

PAKAM
Socio-Economic Survey
of
A Gallong Village in Arunachal Pradesh

Indian Village Studies :
Village Survey No. 13

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Socio-Economic Survey
of
A Gallong Village in Arunachal Pradesh

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P R E F A C E

The present first point village survey Report is the 13th in the series of the village surveyed by this Centre. The field investigation of this village was undertaken in January - February 1970-71 and data in the report relate to the year preceeding the field work.

The village Pakam is situated near Along town the headquarters of Siang District of Arunachal Pradesh. All the inhabitants of this village belong to Gallong tribe, a notable sub-tribe of the 'Adis'.

The village Pakam represents tribal society in transition. Although majority of the villagers adhere to shifting cultivation as the principal source of income, some of them have also taken up settled farming. Introduction of H.Y.V. of paddy in hilly village like Pakam is another important development in economic field in recent years. Certain important changes in other aspects of their socio-economic life are also noted.

Like all other studies of this Centre, the present one is also a joint product under the general supervision of the Director. The name of the research staff associated with the project is mentioned in the study team given at the beginning of the report. Of the two authors Sri Barkataky contributed capters III and IV and Sri P.C. Dutta , chapters I,II,V and VI. Dr.P.D.Saikia, Research Officer in this Centre edited the report. Sri K.N. Bordoloi Senior Computer supervised typing and duplicating the report. The report was typed by Sri K.C. Borah and Sri M.C. Dutta. The work of mimeographing was done jointly by Sri N. Deka and Sri T. Chetry. I am thankful to all my colleagues for their help in preparing the report.

My thanks are also due to the Director of Agriculture, Arunachal Pradesh who rendered necessary help for field investigation. The District Agricultural Officer and Sri S.N. Borgohain, Agricultural inspector, and many other persons in the staff of the office of the

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I am thankful to all of them for their kind help.

I also offer our gratitude to the villagers of Pakam who extended their full cooperation in field investigation to our staff.

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September

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CHAPTER I

Introduction :

1. Location of the Village :

1.1. The village Pakam, is situated in the North-western part of Along Town, the district headquarters of the Siang Frontier District of Arunachal Pradesh. The village is inhabited by people belonging to the Gallong tribe! The distance to the village from the Along town is only 2.5 K.M. One can reach Along town by covering a distance of 140 K.M. of Zig-Zag hilly road from Likabali, a small railway Station of Lakhimpur District of Assam. As the area where the village Pakam situated is like a plateau, the village has less sloping and less rocky land in comparison to other Gallong villages. The river Siang, is the biggest in the region, runs by the side of the village.

2. Climate and Rainfall :

2.1. The whole Siang frontier District witnesses two seasons in a year. One is rainy season from March to September and other is winter season from October to February. Heavy rains start from May and it continues upto the end of August. The highest rainfall is recorded in the months of May to July. During this season the hills are covered with carpets of fogs and clouds making the range of human vision very limited. Cold winds start blowing by the end of October making the climate very hilly upto February.

3. Transport and Communication :

3.1. Being a hilly region the transport and communication system in Arunachal Pradesh is not well-developed. But the people of Pakam can enjoy the road transport facilities available to Along town. The village is connected with Along town by a jeepable road. In rainy season a part of the road

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1. The Gallongs, an important tribe of Arunachal Pradesh are the inhabitants of Siang District. There are a few Gallong villages in Subansiri District also.

becomes muddy and slippery and during this season not to speak of wheeled vehicles, even for pedestrians it becomes impossible to walk on this road. The road was opened by the Deputy Commissioner of the district. As it was opened in the Gandhi centenary year it was named as "Mahatma Gandhi Road". Future extension of Along town would, no doubt, improve transport and communication system in the village. Generally the villagers carry loads on their back to the field and to the market.

4. House Type :

4.1. The Gallong live in long houses which are constructed on a bamboo platforms raised above the ground by 5 or 6 feet. Almost all the houses are identical in construction, but they vary in size. Houses are usually long like a hall and have no partition inside. The houses have bamboo platform raised on wooden pillars, split bamboo walls and roofs are covered either with thatch or straw or palm leaves. The housing materials are collected from nearby forests free of cost. Generally one residential house is built even for several joint families. In every house two entrances are usually kept, one in front and the other on the right or left hand side wall, approached by two wooden ladders. The two entrances are separately meant for men and women. Women enter the house by the side entrance and men by the front one. In no case women are allowed to use the front entrance which is meant solely for men. If by mistake a woman uses the man's entrance she would have to face a shower of rebukes and scolding from the elders and of the family. But men can use the women's entrance in some cases. They usually do not keep window in the house.

4.2. The Gallongs do not have to bear any major cost in construction of their dwelling houses. Housing materials are collected from the nearby jungles by the owner himself. When all such necessary materials are collected, the owner invites the villagers in a particular day to construct his house. The villagers collectively build his house in a day or two when asked for. For such works the owner gives them a feast with meat and rice beer. The nature and quantum of this feast depends largely on the economic condition of the

owner. The villagers do not demand anything from the owner beyond his capacity. As the Gallongs of Pakam do not shift their residences along with their jhum farms, their dwelling houses are of permanent nature to a great extent.

4.3. The main fire place usually exists in the middle of the house. All household affairs like cooking, sitting and sleeping etc. centre round this main fireplace. There is no partition inside and all members of a family sleep beside the same fire place without any privacy. Often a fire place is kept in the outer open platform of the main entrance which is meant for guests and visitors coming from other villages. This place is generally used as resting place in the day time for the family members.

4.4. The Gallongs generally construct their granaries in the outskirts of the village in order to save the grains from incidental fire or the damage done by fowls. Pigsties are constructed below the platforms of dwelling houses and the pigs kept in these pigsties do the scavenging of the latrine. Cattle and poultry birds are also kept below the platform.

5. Food :

5.1. Rice is the staple food for the Gallongs. Besides, a small quantity of millet and maize is used, as staple diet. A considerable portion of rice and a major portion of millet are devoted to the preparation of beer (Apong). Rice beer is a popular drink and it is taken in all occasions by all age groups without any social restriction. Even the small children are given this drink. It is generally used as a substitute for water. Milk is generally not used by the Gallongs.

5.2. The Gallongs are habituated to taking boiled diet. Besides rice, boiled vegetables, pumpkins, brinjals, gourds and jungle roots are commonly used by them. They take meat and fish in large quantity. Meat and fish are usually boiled with chillies and salt. Roasted meat and fish are very delicious items of their diet. But due to proximity of the village to the town and the close contact with the outsiders,

some enlightened families uses mustard oil in preparation of some of its items of diet. Even ghee is also being used by a few of them.

5.3. Tea is being popular but they generally take it without sugar or milk. As intoxicant, tobacco is both chewed and smoked in pipes. Tobacco is locally grown and sometimes it is purchased from the local market. The use of opium is almost nil as it is strictly prohibited by the Administration. The Gallongs are very fond of chewing betel nuts and betel leaves. Betel-nuts or leaves are not locally grown and hence they are to spend a considerable amount of their income in purchasing them.

6. Dress :

6.1. The Gallongs generally uses scanty clothes. Little boys and girls upto the age of 10 go naked. Grown up girls and women put on a skirt (Jesek) which is locally manufactured. Even well-to-do family in Pakam has got a handloom for manufacturing different dresses. Men use a skirt locally known as 'lalik' and it is also woven at home. Mill made fibers are generally used for preparing their dresses.

Few educated boys and girls of Pakam were seen using shirts, garments and blouse etc. of modern fashions at the time of investigation.

7. Marriage :

7.1. Child marriage is prevalent among the gallongs. Polyandry is a popular form of marriage among the Gallongs. It is not due to scarcity of women in their society but due to heavy bride-price. In economically depressed families generally the eldest brother among several brothers is married to a girl and other brothers too can exercise sex-right over her. As she is socially bound to allow other brothers to have sexual intercourse with her, she practically raises no complain regarding this. But the children born to her would be named after her actual husband. In an economically sound family with several brothers all of them can afford to have a wife for each. In exercising sex right over the married women no differentiation is generally made between elder and younger brothers.

A rich man, however, can marry more than one wife. To have a second wife the permission of the first wife is sought. The first wife also generally does not object to it as it is a process of collecting more capable labourers for jhum cultivation. In a polygynous family the eldest wife is put in overall charge of household affairs.

7.2. Marriage is also sometimes performed by exchange. Two young men having sisters may usually exchange their sisters and thereby enabling them to have a wife without much cost. There are some cases of marriage by elopement. In the Gallong society one who cannot pay the required bride price can never hope to have a wife of his own.

7.3. After death of the husband the widow is to live in the house of the deceased. Such a widow is inherited by the unmarried younger brothers of the deceased. If she is not agreeable to this she wishes to marry an outsider, the bride-price paid to her family originally required to be returned by her parents in toto.

7.4. Sometimes marriage negotiation is made between two parents before child birth. It is called 'Nap-Nida' in their dialect. According to this system two persons enter into marriage agreement in anticipation that one's son will marry the other's daughter in future. But this system might create some problems when the wives of both the persons entering into agreement give birth to female child. One such happening was found in Pakam at the time of investigation. Two friends settled up that the son of A will marry the daughter of B. At that time both the wives of A and B were pregnant. Unfortunately, both the women gave birth to female child. Moreover, A had no male child for a long time. When B's daughter Rekki was 15 years old. A brought her home and allowed her to live there with his elder brother's son Dagia. From this union one son and one daughter were born who were named after Dagia. Suddenly, Dagia met premature death. After the death of Dagia, Rekki was kept with a younger brother of Dagia and from his side too a male child was born to her. After all these happenings, A's wife gave birth to a male child Kambo, for which all the arrangements so far made had been altered. Then Kambo was considered as the actual so-ciological father and woman

with all her children were brought under his care. The names of three children were changed to the name of Kambo. These children are older than their father. At the time of investigation the father and the eldest son were seen quarreling with each other and at that time their respective ages being 9 and 12 years respectively. We were very much amused to see the quarrel between the son (12 years) and the father.

7.5. Bride price is paid before the marriage is performed. Bride price generally consists of mithuns (wild buffalo), cows and brass bowls. Minimum of one mithun, one cow and a brass bowl are paid as bride price. Sometimes 10 or 12 mithuns are demanded by bride's parents. The value of one such mithun in their society varies from Rs.1000.00 to Rs.2000.00. It is not possible for a poor family to marry a girl by giving such heavy bride-price.

7.6. On the day of marriage some relatives of the groom (but not the groom himself) would go to the bride's house and they would take the properly dressed bride with them to the groom's house. At the bride's home a little ceremony is performed and in that ceremony the priestess (nyibo) involves the deities and spirits for the welfare of the bride when she goes to the bride-groom's house. Some people from the bride's side would come with her. On the way back the bride's party is entertained several times from the groom's side with meat and rice beer (Apong). At last when the party reaches the groom's house they are given a feast of rice, meat, beer etc. Villagers and relatives of the groom also take part in this feast. Such a feast is usually very costly. At night the wedded couple sleep together but they are not permitted sexual intercourse on that night. After this, the married girl goes back to her parent's house and occasionally she visits her husband for sexual union. This process will continue until a child is born to her. After the birth of the first child she comes to live with her husband permanently.

7.8. Divorce is not common among them. The only cause that leads to divorce is adultery. In this case if the adulterer wishes to marry the woman he can marry her by paying the entire bride-price paid by her aggrieved husband. Barrenness of the wife may also lead to divorce. In this case also the husband would

get back the entire bride-price, if he demands, because barrenness is considered as fault of the woman alone.

8. Religious beliefs and Practices :

8.1. According to the Gallong tradition 'Jimi' is the supreme power and he is the creator of ruler of this vast Universe. At his command 'Doini and Polo' give light and heat to the universe and they watch on all the activities of human beings. They are judges of all activities of human beings and give rewards for good activities and impose punishment for the bad ones.

8.2. Gallongs believe in a number of Gods and Spirits and worship them according to the forms and manners prescribed by the 'Nyibo' (Priest). In order to cure various diseases like cholera, malaria, pox etc. and even to eradicate pests and diseases of crops they take help of various sacrifices of pigs, fowls etc.

8.3. At the time of sickness they call on the 'Nyibo' who diagnoses the disease and prescribes the necessary sacrifices for the cure of the illness. The Nyibo is generally supposed to possess some supernatural powers and with the help of such powers he determines the cause and offers sacrifices to various spirits and deities. The 'Nyibo' gets lucrative fee for the services he renders to the villagers.

8.4. Now-a-days some enlightened families particularly in some sub-urban areas, take help of medical treatment at the time of sickness. Some such enlightened families of Pakam were seen frequently visiting the Government Civil Hospital at Along town for treatment.

8.5. They believe in dreams as forecaster of future happenings. The bad effects of dreams are remedied by sacrifices. Injury in any part of the body in the dream indicates death of family member and dreaming of small fishes results in plenty of crops in the field.

8.6. The Gallongs have got firm belief in some folk-sayings. If it rains on the day of marriage the conjugal life of the wedded couple would not be happy. If the aircraft carrying some VIP fails to land at Along due to bad weather, the Gallong believe that such a person would meet premature

death in immediate future. To prove this saying they cited instances of Jawarharlal Nehru, Zakir Hussain and Fazal Ali. All of them died within a short period after their failure to land at Along according to the previously chalked out town programme.

9. Slavery :

9.1. In Gallong society the institution of slavery was an age-old custom but now it is prohibited by law. At the time of investigation only in one family a slave was found whom they referred as servant. In the olden days in the inter-village feuds some persons were caught in the raids and were sold as slaves.

10. Village Administration :

10.1. The village administration of the Gallong is almost traditional and it is concentrated in the hands of village headman or 'Gaonburas' and the village elders. The village council popularly known as "Kebang" is solely responsible for maintaining law and order within the village as both executive and judicial powers are vested in this 'Kebang'. Any dispute or conflict arising in the village is brought before this council. Every village has a Kebang house for meeting the village council. Besides settling disputes or conflicts, this council takes decision in all other public matters arising in the village. For smooth functioning of Kebang, a strong fund is generally maintained by annual subscription from every household in the village either in cash or in kind. Any fine money received from convicted persons also goes to the 'Kebang fund'. The strength of the 'Kebang fund' in Pakam village was Rs.8000.00 at the time of investigation.

10.2. The inter-village disputes are settled through a council known as "Bango". It consists of several villages and all the village headmen or 'Gaonburas' and other selected leading persons from each village take part in it. This 'Bango' also maintains a fund for its functions and this fund is generally collected through money received as fines from convicted persons. The decision of village or inter village council is final and binding on all and no one can challenge it in any way.

11. Other Facilities Available :

11.1. Water for drinking and other household use is available in the hill streams throughout the year but carrying water from such streams by crossing hill slopes is very difficult. In the year 1957 the Public Health Department connected together several hill streams and from such connected streams water is supplied to the villagers through galvanised pipes. All the villagers get water from this source.

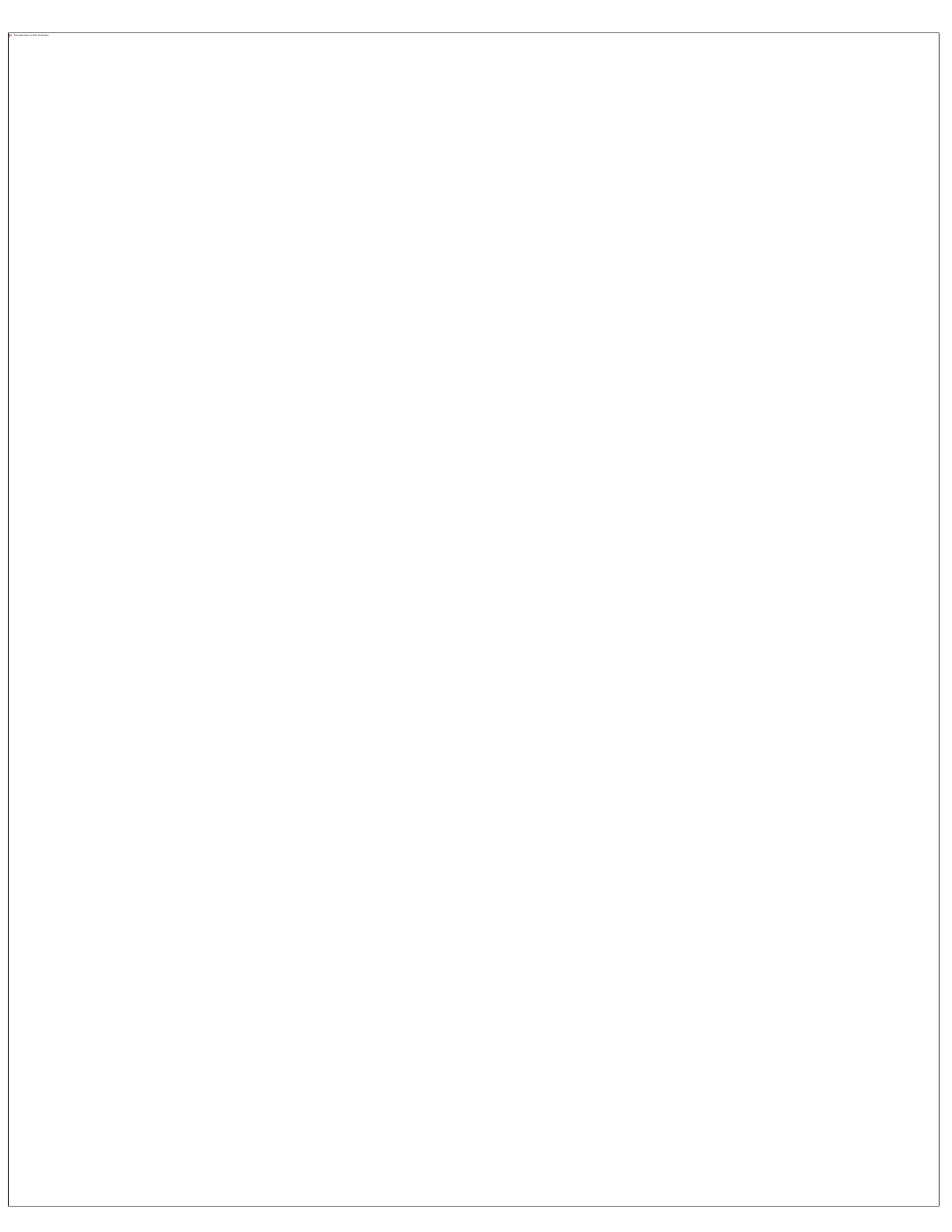
11.2. A music class sponsored by the Sankar Mission, Assam is held in the Local Junior Basic School. Only one teacher was appointed for this music school at the time of investigation. Such a music teacher appointed by the Mission would generally have to discharge his duties in different areas from time to time in rotation. Dancing and singing of various forms are being taught to the local tribal boys and girls by the teacher. One trained girl from Pakam took part in a dancing programme in a function organised on the occasion of the 26th January in the year 1969 at Along.

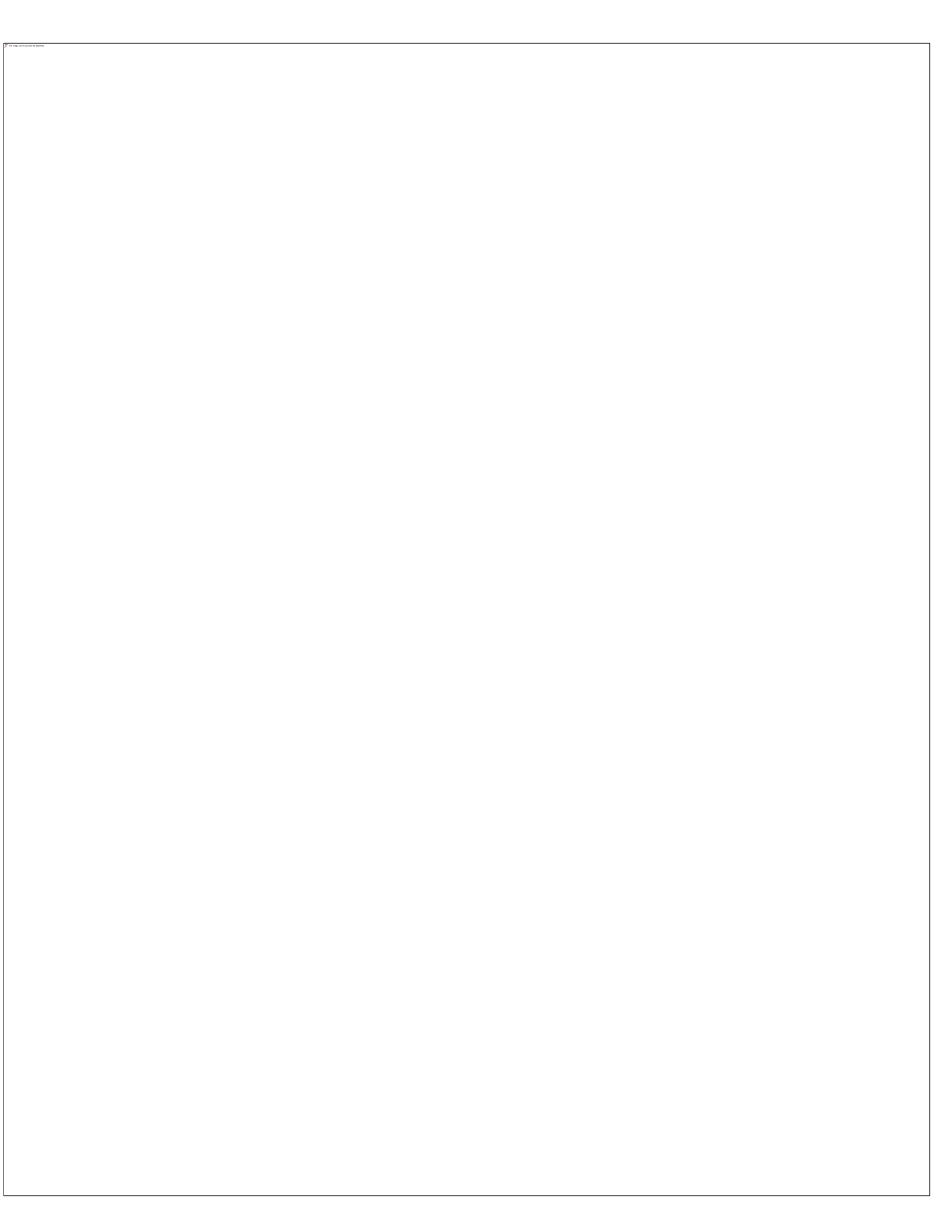
11.3. The Sankar Mission has also opened one leprosy hospital at Along town where hundreds of lepers of that area are getting free treatment. The tribal people have offered necessary cooperation in such missionary works. The Ram Kishina Mission has opened one school near Along town and 2 boys from Pakam were studying in the school at the time of investigation.

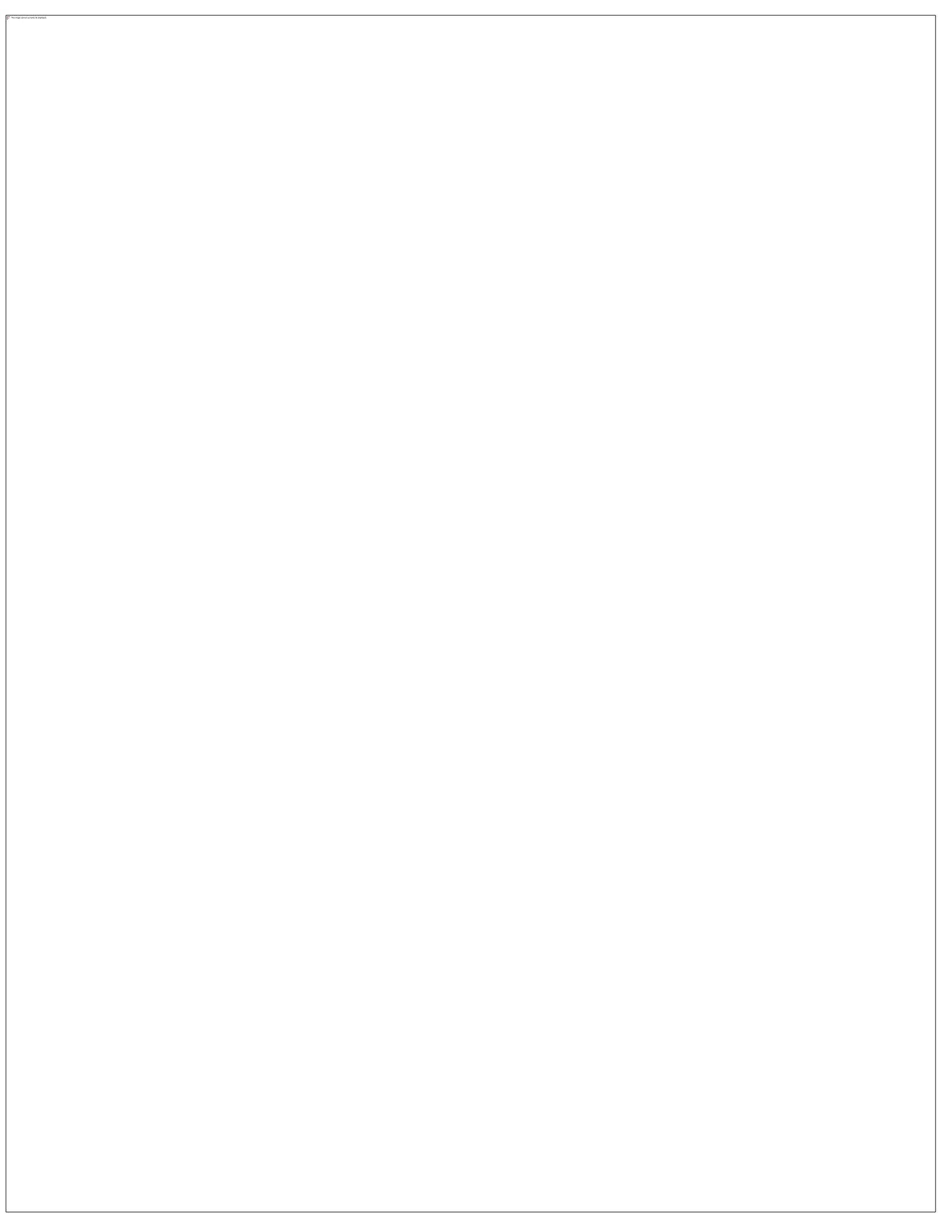
12. Forces of Change :

12.1. The close contact of the villagers with the people of a growing town nearby is expected to have perceptible impact on their socio-economic life. The data on first point survey will throw light on changes that have occurred in the traditional way of life of the people practising a crude form of agriculture (shifting cultivation). The extension of Along town with all modern amenities would certainly bring in a revolutionary changes in social, economic and cultural life of the Gallongs in near future, which will be reflected in the resurvey data to be collected after 5 years.

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Distribution of Population by

Age Group	Male	
	No.	P.C.
0 - 5	20	13.9
5 - 15	39	27.3
15 - 25	27	18.9
25 - 35	15	10.5
35 - 45	18	12.6
45 - 55	16	11.2
55 - 65	8	5.6
65 - 75	--	--
75 & above	--	--
Total	143	100.00

Table 2.3

Proportion of Female Per 1000 male and its distribution by Age and Sex : Pakam, Arunachal Pradesh, 1939-70.

Age-group	Male	Female	Female per 1000 male (Approx.)
Below 5	20	26	1300
5 - 15	39	30	769
15 - 25	27	26	963
25 - 35	15	20	1400
35 - 45	18	19	1000
45 - 55	16	13	813
55 - 65	8	7	875
65 - 75	--	1	--
75 & Above	--	--	--
Total	143	142	993

Table 2.4

Distribution of Population by Age, Sex and Marital Status, Pakam Village, Arunachal Pradesh, 1969-70.

Age Group	Male				Female				Total			
	M	U	W	D	M	U	W	D	M	U	W	D
Below 5	--	20 (7.0)	--	--	--	26 (9.1)	--	--	--	46 (16.1)	--	--
5 - 15	--	39 (13.7)	--	--	--	30 (10.5)	--	--	--	69 (24.2)	--	--
15 - 25	7 (2.5)	20 (7.0)	--	--	17 (6.0)	9 (3.2)	--	--	24 (8.4)	29 (10.2)	--	--
25 - 35	14 (4.9)	--	--	1 (0.4)	19 (6.7)	--	1 (0.4)	--	33 (11.5)	--	1 (0.4)	1 (0.4)
35 - 45	16 (5.6)	2 (0.7)	--	--	18 (6.3)	--	1 (0.4)	--	34 (11.9)	2 (0.7)	1 (0.4)	--
45 - 55	16 (5.6)	--	--	--	10 (3.5)	--	3 (1.0)	--	26 (9.1)	--	3 (1.0)	--
55 - 65	5 (1.8)	1 (0.4)	2 (0.7)	--	2 (0.7)	--	5 (1.8)	--	7 (2.5)	1 (0.5)	7 (2.5)	--
65 - 75	--	--	--	--	--	--	1 (0.4)	--	--	--	1 (0.4)	--
75 and above	--	--	--	--	--	--	--	--	--	--	--	--
Total :	59 (20.4)	82 (28.8)	2 (0.7)	1 (0.4)	66 (23.2)	65 (22.8)	11 (3.9)	--	124 (43.5)	147 (51.6)	13 (4.6)	1 (0.4)

Table 2.5

Distribution of Population by Sex and Educational Standard - Pakam
Arunachal Pradesh, 1969-70.

Educational Standard	Male	Female	Total
Illiterate	108 (37.9)	128 (44.9)	236 (82.8)
Literate	5 (1.8)	2 (0.7)	7 (2.5)
Primary standard	19 (6.7)	9 (3.2)	28 (9.9)
Upto M.E.	8 (2.8)	2 (0.7)	10 (3.5)
Matric Standard	2 (0.7)	1 (0.3)	3 (1.0)
Macticulate	--	--	--
I.A./P.U./ H.S.	1 (0.3)	--	1 (0.3)
B.A./ M.A. etc.	--	--	--
Total :	143 (50.2)	142 (49.8)	285 (100)

Table 2.6

Educational Status of Adult Members by Age and Sex,
Pakam .. 1969-70.

Educational level	Age Group						Total														
	15-25		25-35		35-45		45-55		55-65m		65-75		Total								
	M	F	M	F	M	F	M	F	M	F	M	F	M	F							
Illiterate	18	24	42	15	21	36	12	18	35	13	13	29	8	7	15	-	1	1	84	86	170
Literate	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
P.S.	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Upto M.E.	4	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	5
Matric St.	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3
Matriculate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I.A./P.U.	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1
B.A./M.A.etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total :	27	25	53	15	21	36	18	18	36	16	13	29	8	7	15	-	1	1	84	86	170

Table 2.7

No. of School Going Children According to Age Group - Pakam.
1969-70

Age Group (Years)	Primary		M.E.		H.E.		College		Total	
	M	F	M	F	M	F	M	F	M	F
5 - 9	9	5	-	-	-	-	-	-	9	5
10 - 14	15	8	1	-	-	-	-	-	16	8
15 - 19	2	-	5	2	-	1	-	-	7	3
20 - 25	-	-	-	-	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-	-	-	-	-
Total :	26	13	6	2	-	1	-	-	32	16

Table 2.8

Distribution of Population By Age Sex and Economic Status, Pakam, 1969-70.

Age Group	Male				Female				Total			
	W.	H.	N.W.	St.	W.	H.	N.W.	St.	W.	H.	N.W.	St.
Below 5			20 (7.0)				25 (9.1)				46 (16.1)	
5 - 15	5 (1.8)	6 (2.1)	28 (9.8)	13		6 (2.2)	24 (8.4)	6 (2.2)	5 (1.8)	12 (4.2)	52 (18.2)	19 (6.7)
15 - 25	18 (6.3)	6 (2.1)	3 (1.1)	4	23 (8.1)	3 (1.1)		2 (0.7)	41 (14.4)	9 (3.2)	3 (1.7)	6 (2.2)
25 - 35	15 (5.3)				21 (7.4)				36 (12.7)			
35 - 45	17 (6.0)		1 (0.4)	1	18 (6.3)				35 (12.3)		1 (0.4)	1 (0.4)
45 - 55	16 (5.6)				12 (4.2)	1 (0.1)			28 (9.8)	1 (0.4)		
55 - 65	8 (2.8)				5 (1.8)	1 (0.4)	1 (0.4)		13 (4.6)	1 (0.4)	1 (0.4)	
65 - 75							1 (0.4)				1 (0.4)	
75 and above												
Total :	79 (27.7)	12 (4.3)	52 (18.2)	18 (6.3)	79 (27.7)	11 (3.9)	52 (18.2)	8 (2.8)	158 (55.4)	23 (8.1)	104 (35.5)	26 (9.12)

Table 2.9

Working Force By Economic Status and Labour Force, Pakam, 1959-70.

Category	Distribution by Sex (Nos.)		
	Male	Female	Total
A. Working Force :			
1. Worker :			
(a) Number	79	79	158
(b) Percentage of total working force	(43.6)	(43.6)	(87.2)
2. Helper :			
(a) Number	12	11	23
(b) Percentage of total working force	(6.6)	(6.2)	(12.8)
3. Total :			
(a) Number	91	90	181
(b) Percentage	(50.3)	(49.8)	(100)
B. Labour Force :			
(a) Number	71	78	149
(b) Working to labour force percentage	(111.3)	(101.3)	(106.1)
C. Average working force per family of average size 6.3			
	1.8	1.8	3.6

Table 2.10

Distribution of Working Force By Occupational pattern,
Pakam - 1969-70.

Occupational Groups	No. of families	No. of Workers			No. of families with secondary sources of Income.
		M.	F.	T.	
1. Solisly Jhumia	21 (46.7)	31 (19.6)	32 (20.3)	63 (39.9)	12 (26.7)
2. Jhumia with Settled Farming	23 (51.1)	47 (29.7)	46 (29.1)	93 (58.9)	15 (33.3)
3. Labour (Profession & Services)	1 (2.2)	1 (0.6)	1 (0.6)	2 (1.2)	--
Total :	45 (100)	79 (50.0)	79 (50.0)	158 (100.00)	27 (60.0)

Table 2.11 (Contd.)

Distribution of Population By Occupation, Pakam, Arunachal Pradesh, 1969-70.

Size of Households	Worker		Helper		Non-worker		Prop. of W. to total population		P.C. of worker
	M	F	M	F	M	F	M	F	
1	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	100.00
2	--	--	--	--	--	--	--	--	70.8
3	--	--	--	--	--	--	--	--	70.00
4	2	3	--	--	2	2	25.00	37.50	62.5
5	--	--	--	--	--	--	--	--	50.00
6	2	1	--	--	2	1	33.00	17.00	57.1
7	--	--	--	--	--	--	--	--	50.00
8	--	--	--	--	--	--	--	--	50.00
9	--	--	--	--	--	--	--	--	50.00
10	--	--	--	--	--	--	--	--	40.00
11	--	--	--	--	--	--	--	--	45.5
12	--	--	--	--	--	--	--	--	33.30
13	--	--	--	--	--	--	--	--	76.9
14	--	--	--	--	--	--	--	--	35.7
15	4	4	2	--	2	3	27.00	27.00	53.3
16	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	41.2
Total :	8	8	2	--	6	5	28.00	23.00	55.4

C H A P T E R I I I
Economic Resources

1. Introduction :

1.1. The basis of the economy of Pakam is shifting cultivation. The resources of the village may be classified as 'farm based' and 'prestige based'. It is obvious that functioning of such an economy depends mainly on the utilisation of the resources of the latter type. In this chapter resource position and their pattern of distribution will be discussed. The farm based resources include land, labour and agricultural tools and implements. The prestige bearing resources include mithuns, pigs, poultry birds and beads, etc.; which help to maintain social status at a desired level.

2. Land :

2.1. Broadly speaking there are two main soil types in the village. The first is alluvial and slightly sandy loam which is very similar to the tea growing lands of the plains of Assam. The second one is forest clad low-lying areas and ideal for winter paddy cultivation or settled farming. As the area has not been cadastrally surveyed no authentic land records are available. A very rough estimate indicates that total land area of the village put to different uses is 240.81 hectares out of which 52.99 hectares are crop land and a part of which is devoted to other uses, such as pisciculture, horticulture, gardening, etc. The rest of the land is fallow. The area used for residential purposes has not been included in the above total.

2.2. In a primitive society like that of Pakam, production is primarily confined to agricultural activities which requires the extensive use of land. Prevalance of private ownership of land is one of the interesting features of the Pakam's economic set-up. Of course this ownership is attained by way of natural agreement only which is socially recognised.

2.3. The ownership pattern can be classified as individual and community. As regards ownership, although it is nowhere stated, it follows from the Government regulations that

the Government accept community or individual ownership of land only in respect of land under permanent and semi-permanent cultivation and land attached to a residential unit. Therefore, by implication, all other unutilised land rest with the Administration. Under the regulations, villagers are given customary rights in their jhum land. Therefore, though there is a vast extent of land (at present) within the village boundary under the customary ownership of the farm-families, no attempt has been made here to show it against their credit. It is to be noted, that an individual can acquire right over land either by inheritance or by other tribal customary rights. There is one landless family in the village. The family is an outsider who was persuaded by the villagers to come to Pakam to settle and to act as a village priest.

2.4. The villagers as a whole claim ownership right over a particular territory of the boundary (richi) of which is mutually agreed to by the people of the adjoining villages. The village boundary is demarcated by streams, hillocks, stone posts, etc. Encroachment to the village land by outsiders is not tolerated. But with the permission of the owner an outsider can use land by paying rent. Such cases are, however, very rare. A tenant is required to pay Rs.20/- for cultivating a plot of land by using one basketful of seeds.

Table 3.1

Land Resources of the Village put to different uses, 1969-70.

Type of Land	Area (in Hectares)
1. Jhum Land	52.90
2. Land Under Pisciculture	0.09
3. Land Under Settled Farming	9.27
4. Land Under Horticulture and Gardening.	5.14
5. Culturable waste (Reserve Jhum Land Under Forest)	173.50
Total :	240.90

3. Distribution of Operational Area :

3.1. The pattern of distribution of operational area is shown in Table 3.2. There are 44 farm families in the village. Of them, 41 families are found to own 90% of the total operational area and they account for 93% of the total farm families. If farms having farm sizes below 1.50 hectares as medium farms and 2.50 hectares and above as large farms, then it will be evident, that in the village nearly 62% of the households are small farmers operating 23.27 hectares or 46% of land. On the whole concentration of families is found in the size group of 1.00 to 2.50 hectares. No land revenue is paid.

3.2. Under such conditions, a farmer may develop the tendency to have more working hands so that he can increase his farm size. But the extent to which he can expect to increase his family size is limited by the fixed supply of land in the area.

3.3. The area under settled farming is almost evenly distributed and is a constant proportion for all categories of farm units. Thus for all categories of farm units, jhum enterprise is the crucial contribution agent to the total output. Preference for shifting cultivation rather than sedentary cultivation may be due to the following reasons :- (1) scarcity of suitable land for settled cultivation, (2) inherent difficulties in raising of cash crops on settled farms compared to jhuming to meet the limited demand for money for purchasing certain consumer goods, (3) technological difficulties, (4) the possibility of horticulture is also limited due to the present economic structure and inadequate access to market and (5) preference for leisure.

3.4. It has been mentioned above, as population increases the total farm size of a family also increases. This means further shortening of the jhum cycle. When this happens the jhum cultivators will have not other alternative but to resort to settled farming.

4. Labour :

4.1. Amount of labour which is required on a given unit of area depends on the technique of production and crops cultivated. In the economy of the type under discussion cultivation

of cereals is the primary concern. The demand for labour in such an economy is seasonal. Though labour is not fully employed throughout the year, there is an acute shortage of labour during the busy period. That is why farm, units have not alternative but to engage women labour in the farms, whose activities in the farm are confined to assisting men in the preparation of the fields, seed-drilling, scarring birds, harvesting of crops and other allied activities like hand pounding, etc.

4.2. The total working population of the village consists of 90 male and 89 female workers which includes helpers also. It is found that the proportion of workers to helpers is less among the Solely Jhumias than among the Jhumias with Settled Farming. This indicates that only those who have extra labour take settled farming as secondary occupation. That the farm size in jhum cultivation is a function of availability of labour is clearly borne out by the Table.

5. Tools and Implements :

5.1. Technical efficiency and standard of a community can be judged from the quality of tools and implements which are used by the community. From this point of view, Pakam is far behind the rest of the country. Ploughs are generally not used excepting few cases, There are extensive uses of 'dao', 'axes' and hoes, with which all agricultural operations are performed. Spade is also used, but in a limited way. Bullock and other animal powers are not utilised universally excepting few fields for wet paddy cultivation. It is important to note that weaving as art is known to every family and it is a must in every household. But it is at the primitive stage, there being only tension looms. Although cloth woven in such looms, are strong and durable width of the cloth does not exceed half to three fourths of a metre. Mortar and Pestles also the Foot Pestles (Dhenki) are used as husking implements. Tools and implements position of the village is presented in Table 3.7. These are of traditional type and suited to a highly labour intensive method of production. All these implements can be said to have universal use.

Table 3.7

Tools and Implements Position
of the Village, Pakam, 1969-70.

Type of Tools And Implements	No.	Value (In Rs.)	Value per items (In Rs.)
1. Spade	123	651.00	5.21
2. Hoe	152	391.00	2.57
3. Sickle	148	280.00	1.93
4. Dhenki	28	579.00	20.68
5. Dao	132	491.00	3.72
6. Mortar & Pestle	27	722.00	26.74
7. Axe	34	278.00	8.18
8. Tension Loom	45	---	--

5.2. As regards, distribution of tools and implements by occupational groups and farm sizes, it is seen from Table 3.8 and 3.9, that it is almost even. Perhaps spade is a must for

Table 3.8

Distribution of Tools and Implements by Occupation Class.

Occupational Class	Spade	Hoe	Sickle	Dhenki	Das	Mortar & Pestle	Axe
Solely Jhumia	46	63	66	13	53	10	10
Jhumias with Settled Farming	77	89	89	15	78	17	23
Miscellaneous	--	--	--	--	1	--	1
Total :	123	152	145	28	132	27	34

the Jhumias with Settled Farming. Tools and Implements are found to be directly related to the number of workers and helpers in a farm unit.

6. The Animal Resources :

6.1. The Gallongs have no taboos in their food habits. The meat of dog, bear and monkey are considered as delicacies.

The meat of domestic and wild animals forms a part of their food. Some animals are used as currency. The animals are used as currencies at the time of marriage, to settle payment of fines, to maintain their social prestige and status and in barter of goods, etc. Therefore these can be regarded as prestige bearing resources. It is not however known whether there is any rate of interest and terms of fixing the same. The animals and birds that were found in the village are cattle, mithuns (buffalo like semi-domesticated animal) goats, pig and poultry birds. A list of these animals and birds and their local values are given in Table 3.10. No attempt has been made

Table 3.10

Animal and Poultry Birds and their value
Pakam, 1969-70.

Items	No.	Value. (in Rs.)	Value per item(in Rs.)
Bulls	27	5170.00	191.48
Cow	39	3920.00	100.51
Mithuns	15	18,700.00	1246.67
Goats	3	270.00	90.00
Pigs(all)	223	9532.00	42.74
Poultry birds	377	1487.00	3.94
Dog	21	201.00	9.57

to show their position according to sizes of farms etc. as such a classification has no meaning under shifting cultivation. The village people do not like to reveal their respective asset-positions to their neighbours, not to speak of outsiders for various reasons such as social humiliations, etc. during the time of conflicts.

6.2. In old days, epidemic diseases of livestock was almost unknown. But in recent years, epidemic disease killed a large number of their mithuns and cattle which they use as traditional currency. In the year 1958 about 23 mithuns and 100 heads of cattle were reported to have died due to epidemic diseases. The Gallongs believe that such diseases were carried by the outsiders coming from the plains areas.

Table 3.2

Per Farm and Per Worker distribution of Operational Area by Size Group: Pakem

Size Group (Hectares)	Number in Each Group					(Area in Hectares)				
	Farm Units		Worker			Land Area		Total		
	1	2	Jhum	Settled	Total	Jhum	Farm Settled	Total	Jhum	Workers
										Settled - Total
Below 0.50	1 (2.72)	2 (1,1)	0.27	-	0.27 (0.43)	0.27	-	0.27	0.14	- 0.14
0.50 - 1.00	11 (25.00)	27 (14,13)	7.54	1.27	3.31 (14.17)	0.39	0.12	0.30	0.28	0.05 0.33
1.00 - 1.50	15 (34.10)	56 (27,29)	16.57	2.32	19.19 (30.37)	1.10	0.17	1.23	0.61	0.10 0.71
1.50 - 2.00	9 (20.45)	30 (15,15)	12.51	2.49	15.10 (24.29)	1.40	0.28	1.67	0.47	0.09 0.50
2.00 - 2.50	6 (36.35)	28 (15,13)	11.19	1.54	12.73 (20.48)	1.37	0.26	2.12	0.41	0.03 0.47
2.50 - 3.00	1 (2.72)	5 (2,3)	2.02	0.54	2.56 (4.12)	2.02	0.54	2.53	0.40	0.02 0.09
3.00 & above	1 (2.72)	8 (4,4)	2.70	0.81	3.51 (5.64)	2.70	0.81	3.51	0.30	0.03 0.13
Total	44 (100)	156 (78.78)	52.90	9.27	62.17 (100)	1.20	0.21	1.41	0.34	0.06 0.40

Note :-

- (a) Figures in brackets indicate as follows for the columns :-
- (1) Percentage to total, (2) Male, Female, (5) Percentage to total
- (b) One landless family being excluded.

Table 3.3
Distribution of Cropped area by Occupational Classes (1969-70) : Pakam

Occupational Classes.	Total Number of households in each	Jhum		Settled		Cropped and other area (in hectares)		Pisciculture		Forest			
		Total	Per H.H.	Total	Per H.H.	Total	Per H.H.	Total	Per H.H.	Total	Per H.H.		
Solely Jhumias	21	24.55	1.77	Nil	-	0.62	0.04	Nil	-	84.50	4.02	109.67	5.22
Jhumias with Settled Farming	23	23.35	1.23	9.27	0.40	4.52	0.23	0.09	0.05	39.00	3.87	131.23	5.71
Total		52.90		9.27		5.14		0.09		173.50		240.90	5.48

Note :- (a) H.H. = Households.

(b) Area per households indicates = area per actual participant families.

Table 3.4.

Total working Population in the Village.

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Worker	78	78	156
Helper	12	11	23
Total	90	89	179

(One family is excluded)

Table 3.5.

Distribution of Workers and Helpers by Occupational Class

Occupational Class	Workers & Helpers								
	Workers			Helper			Total		
	M	F	T	M	F	T	M	F	T
Solely Jhumias	31	32	63 (34.8)	2	5	7 (2.8)	33	37	70 (37.5)
Jhumias with Settled Farming	47	46	93 (51.4)	10	6	16 (10.0)	57	52	109 (61.4)
Miscellaneous	1	1	2 (1.1)	-	-	-	1	1	2 (1.1)
Total	79	79	158 (87.3)	12	11	23 (12.7)	91	90	181 (100)

Note :- Figures in brackets indicate P.C. to total.

Table- 3.6

Distribution of workers According to Farm Size.

Size Groups (Hectares)	Worker				Helper				Total		
	M	F	T	U	M	F	T	U	M	F	U
	1	2	3	4	5	6	7	8	9	10	11
Below 0.50	1 (33.00)	1 (33.00)	2 (66.00)	-	1 (33.00)	1 (33.00)	1 (33.00)	1 (33.00)	1 (33.00)	2 (66.00)	3 (100)
0.50 - 1.00	14 (45.16)	13 (41.91)	27 (87.10)	1 (3.23)	3 (9.63)	4 (12.91)	15 (48.39)	16 (51.61)	31 (95.00)	31 (100)	
1.00 - 1.50	27 (42.86)	29 (46.03)	56 (88.89)	4 (6.35)	3 (4.76)	7 (11.11)	31 (49.21)	32 (50.79)	63 (100)		
1.50 - 2.00	15 (42.85)	15 (42.85)	30 (35.71)	3 (8.57)	2 (5.71)	5 (14.28)	18 (51.43)	17 (48.57)	35 (100)		
2.00 - 2.50	15 (46.88)	13 (40.63)	28 (37.51)	2 (6.25)	2 (6.25)	4 (12.50)	17 (53.13)	15 (46.87)	32 (100)		
2.50 - 3.00	2 (40.00)	3 (60.00)	5 (100.00)	-	-	-	2 (40.00)	3 (60.00)	5 (100)		
3.00 & above	4 (40.00)	4 (40.00)	8 (80.00)	2 (20.00)	-	2 (20.00)	4 (40.00)	6 (60.00)	10 (100)		
Total	78 (50.00)	78 (50.00)	156 (100)	12 (100)	11 (100)	23 (100)	90 (100)	89 (100)	179 (100)		

Table 3.9

Distribution of Tools and Implements by Farm Size.

Farm Size (in Hectares)	Tools and Implements (Nos)						
	Spade	Hoe	Sickle	Foot. Pestle	Dao	Mortar and pestle	Axe.
Below 0.50	1	2	2	-	2	1	1
0.50 - 1.00	19	23	26	5	18	5	8
1.00 - 1.50	43	50	51	10	49	9	3
1.50 - 2.00	27	35	28	5	26	7	9
2.00 - 2.50	23	20	29	6	26	4	3
2.50 - 3.00	4	6	4	1	3	-	2
3.00 & above	6	8	5	1	7	1	2
Total	123	152	143	28	131	27	33

Table 3.9

Distribution of Tools and Implements by Farm Size.

Farm Size (in Hectares)	Tools and Implements (Nos)						
	Spade	Hoe	Sickle	Foot.Pestle	Dao	Mortar and pestle	Axe.
Below 0.50	1	2	2	-	2	1	1
0.50 - 1.00	19	23	26	5	18	5	8
1.00 - 1.50	43	50	54	10	49	9	8
1.50 - 2.00	27	35	28	5	26	7	9
2.00 - 2.50	23	20	29	6	26	4	3
2.50 - 3.00	4	6	4	1	3	-	2
3.00 & above	6	8	5	1	7	1	2
Total	123	152	143	28	131	27	33

08 06 88 11 81 82L 8T 8T
(001) (001) (001) (001) (001) (001) (001) (001)

CHAPTER IV.

Economic Activities

1. Introduction :

1.1. In the preceding chapter assets and resources owned by the families of Pakam have been discussed. In this chapter a discussion on the functioning of the economy vis-a-vis structure of production, input-output position, etc. will be given. This would cover the crop and other enterprises i.e. details of crops grown, their yields, the intensity of cropping, handicrafts and other productive activities. As regards input-output relationship two different picture covering shifting cultivation (jhuming) and settled farming (viz. wet paddy cultivation) will be presented. Data on other minor crops grown are not available.

2. Crop Enterprise :

2.1. In analysing crop enterprise the following points may be considered :-

(1) distribution of area between food and non-food crops, (ii) utilisation of the best method at the disposal of the farm units, (iii) maintenance of certain ratios like land labour and output-input, etc. It may be noted that all the farms are free, in the sense that there is no tenancy system and other bindings imposed in the village. One has the right to increase or decrease the size of his 'farm' within the area owned by him. But this is subject to the condition that other economic factors remaining favourable for taking such decisions. In jhum enterprise (Mopi Arik) Dao and Axe serve the purpose of the primary implements when spade and plough are used as the primary implements in case of settled farming (Asi-Arik).

There is more concentration in respect of the cultivation of mixed cropping which accounts for nearly 84.7 p.c. of the total operated area. The area under different crops and their produces are presented in Table 4.1.

2.2. Mixed cropping is the general rule in jhum enterprise. It is informed that the jhum cycle now stands within minimum of 6 years in case of most of the families and 7 to 8 years in case of others. It is learnt that land once cleared for jhuming can be used for two successive years although production declines by 50% in the next

year. In the first year paddy, maize, small millets, chillies and vegetables like leafy vegetables, arum, gourd pumking, brinjal, etc. are grown. In the second year small millets arum and ginger, etc. are cultivated in the same plot of land. About 50% of the area under jhum cultivation is in the first and the rest 50% in second year.

2.4. The practice of settled farming and taking up of horticulture and pisciculture suggest the attitude of the villagers towards the outside forces at work and settled life. It is to be noted that practice of settled farming, along with jhuming is of recent origin and it might be due to the desire on the part of the people to earn more to balance between the growth of the population, demand for money and maintenance of better standard of living. Again, in the subsistence economy there is always a tendency to maintain equilibrium between production and population and that the present state of jhum enterprise alone as in Pakam, is not in a position to maintain the same.

2.5. From Table 4.1. it is evident that the crop-enterprise under jhum cultivation is mixed, it is meaningless to apportion and to average the products with land. It appears that in terms of output (Rs. 1742.02 per hectare) settled farming is more efficient than jhum enterprise, (Rs. 746.25 per hectares). In case of principal food-grains, there is an annual total output of 738.13 quintals which make available 16.78 quintals per family or 3.4. Quintals per head per annum or 0.87 kgs. per day per person. The per head requirement per day is high, because of the use of paddy for the preparation of rice beer.

2.6. In crop-pattern, there is no diversification and rotation of crops. The reason for this is stated earlier. In case of settled farming, yield of paddy per hectare and return per farm unit are higher than that of jhum-enterprise. This might be due to the adoption of high yielding varieties like Tichung N.I., IR 8, etc. on the one hand and virginity of the soil and regular supply of water on the other. It is to be noted that settled farming was being taken up by the villagers only after 1951.

2.7. In Pakam where jhuming is practised, the method of cultivation and farm organization activities are purely primitive in nature. But when settled farming is concerned, this is not so. Here one can see the use of ploughs and use of spade as well. Again use of high-yielding varieties is an important feature. Although rainfall is sufficient, crude methods are reported to be in use for the regular supply of water to the settled farm lands.

2.8. In Table 4.1. yields of all varieties of crops are given. As jhuming is a mixed-cultivation, so it is not possible to apportion volume of land under different crops. What is more important is the average physical return and marginal return per worker, working under different farm units.

2.9. It is seen from Table 4.2. that there is a direct nexus, to a certain degree, between the number of workers employed and the yield per farm. Another fact obvious from the Table is that, yield rate varies directly with the size of the farm and labour used. But this is not so for bigger-sized farms. It suggests that jhum cycle has indirect effects upon production and direct bearings upon the technique of production. Again that intensity of mixed cropping is found to be of higher order for bigger sized farms than the smaller ones. The reason is obvious, the scarcity position will sooner or later, compels the farm units to resort to other type of farm practices.

2.10. In jhuming, physical labour and seeds are the only inputs and as such accuracy may be regarded as more near to the truth. But in case of settled farming it is not so. For instance, due to the gap in reporting, there is no alternative left but to represent the bullock labour in terms of human labour inputs.

2.11. The per hectare requirement of labour man hours for different operations to be undertaken under jhuming at the commencement of every crop year are as follows :

(e) Weeding is another important operation performed only once. This operation is done in July and is known as eji monam. Weeding is generally done when paddy seedlings grow to about 4 - 5 inches.

(f) Harvesting is known as anlanam. Paddy is harvested in October both by men and women.

4.4. Table 4.5 gives an insight of the input structure in the settled farming. Basis of calculation of cost of input are as follows : (a) cost of seedling Rs. 16 per hectare , (b) cost of ploughing harvesting and bird scarring Rs. 210/- per hectare . It is worth mentioning that in calculating costs, no attempt has been made to collect farm wise statistics, instead a norm has been worked out on the basis of information provided by the farmers. The input-output relations shows, much higher profitability position of settled farming (Output/Input average ratio 7.35) over that of jhuming. Ofcourse, it is likely that there are certain omissions like 'fixed cost', etc. which we can neglect for an economy like that of Pakam.

3. Other Enterprises.

3.1. Horticulture on a commercial basis is of newly introduced in Pakam. Ofcourse, orange plantation has got a quite long history. Horticulture and settled farming is an index which indicated transition from hunting and jhuming to settled farming. The tendency to increase income by other means can be attributed for the following :

- (1) increase in demand for luxuries and semi-luxuries
 - (2) impact of new agricultural activities introduced by the department of agriculture and
 - (3) population pressure.
- It appears from Table 4.6 that horticultural activities are

3.5. Besides, hunting and fishing provide enough food to the people of Pakam. At the time of scarcity they depend mostly on collection of wild vegetables, fruits, roots, tubers and animals. Under primitive condition the area under operational holdings must be larger to provide maintenance to the family from jhum cultivation and hunting.

Table A.1

Items	Unit	A.	B.	C.		D.	
				Yield per	Yield per	Yield per	Yield per
...	...	3833.22	...	...	...	82.38	...
...	...	2.00	38	...	...	0.00	0.78
...	...	12.00	80	...	...	12.00	0.30
...	...	53.00	40	...	...	17.20	0.42
...	...	91.20	15.20	...	...	33.12	1.31
...	...	50.00	...	...	...	0.61	0.32
...	...	122.12	0.30	...	...	14.08	5.41
...	...	212.00	0.08	...	...	9.11	2.32
...	...	283.00	0.01	...	...	14.42	11.24
...	...	382.20	...	...	...	100.03	14.44
...	...	1022.00	...	...	...	30.14	50.23
...	...	38235.00	9.13	...	...	243.42	222.10
...	...	12148.20	10.22	...	...	51.00	1265.08

3.5. Besides, hunting and fishing provide enough food to the people of Pakam. At the time of scarcity they depend mostly on collection of wild vegetables, fruits, roots, tubers and animals. Under primitive condition the area under operational holdings must be larger to provide maintenance to the family from jhum cultivation and hunting.

Table 4.1

Farm	Production (Metric Tons)	Area (Hectares)	Firm (Hectares)	Yield per Hectare	
				Production	Area
1	100.00	10.00	10.00	10.00	10.00
2	200.00	20.00	20.00	20.00	20.00
3	300.00	30.00	30.00	30.00	30.00
4	400.00	40.00	40.00	40.00	40.00
5	500.00	50.00	50.00	50.00	50.00
6	600.00	60.00	60.00	60.00	60.00
7	700.00	70.00	70.00	70.00	70.00
8	800.00	80.00	80.00	80.00	80.00
9	900.00	90.00	90.00	90.00	90.00
10	1000.00	100.00	100.00	100.00	100.00
11	1100.00	110.00	110.00	110.00	110.00
12	1200.00	120.00	120.00	120.00	120.00
13	1300.00	130.00	130.00	130.00	130.00
14	1400.00	140.00	140.00	140.00	140.00
15	1500.00	150.00	150.00	150.00	150.00
16	1600.00	160.00	160.00	160.00	160.00
17	1700.00	170.00	170.00	170.00	170.00
18	1800.00	180.00	180.00	180.00	180.00
19	1900.00	190.00	190.00	190.00	190.00
20	2000.00	200.00	200.00	200.00	200.00
21	2100.00	210.00	210.00	210.00	210.00
22	2200.00	220.00	220.00	220.00	220.00
23	2300.00	230.00	230.00	230.00	230.00
24	2400.00	240.00	240.00	240.00	240.00
25	2500.00	250.00	250.00	250.00	250.00
26	2600.00	260.00	260.00	260.00	260.00
27	2700.00	270.00	270.00	270.00	270.00
28	2800.00	280.00	280.00	280.00	280.00
29	2900.00	290.00	290.00	290.00	290.00
30	3000.00	300.00	300.00	300.00	300.00
31	3100.00	310.00	310.00	310.00	310.00
32	3200.00	320.00	320.00	320.00	320.00
33	3300.00	330.00	330.00	330.00	330.00
34	3400.00	340.00	340.00	340.00	340.00
35	3500.00	350.00	350.00	350.00	350.00
36	3600.00	360.00	360.00	360.00	360.00
37	3700.00	370.00	370.00	370.00	370.00
38	3800.00	380.00	380.00	380.00	380.00
39	3900.00	390.00	390.00	390.00	390.00
40	4000.00	400.00	400.00	400.00	400.00
41	4100.00	410.00	410.00	410.00	410.00
42	4200.00	420.00	420.00	420.00	420.00
43	4300.00	430.00	430.00	430.00	430.00
44	4400.00	440.00	440.00	440.00	440.00
45	4500.00	450.00	450.00	450.00	450.00
46	4600.00	460.00	460.00	460.00	460.00
47	4700.00	470.00	470.00	470.00	470.00
48	4800.00	480.00	480.00	480.00	480.00
49	4900.00	490.00	490.00	490.00	490.00
50	5000.00	500.00	500.00	500.00	500.00
51	5100.00	510.00	510.00	510.00	510.00
52	5200.00	520.00	520.00	520.00	520.00
53	5300.00	530.00	530.00	530.00	530.00
54	5400.00	540.00	540.00	540.00	540.00
55	5500.00	550.00	550.00	550.00	550.00
56	5600.00	560.00	560.00	560.00	560.00
57	5700.00	570.00	570.00	570.00	570.00
58	5800.00	580.00	580.00	580.00	580.00
59	5900.00	590.00	590.00	590.00	590.00
60	6000.00	600.00	600.00	600.00	600.00
61	6100.00	610.00	610.00	610.00	610.00
62	6200.00	620.00	620.00	620.00	620.00
63	6300.00	630.00	630.00	630.00	630.00
64	6400.00	640.00	640.00	640.00	640.00
65	6500.00	650.00	650.00	650.00	650.00
66	6600.00	660.00	660.00	660.00	660.00
67	6700.00	670.00	670.00	670.00	670.00
68	6800.00	680.00	680.00	680.00	680.00
69	6900.00	690.00	690.00	690.00	690.00
70	7000.00	700.00	700.00	700.00	700.00
71	7100.00	710.00	710.00	710.00	710.00
72	7200.00	720.00	720.00	720.00	720.00
73	7300.00	730.00	730.00	730.00	730.00
74	7400.00	740.00	740.00	740.00	740.00
75	7500.00	750.00	750.00	750.00	750.00
76	7600.00	760.00	760.00	760.00	760.00
77	7700.00	770.00	770.00	770.00	770.00
78	7800.00	780.00	780.00	780.00	780.00
79	7900.00	790.00	790.00	790.00	790.00
80	8000.00	800.00	800.00	800.00	800.00
81	8100.00	810.00	810.00	810.00	810.00
82	8200.00	820.00	820.00	820.00	820.00
83	8300.00	830.00	830.00	830.00	830.00
84	8400.00	840.00	840.00	840.00	840.00
85	8500.00	850.00	850.00	850.00	850.00
86	8600.00	860.00	860.00	860.00	860.00
87	8700.00	870.00	870.00	870.00	870.00
88	8800.00	880.00	880.00	880.00	880.00
89	8900.00	890.00	890.00	890.00	890.00
90	9000.00	900.00	900.00	900.00	900.00
91	9100.00	910.00	910.00	910.00	910.00
92	9200.00	920.00	920.00	920.00	920.00
93	9300.00	930.00	930.00	930.00	930.00
94	9400.00	940.00	940.00	940.00	940.00
95	9500.00	950.00	950.00	950.00	950.00
96	9600.00	960.00	960.00	960.00	960.00
97	9700.00	970.00	970.00	970.00	970.00
98	9800.00	980.00	980.00	980.00	980.00
99	9900.00	990.00	990.00	990.00	990.00
100	10000.00	1000.00	1000.00	1000.00	1000.00

Table 4.1

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Area, Items Produced, Production, Value and Yield of Agricultural Enterprise, Pakam.

Items	Area (Hectare)	Production		Yield per		Value per		
		Q.	Unit	V.	Farm (Approx)	Hectare	Farm	Hectare
Paddy	9.27	250.37	quintals	16148.50	10.89	27.00	702.11	1742.02
Jhum	51.40	427.61	"	28532.00	9.72	8.32	648.45	555.10
Size	--	15.27	"	1055.00	--	0.30	30.14	20.53
Plat	--	44.88	"	3825.50	--	0.87	100.69	74.44
Millies	--	3.03	"	593.00	0.07	0.06	14.46	11.54
finger	--	2.36	"	275.00	0.08	0.05	9.17	5.35
Pinjal	--	1.77	"	126.75	0.20	0.83	14.08	2.47
Jhum	--	40	Kgs.	20.00	--	0.78	6.67	0.39
Jhum	--	25	"	67.50	12.50	0.49	33.75	1.31
Jhum	--	80	Nos.	23.00	40	--	11.50	0.45
Jhum	--	80	"	15.00	80	--	15.00	0.29
Jhum	--	32	"	6.00	32	--	6.00	0.12
With Alu	--	--	"	3839.25	--	--	95.98	74.71
Vegetables	--	--	"	--	--	--	--	--
Total of Jhum	51.40	--	--	38378.00	--	--	821.58	746.25

Table 4.2

-47-

Distribution of Value of Agricultural Crops by Size-group of Farms, Pakam.

Size-groups	(In Rupees)							Return per farm in each group		
	Jhum Paddy	S.F. paddy	Maize	Millet	Chillies	Seasamum	Ginger & Others		Vegetables	Total
0.50	250.00	--	25.00	--	10.00	--	--	40.00	325.00	325.00
1.00	4800.00	1800.00	152.00	555.00	120.00	30.00	43.00	746.75	8246.75	749.71
1.50	9425.00	4789.50	265.00	1036.00	174.00	37.50	101.00	1235.00	17063.00	1137.54
2.00	6675.00	4325.00	191.75	1067.00	125.00	--	71.00	1103.25	13553.00	1506.44
2.50	5437.00	2634.00	121.25	542.50	114.00	--	26.00	705.00	9579.75	1596.63
3.00	625.00	750.00	200.00	250.00	20.00	--	24.00	200.00	2069.00	2039.00
and above	1320.00	1350.00	100.00	375.00	30.00	--	10.00	--	3635.00	3685.00
	28532.00	16148.50	1055.00	3825.50	593.00	67.50	275.00	4030.00	54526.50	1239.24

Table 4.3

Distribution of Value of Agricultural Crops by Occupational Classes, Pakam.

Occupational Classes	Jhum Paddy	S.F.Paddy	Maize	Millet	Chillies	Seasamum	Ginger	Vegetables & Others	Total	Return per farm
solely Jhumias	12612.00	--	326.50	1589.50	260.00	--	98.00	1655.00	16541.00	787.67
Jhumias with settled Farming	15920.00	16148.50	728.50	2236.00	333.00	67.50	177.00	2375.00	37985.50	1651.54
Miscellaneous	--	--	--	--	--	--	--	--	--	--
Total :	28532.00	16148.50	1055.00	3825.50	593.00	67.00	275.00	4030.00	50526.50	1239.24

Table 4.4

-49-

Value of Input and Output/Input Rates as Used in Jhum Enterprise
By Farm-sizes : Pakam.

(8 hrs. = 1 man day)

Size Group in hectares)	Number of Farm Units	Total Jhum land under each group	Seed		Labour		Total V. (Rs.)	Output/ Input	Return per labour Input
			Q. (Kgs.)	V. (Rs.)	Q. (Kgs.)	V. (Rs.)			
below 0.50	1	0.27	5.00	2.00	267.30	66.82	68.82	4.72	4.86
0.50 - 1.00	11	7.54	139.72	55.89	7464.60	1835.15	1922.04	3.35	3.45
1.00 - 1.50	15	16.57	307.04	122.82	16404.30	4101.08	4223.90	2.90	2.99
1.50 - 2.00	9	12.61	233.65	93.45	12483.90	3120.98	3214.44	2.87	2.96
2.00 - 2.50	6	11.19	207.35	82.94	11078.10	2669.53	2752.47	2.52	2.60
2.50 - 3.00	1	2.02	37.43	14.97	1999.80	499.95	514.92	2.56	2.64
3.00 and above	1	2.70	50.03	20.01	2673.00	688.25	688.26	2.67	2.67
Total :	44	52.90	980.23	392.09	52371.00	13092.75	13484.84	2.85	2.93

Note : Q = Quantity, V = Value, Value of 1 manday = 2/-.

Table 4.5

Farm-size Input Structure and Output/Input Ratio as Used
In Settled Farming, Pakam.

Farm-size (in hectares)	No. of farms	St. Land	I n p u t		Output/ Input
			Human labour and bullock labour (in value)	Cost of seedling (value)	
			Total (value)		
Below 0.50	1	--	--	--	--
0.50 - 1.00	11	1.27	263.70	20.32	287.02
1.00 - 1.50	15	2.32	550.20	41.92	592.12
1.50 - 2.00	9	2.49	522.90	39.84	562.74
2.00 - 2.50	6	1.54	323.40	24.64	368.04
2.50 - 3.00	1	0.54	113.40	8.64	122.04
3.00 and above	1	0.81	170.10	12.96	183.06
Total :	44	9.27	1,945.70	149.32	2,196.02
					7.35

Table 4.5

Physical Units and Value of Production of Horticultural and Other Varieties By Size of Farm, Pakam.

	Horticultural Garden Crops										Total Annual Output	Bamboo (value of total output)	P.C. of horticultural return out of total agril. return	Remark	
	Banana	Mango	Jackfruit	Orange	Pineapple	N	V	N	V	N					V
below 0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	About bamboo bushes not reporting.
50 - 1.00	--	--	1	12.00	6	335.00	6	391.60	2	42.50	781.10	2	1,300.00	9.46	--
100 - 1.50	5	163.00	--	--	6	300.00	12	488.58	--	--	951.58	4	4,200.00	5.58	--
50 - 2.00	6	179.00	1	12.00	4	185.00	7	357.00	--	--	733.00	3	4,900.00	5.41	--
100 - 2.50	2	59.00	--	--	4	230.00	5	298.16	--	--	587.16	2	3,000.00	6.13	--
150 - 3.00	1	15.00	2	40.00	1	150.00	6	359.58	1	--	564.58	1	800.00	27.29	Newly planted.
100 & above	1	20,00	--	--	--	--	2	107.58	3	175.00	302.58	--	--	8.21	About bamboo bushes estimate not given.
Total :	15	435.00	4	64.00	21	1200.00	38	2002.50	6	217.50	3920.00	12	14,200.00	7.19	--

N = Number, V = Value.

Table 4.7

Physical Units and Value of Horticultural and Other Varieties by Occupational Classes : Pakam.

	N	V	N	V	N	V	N	V	N	V	N	V	
July Jhumias	5	140.00	-	-	9	400.00	17	741.00	1	5.00	4	5200.00	7.77
Jhumias with S.F.	9	296.00	4	64.00	12	800.00	21	1261.00	2	212.50	8	9000.00	6.93
Miscellaneous	--	--	--	--	--	--	--	--	--	--	--	--	--
Total :	14	436.00	4	64.00	21	1200.00	38	2002.00	3	217.50	12	14200.00	7.19

Note : (a) Colum numbers referred to columns of Table 4.6
 (b) N = Number, V = Value.

CHAPTER- V.

Income and Expenditure

1. Introduction:

1.1. The nature and quantum of income and pattern of expenditure of a community for a particular period would reflect the economic condition of that community to a great extent. But in tribal areas, the collection of reliable data on income and expenditure poses a problem as the system of keeping such records is totally absent among them. Existence of a large non-monetised sector of economy with barter trade makes the calculation of income and expenditure more difficult. Data presented in this chapter on income and expenditure would thus represent only a rough and partial picture of the village economy.

1.2. The traditional medium of exchange in Gallong society consists of traditional bells (Sri) utensils (Barbba, Ber, Mikli), beads of various kinds and qualities (Pongue, Lichim, Liker) mithuns, dogs, pigs, cows, goats, fowls and in some cases agricultural crops too. The rate of exchange is as follows -

2 Cows	=	1 mithun
2 Piglings	=	1 dog
2 Pigs	=	2 goats = 1 cow
1 Pig	=	1 dog
1 Cow	=	40 to 60 baskets (eigns) of

paddy. Now-a-days traditional money has gradually been replaced by modern currency and the systems of barter trade too has been changed into money trade to a large extent in Pakam.

2. Sources of Income:

2.1. Table 5.1 shows the sources and quantum of income of the villagers in Pakam for the year 1969-70.

Table 5.1.

Distribution of sources of Income, Pakam- 1969-70.

<u>Sources</u>	<u>Income (Rs)</u>	<u>Percentage of Total</u>
1. Agricultural Production	54,526.50	72.26
2. Horticulture	3920.00	5.19
3. Arts & Crafts	1509.00	2.00
4. Livestock	1587.00	2.10
5. Casual Labour	10,320.00	13.68
6. Salaried Jobs	3600.00	4.77
Total	75,462.50	100.00

Income per capita - Rs. 264.78

Income per household - Rs. 1511.99

2.2. Here some items such as firewood collected from the jungle for household consumption, fish caught and domestic or wild animals or birds killed for home consumption, jungle roots and tubers etc. are excluded from the present assessment. Exclusion of these items from income would not affect the family budgets as they are excluded from expenditure too.

2.3. From Table 5.1 it is seen that agriculture is the primary source of income in the village which constitutes 72.26% of the total income. Next to agriculture comes the source of income from casual labour. Although the Gallongs are not habituated in doing casual work in the households of their relatives or neighbours, depressed economic conditions compel many of them to work as casual labours in the nearby Along town. The daily wage is lucrative. Of-course only the poor villagers generally work as casual labourers. Horticultural products like orange, pineapples etc. although grow abundantly fail to produce suitable income to the villagers as Along is the only market place where they can sell their products. The annual per capita income of the village is Rs. 264.78 which is much low in comparison to other rural areas of Assam plains.

2.4. The recent introduction of H.Y.V. of paddy, if it is cultivated properly, would naturally increase their income from agriculture. Most of the lands in the village are suitable for H.Y.V. of paddy cultivation. Other facilities for its cultivation with success are also present.

3. Household Expenditure :

3.1. The annual consumption data have been calculated from monthly data collected for a month and then multiplied by it by 12. In doing so care has been taken to find out those items which are not commonly used for the whole year and those which are used for the year as a whole.

3.2. Table 5.2 gives a picture of annual expenditure of the village in nutshell. It may be noted that the people do not like to disclose their consumption pattern in toto and some of them do not recollect them. Table 5.2 shows the consumption pattern in the Pakam village which to a large extent reflect the economic condition of the Gallongs.

Table 5.2

Annual Expenditure Under Different Heads,
Pakam, 1969-70.

Items	Expenditure(Rs.)	P.C.of Total
1. <u>Cereals</u>		
(a) Rice	40416.00	54.49
(b) Others	3241.80	4.37
2. Non-cereals	8786.40	11.85
3. Lighting	1716.60	2.31
4. Intoxicants	4632.00	6.25
5. Luxuries & comforts	1777.44	2.40
6. Clothing, Footwear etc.	5847.47	7.88
7. Medical	--	--
8. Education	650.00	0.88
9. Ceremonials etc.	7100.00	9.57
	<u>74167.71</u>	<u>100.00</u>

Per Capita Expenditure : Rs.260.24
Expenditure per household : Rs.1648,17

Value of expenditure per household will be much higher if the value is imputed to those processed and forest gathered goods. Table 5.2 shows that total annual expenditure is Rs.74167.71 against total annual income of Rs.75462.50 which gives a surplus of Rs.1294.79. It is of course an indicator of their sound economic condition. Most of the Gallongs are self-sufficient in food especially in rice and majority of them can sell rice. Expenditure on cereals includes rice, maize, millet and small quantity of atta and excludes pulses, sugar, tea, fish, meat etc. grouped as non-cereals. Expenditure on lighting here means expenditure on kerosine, match etc. fuels collected from the jungles free of cost are excluded. Under the head 'intoxicant' rice-beer prepared at their own house is excluded. Here major expenditure is shared by tobacco, bidi, cigarette, betel nut and leaves. There is practically no cash expenditure, under the head 'medical'. The Government Civil Hospital provides medical treatment at free of cost. Sacrifices are made of

curing diseases and as such expenditure under the head 'ceremony' is considerably high next to food. Moreover some expenditure under the head 'ceremony' has been excluded as the value of some traditional goods can hardly be calculated in terms of money.

4. Durable Consumer Goods :

4.1. Table 5.3 gives a list of durable consumer goods possessed by the villagers. This Table would also indicate their standard of living as well as their way of life. The possession of radio, watch etc. signifies how far modern civilisation has made an inroad into the tribal community even in the midst of their traditional practices. A radio set with an amplifier was supplied to the village by the Social Welfare Department in 1968. Some of the villagers are interested in daily news bulletin and most of them listen to Vividh Bharati programme of the A.I.R.

Table 5.3
Durable Consumer Goods in Use, Pakam, 1969-70.

<u>Name of the Articles</u>	<u>No. in use</u>
1. Bicycle	--
2. Torch	25
3. Gun	2
4. Watch & Clock	14
5. Radio	2
6. Sewing Machine	--
7. Table	3
8. Chair	8
9. Cot	2
10. Aluminium Utensils	105
11. Lantern	18
12. Bucket	--

Absence of bicycle is understandable due to the uneven topography. But absence of sewing machine in a place where there are two radio sets shows that surplus money is not yet diverted to productive investment.

Chapter VIConcluding Remarks & Suggestions

1. The discussion in the foregoing chapters gives a fairly comprehensive picture of the socio economic life of a tribal village in transition. The establishment of the district headquarters at Along generated certain new forces of change which have brought about few distinct changes on various aspects of day-to-day life of the people of Pakam. The Gallongs, it is observed are very active and trustworthy people and they react to the force of change very quickly and effectively.
2. The villagers are availing the educational facilities of the nearby Along town to a great extent. Most of the villagers send their children to school. Sending the children to school might hamper the day to day economic activities of the parents. But some of the enlightened villagers reported that they are ready to forego the help of their children in economic activities provided their children get proper education.
3. Although they are very tradition bound from the core of their heart, it is observed that they avail medical facilities provided by the government civil hospital at Along. This they do without giving up their traditional worship and sacrifices for curing diseases which is very much time consuming and expensive. With the extension of modern medical facilities the reliance of traditional system is found to lesser.
4. Livestock is a very important asset in the village economy as it is used as a traditional currency specially in payment of bride-prices. It is reported that in the recent years epidemic diseases have almost ruined this important economic resource. Unless certain effective remedial measures are taken by the Veterinary Department, the village economy especially the non-monetised sector cannot flourish.
5. One of the noteworthy custom in Gallong society is the existence of polygyny and polyandry side by side. While the rich can marry several wives by paying high bride price, the poor families are compelled to take resort to polyandry. This social custom invites some reforms.

6. Although the entire people in the village practise a shifting form of cultivation (Jhum) they do not shift their residences along with their farms. It is because of the recognition of individual ownership of land and partly for the adoption of settled farming along with jhuming.

7. Almost all the families in the village have adopted settled farming to a varying degree. Eight families in the village cultivated high yielding variety of paddy in a few acres of land during 1969 and the yield was satisfactory being not less than 30 maunds per acre. It may be considered a remarkable achievement for a tribal village situated in the interior of hilly regions. Of course, the department of agriculture had helped the cultivators much in this regard by supplying necessary ^{seed} and fertilisers free of cost.

8. Besides the eight families who cultivated high yielding variety of paddy 14 other families cultivated local variety of winter paddy in the form of settled farming in about 14 acres of land along with their traditional jhum cultivation in that year. Due to adoption of settled farming most of the families in the village were found to be self-sufficient in food and even some of them were able to sell the surplus in the local markets. It is felt that adequate supply of agricultural credit to the villagers for terracing the moderate slopes and timely supply of other inputs such as seeds, fertilisers, pesticides, etc. would help a lot in expanding settled farming in and around the village.

9. At the initiative of the Agricultural Department two persons in Pakam started fruit gardens to grow oranges, lemons, pineapples etc. The name of one such garden is kept as "Gandhi Centenary Farm". Along the headquarters town is the only market where the villagers can sell their agricultural products, but it is doubtful whether such enterprises would be able to expand in future on the basis of a demand from a nearby small township. Compared to the production in the village, the local demand for these fruits is almost nil. Lack of proper road communication system prevents timely transportation of these fruits to outside markets. In 1969, a progressive farmer of a neighbouring village produced 2000 pineapples

by starting a garden but due to limited marketing facilities he failed to get even the prices to meet the cost of production. This has disheartened the farmers to a great extent. The establishment either a good market for fruits or a processing industry will no doubt give a good economic support to the tribal people. As some of tribal cultivators of this area have taken to horticulture in large scale a fruit processing unit at Along will be economically feasible.

10. Lack of adequate communication facilities and well organised marketing facilities are the two main reasons for agricultural backwardness in this hilly region. Now the extension of N.F. Railway upto Silapathar, the easternmost part of Assam will encourage to establish links with many of the interior places of Arunachal Pradesh. It will help to some extent the transportation of horticultural products to the markets outside the region. But the transportation of the agricultural products from the interior hilly areas is practically nil at present. If transport facilities are subsidised by the Govt. the agricultural production in tribal areas will get a boost. Also, facilities to preserve and process the fruits locally should be arranged. This will help in improving the economic condition of the tribal people to a great extent.

