Gallongs surrounded by a host of spirits - malevolent and benevolent - carve out their destiny, fighting the curse and ill - luck bestowed by the one and acknowledging the blessings and the good - will of the other".¹

A variety of measures are taken by the people to prevent spread of diseases. Isolation and quarantine of patients are some of the effective means adopted. Patients suffering from hansen disease or other major diseases are usually isolated in small huts away from the village, while those having minor ailments are segregated in their own houses. Two forms are quarantine, inward and outward, are observed. The inward quarantine is resorted to when an epidemic breaks out in the neighbourhood. All approach roads to a village are closed by erecting gates and an animal killed for that purpose is kept hanging from the gates to warn outsiders not to enter the village and spread the infectious disease. In exceptional cases, outsiders may be allowed entry, but not before the evil spirit, believed to be the cause of the epidemic disease and accompanying the outsiders, is exorcised by the village physician. Codes of the outward quarantine are followed when an epidemic occurs in a particular village. The entrance to the affected village is closed with a gate, and movement to and from the village is restricted.

Besides these preventive measures taken by the villagers they have their own methods of diagnosis and cure. Herbal medicines are used by them. Leaves and barks of some particular wild plants are also taken as medicines. A kind of herb locally known as *omerhinko* is used for treatment of diarrhoea and dysentery. Leaves of a tree recorded as *yet-po-pe-mo* are prescribed for curing syphilitic sores. Bark of a tree is applied for stopping haemorrhage.

Survey of Public Health and Medical facilities in Early Times

Father N.M. Krick, a French missionary, is said to have first used modern medicines in this region over a century ago. He has left for us a valuable account of his visit to the Mebo area of Pasighat Sub-division in 1853, which in the following passages reveals how the people suffered from many diseases and their helplessness.

"Yes, yes, 'they all replied with one voice, ' and if you cure our sick, we shall keep you for ever, and we shall build you a house, 'and in evidence of their sincerity, the chiefs put the guardhouse at my disposal.

"No sooner was I settled down in my new home. than invitations poured in from all sides requesting me to go and look after the sick : being a priest, I must needs be a physician too. The only remedy these people ever heard of is religion. They have recourse to neither drugs nor medical treatment of any kind; even the use of simples is unknown. Such things are according to them perfectly useless, as all diseases, both internal and external, are directly caused by either bad spirits, or good spirits having some good reasons to show their dissatisfaction. Exorcism is therefore the only remedy, and the only doctor is the priest : the bad spirit must be expelled, or the good one propitiated by sacrifices. If the complaint is proof against these superstitious practices, it is because the spirit is unrivalled in malice and power : there lies the secret of all mortal diseases. As I am writing to you,¹ my room exhibits the appearance of a hospital of incurables : here is a young woman whose arm is covered with a horrible ulcer. 'When did you get that?' 'Three years ago,' she replied 'I killed a rat; my disease dates from that time.'

"Further on there lies a young man suffering from scrofula; his legs are swollen, his body is covered with ulcers, a dying skeleton. 'How long have you been ill ?' Migom, I used to be nice and fat, a stout and brave warrior; but last year the evil spirit got hold of me, and he has done his work.' Another patient has his stomach swollen to awful dimensions. I see nothing but suffering all about me. All these patients are somewhat trying to my medical skill; they are draining my dispensary, whose deficiency beats that of my capacity. However it was God's will that several patients should recover perfect health; hence there was a rush for the French Hippocrates. Everybody wanted to fall sick for the sole pleasure of being looked after by such a learned man. It was no good my pretending to be unable to cure certain diseases; if I did not cure them, it was because I did not want to; willy-nilly, I had to give them remedies, were it but a few drops of water. A few purgatives, some ointments, a little care, had worked all these marvels. Such was the enthusiasm

1. L.R.N. Srivastava, *The Gallongs*, (Shillong, 1962) pp 111-112.

1. This account was originally sent to Dr Bousquet, surgeon at the Necker Hospital, Paris, under whom Father Krick had taken some lessons in medicine.

that those people wanted to carry me in triumph on their shoulders. It was no use for me to tell that Almighty God had given to my remedies the virtue that cures; they would not believe me. My power was in the touch of my hand. And so they went on repeating: 'You are the most powerful Dondai (priest) ; no spirit can resist you; your hands cures everything.' Of all this the practical consequence was that I had to touch everything with my hand, even the most disgusting wounds. I was not given a minute's rest. At every moment someone came rushing to me: 'Father, some medicine'. At early dawn I went out to see my patients only to return at midday thoroughly fagged."¹

Before independence there was only one hospital in Siang. This was established in 1912 at Pasighat. Medical aids were available in a few more health units at some official centres but they were too inadequate to be of any relief to those living in the deep interior areas and afflicted by diseases. At times, doctors used to go the interior villages, and their occasional visits were the only opportunities for the villagers to get some medical aids.

Love and sympathy for these people find a most passionate expression in the words of Dr. Elwin as follows:

"The lack of medical facilities in the past has meant that there have been hundreds, thousands, of unrecorded tragedies, the sick living out their days in pain and misery, unnoticed in their little huts. I think of the children with sore and inflamed eyes, their little limbs distorted by rickets, their stomachs grossly swollen with enlarged spleens; I have seen many people shockingly disfigured by untreated burns. In one village on the Upper Siang, I found an old woman with only one arm. Sometime before the other had been bitten by a snake and had, as they put it, 'rotted away'. She had begged her husband and friends to cut it off, but they were afraid. Finally, after weeks of agony, the arm broke off at the joint and she recovered. In another village there was an Adi man who had his leg bitten by a bear and suffered in the same way. The wound seems to have become gangrenous, the leg swelled monstrously and at last it too broke off at the joint.

"Think of the incredible suffering that these people must have endured; consider too the invincible will-to-live and the physical strength which enabled them to survive such ordeals.

"I was particularly moved by the Adi man. I met him first climbing up a steep and narrow track; he was going along on his one leg, entirely alone, carrying his things, somehow getting across the suspension bridges and up and down the tremendous hills. I saw him again fifteen miles further on-and

1. Verrier Elwin, *India's North-East Frontier in the Nineteenth Century*, (London, 1962), pp 238-239.

every time we met there was a beaming smile, never a complaint, and never a hint of begging for anything. Here was the true Adi spirit-proud, independent, courageous, filled with a zest for life. These people deserve the very best that medical science can give them.¹

Steps were taken after independence to extend medical facilities to as many villages as possible. Till 1951, only curative medical services were provided. Curative and preventive services worked separately in the following five years until they were integrated in 1956.

During the British rule, the medical services were under the overall control and supervision of the Inspector General of Civil Hospital, Assam, who was later redesignated as Director of Health Services, Assam. Working under him, the Civil Surgeon at Sadiya guided and directed all medical activities in the territory now known as Arunachal Pradesh. In 1951, a separate medical department for the territory was set up with a Chief Medical Officer (later redesignated as Director of Health Services) and its head with his headquarters at Pasighat, which was subsequently shifted to Shillong.

A large area in the interior of Siang was gradually brought under medical coverage. Intensive efforts were made to implement public health programmes for opening new health units and popularising modern medicines among the tribal people, who were hitherto left without medical care. But, most of the people knew nothing of the medical science and methods of medical treatment. They were at first reluctant to use modern medicines. They preferred to rely on their own medicine-man and their indigenous ways of treatment. "One of the major difficulties," said Dr. Elwin, "in the way of persuading tribal people in all parts of India to come for medical treatment is the fact that they themselves have a fully developed system of diagnosis and cure. The usual theory of disease in tribal society is that it is caused by hostile spirits the ghosts of the dead, or the breach of some taboo. What is spiritually caused, therefore, must be spiritually cured, and this the main reason why the people prefer to go to their own doctors rather than to ours".²

It was, therefore, an important task of the medical staff to adopt persuasive means to make the people aware of the efficacy and benefit of modern medicines and the value and utility of public health services. The initial task was not only to extend medical facilities and medical relief to the people, but also to educate them in the elementary principles of hygiene and sanitation.

Vital Statistics

No early record of births and deaths in Siang is available. Collection of vital statistics is a new activity started in this area only after formation of the

1. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), p. 90.

2. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), pp. 177-178.

Union Territory of Arunachal Pradesh in 1972. The Registration of Births and Deaths Act, 1969 (No.18 of 1969) has come into force in Arunachal Pradesh from the month of October 1973.

In the beginning, attempts were made to collect data of birth and death rates through medical staff, school teachers, Village Level Workers and *Gaon Burahs* (village elders), who were engaged in this work. This could not go a long way for lack of response.

In 1975, the *Gaon Burahs* of each village and the Members of Gram Panchayats were appointed as Informants and Notifiers respectively of births and deaths. The *Gaon Burahs* have been entrusted with the task of giving information of births and deaths in their own villages, while the Members of Gram Panchayats have been assigned the job of notifying births and deaths and also certifying cause of deaths. In 1977, the nurses of the Medical Department were appointed also as Notifiers of Births and Deaths. For the purpose of registering births and deaths, Village Level Workers and primary school teachers are working as Sub-Registrars, Circle Officers and Extra Assistant Commissioners as Registrars, Medical Officers in charge of Medical institutions as Registrars and District Statistical Officers as Additional District Registrars. The Deputy Commissioners are the District Registrars.

According to the provisions of the said act of 1969, each head of family or his nearest relative has a legal duty to notify the births and deaths occurring in the household to the concerned Registrar within a specified period. But it was reported that in Arunachal Pradesh most of the villagers were not aware of the implications of this Act, and the vital events of births and deaths were not reported and registered as they ought to have been done. Till 1983 only less than half of the total number of circles in Arunachal Pradesh was covered by the reporting system of vital statistics. As a result, the actual birth and death rates during a given period of time cannot be ascertained accurately from the official records. It may, therefore, be noted that the vital statistics as recorded so far are incomplete. The data collected so far, however, show that during the years from 1976 to 1980 rates of birth were much higher than those of death. The Census of 1981 indicates that the decennial growth rate of population from 1971 to 1981 is over 25 percent in West Siang District and over 43 percent in East Siang District, and that the Scheduled Tribe population has increased in this decade. According to the 1981 Census, the Scheduled Tribe population constitutes 78.16 percent of the total population of Siang comprising both the districts of West and East Siang. It, therefore, seems that the mortality rate among the indigenous population is less than what it was perviously.

Common Diseases

The major and menacing diseases, which large numbers of people suffer from, are diarrhoea and dysentery, stomach and intestinal diseases, respiratory diseases, scabies and skin diseases. Malaria is also prevalent. Goitre, which is endemic to this region is now under control, though the number of cases shows a slight upward trend. Occurrence of leprosy also appears to have been considerably checked. Cases of tuberculosis though not great in number show a rise in 1977-78 over that of 1976-77.

Diarrhoea, Dysentery, Stomach and Intestinal Diseases

Prevalence of these diseases is attributable to lack of nutritious food and use of stagnant and polluted water for drinking and cooking. Thousands of people fall victims to these diseases every year.

Respiratory Diseases : The number of patients suffering from respiratory diseases is alarmingly high. Bronchitis, broncho-pneumonia and cough with cold are common, particularly among the children. Apart from the ecological factors, the conditions of domestic life of the people also appear to be greatly responsible for these diseases. The houses have no proper ventilation and hardly any window. Internally, they are congested and at times suffocating due to the heavy smoke rising from fireplaces in the rooms and spiralling inside without finding any outlet.

Skin Diseases : Dense forests, insect-infested jungles, use of water from stagnant pools, low living standard, poor and unhygienic conditions of living, lack of sanitation and nutrition seem to be some of the factors responsible for the high occurrence of skin diseases, such as scabies, ringworm or tinea and eczema in this area. The people have now the facilities for medical treatment of these diseases.

Goitre : An extensive survey carried out in 1958 in the erstwhile North East Frontier Agency revealed that there was a fairly high incidence of goitre throughout the territory, and the persons suffering from this disease constituted 15 to 65 percent of the population in different villages. Results of investigations showed that goitre was associated with cretinism, deaf-mutism and mental retardation.

The endemic goitre is a deficiency-disease which is due to lack of iodine in water. Iodised salt is an antidote to goitre. Production and distribution of iodised salt were first started at Pasighat in 1955-56. It was later arranged with the Salt Commissioner, India that iodised salt would be supplied from the iodised salt production centre in the Sambhar Lake in Rajasthan.

Leprosy : The disease, as already stated, has been held in check. In 1977-78, the number of lepers under medical treatment was 13 compared to 77 in 1975-76. There are two leprosy colony /H.D. Sanatorium in Siang, one

The number of cases treated (Indoor and Out-door patients) during the period of 1983-84 to 1990-91.²

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	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Indoor Patients								
East Siang	805	975	838	2223	2529	2620	2780	3700
West Siang	3421	3787	4453	5191	6198	6196	7820	7100
Out-door Patients/								
East Siang	79764	128718	86503	115801	116904	116808	127809	127900
West Siang	50221	200316	213595	186290	196296	20694	217621	218100
Total :-	134211	333796	305389	309505	321927	146318	356030	356800

1. Source : Statistical Abstract of Arunachal Pradesh, 1984 to 1991.

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each in the two districts of East Siang and West Siang.

Tuberculosis : Some T.B. cases are reported to have been detected in the Pasighat area as early as 1910. Campaign for BCG vaccination was launched in the same area in 1956. As a result of curative and preventive measures being taken, T.B. is now considerably checked. But, in the recent years a slight increase in the number of patients have been recorded. There were 1,298 T.B. patients in 1977-78 as against 1,023 in 1976-77. The number of beds in hospitals and health units authorised for T.B. patients is 62, of which 26 beds are in West Siang District and 36 in the East Siang District.

Venereal Diseases : The number of patients afflicted by syphilis or gonorrhoea was 56 in 1977-78 compared to 243 in 1976-77. Obviously, there was a considerable fall in the number of cases.

Eye Diseases : Trachoma ulcerative blepharitis and chronic conjunctivitis may be commonly found in Siang as in the neighbouring areas in Arunachal Pradesh. One of the main causes injuring the eyes of the local people is the unventilated smoky rooms they live in. Severe cold and chilly wind in areas at high altitudes may also affect the eyes adversely.

The table below shows the number of patients in Siang, who received medical treatment for various disease in some years past.¹

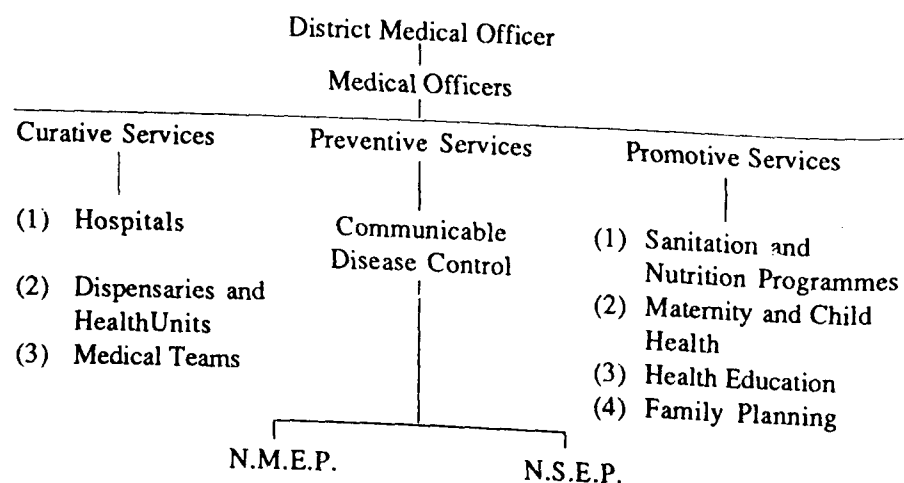
Sl No.	Name of Disease	Number of Patients Treated	
		1976-77	1977-78
1.	Diarrhoea/Dysentery	13,812	10,692
2.	Stomach and Intestinal Diseases	4,036	4,998
3.	Respiratory Diseases	14,811	28,187
4.	Malaria	2,889	3,119
5.	Syphilis and Gonorrhoea	243	56
6.	Scabies and other skin diseases	15,643	4,638
7.	Goitre	278	478
8.	Leprosy	-	13
9.	T.B.	1,023	1,298
Total		52,735	53,479

1. Statistical Hand Books of Arunachal Pradesh, 1977-78 and 1979-80.

Epidemics : No serious epidemic in recent years has been reported. Disease like dysentery may, however, break out in epidemic form.

Immediate measures are taken to check a contagious or infectious disease. Apart from medical reliefs given, medicines are sometimes distributed liberally to the people attacked by such diseases. The tribal custom prohibiting visits from one village to another during an epidemic also proves to be very effective as a preventive measure.

Medical Organisation : The Medical Department at the district level is headed by a District Medical Officer, while the Deputy Commissioner, who is the district head exercises a general administrative control over the activities of the department. Assisted by a number of medical officers and staff, the District Medical Officer supervises all Government medical institutions of the district. The Director of Health Services is the highest medical authority in Arunachal Pradesh. The medical department works under his guidance and direction. The organisation of the Medical Department in the district is shown in the following chart :



Hospitals and Dispensaries

The first hospital in Siang, as mentioned earlier, was opened at Pasighat in 1912. In 1915, it was enlarged with arrangement for indoor treatment. In course of time, the unit has grown into a modern General Hospital with 106 beds (as on 31.3.78) including 30 beds for T.B. patients. The hospital consisting of indoor and outdoor department, X-ray unit, pathological laboratory etc. is the largest in Siang.

The General Hospital at Along was established in 1948. It has 82 beds (as

on 31.3.79) including 10 beds for T.B. and 42 for leprosy patients. The hospital provides all modern medical facilities to patients.

Before 1947, there were three health units in Siang besides the hospital at Pasighat. These units were at Karko and Riga opened in 1940 and at Pangin opened in 1945. The unit at Karko was shifted to Yingkiong in 1958-59. In 1948, a dispensary was established at Laimakuri under the charge of Dr. S. Ghosh, Civil Assistant Surgeon (I). The dispensary was shifted to Daring in June 1951. Dr. S.S. Paul took over the charge of this dispensary in 1953 and served till 1956. In 1954, a mobile health unit was also functioning under the charge of Dr. S.K.Das with headquarters at Daring. In 1951, another health unit was opened at Damro. This was followed by opening of health units at Gelling and Mechuka in 1952. Dr. S. Dutta was in charge of the former and Dr. S. Bhadra opened the latter. In 1953, health units were set up at Mebo and Gusar. The unit at Gusar was opened by Dr. Kumaresh Choudhury. In 1954, two health units were established, one at Basar and the other at Sille. The unit at Basar was an Ayurvedic dispensary. In 1955, three more health units came up. These were at Mirem, Tadadege and Tuting. The unit at Mirem was opened by Shri R. Yusuf Ali, the then Deputy Adviser to the Governor of Assam. The dispensary opened at Tadadege by Shri D. Neog, Compounder was, however, closed after few months. The six bedded unit at Tuting was opened by Dr. G.N. Ganguli, Civil Assistant Surgeon (II). In the late fifties, health units were opened at Manigong in 1957, Liromoba and Yapuk in 1959. Health units at Gensi and Gasheng were established in 1960 and at Basar 1961. In the following decades, medical facilities were further extended to all parts of Siang through establishment of health units and dispensaries at other places namely Rungong, Payum, Likabali, Tirbin, Tato, and Singa in the West Siang District and Bilat, Koyu, Telam, Boleng, Mariyang, Geku and Dite-Dime in the East Siang District.

There are two Hansen Disease Sanatoriums (Leprosy Colony) in Siang, one in the East Siang District and the other in the West Siang District. The former is one of the oldest sanatoria in Arunachal Pradesh. It was shifted from Kobo to Pasighat after great earthquake of 1950. The other sanatorium at Along was opened in 1950.

The following table indicates the achievements made in setting up hospitals and dispensaries upto the end of March 1981:

Particulars	Number	
	West Siang	East Siang
1. District General Hospital	1	1

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2. Health Unit/Dispensary	14	14
3. Medical Team	9	1
4. Hansen Disease Sanatorium/ Leprosy Colony	1	1
5. Authorised bed in Hospitals/ Health Units/Dispensaries		
(a) General bed	124	180
(b) T.B. Bed	26	36
(c) Hansen Disease bed	110	110
6. Doctor	31	34
7. Staff Nurse/Sister/Matron	5	7
8. Auxiliary Nurse/Midwife	16	18
9. Pharmacists	19	20

More beds were added to the hospitals and health units in the subsequent years and the authorised general beds in 1983-84 were 635, of which 285 were in West Siang and 350 in East Siang.

The total number of Medical Institutions and the total number of beds in hospitals in East and West Siang Districts as on 31st March of each year is as follows:¹

Medical Institutions

Districts	1987	1988	1989	1990
East Siang	21	25	30	31
West Siang	20	29	28	30

BEDS

East Siang	368	374	386	411
West Siang	330	330	331	346

Mobile Medical Cover

Ten medical teams are functioning in Siang. These teams undertake extensive tours to provide medical relief to the people. The preventive aspects of health services, such as improvement of environmental sanitation with special emphasis on the principles of hygiene, use of fresh water, cleanliness, etc, are stressed by these teams. They also render services in the event of

1. Source : Statistical Abstract of Arunachal Pradesh, 1987 to 1990.

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epidemics or outbreak of any widespread contagious disease.

Maternity and Child Welfare

Maternity and child welfare services are rendered with special care in the hospitals, health units and dispensaries. Serious cases are referred to the district hospital or other hospitals inside or outside the State, which provide specialised treatment.

The Family Planning Programme has been introduced in Arunachal Pradesh on a limited scale. There are three family welfare clinics, two in West Siang and one in East Siang.

Health Training and Research Centre

The Health Training and Research Centre at Pasighat founded in 1956 is the only institution of its kind in Arunachal Pradesh. In order to keep pace with the increasing activities for extension of public health services and also to promote health education, it was envisaged that the local people should be given such training as to enable them to work for implementation of the public health programmes in their own areas.

School Health Programme

Medical Check-up of School students is carried out from time to time. Apart from the hygienic teachings included in the School curriculum, the general well-being of the students is looked after. Drills, physical training, games, sports and tournaments are conducted to help them to grow healthy. Medical aids are also given to them as needed.

School health is an important aspect of health services. Ignorance of rules of personal and community hygiene is the primal cause of many maladies, which the people particularly the children, suffer from. The practice of clean and healthy living is, therefore, greatly emphasised in the school health and educational programmes.

In a development directive issued by the former NEFA Administration for a systematic check of health of school children by Medical Officers, the following items of the School Health Services were specified:

- The school buildings and the surrounding should be inspected to assess if they conform to the hygienic standards of ventilation, lighting, floor space, sanitation etc.
- There should be a routine physical check-up for all the students.
- The spleen-rate of the children should be recorded.
- The Medical Officer should make a note of the personal hygiene of the children and find out from the teacher how far regular bath, wearing of clean clothes etc. are in practice.
- All nutritional deficiencies should be detected and rectified.

- (f) Arrangements for physical education should be reported.
- (g) Immunization against small-pox, typhoid, diphtheria, and whooping-cough should be carried out.
- (h) The condition of the teeth of the children should be examined.
- (i) Orthopedic deformities should be recognized and steps should be taken to correct them.
- (j) The number of children suffering from endemic goitre should be recorded and distribution of Lugol's iodine or potassium iodide tablets in appropriate doses should be arranged.¹

With this object in view, the institution has been functioning since its inception and imparting training in various courses, such as one year Health Assistant (Junior Course) for boys, two years Auxiliary Nurse-cum-Midwife course, three years Pharmacist course, six months Midwife course etc.

Under the charge of an Assistant Director of Health Services, the institution consists of three main sections as follows:

- (1) Training centre for field work,
- (2) Section conducting courses of training to meet the requirement of trained personnel for Arunachal Pradesh, and
- (3) Research Centre.

National Small-Pox Eradication Programme (NSEP)

A number of NSEP teams consisting of Inspectors and Health Assistants have been working in Siang to implement the programme. There were eleven such teams, six in West Siang and five in East Siang, in 1980-81. Small-pox vaccinations are given annually by these teams as shown in the following table.²

Year	No. of Primary Vaccination (PV) given	No. of Re-vaccination (RV) given	Total Number
1974-75	4470	33550	38020
1975-76	3840	29420	33260
1976-77	4403	21440	25843
1977-78	3374	13537	16911
1978-79	2613	4460	7073
1980-81	1565	696	2261

1. Dr Verrier Elwin, B. Shastri and I. Simon (ed), *Important Directives on Administration of NEFA*, (Shillong, 1967), P. 158.
2. Source : Statistical Hand Books of Arunachal Pradesh. 1974-75 to 1980-81.

It may be noted that no case of small-pox has been reported in recent times.

National Malaria Eradication Programme (NMEP)

The year 1952 marked the beginning of a series of measures taken against malaria. Initially, larvicides besides D.D.T. (Dichloro-Diphenyl-Trichloroethane) were used. The Anti-malaria activities were thoroughly re-organised and strengthened with the introduction of National Malaria Eradication Programme.

Arunachal Pradesh is divided into four zones for implementation of the NMEP. The districts of East Siang and West Siang are in the Central NMEP zone. A Zonal Malaria Officer is in charge of each zone. Assisted by a number of Unit Officers, Entomologists, Malaria Inspectors, and Sub-Inspectors, he carries out the anti-malarial programme in the area under his jurisdiction. The programme includes active surveillance and D.D.T. spray.

Active surveillance is exercised by Domiciliary House Visitors (D.H.V.). Each visitor is allotted a number of villages ranging from five to twelve according to the dispersion of houses in the villages. The D.H.V. visits each house at regular intervals to find out possible malarial cases. Collection of blood slides and presumptive treatment are done by the D.H.V. and the cases of positive slides are referred to hospitals or treated radically.

Anti-Malaria Units were opened, at Pasighat (the unit was started earlier), Along and Daring in 1952, Mirem in 1953, Mebo and Damro in 1954 and Sille in 1955. Besides these, Anti-Malaria Units were also working at Pangin, Yingkiong and Riu.

The most common malarial parasites found in this area are plasmodium vivax and plasmodium falciparum. Among the vector species of mosquitoes carrying malaria germs are Anopheles minimus, Anopheles anularis, Anopheles sconnitus and Anopheles maculatus, which have been identified in this region. Of these species, the chief vector is Anopheles minimus.

Malaria is one of the major diseases prevalent in this area. Cases are quite numerous, showing a slight upward trend in the recent years. The number of malaria patients treated has increased from 2,889 in 1976-77 to 3,119 in 1977-78. But, as a result of effective measures being taken to check the disease, it is evident that malaria has been considerably controlled.

The performances under the NMEP in Siang are indicated in the following table.¹

1. Source : Statistical Hand Books of Arunachal Pradesh, 1977-78 to 1980-81.

Year	Number of Blood slides Collected	Number of Blood slides Examined	Number of Blood Slides Found Malaria Positive					Number of Cases Radically treated
			P.V.	P.f.	P.m.	Mixed	Total	
1977-78	28880	28880	2588	117	-	414	3119	2298
1978-79	44709	44709	3817	167	-	436	4420	4074
1980-81	43327	43327	3613	182	-	490	4285	2987

N.B.=P.v. Plasmodium vivax, P.f.-Plasmodium falciparum, P.m-Plasmodium malariae

Sanitation

The whole of Siang is rural area barring the two towns of Pasighat and Along, which are also the district headquarters of East Siang and West Siang respectively. Sanitation and water supply in the towns are looked after by the Public Works Department. A town like Along situated in an undulated valley also enjoys the benefit of some natural drainage.

But the condition in villages lying scattered over the hills is different. The people save the Membas and Khambas live in houses built on bamboo piles or stilts, and there may be a jumble of such houses in a village. Most of the villagers are illiterate, and they are generally indifferent to sanitation and hygiene. The dwelling houses are stuffy and dark inside. Smoke emitted from fireplaces in the rooms having no proper ventilation as already stated, makes conditions more worse. The household conditions are largely responsible for eye and respiratory diseases.

But, however deplorable these conditions may appear to be, the ecological circumstances under which the tribal people live must not be forgotten. Life in the hills is a perpetual struggle for adaptation to environment. It is extremely cold at high altitudes. Many villages are situated above 1500 metres. The environmental factors have certainly influenced the construction of house types they have designed for themselves as shelters against the extremities of nature.

The living standard of the people is low and most of the villagers are poor. They cannot afford to have permanent house drains or a sewerage system in their villages. Dirty water and garbages are sometimes seen making filthy pools or lying in heaps in house premises. In fact, the lack of sanitation is often the cause of various diseases which the villagers suffer from. Supply of fresh water to the rural areas is a matter of utmost importance. In the absence of water reservoir of any kind at many villages, the people fetch water for

drinking and domestic purposes from stagnant pools or streams running down the slopes. Water is also carried to villages through bamboo pipes from distant springs. At times, the villagers are compelled to fetch water from any nearby source however polluted it may be. In the level areas, water is drawn from streams and rivers. The high incidence of diarrhoea and dysentery, stomach and intestinal diseases is due mainly to the scarcity of drinking water.

A comprehensive programme taken up by the Government to tackle the sanitary problems and promote public health is under way. Although the Medical Officers in the districts are primarily concerned with sanitation, which is an important subject of the promotive services of the Medical Department, the programme involves a number of other departments for its successful implementation. In fact, concerted efforts are being made by the field officers of various Government departments namely, Medical, Rural Works, Rural Development, Education and Agriculture for execution of public health and rural development schemes concerning maintenance and improvement of environmental sanitation, water supply, protection of the sources of drinking water from pollution etc. In order to fulfil the minimum needs a number of Rural Water Supply schemes have been implemented. In 1983-84, some 49 villages, 33 in West Siang and 16 in East Siang, were provided with water supply to the benefit of thousands of people. Whereas as on 31st March 1991, number of villages covered under Rural Water Supply Schemes was 137 in East Siang and 414 in West Siang District. Health education laying particular stress on improvement of sanitary conditions is imparted to the villagers by audio-visual means, display of posters in hospitals, health units, public places etc. Hygiene is specially taught in schools and care is taken to see that instructions for observance of cleanliness are followed by the students. The Village Level Workers of the Agriculture Department undertake periodical campaigns for maintenance of sanitation. Besides these, intensive measures, both curative and preventive, to check communicable and other diseases are taken through execution of public health programmes, such as NMEP, NSEP, T.B. and goitre control programmes, leprosy eradication programme etc. as stated earlier.

Nutrition

The basic diet consists mainly of rice, millets, maize, vegetables, meat and fish. Rice is the staple food of the people, particularly of those living in areas where wet-rice or terrace-rice cultivation is practised. Millets, maize and vegetables are generally grown in *jhum* fields. Sweet potato, yam, ginger, onion, mustard and chilli are also cultivated. They have a liking for various kinds of vegetables - potato, papaya, brinjal, beans, pumpkin etc. A large variety of wild leafy vegetables, roots, tubers, edible mushrooms, and fruits

are eaten to supplement the cultivated crops. "A favourite dish is prepared from young bamboo shoots, which are pounded up and stored in bamboo tubes until they ferment." Sugar-cane is cultivated in northern Siang. The people are fond of meat and fish. Their livestock includes mithuns, cattle, pigs, goats, and chickens. Meat and fish are often dried and stored for use. Most food is boiled, though meat may sometimes be roasted.

The Adis, in general, are not used to take milk. Of late, milk is being favoured, particularly by the advanced and educated sections of the people, who have developed a liking for tea with milk. The Buddhist tribes, the Membas and Khambas of northern Siang, are however, fond of milk which is used by them mostly as butter and ghee.

An indigenous beer, familiarly known as *apong* is an important drink. Prepared from rice, it is held in high esteem for its utility and food-value. The rice-beer-(*apong*) is not merely an alcoholic drink, it is indeed an essential item of food, taken by the people regularly for nourishment especially during social and ritual functions and festivals.

"The Department of Anthropology has made a dietary survey in the Siang Division which has shown that the Adi's food is richer in many respects than that of the average Indian peasant. It is said to contain 16 percent more calories, 17 percent more protein, 70 percent more calcium and 33 percent more Vitamin A. This is largely due to the rice-beer which supplements the ordinary food and is rich in protein and minerals. In spite of this, however, Dr. P.N. Sen Gupta has pointed out that the diet has a number of defects. 'For instance, the calorie intake is not in accordance with the climate, body-size and work; animal protein of high biological value is inadequate; because of the practice of smoking and drying meat, a considerable amount of useful protein is lost; and calcium is mainly supplied by the green leafy vegetables, the maximum value of which may not be derived by the system.' He adds that the very hard-working Adi women do not receive nearly enough energy-foods and may become inactive in their forties...

"The *apong* (beer) of the Adis has been studied by the Department of Anthropology which has found that, while the alcohol content is small, it enriches the nutritive value of the Adi diet approximately by 10 per cent of calories, 5.5 per cent of protein, 5.3 per cent of calcium, 11 per cent of phosphorus, 29 per cent of iron and 8 per cent of niacin, with the result that it has been found superior to the food of the average Indian peasant in all important nutrients."

Nutrition is one of the important promotive services rendered by the

Medical Department for public health development. The Rural Development Department has also undertaken a 'Special Nutrition Programme.' A scheme for providing nutritious food to children as well as pregnant and lactating mothers is underway. Supply of milk to school students has also been very beneficial.

CHAPTER XV

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Representation of the Districts in the State and the Union Legislatures

Under the provisions of the North-East Frontier Agency Panchayat Raj Regulation, 1967, as amended by the North-East Frontier Agency (Administration) Supplementary Regulation, 1971, a Pradesh Council was constituted in place of the Agency Council for the erstwhile North-East Frontier Agency (NEFA). The Pradesh Council consisted of:

- the member of the House of the People representing the North-East Frontier Agency,
- the Vice-Presidents of all the Zilla Parishads, operating at the district level,
- three representatives from each of the Zilla Parishads elected by the members thereof from amongst themselves, and
- three persons nominated by the Administrator to provide representation for such tribes or communities as have not obtained any representation in the Council.

The Pradesh Council had, *inter alia*, the function of discussing and making recommendation to the Administrator on proposals for undertaking legislation for the North-East Frontier Agency with respect to any of the matters enumerated in the State List or in the Concurrent List in the Seventh Schedule to the Constitution.

With the promulgation of the North-Eastern Areas (Reorganisation) Act, 1971, the North-East Frontier Agency has been constituted as an Union Territory and renamed as Arunachal Pradesh on and from January 21, 1972. The Pradesh Council continued to function till the enforcement of the Constitution 37th Amendment Act, 1975 from the 15th August, 1975 which provides for a Legislative Assembly with a Council of Ministers for the Union Territory of Arunachal Pradesh with 30 elected members. The Pradesh Council was dissolved and replaced by the Legislative Assembly, which started functioning from the 15th August, 1975 with the existing members of the Pradesh Council. 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 in Arunachal Pradesh also from the 15th August, 1975 provides two parliamentary seats in the House of People, i.e. Lok Sabha for Arunachal Pradesh.

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According to the provisions of the said Acts and the Order of the Election Commission regarding the delimitation of Assembly and Parliamentary Constituencies, the districts of East Siang and West Siang are represented in the Arunachal Pradesh Legislative Assembly by seven members, who are elected from the following single member territorial constituencies:¹

<i>Name of Assembly Constituency</i>	<i>Extent of Constituency</i>
1. Mechuka	Mechuka, Manigong and Tato Circles in the Mechuka Sub-division, and Payum Circle in the Along Sub-division.
2. Along North	Liromoba Circle and the villages in Along Circle lying on the east and north-east of Siyom river in the Along Sub-division.
3. Along South	Along town and Along Circle excluding some specified villages in the Along Sub-division.
4. Basar	Basar, Gensi and Likabali Circles in the Basar Sub-division.
5. Pasighat	Pasighat Circle in the Pasighat Sub-division.
6. Yingkiong-Pangin	Yingkiong Circle in the Mariyang Sub-division, Pangin and Boleng Circles in the Pasighat Sub-division and Tuting, Gelling and Singa Circles in the Tuting Sub-division.
7. Mariyang-Mebo	Mariyang Circle in the Mariyang Sub-division and Mebo Circle in the Pasighat Sub-division.

The two territorial Parliamentary Constituencies into which the Union Territory of Arunachal Pradesh has been divided for the purpose of elections to the House of the People or Lok Sabha are (1) Arunachal West and (2) Arunachal East. Of the above-mentioned seven Assembly Constituencies, Mechuka, Along North, Along South and Basar are included in the Arunachal West

1. Vide The Arunachal Pradesh Gazette, Extraordinary Issue No. 42, Itanagar, dated 5 November, 1975.

Parliamentary Constituency; and Pasighat, Yingkiong-Pangin and Mariyang-Mebo in the Arunachal East Parliamentary Constituency.

Political Parties

The political parties exercising influence over this area at different periods of time as reflected in the foregoing general elections are mainly the two National Parties-the Indian National Congress (I) and the Janata Party. These apart, the People's Party of Arunachal (later renamed as United People's Party of Arunachal or UPPA for an interim period) is a strong State party.

In the first ever Parliamentary Election held in Arunachal Pradesh in the month of March 1977 for constituting the sixth Lok Sabha, Shri Rinchin Khandu Khrame, a Congress candidate, was returned uncontested from Arunachal West Constituency; and Shri Bakin Pertin, an independent candidate, was elected from the Arunachal East Constituency, defeating his nearest rival, a Congress candidate, by a margin of over seven thousand votes.¹

In the first ever General Election to the Legislative Assembly of Arunachal Pradesh, held in the month of February 1978, there were in Siang two political parties in the field, the Janata Party and the People's Party of Arunachal (PPA), each contesting for six out of the total seven assembly seats. The two parties were in a straight contest for the Basar seat.

The results of the Assembly Election were as follows:²

Parties	Number of Seats Won	Name of Candidates Elected	Name of Constituencies
Janata Party	1	Shri Gegong Apang	Yingkiong-Pangin
People's Party of Arunachal	4	Shri Lijum Ronya Shri Tomo Riba Shri Suteam Tasung Shri Onyok Rome	Along North Basar Pasighat Mariyang-Mebo
Independent	2	Shri Tadik Chije Shri Boken Ete	Mechuka Along South

The total number of voters of the seven constituencies was 59,228 and the percentage of poll was 79.50

1. *Arunachal News* (Shillong, March 1977), Vol. 5 No. 10, p.7.

2. *Vide* (1) *The Arunachal Pradesh Gazette, Extraordinary Issue No. 59 and No. 61, Itanagar*, dated February 6, 1978 and March 9, 1978 respectively. (2) *Arunachal News* (Shillong, February-March 1978) Vol. 7 No. 1, pp. 1-2.

Momentous changes and developments in the political scene of the country in 1979 and defection of the members of Arunachal Pradesh Legislative Assembly led to the dissolution of the Janata Ministry of Arunachal Pradesh with the resignation of the Chief Minister Shri Prem Khandu Thungon on September 6, 1979. A new Ministry formed by the United People's Party of Arunachal under the Chief Ministership of Shri Tomo Riba was sworn in on September 18, 1979. But it was short-lived. After about one and a half months it stepped down following a change of party positions in the Assembly due to defection of the legislators. As a result, the Assembly was dissolved and the President's rule was imposed in Arunachal Pradesh on November 3, 1979.

In the mid-term General Election to the Legislative Assembly held on January 3, 1980, mainly two political parties, the Indian National Congress (I) and the United People's Party of Arunachal were in the election fray. Both the parties contested for all the seven assembly seats of Siang, and they were in straight contest in three constituencies, namely Along North, Pasighat and Mariyang-Mebo. The People's Party won four out of the total seven seats as previously in the 1978 assembly election. The results of the election were as follows:¹

Parties	Number of Seats Won	Name of Candidates Elected	Name of Constituencies
Indian National Congress (I)	2	Shri Talong Taggu Shri Gegong Apang	Along North Yingkiong-Pangin
United People's Party of Arunachal	4	Shri Tumpak Ete Shri Tomo Riba Shri Talo Kadu Shri Onyok Rome	Along South Basar Pasighat Mariyang-Mebo
Independent	1	Shri Pasang Wangchuk Sona	Mechuka

The total number of voters in the above constituencies was 65,179 and the percentage of votes cast was 77.28

A Congress (I) Ministry in the Union Territory was formed in January 1980 following the 1980 General Election, and Shri Gegong Apang, who was elected from the Yingkiong-Pangin constituency of Siang, was sworn in on January 18, 1980 as the Chief Minister of Arunachal Pradesh.

In the Parliamentary Election for constitution of the seventh Lok Sabha

1. *Source : Arunachal News, Republic Day Issue 1980, Vol 8 No. 9, pp. 12-13.*

held in Arunachal Pradesh simultaneously with the Assembly Election on January 3, 1980, the two seats of Arunachal Pradesh were both won by the Congress (I) candidates.

Shri Prem Khandu Thungon, the first Chief Minister of Arunachal Pradesh and formerly the Union Deputy Minister of Education, was elected from the Arunachal West Parliamentary Constituency. In a five cornered contest, he defeated his nearest People's Party candidate by a margin of over four thousand votes. The total number of voters in this constituency was 1,51,450 and the percentage of votes polled was 69.

Shri Sobeng Tayeng, formerly Minister of Agriculture, Rural Development and Co-operation, Arunachal Pradesh won the Arunachal East Parliamentary seat defeating his nearest People's Party candidate by a margin of over two thousand votes in a triangular contest. The total number voters in this constituency was 1,14,616 and the total percentage of poll was 68.

The next General Election for constituting a new Legislative Assembly as well as the eighth Lok Sabha was held in Arunachal Pradesh on December 24, 1984. In the Assembly Election in Siang, three political parties, namely the Indian National Congress (I), the People's Party of Arunachal (PPA), and the Bharatiya Janata Party (BJP) were in the field. The Congress (I) contested for all the seven assembly seats, while the PPA fought for five seats, and the two parties were in straight contest in four constituencies, namely Basar, Pasighat, Yingkiong-Pangin and Mariyang-Mebo. The BJP won one seat for which it fielded its candidate.

The results of the Assembly Election were as follows:

Parties	Number of Seats Won	Name of Candidates Elected	Name of Constituencies
Indian National Congress (I)	2	Shri Geong Apang Shri Todak Basar	Yingkiong-Pangin Basar
People's Party of Arunachal	3	Shri Doi Ado Shri Tapum Jamoh Shri Bakin Pertin	Along South Pasighat Mariyang-Mebo.
Bharatiya Janata Party	1	Shri Lijum Ronya	Along North
Independent	1	Shri Tadik Chije	Mechuka

The seven assembly constituencies had a total of 76,238 voters and the total votes polled were 61,243, the percentage of poll being a high 80.33.

In the 1984 General Election to the Arunachal Pradesh Legislative Assembly, the Congress (I) was voted to power. Shri Gegong Apang was

sworn in as the Chief Minister on January 2, 1985 for a second term.

In the Lok Sabha Election held in 1984, the Congress (I) and the PPA had contested for both the parliamentary seats of Arunachal West and Arunachal East, while the Janata Party put up a candidate only for Arunachal West constituency. The Congress (I) succeeded again in winning the two seats.

Shri Prem Khandu Thungon, the Congress (I) candidate, was elected from the Arunachal West Parliamentary Constituency for a second term. In a four cornered contest, he defeated his nearest PPA candidate Shri Tomo Riba by a margin of 461 votes. The constituency had an electorate of 1,83,170 voters and the percentage of votes polled was 76.71.

Shri Wangpha Lowang contesting as a Congress (I) candidate was returned from the Arunachal East Parliamentary Constituency. He defeated his nearest PPA rival Shri Bakin Pertin by a margin of over 19 thousand votes in a five cornered contest. The constituency had an electorate of 1,35,879 voters and the percentage of votes polled was 73.81.

In the 1990 general Election to the Arunachal Pradesh Legislative Assembly out of 7 Assembly Constituencies in East Siang had total number of electorate was 55,212 and votes polled 44,410 and in West Siang out of Assembly Constituencies the number of total electorate was 60,592 and votes polled 45,943. The percentage of poll were 98.65% in East Siang and 98.47% in West Siang district respectively. In this election also the Congress (I) was voted to power. Shri Gegong Apang was sworn in as the Chief Minister of Arunachal Pradesh for the third term.¹

The high percentage of voting in all the general elections held in Arunachal Pradesh so far is significant in that it reflects the political consciousness of the tribal people, their faith in democracy and their integration with the Indian body-politics. The people of Arunachal Pradesh exercised their franchise in 1977 for the first time. It was a late start for them compared to the electorate of the rest of the country. Their quick adaptability to the modern methods and concepts of election and active participation for formation of representative governments are remarkable indeed.

VOLUNTARY SOCIAL SERVICE ORGANISATIONS

The voluntary social service organisations functioning in Siang for welfare of the people, preservation and development of their traditional culture and for social progress may be classified under three broad categories, such as (a) social welfare organisation for women and children, (b) social and cultural development organisations and (c) organisations for tribal welfare. All these organisations are given grants-in-aid by the Government.

1. Source :- The Chief Electoral Officer, Arunachal Pradesh, Itanagar.

Social Welfare Organisation for Women and Children

Arunachal Pradesh Social Welfare Advisory Board: The Arunachal Pradesh Social Welfare Advisory Board, formed in 1963, has been executing various welfare programmes for women and children through Welfare Extension Project Centres (W.E.P.C) under the Border Area Projects known as Project Implementing Committees (P.I.C.). There are two such committees working in Siang, one at Along and the other at Pasighat. Each of the committees has a Chairman or a Vice-Chairman, who are women social workers rendering voluntary services. The work of a committee is supervised by a *Mukhya Sevika*. There were in 1984-85 nine W.E.P.C – five under the P.I.C., Along and located at Kabu, Pangkeng, Bame, Kombo and Likabali; and four under the P.I.C, Pasighat and placed at Yagrung, Ayeng, Damro and Telam. The centres are each staffed by a trained *Gramsevika*, a *Dai* and a helper, who are all paid for their services. The accounts of the centres are maintained by accounts clerks. The expenditure of the Social Welfare Advisory Board is shared by the Government of Arunachal Pradesh and Central Social Welfare Board, New Delhi.

The State Board follows the rules and procedures laid down by the Central Social Welfare Board in regard to schemes, projects and programmes.

The welfare programmes undertaken for implementation by the Welfare Extension Project Centres in Siang are, among other things, as follows:

(1) **Balwadis (Pre-Basic Schools) for Children :** The Balwadi attached to the W.E.P.C provides elementary education to children through recitation of nursery rhymes and English alphabet, demonstration of toys and numerical blocks etc. The Balwadi also gives nutritious food to the children once a day. Special care is taken by the *Gramsevikas* for the well-being of children. They also look after the bathing, cleaning and clothing of the children.

Nine Balwadis with a total enrolment of 675 children were opened till 1981-82.

(2) **Immunisation Programme :** The children in the balwadis are covered by this programme. The immunisation programme comprises T.A.B.C, B.C.G, Polio Vaccine and other primary medical cares.

(3) **Nutrition Programme :** The Supplementary Nutrition Programme sponsored by the Central Social Welfare Board and the Union Territory Government has been extended to the Balwadis. The number of beneficiaries under this programme was 620 during 1984-85.

(4) **Free Medical Aid to the Villagers :** Medicines are distributed freely by the trained *Dais* to patients in villages and W.E.P. centres. Maternity services, pre-natal and post-natal, are also rendered by the *Dais*.

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(5) **Social Education :** It is the duty of the *Gramsevikas* to deliver lectures to the villagers in a regular manner on personal hygiene, child-care, sanitation etc. Dramas of educative value are organised and staged.

(6) **Adult Education :** The *Gramsevikas* hold evening classes for education of adult women.

(7) **Craft Classes :** Various arts and crafts, such as weaving, sewing, tailoring, knitting, etc. are taught to the village women by *Gramsevikas*. 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.

(8) **Cultural and Recreational Activities :** The W.E.P Centres pay due attention to the cultural and recreational activities. Folk music and dance, sports and games are organised by the *Gramsevikas*. Besides these, important occasions, such as Republic Day, Independence Day, Children's Day and Vanamahotsava are celebrated in the centres.

(9) **Mahila Mandal :** In 1977-78, a Mahila Mandal or Women's Welfare Centre was formed at Pangin for establishment of Balwadis as well as adult education and craft classes for women. Subsequently, another such Mahila Mandal was organised at Along.

Under the training programme in 1977-78, the Board sent six local girls to the Kasturba Gandhi National Memorial Trust, Sarania, Gauhati for training in one year *Gramsevika* course. Six other local girls, as sponsored by the Board, were undergoing a six month course of *Dai* training at the Health Training and Research Centre, Pasighat.

Social and Cultural Development Organisations

Social and Cultural Societies : The social and cultural awakening of the tribal people, the Adis in particular, fostered under the welfare policy of the Government and the impact of manifold changes and developments which this territory has been undergoing since independence, is a fact of great importance. With an urge for preservation and revitalisation of their cultural traditions, arts and crafts, and also for general welfare, the people have come forward to form various voluntary organisations, of which the District Social Welfare and Cultural Society, Along and the Adi Cultural and Literary Society, Pasighat are renowned institutions at the district level. The activities of these societies include, among other things, cultural functions, publication of books on indigenous culture, religion, folk tales and music, holding of seminars etc. The cultural troupes of these societies stage dance, music and drama performances at different villages. The Adi Cultural and Literary Society, Pasighat has also an educational centre for needy children. This centre with boarding facilities for the children has been functioning with the

financial help received from the Government of India under a Centrally Sponsored Scheme.

Organisations for Tribal Welfare

Ramkrishna Mission : The social welfare activities and services of this noble mission are well known. The mission runs a model school at Along for general education - of tribal boys and girls. They also operate a mobile medical unit to give medical aids to the people.

Bharatiya Adimjati Sevak Sangh : This is an old institution working for the welfare of the tribal people in India. It has five centres in Arunachal Pradesh including one in Siang for education of tribal children. The institution extends its services for development of Khadi industries and beekeeping. It also imparts training in various crafts—weaving, knitting, cane and bamboo work, tailoring etc.

Gharmora Model Satra : This old institution of North Lakhimpur, Assam has been rendering its services for spread of education amongst the tribal people of this territory. In Siang it has a sub-centre near Likabali, where a Middle School has been functioning under its management. A number of students from Arunachal Pradesh read in this school.

Chungi Lote : This tribal organisation at Dipa in the Likabali circle along the foothills has been striving for revival of the indigenous art of weaving amongst the local Adis. For this purpose, a weaving centre has been established here with ten girl stipendiaries and an instructor.

CHAPTER XVI

PLACES OF INTEREST

Introductory

Siang is sometimes lovingly referred to as the heart of Arunachal Pradesh, because it occupies the central part of the State and also an unique position from all other points of view. Both the districts of East Siang and West Siang are watered by the river Siang known as Dihang. The Siang is the artery of the river system of this region, which forms the upper course of the great river Brahmaputra. The Siang and the other major river the Siyom with countless streams and their many tributaries rumbling and cascading down the snowy mountains and the wooded hills endow the countryside with a splendour of natural beauties. "The scenery of Siang is of unusual beauty. I have travelled by both banks of the Siang, the fabulous Tsangpo of the early explorers, all the way from Pangin to Gelling, and I shall never forget the great winding river, the forest-clad hillsides and the snow-clad mountains of the north. The Siyom Valley is almost as beautiful, and the Sike River which flows into it, leads into the hills of the Boris, one of the most good-looking and picturesque tribes in NEFA".¹

The hard life in the hills on the one hand and the bounties of nature making the country lovely and splendid on the other have had their influence on the character and temperament of the people. They respond to the challenge of nature fearlessly, and they are lovers of art, dance and music, of strong and beautiful things. The Adis of Siang are generally plain-spoken, occasionally rude, proud and daring and at the same time they are friendly, co-operative and a progressive community as a whole. To the extreme north of Siang along the international boundary live two gentle Buddhist tribes, the Membas and Khambas. "The Khambas of the romantic and sacred Yang Sang Chu Valley have maintained their remarkable dances, as have the Membas of Gelling and they are now beginning to rebuild their shrines and temples which had fallen into a deplorable state of dilapidation."²

Siang with its beautiful hillsides and river valleys inhabited by a galaxy of tribes is charming and attractive in many other ways as well. A journey to this mountainous country is no longer difficult and hazardous as it was in the British days. Most of the administrative headquarters and important places have been linked by a network of roads. Here one would see today the great endeavours for all-round change and development which has been going on, a

1. Verrier Elwin, *A Philosophy for NEFA*, (Shillong, 1964), pp. 20-21.
2. Verrier Elwin, *A Philosophy for NEFA* (Shillong, 1964), p. 20.

process of socio-economic transition whereby the tribes are making headway towards a better life. Towns with modern facilities, developing villages and flourishing trade centres have sprung up throughout Siang. A good number of places have been electrified and rural electrification is under way. Literacy is spreading to remote villages. Changes are visible in all spheres of life, and to see this changing face of an erstwhile inaccessible, neglected and undeveloped county is a matter of great interest.

Places of Historical and Tourist Interest and Pilgrim Centres
Akashiganga

On way to Along from Likabali, there is a sacred place, about 25 km from the nearest railhead at Silapathar in Assam, hallowed as Akashiganga. The name Akashiganga is suggestive of a water channel in the hill. It is believed that this place is associated with the legend narrated in the Kalika Purana (c. 8th Century A.D.) that where the corpse of Sati (Parvati) was cut into pieces by Vishnu with his discus at the refusal of Siva to part away with it, her head fell somewhere near Akashiganga. The place is, therefore, held in high esteem as a *pithasthan* where the devoted Hindus on pilgrimage take holy dip in a nearby water-pool formed by a falls.

The place provides a magnificent bird's-eye view of the Brahmaputra glimmering far below.

Malinithan

Among all the archaeological sites in Arunachal Pradesh, Malinithan, a place of high sanctity, is the most ornamental and sublime. Set on a mound of about 60 meters high, overlooking the vast stretch of the Brahmaputra Valley, Malinithan is situated near the Arunachal-Assam border at a point where the plains end and the hills begin. It is only one kilometre east of the circle headquarters at Likabali in the West Siang District and about five kilometres from Silapathar in Assam. Linked by rail and road communications Malinithan is easily approachable.

Like many other sacred places in the north-eastern region, Malinithan is also associated with the Krishna legends. According to the tradition, Krishna and Rukmini, daughter of King Bhismak, took a rest at this place on their way to Dwaraka from Bhismaknagar.¹ They were received cordially by Siva and his consort Durga (Parvati) as guests. Durga garlanded them with choicest flowers. At this, Krishna, in praise, addressed her as Malini (mistress of the garden). Since then, the place came to be known as Malinithan or Malinisthan—the seat

1. In the present Dibang Valley District of Arunachal Pradesh there are ruins of an extensive fort known as Bhismaknagar.

of Malini.

Relics of stone images of Malinithan littered all over the mound came to notice from the early twenties of the present century. In course of a series of excavations beginning from 1968 and ending in 1971, ruins of temples and valuable sculptures were unearthed at this site. Beautifully designed and decorated basement of a temple, divine images, icons of Hindu deities, fine sculptures with animal motifs and floral designs, broken columns and panels with carvings were among the huge mass of stony remains, which were dug out as if from a 'buried treasure'.¹

The fame of Malinithan as a holy place must have spread far and wide in early times. It is still a place of worship, and draws a large number of visitors and pilgrims.

Mankhota

Mankhota is a village in the Singa circle of the Tuting Sub-division. Situated at an altitude of 1120 metres in the Yang Sang Chu Valley, the village is inhabited by the Khambas, who are Buddhist by religion.

Mankhota is famous for its old *gompa* (Buddhist monastery) decorated with religious paintings.

OTHER IMPORTANT PLACES
EAST SIANG DISTRICT

Mariyang

Mariyang is an important administrative centre to the northern part of the district, is situated along the river Yamne at an approximate altitude of 1067 metres and a distance of about 78 Km from Pasighat.

Connected by road and postal communications Mariyang is inhabited by a grand population complex of the Adis, namely the Minyongs, Milangs, Shimongs, Padams and Karkos.

The climate of the place is moderate and salubrious. Mariyang has, among other things, a health unit and a sub-divisional library.

Mebo

Mebo, a circle headquarters in the Pasighat Sub-division, is situated in the extreme south-east corner of the district, 14 km away from Pasighat by road.

Mebo is a renowned village of the Padams, occurring repeatedly by various names, such as Membu, Mimbo, Membo etc, in the British records of the 19th century.² An administrative circle with Mebo as head quarters was constituted as early as 1952.

1. See Chapter II for a detailed account.

2. See *India's North-East Frontier in the Nineteenth Century*, (London, 1962) by Verrier Elwin, pp. 231-277.

Father N.M. Krick, a French missionary and explorer who visited Mebo in 1853, gave a description of the place as follows:

"Then I cast a long parting glance towards the village of Mimbo which I was so sorry to leave.

"The village was situated at a height of 600 ft. above the plains of Assam, and spread out on the curved flanks of a magnificent mountain, that was encircled by a belt of peaks rising to a prodigious height. To the west rose the sacred Orega peak, the rendezvous of all the spirits of the country. The small river Sikan flows from East to West along the foot of the mountain. Towards the South, the eye rests on the smooth plains of Assam, where the famous Siong or Dihong of the Assamese shoots up, reflecting the rays of the sun across the sky."¹

Today, Mebo is an electrified village having a High School, a Government Library, a Health Unit, a Post Office and a Candle Factory.

Pangin

The most impressive feature of Pangin is its beautiful riverscape. It stands at a point where the two major rivers, the Siang and the Siyom, meet and mingle together.

Situated at a distance of about 75 km from Pasighat and linked by road and postal communications, Pangin is a circle headquarters in the Yingkiong Sub-division. An administrative centre was first opened here in 1952. The Minyongs constitute the bulk of local population.

Pangin has a High School, an orphanage, a health unit and small-scale industries.

Pasighat

Pasighat derives its name from the Pasis. It has the distinction of being the first place in Arunachal Pradesh in many respects. The first administrative centre was opened at Pasighat in the year 1911, it is the first town built up, its population numbering 9,139 is the largest of all the present towns of Arunachal Pradesh according to the 1981 Census, the first college was established here in 1964 and so on. Pasighat was the headquarters of the erstwhile Abor Hills District for about four years from 1948 till the headquarters were shifted to Along in February 1953.

Pasighat was greatly damaged and partly devastated by the great floods of the fifties. It has, however, survived the havoc and been rebuilt and developed.

The town of Pasighat spreads over a strip of plains on the right bank of the river Siang, which is wide, affluent and navigable in this area. The town is fringed on the one side by some undulated hillocks, on which the office

1. *Ibid*, p. 241.

quarters are situated. A splendid panorama of the great expanse of the Brahmaputra Valley to the south and the stretch of plains of the Mebo area to the east is visible from the higher elevations of the town.

Lying at an altitude of about 150 metres in the level area of the lower region extending to the plains of Assam, Pasighat is well connected with the rest of the country by road. It is only 38 km away from the nearest railhead at Murkong Selek in Assam.

The climate of Pasighat is hot and humid in the summer and temperate in the winter. It receives an average annual rainfall of 539 cm.

The importance of Pasighat as the headquarters of the newly formed East Siang District and the centre of higher education in Arunachal Pradesh and also as a flourishing trade centre has drawn towards it a moderately large and mixed population composed mainly of the local Pasis and the other Adi tribes, namely the Minyongs, Gallongs and the Padams. Pasighat is growing with all the facilities of a modern town, such as a network of surfaced roads for vehicular traffic, electric illuminations, water supply, a big and permanent market with all types of shops, health and educational services etc. It has, among other things, a Higher Secondary School, Post Office with telegraph facilities, telephone exchange, a general hospital, a branch of the State Bank of India, a district museum and library etc. Besides the premier educational institution of Arunachal Pradesh, namely the Jawaharlal Nehru College, the important institutions of the Gramsevak Training Centre, the Farmer's Training Centre and the Health Training and Research Centre are also situated at this place.

Many small-scale industrial units have been established in and around Pasighat. Apart from a craft centre, it has rice and saw mills, soap and candle works, ice cream factory, printing press etc. A Light Roofing - Sheet Factory with a production capacity of 50 sheets per day set up recently is a major industry.

Yingkiong

Yingkiong is an important Sub-divisional headquarters lies 158 km north of Pasighat between the river Siang and the headwater of the Yamne. The local people are the Shimongs and the Minyongs. The administrative centre was first opened here in 1959.

Yingkiong has a Higher Secondary School, a health unit, a craft centre, a Post Office and small industries. The place is connected by road.

WEST SIANG DISTRICT

Along

Along, the headquarters of West Siang District, is a famous place in Arunachal Pradesh. It was formerly the headquarters of the abor Hills District

from February 1, 1953 to January 25, 1954 and also of the Siang Frontier Division from January 26, 1954 and renamed Siang District from 1965, till the district was divided into two new districts, namely East Siang and West Siang, with effect from June 1, 1980. Along was constituted as an administrative centre originally in 1948. It is now the headquarters of not only the newly formed district, but also of the Along Sub-division and Along Circle.

Set in a wide open valley where the river Sipu merges with the Siyom against the background of near and distant hills all around. Along is a beautiful town linked by road, air, post and telegraphic communications. Its nearest railhead is Silapathar in Assam at a distance of 144 km.

Situated at an altitude of about 350 metres, Along enjoys a moderate climate. The winter months are pleasant. It receives an average annual rainfall of 210 cm.

The main segment of the town population of 8,074 as enumerated in the 1981 Census is constituted by the Gallongs. The Minyongs also form a conspicuous section of the population.

Along extends over an undulated area, which is divided into several sectors inter-connected by a network of roads and lanes. With all the ancillary facilities of a developing town, Along has a telephone exchange, a beautiful circuit house, a Higher Secondary School, a general hospital, a craft centre with emporium, a government agricultural farm, a branch of the State Bank of India, a district museum and a district library. The Ramkrishna Mission School of Along is a model institution. Its Donyi-Polo Dere is an architectural beauty. Its permanent and flourishing market meets all the needs of an urban population. Besides these, Along has two fish ponds and a mini zoo.

Along by night with hundreds of its electric lights flickering and glowing over the broad valley looks like a wonderland from the top of the hills.

A number of small-scale industries have sprung up in this place. A fruit processing plant has been set up at Nigmoi (Doji) village 16 km from Along.

Basar

As an administrative centre since 1955, Basar is a well-known place. It is now a Sub-divisional and also a circle headquarters, situated on the Along-Likabali road, about 51 km south of Along. The Kedi, a stream, is flowing through Basar.

Lying at an altitude of about 650 metres, Basar has an average rainfall of 227 cm. The climate is typical of the lower hills, salubrious and moderate.

Basar is a developing township. It has a Higher Secondary School, a health unit, a Post Office with telegraph facilities, a sub-divisional library and some small industrial units. It has also the amenities of electric lights,

inspection bungalow, shops etc. The State Bank facilities have been extended to Basar.

The local people are the Gallongs. Permanent rice cultivation and multiple cropping in the Basar area are being successfully practised by the progressive farmers. Basar has also assumed importance for tea plantation, which was started on an experimental basis.

Gelling

Gelling is a circle headquarters to the extreme north of the district along the international boundary. An administrative centre was first opened here in 1951.

Situated at a high altitude of 1829 metres, Gelling receives an average annual rainfall of 290 cm. The local people are the Membas.

Gelling merits a special mention as a place of interest for the fact that the great river Brahmaputra known in Tibet as Tsangpo enters India east of Gelling, cutting through a deep gorge, where it is called Dihang, or by the Adis, the Siang.

There are, among other features, a health unit and a Post Office at Gelling.

Liromoba

Liromoba, a circle headquarters in the Yomcha Sub-division, is about 90 km west of Along. It is known as an administrative centre since 1959. The circle population is constituted mainly by the Gallongs.

Linked by road, Liromoba has a craft centre, a Middle School, a health unit and a Post Office.

Manigong

Manigong, a circle headquarters in the Mechuka Sub-division is situated at an high altitude of 1829 metres at a distance of about 177 km north of Along. It was constituted as an administrative centre originally in 1956.

Surrounded by hills and mountains, Manigong lies near the international boundary where a tributary of the river Siyom is flowing by. Formerly, the Bokars of this area had regular trade relationship with Tibet. In spite of its remoteness, Manigong has a Post Office, a health unit and a Middle School.

Though intensely cold in the winter, Manigong enjoys a salubrious climate. The average annual rainfall is 145 cm. A strong wind blows over this area, usually after the winter.

The vicinity of Manigong is attractive for its scenic beauties, which offers a wonderful view of the magnificent snow-capped mountains.

Mechukha

Of all the administrative headquarters of Siang, Mechukha stands at the highest altitude of 1890 metres. It lies in the extreme north-west corner of the

district, about 173 km away from Along.

"The name Mechukha came from the village Mechukha where the subdivisional administrative centre was located. The word "Mechukha" can be split up for its meaning. Though its exact meaning is not available, there are three widely believed theories. 'me' meaning medicine, 'chu' meaning water, 'kha' meaning mouth/snow. (while pronouncing it, the local Membas pronounce with a nasal sound as in 'men').

"So one meaning is, it is a place on the side of medicinal water. The second theory is that it was called Banja Shingri which means "hidden heaven". This may be due to the panoramic view of the valley. The third theory is that the place was known as Ne nang which means "a place of pilgrimage".¹

Mechuka, a sub-divisional as well as a circle headquarters, is inhabited by the Membas and the Ramos. The administrative centre at this place was opened as early as 1951. Mechuka is developing into an electrified township. It has a High School, a craft centre, a health unit, a Post Office, a sub-divisional library and an inspection bungalow. There are old Buddhist gompas (monasteries) in the vicinity of Mechuka.

The average annual rainfall of the place is 110 cm. The winter months are extremely cold, but the climate is on the whole salubrious and pleasant. The area witnesses occasional snow-fall in the cold season.

Situated in a flat river valley in the midst of hills dressed in coniferous pines and adorned with a lovely seasonal flowers blossoming in a wild colourful profusion all around, Mechuka is a place of supreme beauty. The mountain scenery is majestic. The view of its adjacent hills gently ascending to the pinnacle of the snow-covered Eastern Himalayas delineating the watershed between India and Tibet (China) is serene, unforgettable and glorious.

Tuting

Tuting, a sub-divisional as well as a circle headquarters, is an important place. It was constituted as an administrative centre in 1953. It has a mixed population composed mainly by the Ashings, Membas and Shimongs.

Tuting is situated along the river Siang, about 201 km due north of Along. Ideally placed at an altitude of about 590 metres, Tuting enjoys a temperate and pleasant climate. The average annual rainfall is 364 cm.

The township of Tuting is having electric lights, post and telegraphic facilities, a health unit, a craft centre, a High School, a sub-divisional library and an inspection bungalow. Besides these, it has a government agricultural farm and small industrial units.

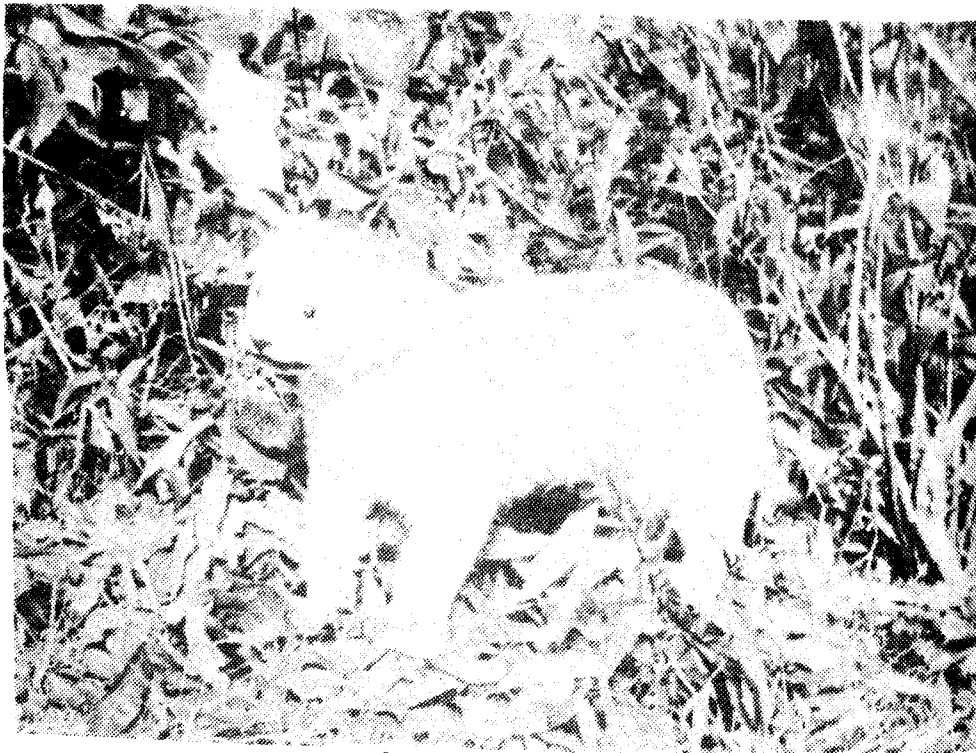


1. A snow-capped mountain



2. An Adi village

1. M.M. Dhasmana, *the Ramos of Arunachal*, (New Delhi, 1979), p. 18.



3. A Jungle Cat



5. Stone Sculpture in Mallinithan.



4. The Indian Elephant



6. Terrace cultivation



7. Wet-rice cultivation



8. A group of the Boris



9. Kebang of the Gallongs



10. A class room



11. Memba girls in carpet making



12. Girl trainees in a C.I.P.T.C



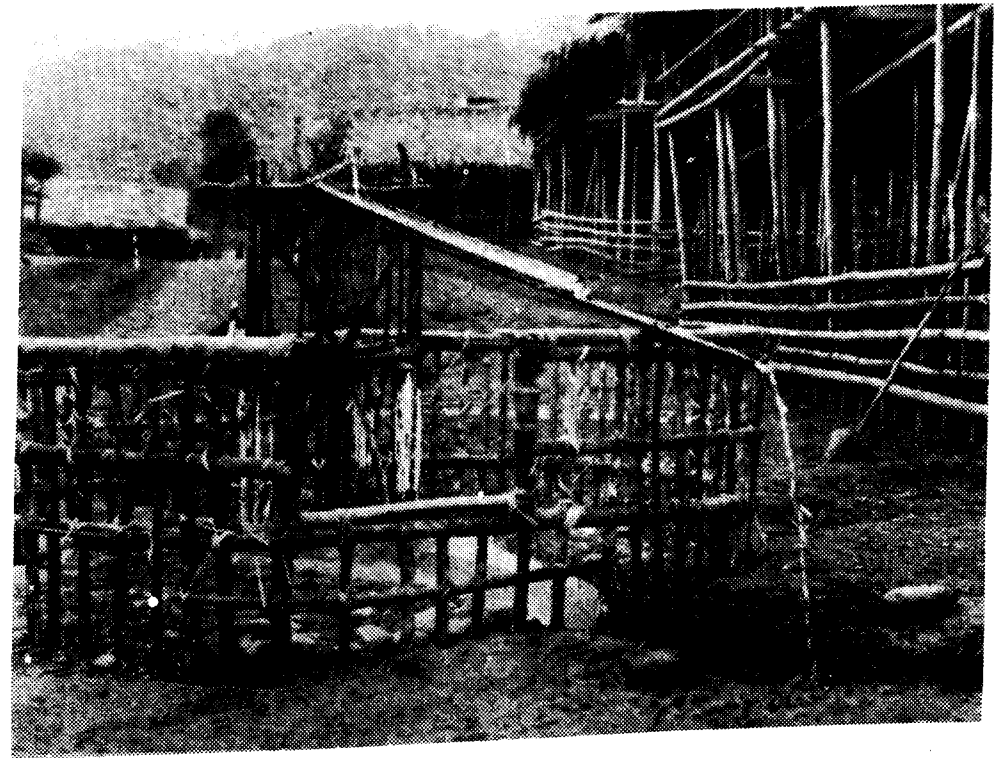
13. Punung dance of the Gallongs



14. War dance of the Gallongs



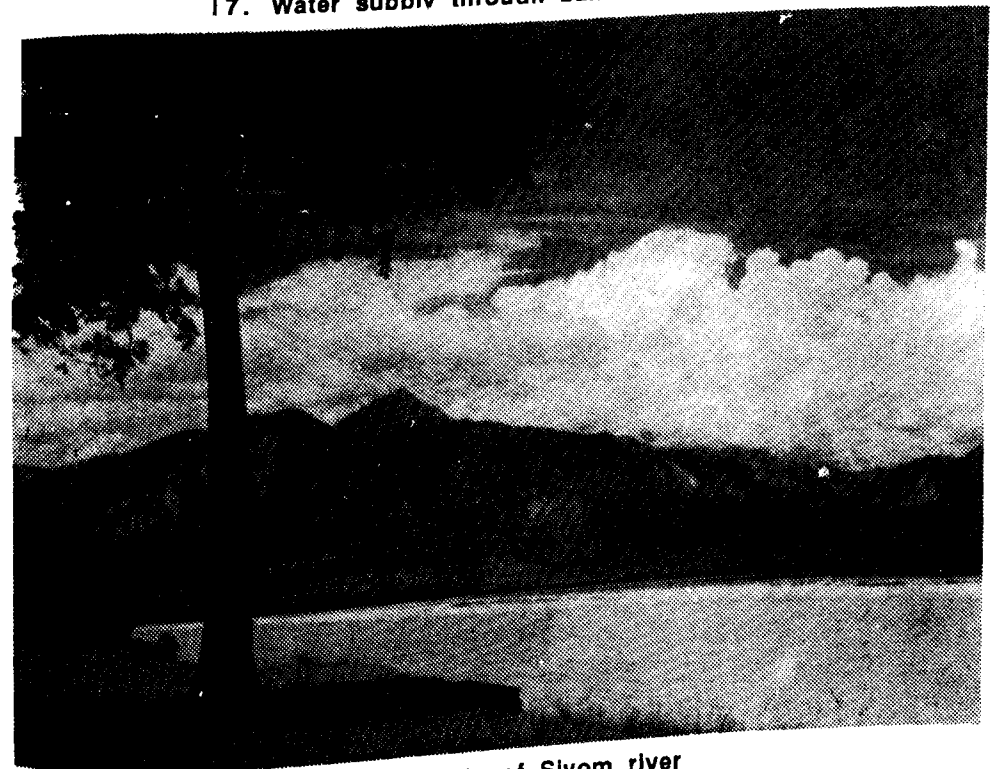
15. Mask dance of the Membas



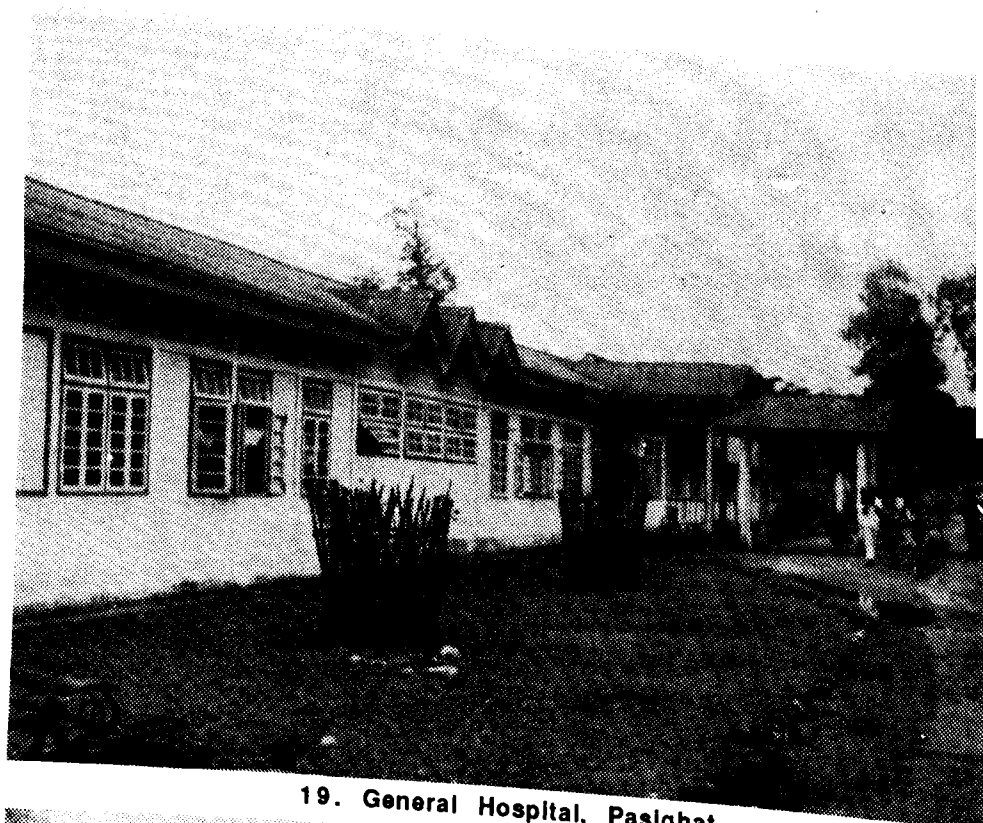
17. Water supply through bamboo pipes



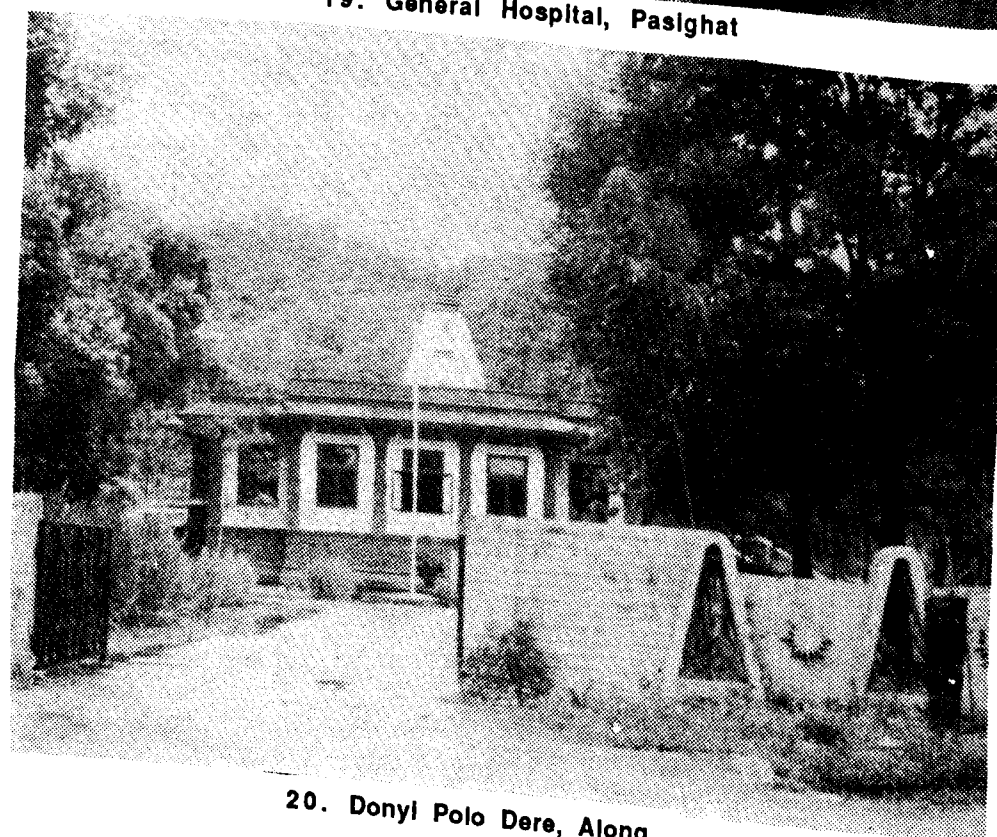
16. Front view of Jawaharlal Nehru College, Pasighat



18. Scenic beauty of Sliom river



19. General Hospital, Pasighat



20. Donyi Polo Dere, Along

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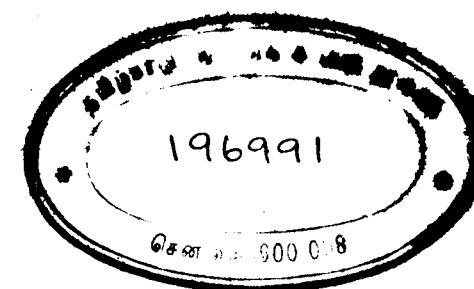
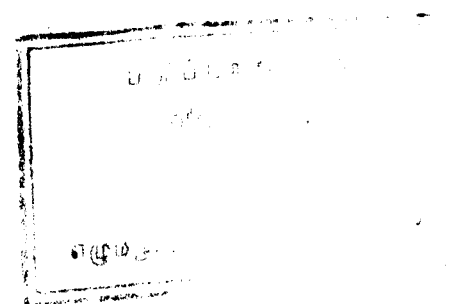
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