

S T U D Y   T E A M

General Guidance

Dr. P. D. Saikia.

Project-in-charge

Shri Narendra Ranjan Goswami.

Field Investigation  
and  
Report Writing.

Shri Narendra Ranjan Goswami.

Shri Satyendra Nath Buragohain.

Tabulation

Shri Khagendra Nath Bordoloi.

## P R E F A C E

The present Report on Hatiduba, a Miju Mishmi village in the Lohit District of Arunachal Pradesh presents the findings of the first point socio-economic survey conducted by this Centre in March, 1981. The data in reference relate to the year, 1980-81.

Hatiduba is, by and large, a homogenous village inhabited by the Miju Mishmis. The Miju Mishmis are numerically the dominant group among the three groups of the Mishmis. The village is situated in a valley area of the Lohit District. The economy of the village is dependent mainly on both swidden and sedentary types of cultivation. The villagers have gradually shifted from swidden to sedentary type of cultivation. But the discouraging feature is that the villagers depend on outsiders for cultivation in settled farms. The Nepali immigrant farmers raise crops under settled cultivation for the villagers. The Nepali farmers who are well-versed in settled cultivation bag a better proportion of the produce taking advantage of the ignorance and apathy of the Miju Mishmis towards settled cultivation. It is felt that for healthy development of the village economy the villagers should be persuaded to take up settled cultivation themselves independently.

There is wanton destruction of forest wealth for reclamation of land for cultivation. Programme for social forestry should be taken up to train the people in afforestation which would help in restoring the ecological balance in the region to a great extent.

There are a number of big farmers in the village with surplus family income. But there is no proper investment of surplus income on productive purposes other than on durable consumer goods. Avenues for productive investment of surplus income should be created with proper guidance.

The presence of a good number of opium-addicts in the village presents a picture of despondency. The opium-eaters and smokers are found to be unhealthy and a considerable part of the village income is wasted by them on this contraband item. This habit must be discouraged immediately.



Like all other studies of the Centre, the present report is also prepared by a team of workers under my guidance. The report has been jointly written by Shri Narendra Ranjan Goswami and Shri Satyendra Nath Buragohain. The study team is given elsewhere in the report. Shri Durgeswar Borah has gone through the draft report and offered valuable suggestions for improvement. Shri P.C. Dutta and Shri D.K. Buragohain also read a part of the draft and offered their valuable suggestions. The report is typed by Shri Nagen Chandra Borah, Shri Manik Chandra Dutta and Shri Kamal Chandra Borah. The mimeographing of the report is done by Shri Narendra Nath Deka. I am thankful to them all.

I would like to offer my thanks to the Deputy Commissioner, Lohit District, Tezu for helping the research team in various ways. I also express my thankfulness to the District Agricultural Officer, the District Statistical Officer and the District Research Officer of Lohit District and the Village Level Extension Workers for their kind help and cooperation. I am also grateful to the villagers of Hatiduba who actively cooperated with our staff in field investigation.

Jorhat,  
January, 1982.

Dr. P.D. Saikia,  
Director.

C O N T E N T S

|   | <u>PAGE</u> |
|---|-------------|
| <u>PREFACE</u>                                  | 1 - ii      |
| <u>CHAPTERS</u>                                 |             |
| I. INTRODUCTION                                 | 1 - 9       |
| II. THE VILLAGE SETTING                         | 10 - 16     |
| III. SOCIOLOGICAL ASPECT OF<br>THE MIJU MISHMIS | 17 - 35     |
| IV. DEMOGRAPHIC ASPECTS OF<br>HATIDUBA          | 36 - 46     |
| V. ECONOMIC RESOURCES AND<br>ACTIVITIES         | 47 - 91     |
| VI. INCOME, EXPENDITURE AND<br>LEVEL OF LIVING  | 92 - 109    |
| VII. SUMMARY AND CONCLUSION                     | 110 - 118   |

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## CHAPTER ONE

### INTRODUCTION

#### 1. The Mishmis

1.1. The village Hatiduba in which the first point survey is conducted is situated in the Lohit District of Arunachal Pradesh. The village is inhabited by the Mishmis. The Mishmi group of tribes is one of the major tribes of Arunachal Pradesh. This group of tribes mainly inhabit Lohit District. There are three main groups of the Mishmis viz. the Idu, the Taraan and the Kaman, who are commonly called as the Chulikatas, the Digarus and the Mijus respectively. The population of Mishmi tribes in Arunachal Pradesh as per 1971 Census is given in Table 1.1 with sex-breakups.

Table 1.1

Mishmi Groups of Tribes in Arunachal Pradesh.

| Name of Tribes       | Population |       |        |
|----------------------|------------|-------|--------|
|                      | Persons    | Male  | Female |
| Digaru or Taraan     | 5,384      | 2,607 | 2,777  |
| Idu or Chulikata     | 8,136      | 3,927 | 4,209  |
| Kaman or Miju        | 8,233      | 4,044 | 4,189  |
| Mishmi(unclassified) | 808        | 436   | 372    |

Source : Census of India, 1971.

1.2. Among the tribes of the Mishmi group, the Kaman is the numerically dominant group. The village Hatiduba is inhabited by the Kaman section of the Mishmis.

1.3. The village Hatiduba is purposively selected for the study on consideration that it is one of the villages situated in the valley where in shifting cultivation, wet

rice cultivation as well as Rabi crop cultivation are practised.

1.4. The investigators had to take the help of interpreters for interviewing the respondents. However, every possible care has been taken to get reliable information from the respondents.

## 2. Arunachal Pradesh :

2.1. Arunachal Pradesh is a thinly populated hilly tract lying roughly between the latitudes  $16^{\circ}28'N$  and  $29^{\circ}30'N$  and the longitudes  $91^{\circ}30'E$  and  $97^{\circ}30'E$  in the north-east region of India, with an area of about 83,743 sq.km. bordering the international boundaries of Bhutan on the West, Tibet and China on the North and Burma on the South-East. On the South of it Assam serves as the link-state with the rest of the country.

2.2. Arunachal Pradesh was known as the North-East Frontier Agency (NEFA) which was constitutionally a part of the State of Assam, till 21st January, 1972. On the 21st day of January, 1972, NEFA attained the status of Union Territory under provision of the North-Eastern Areas (Reorganisation) Act, 1971 (81 of 1971) with the new name of Arunachal Pradesh. Arunachal Pradesh consisted of 5 districts till May, 1980. Under the Arunachal Pradesh Reorganisation of Districts Act, 1980 four new districts were carved out of the Kameng District, Subansiri District, Siang District and Lohit District. The reorganised districts along with population, sex ratio, growth rate, density of population break-ups are shown in Table 1.2.

2.3. Arunachal is a thinly populated territory rich in flora and fauna. The density of population per square kilometer is 7 (1981 Census provisional figure). It has got



Table 1.2

Statement showing a comparative picture of the population of Arunachal Pradesh. (1981 Census, Provisional Figures).

| District        | Total Population |                | Decennial Growth Rates |                  | Density of Population 1981 (Per km. <sup>2</sup> ) | Sex-Ratio (Females per 1000 males) |            |
|-----------------|------------------|----------------|------------------------|------------------|--|------------------------------------|------------|
|                 | 1971             | 1981           | 1961-71                | 1971-81          |  | 1971                               | 1981       |
| West Kameng     | 50,867           | 62,946         | (+) 22.04              | (+) 23.15        | 7  | 727                                | 370        |
| East Kameng     | 35,134           | 42,722         | (+) 24.44              | (+) 21.60        | 10   | 430                                | 943        |
| Lower Subansiri | 80,914           | 113,300        | (+) 30.32              | (+) 40.02        | 9  | 940                                | 883        |
| Upper Subansiri | 32,014           | 39,406         | (+) 30.77              | (+) 23.09        | 6  | 953                                | 971        |
| West Siang      | 59,242           | 74,151         | (+) 23.43              | (+) 25.17        | 6  | 850                                | 912        |
| East Siang      | 49,005           | 70,274         | (+) 34.49              | (+) 43.40        | 11   | 369                                | 350        |
| Dibang Valley   | 15,232           | 27,716         | (+) 48.59              | (+) 81.93        | 2  | 806                                | 733        |
| Lohit           | 47,633           | 69,400         | (+) 34.63              | (+) 45.7)        | 6  | 762                                | 781        |
| Tirap           | 97,470           | 128,135        | (+) 63.56              | (+) 31.43        | 13   | 833                                | 872        |
| <b>Total :</b>  | <b>467,511</b>   | <b>628,050</b> | <b>(+) 33.91</b>       | <b>(+) 34.34</b> | <b>7</b>   | <b>861</b>                         | <b>870</b> |

Source : Census of India, Arunachal Pradesh, 1981 (Series 25, Paper 1.)

vast resources for generating hydel power. Though mineral resources are expected to be plentiful, yet exploration in most of ~~all~~ the hills is not taken in hand. Forest wealth abounds in Arunachal Pradesh and under proper management it can yield rich dividends.

2.4. Arunachal is predominantly inhabited by tribal people. As per 1971 Census, tribal population consisted of 79.02 per cent of the total population. About 50 distinct languages and dialects are spoken in the territory by 110 different tribes and sub-tribes.

2.5. Arunachal is not one socio-economic unit, but a conglomeration of cultures based on different tribal practices. The growth rate of population in Arunachal Pradesh during the decade 1971-81 is 34.34 per cent (Provisional figures). The growth rate has considerably decreased during 1971-81 in comparison to the previous decade of 1961 to 1971 which was 38.91 per cent.

2.6. 1981 Provisional figures show that there are 126,185 literate persons in Arunachal Pradesh. The percentage of literacy was 11.29 in 1971; which has gone upto 20.09 per cent in 1981, which indicates a quick spread of education in the territory.

2.7. The Union Territory lacks in good surface communication. Difficult terrain, stiff hills, turbulent rivers and streams which change courses very frequently cause constant problems for smooth maintenance of surface communications. Construction of roads and bridges over the rivers is difficult and very costly.

2.8. Agriculture dominates the pattern of economic activity of the people of Arunachal Pradesh. About 80 per cent of the workers are either cultivators or allied



agricultural workers. The predominant system of cultivation practised by the people is shifting cultivation with a few exceptions.

3. The Lohit District :

3.1. The Lohit District lies in the north-eastern part of Arunachal Pradesh. It covers an area of 11,402 sq.km. and lies roughly between  $95^{\circ}45'E$  to  $97^{\circ}30'E$  longitudes and  $27^{\circ}30'N$  to  $28^{\circ}30'N$  latitudes. It is bounded by China and Burma to the East, China and Tibet to the North, Dibang Valley District to the West and Assam to the South.

3.2. The district is mountainous except its lower belt. The district comprises of three sub-divisions, viz. Tezu Salar Sub-Division, Namsai and Hayuliang Sub-Division.

3.3. The Lohit, the Kamlang and the Noa-Dihing are the main rivers of the district and each of these rivers are fed by a number of turbulent tributaries running through mountains. The Lohit emerges from the higher Himalayan zone whereas the Kamlang and the Noa-Dihing emerge from the Daphabum range of the lesser Himalayas.

3.4. The general climate of Lohit District varies from place to place depending on the topographical conditions of the region. The extensive valleys formed by the Lohit across the mountainous terrain are deep and narrow. The nature of the terrain has profound influence on the climate of the region. The complexity of hilly terrain gives rise to variations of climate from place to place. Table 1.3 shows rainfall, temperature and relative humidity recorded at Tezu the district Head Quarters for 1980.

3.5. Because of obvious geographical and economic constraints the road communication in the district is still in an underdeveloped stage. The inadequate road net

Table 1.3  
Rainfall, Temperature and Relative Humidity at Tezu in 1980.

| Month           | Total Rainfall<br>(in mm.) | No. of<br>Raindays | Temperature in 0°C Relative<br>Humidity %<br>(Morning reading) | Temperature in 0°C Relative<br>Humidity %<br>(Evening reading) |
|-----------------|----------------------------|--------------------|--|--|
| January, 1980   | 66.9                       | 7                  | 20.8   | 78.4   |
| February, 1980  | 88.9                       | 7                  | 22.5   | 79.8   |
| March, 1980     | 269.2                      | 13                 | 24.3   | 85.5   |
| April, 1980     | 495.4                      | 13                 | 27.2   | 85.2   |
| May, 1980       | 142.7                      | 11                 | 29.9   | 91.6   |
| June, 1980      | 404.6                      | 16                 | 32.4   | 84.6   |
| July, 1980      | 71.1                       | 19                 | 32.2   | 84.4   |
| August, 1980    | 619.2                      | 21                 | 31.1   | 84.9   |
| September, 1980 | 259.8                      | 11                 | 32.2   | 80.1   |
| October, 1980   | 271.8                      | 7                  | 29.2   | 75.8   |
| November, 1980  | Nil                        | Nil                | 28.2   | 64.4   |
| December, 1980  | Nil                        | Nil                | 20.4   | 69.6   |

Source : District Agricultural Office, Tezu.



work and transport system are two important factors responsible for backwardness of the region. The Saliya-Tezu motorable road came up in 1967 and had been extended upto Yatong. Yet on the road to Tezu, the Digaru stands permanent obstacle to communication. The meanderiness of the Digaru has made a bed of one kilometer wide. During the winter months the Digaru shrinks to fifty meters or so, occupying unpredictably any part of the bed at random. As an outcome of this, building of a bridge over the Digaru could not be made possible. In the summer one has to ride on an elephant to cross the Digaru to reach Tezu. The elephant picks its careful way holding its trunk aloft and avoiding the strong current of the river. There is a motorable road connecting Alubari, Chowkham and Namsai. All the administrative Centres in the district are connected by either motorable roads or porter tracks. Data provided by the Executive Engineer (P.W.D.), Tezu show that the total length of roads in the district as on 31.3.80 is only 239.77 km. of which a meagre length of 69.53 km. is black topped.

3.6. 1981 Census Provisional Population Tables show that the total population of Lohit District is 69,400 out of which 38,964 are males and 30,436 females. District Headquarters Tezu is the only town in the district. Literacy rate in the district is 27.35 per cent.

3.7. There are only one Higher Secondary School, four Secondary Schools, Thirteen M.E.Schools, eighty three L.P./J.B. Schools and five pre-primary Schools in the district. The Government has taken up adult education programme and so far as many as 25 adult literacy centres have been established.



3.8. The district is rich in forest resources. In fact, forest is the top most revenue earner of the district. The district has good potentiality for development of forest base industries. There is a large plywood and veneer factory on private sector at Namsai. A good number of big and small saw mills are coming up in the lower belt of the district.

3.9. Though majority of the people practise shifting cultivation, Bhamptis, Shingphos and other small tribes inhabiting the areas adjacent to the plains of Assam practise wet rice and terraced rice cultivation. Due to constant efforts of the administration, the farmers are taking up wet rice or terraced rice cultivation wherever suitable land is available. The main crops grown in the hilly areas are paddy, maize, wheat, millet etc. The Govt. is keen to induce people to take up improved forms of cultivation by supplying improved varieties of seed, agricultural implements and chemicals on subsidy basis.

Table 1.4 shows the principal crops grown in the district along with their harvest price and yield rate for the year 1979-80. Data available from the District Agricultural Officer, Tezu show that an area of 4769.6 hectares is under permanent cultivation in the district of which a good portion of 4275.0 hectares is under wet rice cultivation and an area of 274.6 hectares is under terraced rice cultivation.

Table 1.4

| Crops          | Harvest Price(Per Qtl.) | yield per Hect.(In M.T.) |
|----------------|-------------------------|--------------------------|
| Paddy          | Rs.100.00               | 1.66                     |
| Wheat          | Rs.115.00               | 1.39                     |
| Maize          | Rs. 85.00               | 1.36                     |
| Millet         | Rs.400.00               | 2.30                     |
| Potato         | Rs.125.00               | 6.88                     |
| Mustard        | Rs.245.00               | 1.40                     |
| Sugarcane(Gur) | Rs.350.00               | 1.61                     |

Source : District Agricultural Officer, Lohit District.



3.10. Paddy is the principal crop and a greater portion of arable land in the district is utilised in its cultivation. Next to paddy maize occupies the second position in respect of cropped area in the district. Mustard is an important crop and it is grown in the Rabi season under rainfall condition. Wheat, millet and potato are other important crops of the district. The average yields per hectare of the principal crops of the district are satisfactory.

3.11. Though various land development measures are taken by the administration, the pace of development is slow in the district largely due to rough topography, conservativeness of the people and lack of adequate technical staff.

## CHAPTER TWO

### The Village Setting

#### 1. Location of the Village :

1.1. In the foregoing chapter a brief account of Arunachal Pradesh as well as that of Lohit District to which the village Hatiduba belongs has been presented to have an idea of the general background of the field of study. The village Hatiduba is situated at a distance of 25 kms. from Tezu, the district headquarters of Lohit District.

1.2. The village is situated in the Lohit plains. It is in the Tezu sub-division and under the jurisdiction of the administrative unit of Tezu C.P. Block. The river Lohit is at a distance of about 6 kms. by the shortest route from the village. The village is on the south of Sadia-Tezu Road. On the west of it, the village Chailiang stands. The village Hatiduba is bounded by the rivulet Hatiduba on the south and south-east. Paya Forest is at a distance of 2 kms. only from the village on the east. An all weather road constructed by the C.P. Block and known as Block Road that runs around the village in a semi-circular way and touches the Sadia-Tezu Road at two points connects the residential houses. On both the sides of the road, in the eastern part of the village lay the low-lying land, parts of which are utilised for wet rice cultivation. The land in the village, except the wet rice cultivation land is uninundated high land which is utilised for cultivation of both Kharif and Rabi crops. Along the south bank of ravine Hatiduba the villagers have their cultivation fields as well as individual forest land.



1.3. The residential houses are laid along and facing the Block Road. Prior to 1977, the households were sparsely distributed. On the initiative and incentive from the Government the residential houses were rearranged and constructed systematically in a row along the Block Road. According to information collected from the respondents 10 families came from different villages of Hayuliang and Lohit sub-divisions and adjoining villages for settlement in the village prior to 1970. The rest settled in the village in between 1970 and 1977. The name of the village Hatiduba though appeared in primary Census Abstract (1971) of 1968, yet in the process of final enumeration for 1971 Census the village was merged with the adjoining village Muji.

2. House Type :

2.1. A Mishmi dwelling house is a house constructed on a raised platform. The materials required for construction of a house are bamboo, thatch and wooden posts. These building materials are generally gathered from nearby jungles. Dao, hatchet and axe are the only tools used. The platform of a house is erected upon stout wooden posts with bamboos. Generally, the height of platform from the ground level varies from 4 to 6 ft. All the Miju Mishmi houses are of the same pattern, although they vary in length according to the social position and the size of the family. Houses are generally twelve to fifteen feet wide while their lengths range between 50 to 100 feet. On the solid framework of wooden beams and battens are placed mats of thick bamboo splits to form the floor. Though the floor of the house is generally made of split bamboos, in

Some cases wooden planks are also used for flooring.

Floors and walls built with wooden planks made by scrapping off soft timber with dao, are also noticed.

2.2. Every dwelling house has an open balcony (Handia) with timber planks or split bamboo floor on the entrance. The roofs are covered with thatch and walls are made of split bamboo and wooden planks. A short balk of timber with notches cut in it (Tomaflong) leads up to the open balcony. From the balcony one can enter into the first compartment (Tama mong) which again leads to the next big compartment (Tama Kasam). The compartment having a separate hearth is known as "Tama Kambran". At the rear end of the house there is a very small room (Takru) used as latrine. Except the front room the whole house is a large hall with no partitions within. On the walls along the passage, are hung the skulls of mithuns, buffaloes, deer, bears and bears, all arranged in rows. These trophies are counted as indicative of magnitude of wealth of the owner, larger the trophies greater the wealth. The position of the fire place is noteworthy. The fire place (Tomanyu) is prepared by fixing specially designed wooden tray in the open space cut in the matting of the floor and covering it with soil. Over the hearth hangs a three-tiered hurdle (Kaka, Krong and Kandom) made with split bamboo and cane strings, used as shelf for drying fish, meat and fire wood. In a house there are only two doors (phoon) one in the front and the other at the back. Another ladder is used to escalate to the back door of the house. There is no window but a door like large opening is kept on one side <sup>wall</sup> in the middle of the house. The granary is erected at some convenient



distance from the dwelling house. From the number of granaries within the same homestead one can ascertain the number of wives possessed by the owner of the house. Each wife has a granary of her own in which she stores all the grains and other produces that she raises. Among the Miju Mishmis, a group of families are also found to live together in the same house like a joint family. Under the same roof, they maintain independent identity as separate units by taking meals prepared in separate hearths, cultivating separate plots of land, storing grains in separate granaries and performing rituals etc. from separate funds.

2.3. The ground space below the platform<sup>of</sup> a house is used as pigsty (Kamu). Fowls are kept in specially made bamboo cages (Yrakrung) placed inside on the floor.

### 3. Communication :

3.1. The Tezu-Sadia Road passes by the side of the village. Cooperative Society buses ply regularly to and from Tezu by this road. The C.D. Block Road which was constructed by the Tezu C.D. Block in 1977, inside the village is in good condition. Light vehicles can easily ply through it.

### 4. Postal Communication :

4.1. The nearest post office is situated at Sunpura at a distance of about 8 kms. from the village. This post office is equipped with Telegraphic facilities.

### 5. Health and Sanitation :

5.1. The general health, by and large, of the people of Hatiduba is apparently satisfactory. However, occurrence

Acc No  
127

of Malaria is quite common in the village. The other common diseases as reported are dysentery, diarrhoea and skin diseases. Spraying of D.D.T. is carried out in the village as a preventive measure. The practice of performing rituals prior to seeking medical help is still in vogue among the villagers. In practice the villagers seldom consult a physician for treatment of diseases. The Health Unit with the provision of two beds at Sunpura at a distance of about 8 kms. from the village serves the village. In the case of serious ailment needing hospitalisation, the doctor of Sunpura Health Unit refers the case to the General Hospital at Tezu.

5.2. The source of drinking water in the village is ring wells. There are 5 ring wells in the village.

5.3. There is no drainage arrangements in the village. But as the residential area of the village is on a flat highland and as the rivulet Hatiduba flows nearby water logging in the residential area does not occur during rainy season.

#### 6. Educational Facilities :

6.1. Educational facilities in the village cannot be said to be in easy reach. Children have to walk about 4 kms. to Yealiang Junior Basic School to receive primary education. There is an M.E. School at Jaco, at a distance of about 7 kms. from the village. The school imparts education from primary level to M.E. level. The Vivekananda Kendra Vidyalaya is under construction at a nearby place. The medium of instruction in the schools is English.



Remoteness of centres of learning stands as hindrance to the spread of education in the village. We came across many a parents of the village who were interested in educating their children yet not willing to send them to a far off school, lest they might be attacked by wild animals.

7. Veterinary Facility :

7.1. The veterinary services and facility in the village cannot be said to be adequate and satisfactory. The nearest veterinary centre is located at Sunpura.

8. Village Industry :

8.1. The only household industry of importance in the village is weaving. Much of the clothings worn by both males and females are woven by the women on the traditional small tension loom. The Miju Mishmi women are very good weavers. In the olden days they dyed the yarn with fast bright colours prepared indigenously. They produced all the clothings according to family requirements with various designs and texture. At present women folk produce the only unavoidable pieces for family use. It is observed that of late the villagers commonly use cheap mill-made textiles and weaving as a craft is somewhat on the verge of decline among them. It is also noticed that no woman produces cloth for sale; what is produced is exclusively for family use.

9. Marketing Facility :

9.1. There is no market place for disposal of agricultural products and procurement of commodities within or near the village Hatiduba. But there are three

small shops, the keepers of which serve as procurement agents for collecting agricultural products like mustard and maize. Villagers generally sell their saleable agricultural produces to the keepers and buy their provisions for every-day use. The weekly market at Sunpura on the other bank of the Balijan, which is on the territory of the neighbouring State of Assam, provides marketing facilities to the villagers. The villagers generally come to this market to purchase bell metal, utensils, garments, footwear, yarn and clothes. Though the weekly market ('hat') place is in Assam, there is no restriction in coming and going to the market. They usually come to the 'hat' by a narrow bridge across the river Balijan on market days.



## CHAPTER THREE

### Sociological Aspects of the Miju Mishmis

#### 1. Introduction :

1.1. The Kaman or Miju Mishmis, one of the three groups of the Mishmis, live in the Upper Lohit and Yamlang valleys of the Lohit District. As mentioned earlier in Chapter I, the Miju Mishmis are the numerically dominant group among the Mishmis. In this Chapter some important sociological aspects of the Miju Mishmis are discussed.

#### 2. Physical Features :

2.1. The Miju Mishmis are generally short statured people and belong to the Mongoloid ethnic stock. They present Mongoloid features in their racial characters. Their complexion varies from light brown to dark brown. The presence of the epicanthic fold is almost common. They are also characterised by flat face with prominent cheek bones, scanty facial and body hair. The Miju Mishmis speak a language of Tibeto-Burman group.

#### 3. Clan System :

3.1. The Miju Mishmi society is divided into a number of exogamous clans and sub-clans. The clans are based on an assumption of common origin, the members of the clan regard themselves to be the descendants of a common ancestor. Since the clan members regard themselves to be of common blood, any marriage within one's own clan is believed to be marriage within one's own family, thus causing the breach of incest taboo and hence restricted by the rule of clan exogamy. The rule of clan exogamy is as strict in nature as the rule of tribal endogamy among

the Miju Mishmis. However, the intermarriage between Miju Mishmis and Digaru Mishmis is a common feature as both the groups follow exactly the same socio-cultural activities although they have linguistic dissimilarities. Structurally, the clan is a division of patrilineal kin. A Mishmi clan (Brong) is an important social unit and its members are bound to each other by definite obligations of mutual help.

3.2. As the Mishmi villages are very small, usually consisting of four to six households on the average, the number of clans found in a village is hardly more than two. A village of more than fifteen households is almost rare among the Mishmis.

3.4. There is no class system among the Miju Mishmis. In the past the pattern of village settlements depended on the distribution of clans. The tradition of one clan to one village is no longer generally operative. When, with the growth of population, the land within the village proves insufficient, some of the villagers migrate to a neighbouring area where ample cultivable land is available. Persons belonging to other clans may also join them and thus form a new heterogeneous village.\*

#### 4. Laws and Custom :

4.1. The Miju Mishmis usually settle their disputes by negotiation. When occasions arise, they approach the Govt. appointed headman (Gaonbura), Panchayat members or influential elderly persons representing each clan from several villages. The council, thus formed is known as Pharai.

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\* Hatiduba is one of the biggest Miju Mishmi villages of the district consisting of 22 households belonging to eight clan groups. The first group of people belonging to Kamblung and Yun clan migrated from Pangum and Gap areas and settled in the village around 1960. Later on people belonging to other clans came to join them.



4.2. The guiding principle behind all the Mishmi laws is that the culprit or offender should be punished and justice should be awarded to the aggrieved. The punishment varies according to the nature of the offence committed. The Miju Mishmi hardly violate their traditional penal codes. Instances of murder and inter-village feuds are very rare. In serious offences, heavy fine of payment of a number of mithuns is imposed on the guilty person. Generally for all sorts of offences, a fine is imposed and is to be paid either in cash or in kind. The village headman or 'Gaonbura' plays an important role in various activities of village administration. He also settles minor disputes amicably.

4.3. The clan holds joint responsibility in case of disputes. For this purpose the Miju Mishmi usually take into consideration clan members who reside within a particular locality.

#### 5. Marriage :

5.1. Marriage (Kamai-la-kram) in Miju Mishmi society takes place in two ways viz. either by (i) negotiation (Phare-Neko) or by (ii) the romantic way of capture (Ghat-Neko). The first is the traditional and more popular system of marriage while the latter is also a socially approved practice.

5.2. Marriage by negotiation is generally initiated from boy's side. The boy who has already seen a girl or known her for sometime past and has made up his mind to marry her may give an indication of his desire to his parents. They then call a go-between (Phare-Kathai) to initiate the marriage proposal on behalf of the boy's family.

The Phare-Kathai may be a relative of the boy or some elderly person of his village community. He plays the most important role in negotiating the marriage. Success or failure of the proposal depends largely upon his intelligence and tactfulness of the go-between. The most fundamental things to be decided in the negotiation after obtaining the consent of the girl's parents to the marriage proposal is the fixation of the bride-price (Kamai-Ningh). The bride price usually consists of a number of mithuns, cows, pigs and sometimes buffaloes. However, the amount of bride-price to be paid depends upon the economic and social status of the bride's parents. The higher the position enjoyed by the bride's father in society, the greater the amount of bride-price he can expect. A rich man can afford to pay even ten mithuns\*. In case, a man cannot afford to pay the entire bride-price in one instance, he may be permitted to pay a part of it at marriage and the rest afterwards.

5.3. Besides the bride-price, a man has to pay to the bride's parents gifts (Cha-thal) consisting of several baskets of dried fishes and pork which is also considered as part of the bride-price. Such cha-thal has to be paid on different occasions before the marriage takes place.

5.4. The second form of marriage of the Miju Mishmis is the marriage by elopement (Ghat-Neko). Generally a boy

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\* Mithuns (Bos-Frontalis) is a rare animal reared in the North-Eastern Hills regions, mostly in Arunachal Pradesh. It is regarded by the tribes of the territory as the most valuable animal. Irrespective of its economic importance this animal is sacrificed in their festivals and rituals. A man having more mithuns is considered to be wealthy and thus deserves respect and social status.



takes resort to it when he apprehends that his parents would refuse to bring in the girl of this choice or simply to avoid the elaborate and expensive formalities.

5.5. A young boy in love with a girl of his own or some other village may elope with her to his parental village without giving any notice of the event to the parents of the girl. In such cases, the bride-price is to be paid by the groom's parents after a mutual agreement with the bride's parents. This type of marriage (Chat-Neko) is considered to be convenient and so it is preferred by a section of the younger generation.

5.6. It has been stated earlier that marriage <sup>within</sup> in the clan is considered incestuous and prohibited. Seeking the mate amongst the daughters of one's father's or mother's sister's is also considered incestuous. The other types of cross-cousin marriages are permissible among them. As for example, marriage with the daughter of one's mother's brother is permissible, but, marriage with the mother's brother's son is not permissible.

5.7. The Miju Mishmis practise polygyny. It depends more upon one's economic and social status than anything else. Along with this, the consent of the first wife is always necessary which, in fact, is not difficult to obtain. To a Miju Mishmi, a wife is a working partner and is considered a highly valued asset. In case of polygyny, the first wife (Konang) holds higher and more prominent position than the second (Kotai) and third wife (Kichik) in their day to day domestic affairs. It is customary that each wife owns a separate hearth (Toman-Yoo) and

granary (Ka-tam) though they live in the same house. Polygyny enhances a man's status in the society since it is indicative of his economic stability.\* Polyandry is unknown among the Miju Mishmis.

5.8. Secondary marriage in the forms of both levirate and sororate are also widely practised among the Miju Mishmis. A man usually inherits the widow of his elder brother. It is customary for a widow to start living with her husband's younger brother as his wife. This custom is known as Chami-Kuwang. It is also a customary rule that a man inherits the widow of his younger brother. Hence, the practice of inheriting the wife of the elder brother or younger brother (both senior levirate and junior levirate) is present among the Miju Mishmis. In case of absence of husband's younger brother, she may be inherited by another member suitable to her within the clan.

5.9. Another form of marrying one's sister-in-law, (Sororate) is also prevalent among the Miju Mishmis. When a wife dies without leaving any child, the widower is usually entitled to have his deceased wife's unmarried younger sister as his wife. If there is no unmarried younger sister of the deceased wife, one of her cousin sisters may be given in marriage to him. However, in such cases, he is required to pay a nominal bride-price according to their social custom. Inheriting one's own

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\* According to an information a well-to-do Miju Mishmi man of Tezu belonging to Kri Clan have got ten wives and his all wives live in a single long house.



step mother as wife (Poya-Kowang) after the death of father is also practised among the Miju Mishmis. They feel that a women should be protected socially and economically and as such, responsibility generally goes to nearest relative of the clan; and hence inheriting of wives of elder brother, younger brother, or even the step mother, is an essential part of their social system.

5.10. The date of marriage is decided by the groom's parents. The bride need not accompany the groom to his home immediately after the marriage ceremony. She stays with her parents for about a year or more after the marriage. The husband may, however, visit her during the period at her parental house. At the end of the year or so, the husband along with some relatives goes to bring her home and only then the bride assumes full membership of her husband's family. The traditional custom of staying for about a year with her parents after the marriage, is now being relaxed and a bride may begin to live with her husband even earlier than the specified time.

#### 6. Inheritance of Property :

6.1. According to the customary law of the Miju Mishmis all the properties are inherited by the male descendants only. No female member can claim as heiress. When the father dies, the son inherits the property. Generally the property is equally divided among the sons. But the shares among the sons may vary from person to person. It is generally depends upon the will of the father. Therefore, it is difficult to fix the exact proportion of shares each son receives. Some movable property like mithun

and immovable property like land are generally kept as common property of all the sons.

6.2. Among the Miju Mishmis, like other tribes of Arunachal, the descent is patrilineal and residence is virilocal or neolocal. It is to be mentioned that the virilocality is the general rule. Neolocality is coming to be a new mode of residence to the persons settled in the urban centres for salaried employment etc.

6.3. Sometimes two or more related families, are also found to live in a common long hall-type-house. Unlike a joint family each family prepares food in a separate hearth, performs rituals etc. from separate funds and cultivates separate plots of land. Thus they maintain their affairs quite independently as separate household units. A joint family may split up into elementary families due to division and separation.

#### 7. Birth :

7.1. After the birth (Chay-Nank) of a male child, a taboo is observed by the parents, the father is to observe is for eleven days while the mother for ten days.\* But in case of birth of a female child, taboo is observed by her father for ten days and mother for nine days. Within this taboo period they are to abstain from doing certain works. The birth of a child is a matter of rejoicing not only to the family but also to the clan members of the village.

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\* The taboo (Gena) is also observed in case of the birth of a mithun and pigs. At the birth of ten piglings, taboo is to be observed for five days, if five in number, taboo is for three days and if number is two it is to be observed for one day only.



7.2. As a woman feels the labour pain she generally goes out to the nearby jungle or to such other available bushes of trees just to hide herself for giving birth to the child. She even does not allow her husband to assist her in the natalitial care. Giving name to a child is done at any time within a year or so.

8. Rites and Rituals :

8.1. The Miju Mishmi religion is based on the magico-religious beliefs. They believe in a supreme diety (Metai) whom they regard as the creator of earth, and on the other hand they believe in the existence of a number of benevolent or malevolent supernatural forces, who for all practical purposes, have a direct influence in determining happiness and prosperity or misery in the life of an individual. Sacrifice of animals is specially made to propitiate these supernatural spirits whenever illness or misfortune occurs among them. Some of these supernatural spirits are believed to reside on big trees, in jungles, in hills, in water or in air etc., while others wander in disguise and are on the look out for taking human life and damaging property. Occurrence of earthquake, landslide, torrential rainfall, epidemic, diseases, etc. are attributed to the annoyance of some of the spirits. Almost all the common diseases of men and livestock are supposed to be the wrath of evil spirits. On each of these occasions, the spirit concerned needs to be appeased by offering sacrifices. Mithuns (Chal), Cows (Monte), buffaloes (Toloi), Figs (Lee) fowls (Kry), etc. are the animals usually sacrificed. The number of animals to be sacrificed are generally determined

considering the nature of spirits. Other necessary requirements connected with a ceremony are food and rice-beer for the guests and relatives attending the ceremony. The priest (Kombring) conducting the ceremony is also to be given a large number of gifts which vary according to the nature of the ceremony.

8.2. The rituals or the ceremonies performed by the Miju Mishmis can broadly be classified into three groups - Ceremonies connected with cure of sickness, ceremonies connected with agricultural operations and death ceremony. There is no fixed period of time for celebration of ceremony. They perform these ceremonies according to their convenience.

8.3. The Thung is the most important ceremony performed by the Miju Mishmis which is known as Duiya among the Digaru Mishmis.\* The performance of the ceremony is so expensive that it is hardly possible even for a rich man to perform it for more than two times during his life. It is performed in honour of the Supreme Creator (Metai) with the object of appeasing him and praying him to bless the performer with good health, happiness to family abundant crops and property. Usually a large number of animals are sacrificed. The minimum number of mithuns and pigs is five and four and these may go upto 30 and 12 respectively. The number of fowls required for sacrifice is quite large. The ceremony continues for five to seven days and a large number of guests generally attend the ceremony and thus the Thung ceremony involves a heavy expenditure.

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\* The rituals or the ceremonies of the Digaru Mishmis (Taron) and the Miju Mishmis (Kaman) are practically the same although they are named differently. A Miju Mishmi priest conducting ceremony in a Digaru Mishmi household and vice-versa is quite common.



8.4. The Taka-Do of the Miju Mishmis which is known as Tamla-Do or Tamla-Wingya among the Digaru Mishmis, is an important Mishmi festival. They believe that every village is guarded by a spirit known as Bru or Bruiya, who wards off the spirits causing epidemic to the villagers and protects the crops from the ravages of wild animals and insects. The ceremony is performed by all the villagers jointly every year with great enthusiasm. Besides performing annually, it is performed at the time of establishing a new village or before leaving the old village for another new site.

8.5. It has been mentioned earlier that they believe that the evil spirits cause diseases. As for example, the spirit called Chuppa who lives in big trees is associated with leprosy or such other serious skin diseases. The spirit Glong, causes stomach trouble to the children and the Kachal cause dysentery and brings epidemic to the village. The spirit called Alang is responsible for causing continuous fever and the Kukoo, for malaria and typhoid. The other evil spirits like Kung-Gau, Hambam, Chupong, Bru-Kandan, Kamau, etc. are also responsible for causing serious illness. The spirit known as Bru-Hutang is specially concerned with child birth and if neglected he may cause miscarriage or make the baby physically deformed. Besides these spirits, there are also several other less important ones such as Kanang-Kisa, Munglo-Kisa, Anjao-Kisa, Krun-Kloung etc. and each of them is also being associated with some diseases. These spirits have to be appeased whenever a member of the family is ill or when any such danger is apprehended. They believe that the spirit Chuppa

causes accident to man and the Bru looks after the welfare of human beings, gives good crops and cattle and protect man from accident.

8.6. Among some of the important rites and rituals performed by the Miju Mishmis are Aupoung, Singrang-Takso, Tulu, Tano and Ta-Tuwat. The performance of Aupoung (ancestor worship) involves heavy expenditure as a number of mithuns and cows are to be sacrificed in honour of the ancestors. On this occasion, a large number of guests and relatives come from far distances to attend the ceremony. In performing the ceremony the head priest (Kumbrum Kutai) is generally assisted by several junior priests (Motai-Kutuwat) as this ceremony is a much time taking affair. They also beat drums (Kasang) and brass plates (Mandong) during the performance of the ritual. After the ritual is over, the members of the household observe some taboos (Kuman). They cannot come out of the house as long as the taboo remains in operation and thus careful arrangements have to be made to store sufficient food and water before the taboo starts. All outdoor activities have to be suspended during the period of taboo.

8.7. Similarly, in performing other important rituals, viz. Singrang-Takso, Tulu, Tano and Ta-Tuwat, they have to observe taboo which may last from one to five days. Prayers are uttered and sacrifices offered by the priest (Kumbrum-Kutai) to secure the blessings from respective deities associated with these rituals. Sacrifices of animals generally include mithuns, cows and pigs. Fowls are also sacrificed in addition to the main sacrifice.



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9.4. The actual ceremony begins when the priest blows his horn and his assistants beat a drum (Kasang) and a gong (Mandong) continuously for more than an hour. The ceremony continues for the second and third day also and sometimes it takes one or two days more when the priest is slow in performing the rites. The ceremony which takes place on the third day is known as Bradda. After this has been done, a pig and a fowl are sacrificed to appease the spirit called Bruhutang for the welfare of the family. The ceremony comes to an end with the performance of Tapang where all the spirits are offered their due share of sacrificial offerings. After the ceremony is over, the members of the deceased family abstain from going out of the village and the outsiders are also not allowed to enter the village for three days. Such taboo observed by them is known as Tulu-Kumun. The ceremonial mourning generally lasts for ten days. No socio-religious ceremony is performed during the period of mourning.

#### 10. Food Habits :

10.1. The staple cereal food of the Miju Mishmis is rice (Mang). Besides, a small quantity of millet (Pro) and maize (Bo) are also used. The two principal meals consist of rice, small quantity of vegetables and meat or dried fish whenever available. Rice and vegetables are boiled and meat is sometimes roasted. Except salt (Timin) and chilly (Buchi) no other condiments are taken. The common vegetables are pumpkin, gourd, roots and tubers, bamboo shoot (Wa-Thuwong), cane shoot (Kanching-Clo) mushrooms (Ma-pat, pai-chee) and some other will leaves and shoots locally known as Khajing, Kramshes, etc. Food is usually prepared and served by the women.



9. Funeral and Death Ceremony :

9.1. The ceremony that is performed after the death of an individual is known as Tulu. The ceremony continues for three to five days and is conducted by a priest (Kumbrum-Kotai) and his assistant (Motai-Kotuwat).

9.2. Death due to old age is considered to be natural. The dead are cremated. Cremation is done in the day-time and all the persons attending the funeral have to come back from the cremation ground before dusk. Immediately after the death, the dead body is taken out of house and laid on a newly made bamboo mat and hands and feet are tied up according to their custom. If death occurs at night, the body is kept inside the house till the next morning. In all circumstances, the relatives (particularly clan members) of the deceased are given a chance to have a last look at him before the body is taken to the cremation ground (Mongru). The body is usually carried on a bamboo framework (Tan-Tiyayang) by two clan men of the village. No woman accompanies them. The corpse is burnt on a pyre of bamboo and wood arranged like a tressel.

9.3. The death ceremony (Tulu) is generally performed after one month and some times under adverse circumstances within a year according to convenience of the family of the deceased. On the first day of the ceremony fowls are sacrificed in honour of the hill god (Shuta). The relatives of the deceased assemble near the priest and relate to him the sequence in which the death took place. They also ask the priest to drive out the evil spirit (Chuppa) from the house and install the benevolent spirit (Bru) instead.



9.4. The actual ceremony begins when the priest blows his horn and his assistants beat a drum (Kasang) and a gong (Mandong) continuously for more than an hour. The ceremony continues for the second and third day also and sometimes it takes one or two days more when the priest is slow in performing the rites. The ceremony which takes place on the third day is known as Bradda. After this has been done, a pig and a fowl are sacrificed to appease the spirit called Bruhutang for the welfare of the family. The ceremony comes to an end with the performance of Tapang where all the spirits are offered their due share of sacrificial offerings. After the ceremony is over, the members of the deceased family abstain from going out of the village and the outsiders are also not allowed to enter the village for three days. Such taboo observed by them is known as Tulu-Kumun. The ceremonial mourning generally lasts for ten days. No socio-religious ceremony is performed during the period of mourning.

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10.2. The Miju Mishmis do not take milk. But the meat and fish are favourite items of food. They rear cattle, pigs, and poultry entirely for home consumption. However, as the killing of these animals is associated with religious occasions, their consumption is confined to such occasions only. Mithuns are owned but left to roam in jungles as semi-wild animals.

10.3. The menfolk enjoy feast and festivities without any reservation, but there are restrictions for womenfolk. The young girls, before attainment of puberty are allowed to take all kinds of meat. A female from the stage of attaining puberty cannot take any meat till she become a mother of three children. After that the woman can take pork and chicken, but it is a taboo for her to take beef or mithun's meat. There is no restriction of taking fish. They believe that if a woman dares to violate this rule, the supernatural power may inflict a heavy punishment on her.

10.4. A considerable portion of rice and a major portion of millet are used for preparing beer (chee). Rice beer is a favourite and regular drink, and it forms an ingredient to the staple food of the people. It serves as a milk stimulant. 'Chee' being a staple drink, is taken without reservation by all men, women as well as children. However, menfolk consume major portion of 'chee'. They have a strong belief that a drink of chee tones up their energy.

10.5. The Miju Mishmis take tobacco, cigarettes, bidi regularly. Some of them also take opium. They grow tobacco and opium in the hills. They are chain smokers; the pipe or the cigarettes are seldom kept away from their lips.

Owing to opium addiction, they have become lethargic and devitalised. However, the other Mishmi group i.e. the Idu Mishmis do not take opium.

11. Press and Ornaments :

11.1. The artistic mind of the Miju Mishmi is well expressed in the clothes they weave. The women weave, for the family using a small tension loom (Bongthoma) made of bamboo and wood, which is simple, portable and inexpensive. The men wear a coat (Gu Khana) of black or maroon colour without sleeve and a narrow waist coat (Bron) with an embroidered flap on the front that reaches from the neck down to the knees. The dress of the lower part worn by the Miju men consists of a narrow strip of cloth (Lapo, Bran) with embroidered border bound round the loins, which passes between the legs and is fastened in front. The menfolk also wear a turban (Phrong) which serves the purpose of a head gear. They carry a dao (Ta-shoot, Samphrang) suspended to a leather shoulder belt across the waist, particularly when going out to the field, jungle and to some distant places. They also usually carry a bag (Tapei) and on the back flat shaped basket (Bhai) which is covered with long fibres of tree or ornamented with animal skins.

11.2. They purchase yarn from the market for weaving their clothes. The technique, design and colour combination on the cloths made by Miju Mishmi women indicate their proficiency in weaving. It is to be noted that the Miju Mishmis have been making their own traditional dress and even some ornaments by themselves from time immemorial.



In ancient days the menfolk helped the women in collecting fibre plants (Tasha) and preparing yarn out of them. They also extracted dyes out of certain wild crepper and with these they dyed the yarns. Now, of course, they do not prepare yarn out of the Tasha plant nor do they make dyes; instead they purchase these from markets. As a rule each and every young girl must know weaving in Miju Mishmi society. Otherwise, it would be quite difficult for her to get married. So, a mother's first duty is to teach weaving to her daughter. A Mishmi boy is expected to know all the qualities of the girl before marriage. If the girl is really good in weaving she will be married at an early age even if she lacks some other qualities.

11.3. The women wear black or red-striped skirts (Dal) that reaches from the waist as far as the knee and a sleeveless short blouse (Cu) to cover the upper part of the body. A colourful piece of cloth (Tangran) is also fastened loosely round the waist over the skirt (Dal). The womenfolk wear a number of silver ornaments. Their hair is bound up in a knot on the crown of the head with a thin band of silver (Sung-gaap) passing round the forehead. The lobe of the ears is distended to about an inch in diameter to admit the silver earrings (Ing-sut). Necklace made of either silver coins (Appai-Pa) or beads (Kruncha) is commonly used. On their heads they wear a band of a very thin silver plate (Forong) which is broad on the forehead and tapering to about half an inch in breadth over the ears, thence continued round the back of the head by a chain of small shells. The bangle made of silver (Appai-jhan) is used by both male and female adult members of the Miju Mishmis.

11.4. On ceremonial occasions, the womenfolk take much care to decorate themselves with rich ornaments and garments. Now-a-days, the young Mishmi boys and girls and many others use modern dress available in the market. Yet, the system of wearing traditional dress still remains in every family. It is to be mentioned that the dress and ornaments of the Digaru and Miju Mishmis are practically the same.

12. Forces of Change :

12.1. The Miju Mishmis have a long contact with the plains of Assam since several centuries past. As such, they are much influenced by the Assamese culture. Most of them understand Assamese language and many of them have good command over it. Their socio-economic life also reflects a greater impact of the Assamese culture. In the recent years, the development in the communication system as well as administrative set up at different localities of the district and establishment of some Miju Mishmi villages in the plains areas of Sunpura bordering Assam and Arunachal Pradesh have led to faster mobility among the people. Hence, their regular contact with the outsiders and the official staff has exposed them to the outside world. Moreover, establishment of schools, hospitals, craft centres, markets, cinema halls, cooperative shops, transportation etc. has brought a considerable socio-economic change among them.

12.2. The regrouping of several Miju and Digaru Mishmi villages under rehabilitation programme also provide a new vista for their socio-economic upliftment. After 1960, as many as 200 families belonging to both the Digaru and Miju



Mishmis established their villages in the areas located between Sunpura and Paya reserve forests. Their hunger for plains land has increased much during last decade and as such their migration from the hills to the plains is an important phenomenon which involves various infra-structural changes along with certain changes in their traditional way of life.

12.3. In the plains, they take the help of the Nepali immigrants to cultivate their land, mainly to raise mustard, wet rice and maize on contract basis of sharing the agricultural products between the owner and the Nepali cultivators. Now, the Miju Mishmis have acquired the idea of raising cash crops, like mustard and maize. They sell the products to some local traders.

12.4. The recent trend of migration of the tribe to the plains has perceptible impact on the socio-economic life of the Miju Mishmis. There is no doubt, that their increased contacts with the plains of Assam has affected the economic pattern. However, the Miju Mishmis are still retaining the basic pattern of their social and cultural life.

## CHAPTER FOUR

### Demographic Aspects of Hatiduba.

#### 1. Population :

1.1. Hatiduba is a small village consisting of 22 households with a total population of 129 (54 males and 75 females) at the time of investigation in March, 1981. In comparison to the average size of Indian villages, this is undoubtedly a very small village. But so far the Miju Mishmi villages of Arunachal Pradesh are concerned, this would seem to be one of the biggest villages. The Miju Mishmi villages are generally very small. A Miju Mishmi village consisting of more than 15 households is very rare.

#### 2. The Family :

2.1. The families in Hatiduba village are divided into two broad groups, viz. nuclear and joint families. A nuclear family consists of husband and wife and their unmarried children. The joint families are classified into three categories, viz. (i) joint vertical, consisting of parents, unmarried and married sons with their children, (ii) joint horizontal type consisting of married brothers with their wives and children and (iii) in the special type of joint family some relatives live with the family as its members.

2.2. Table 4.1 shows that 15 families (68.19%) of the village belong to nuclear type while the remaining 7 families belong to joint type of which 3 (13.63%) are joint vertical, 3(13.63%) are special and only 1(4.55%) family belongs to joint horizontal type.



Table 4.1

Distribution of Households and Population  
by Types of Family.

| Family Type      | No. of H.H.    | Population     |                |                 | Females per 1000 males | Average size of H.H. |
|------------------|----------------|----------------|----------------|-----------------|------------------------|----------------------|
|                  |                | M              | F              | T               |                        |                      |
| Nuclear          | 15<br>(68.19)  | 34<br>(62.96)  | 46<br>(61.33)  | 80<br>(62.01)   | 1353                   | 5.33                 |
| Joint Vertical   | 3<br>(13.63)   | 9<br>(16.67)   | 12<br>(16.00)  | 21<br>(16.28)   | 1333                   | 7.00                 |
| Joint Horizontal | 1<br>(4.55)    | 4<br>(7.41)    | 5<br>(6.67)    | 9<br>(6.98)     | 1250                   | 9.00                 |
| Special          | 3<br>(13.63)   | 7<br>(12.96)   | 12<br>(16.00)  | 19<br>(14.73)   | 1714                   | 6.33                 |
| Total            | 22<br>(100.00) | 54<br>(100.00) | 75<br>(100.00) | 129<br>(100.00) | 1389                   | 5.86                 |

N.B. Figures in the brackets indicate P.C. of Total.

2.3. The average size of a nuclear family in the village is 5.3 and that of a joint family is 7.0. There is no nuclear family with more than 8 members and no joint family with more than 10 members. Table 4.1 shows that the average size of a household is 5.86 for the whole village. The average size is somewhat low because of predominance of nuclear type of families.

2.4. Table 4.2 shows the distribution of households and population according to family size. There is no significant variation between households and family size. Households with five members or less is only 8 (36.37%)

while 14 (63.63%) households belong to the broad group with six members or more in a family.

Table 4.2

Distribution of Households and Population by Size of Family.

| Family Size          | Households |        | Population |        |
|----------------------|------------|--------|------------|--------|
|                      | No.        | %      | No         | %      |
| Family with 1 member | 1          | 4.55   | 1          | 0.78   |
| " " 2                | 1          | 4.55   | 2          | 1.55   |
| " " 3                | 1          | 4.55   | 3          | 2.33   |
| " " 4                | 3          | 13.63  | 12         | 9.30   |
| " " 5                | 2          | 9.09   | 10         | 7.75   |
| " " 6                | 5          | 22.72  | 30         | 23.26  |
| " " 7                | 4          | 18.18  | 28         | 21.70  |
| " " 8                | 3          | 13.63  | 24         | 18.60  |
| " " 9                | 1          | 4.55   | 9          | 6.98   |
| " " 10               | 1          | 4.55   | 10         | 7.75   |
| Total                | 22.        | 100.00 | 129        | 100.00 |

3. Clan Division :

3.1. The clan division of the Miju Mishmis is important social unit. This aspect has been discussed in the preceding chapter. There are in all eight clans (Brong) in Hatiduba, viz. Yun, Manyu, Kambrai, Appa, Maso, Ama and Mela. It is to be noted that the single households belonging to the Mela clan living alone at the outskirts of the village belongs to the Digaru Mishmis. All the clans are exogamous.



Table 4.3  
Distribution of Households and Population  
by Clans.

| Name of Clans | No. of<br>H.H. | Population |        |       |
|---------------|----------------|------------|--------|-------|
|               |                | Male       | Female | Total |
| Kamblong      | 5<br>(22.72)   | 15         | 22     | 37    |
| Yun           | 5<br>(22.72)   | 10         | 15     | 25    |
| Manyu         | 4<br>(18.18)   | 10         | 15     | 25    |
| Kambrai       | 3<br>(13.64)   | 6          | 3      | 9     |
| Appa          | 2<br>(9.09)    | 3          | 10     | 13    |
| Maso          | 1<br>(4.55)    | 4          | 5      | 9     |
| Mela          | 1<br>(4.55)    | 4          | 2      | 6     |
| Ama           | 1<br>(4.55)    | 2          | 3      | 5     |
| Total :       | 22<br>(100.00) | 54         | 75     | 129   |

N.B. Figures in the brackets indicate p.c. of total.

3.2. The number of households and population belonging to different clans are shown in Table 4.3. The Kamblung clan consists of largest number of population (37%) followed by the Yun (25) and the Manyu (25). Other clans are smaller in size ranging from 5 to 13 persons.

4. Age and Sex Distribution :

4.1. Table 4.4 shows the distribution of population of Hatiluba village by age and sex. The total population consist of 54 males and 75 females giving an average

sex ratio of 1389 females per 1000 males. The sex ratio for Arunachal Pradesh as a whole according to 1981 Census is 870 females per 1000 males. The number of girls in Hatiduba village much higher than that of boys in age group of below 10 years. It is interesting to note that there are 44 girls and 26 boys (sex ratio 1833) in the population below the age of 20 years whereas there is no significant difference in the sex ratio of the population 20 years and above. Such differences in sex ratio in the early age groups could not be ascertained. There are 28 males and 31 females (sex ratio 1107) in this age group. 47.28 per cent of the total population of the village belongs to age group 0 to 15 years. The corresponding figure for the whole of Arunachal Pradesh according to 1971 Census was 38.23 per cent.

Table 4.4  
Distribution of Population by Age and Sex.

| Age-Groups    | Male           | Female         | Total           | Female per 1000 male |
|---------------|----------------|----------------|-----------------|----------------------|
| Below 5 years | 6<br>(11.11)   | 16<br>(21.33)  | 22<br>(17.05)   | 2,667                |
| 5 - 10 "      | 6<br>(11.11)   | 16<br>(21.33)  | 22<br>(17.05)   | 2,667                |
| 10 - 15 "     | 11<br>(20.38)  | 6<br>(8.00)    | 17<br>(13.18)   | 545                  |
| 15 - 20 "     | 3<br>(5.55)    | 6<br>(8.00)    | 9<br>(6.98)     | 2,000                |
| 20 - 25 "     | 3<br>(5.55)    | 3<br>(4.00)    | 6<br>(4.65)     | 1,000                |
| 25 - 30 "     | 5<br>(9.26)    | 5<br>(6.67)    | 10<br>(7.75)    | 1,000                |
| 30 - 40 "     | 7<br>(12.96)   | 8<br>(10.67)   | 15<br>(11.63)   | 1,143                |
| 40 - 50 "     | 4<br>(7.41)    | 8<br>(10.67)   | 12<br>(9.30)    | 2,000                |
| 50 - 60 "     | 4<br>(7.41)    | 5<br>(6.67)    | 9<br>(6.98)     | 1,250                |
| 60 & above "  | 5<br>(9.26)    | 2<br>(2.66)    | 7<br>(5.43)     | 400                  |
| Total :       | 54<br>(100.00) | 75<br>(100.00) | 129<br>(100.00) | 1,389                |

N.B. Figures in the brackets indicate p.c. of column total.



4.2. The adult population belonging to the age group of 15 to 60 years accounts for 47.29 per cent of the total population. The number of people in the age group 60 years and above is quite low and it constitutes only 5.43 per cent of the total population.

5. Marital Status :

5.1. Table 4.5 gives the distribution of population by age, sex and marital status. Of the total population 41.86 per cent are married, 55.03 per cent unmarried and 3.11 per cent widowed.

Table 4.5  
Distribution of Population According to Age,  
Sex and Marital Status.

| Age-Groups   | Married |    | Unmarried |    | Widow/er |   | Total |    |
|--------------|---------|----|-----------|----|----------|---|-------|----|
|              | M       | F  | M         | F  | M        | F | M     | F  |
| Below 5 yrs. | -       | -  | 6         | 16 | -        | - | 6     | 16 |
| 5 - 10 "     | -       | -  | 6         | 16 | -        | - | 6     | 16 |
| 10 - 15 "    | -       | -  | 11        | 6  | -        | - | 11    | 6  |
| 15 - 20 "    | 1       | 2  | 2         | 4  | -        | - | 3     | 6  |
| 20 - 25 "    | 1       | 3  | 2         | -  | -        | - | 3     | 3  |
| 25 - 30 "    | 4       | 5  | 1         | -  | -        | - | 5     | 5  |
| 30 - 40 "    | 7       | 7  | -         | 1  | -        | - | 7     | 8  |
| 40 - 50 "    | 4       | 7  | -         | -  | -        | 1 | 4     | 8  |
| 50 - 60 "    | 4       | 4  | -         | -  | -        | 1 | 4     | 5  |
| 60 & above   | 5       | -  | -         | -  | -        | 2 | 5     | 2  |
| Total :      | 26      | 28 | 28        | 43 | -        | 4 | 54    | 75 |

5.2. Table 4.6 shows that 3.84 per cent of males and 7.14 per cent of females are married under 20 years of age. There is no divorced or separated individuals in the village.

Table 4.6

Distribution of Population by Age, Sex and Educational Status.

| Age-Groups   | Illiterate |    | Literate |    | L.P. |    | M.E. |    | Matric Standard |    | H.S.L.C. Passed |    | Pre-Degree |    | Total |    |
|--------------|------------|----|----------|----|------|----|------|----|-----------------|----|-----------------|----|------------|----|-------|----|
|              | M.         | F. | M.       | F. | M.   | F. | M.   | F. | M.              | F. | M.              | F. | M.         | F. | M.    | F. |
| Below 5 Yrs. | 6          | 16 | -        | -  | -    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 6     | 16 |
| 5 - 10 "     | 6          | 16 | -        | -  | -    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 6     | 16 |
| 10 - 15 "    | 6          | 16 | 3        | -  | 2    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 11    | 6  |
| 15 - 20 "    | 1          | 5  | 1        | -  | -    | 1  | 1    | -  | -               | -  | -               | -  | -          | -  | 3     | 6  |
| 20 - 25 "    | 2          | 3  | -        | -  | -    | -  | -    | -  | 1               | -  | -               | -  | -          | -  | 3     | 3  |
| 25 - 30 "    | 4          | 5  | -        | -  | 1    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 5     | 5  |
| 30 - 40 "    | 6          | 8  | -        | -  | -    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 7     | 8  |
| 40 - 50 "    | 4          | 8  | -        | -  | -    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 4     | 8  |
| 50 - 60 "    | 4          | 5  | -        | -  | -    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 4     | 5  |
| 60 & above   | 5          | 2  | -        | -  | -    | -  | -    | -  | -               | -  | -               | -  | -          | -  | 5     | 2  |
| Total        | 44         | 74 | 4        | -  | 3    | -  | 1    | 1  | 1               | -  | -               | -  | -          | 1  | 54    | 75 |

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Moreover, remarriage as well as widow marriage is permitted among them. Thus it is rare that a woman in the reproductive age remains single. The four widows in the village are above 40 years of age. Remarriage after widowhood is the general rule both among men as well as among women so long as they are young enough to remarry. They do not practise child marriage. Early marriage of girls has been gradually going down in Hatiduba. In the village four girls in the age group of 15 - 20 years remained unmarried. It is also to be noted that one unmarried girl was above 25 years of age. The marriage of male was found to have taken place in between 15 to 30 years. There was no unmarried male above 30 years of age. There are only 2 persons in the village having 2 wives each.

5.3. Although endogamy is strictly practised one Mishmi girl of the village is married to a Nepali immigrant who settled in the village.

6. Educational Status :

6.1. The overall rate of literacy in Hatiduba village is very poor, the percentage being 8.53 only. The literacy rate is much lower as compared to that of the Lohit District which is 27.35 per cent according to 1981 Census. As per 1981 Census overall literacy rate for Arunachal Pradesh was 20.09 per cent. The poor rate of literacy may be due to the fact that the village is located in a comparatively disadvantageous position in regards to education, as there is no educational facilities within the village.

6.2. In Hatiduba only 11 persons out of a total population of 129 have returned as literate (Table 4.6).

Women of the village have remained almost outside the range of literacy, there being only a single literate woman in the village. Only two boys attend L.P. school in the village. There are only two persons to have acquired education above M.E. level, one of them is of matric standard, the other had education upto pre-degree level. Table 4.7 shows the number of students attending schools by age and sex.

Table 4.7  
No. of Students Attending School by  
Age and Sex.

| Age-Groups     | No. of Students |           |          | P.C. of Total Student to Total Population | P.C. of Male Students to Total Male Population |
|----------------|-----------------|-----------|----------|---|--|
|                | M.              | F.        | T.       |   |  |
| Below 10 years | --              | --        | --       | --  | --   |
| 10 - 15        | 5               | --        | 5        | 3.88                                      | 9.26   |
| 15 - 20        | 1               | --        | 1        | 0.78                                      | 1.85   |
| 20 & above     | --              | --        | --       | --  | --   |
| <b>Total :</b> | <b>6</b>        | <b>--</b> | <b>6</b> | <b>4.65</b>                               | <b>11.11</b>                                   |

7. Economic Status :

7.1. Table 4.8 gives the distribution of population of Hatiduba by economic status, sex and age group. The population is classified into three categories according to economic status, viz. workers, helpers (earning dependents) and non-workers (dependents). The persons who are primarily engaged in some economic activities are classified as workers. The persons whose main activities are different but help in economic pursuits of the household when occasion



demands and time permits, are classified as helpers. The persons who are basically non-workers are minor children of below 15 years of age. Old persons who are economically not active are also included in this category.

Table 4.8  
Distribution of Population According to  
Age, Sex and Economic Status.

| Age-Groups    | Worker |    | Helper   |    | Non-Worker |    | Total |    |
|---------------|--------|----|----------|----|------------|----|-------|----|
|               | M.     | F. | M.       | F. | M.         | F. | M.    | F. |
| Below 5 Years | --     | -- | --       | -- | 6          | 16 | 6     | 16 |
| 5 - 10        | --     | -- | --       | -- | 6          | 16 | 6     | 16 |
| 10 - 15       | --     | -- | 5<br>(2) | 2  | 6          | 4  | 11    | 6  |
| 15 - 20       | 1      | 6  | 2<br>(1) | -- | --         | -- | 3     | 6  |
| 20 - 25       | 2      | 3  | --       | -- | 1          | -- | 3     | 3  |
| 25 - 30       | 5      | 5  | --       | -- | --         | -- | 5     | 5  |
| 30 - 40       | 7      | 7  | --       | -- | --         | 1  | 7     | 8  |
| 40 - 50       | 4      | 8  | --       | -- | --         | -- | 4     | 8  |
| 50 - 60       | 4      | 5  | --       | -- | --         | -- | 4     | 5  |
| 60 & above    | 5      | 1  | --       | -- | --         | 1  | 5     | 2  |
| Total :       | 28     | 35 | 7<br>(3) | 2  | 19         | 38 | 54    | 75 |

N.B. Figures in the brackets indicate student helper.

7.2. Table 4.8 shows that out of a total population of 129 as many as 63 persons are workers in the village. Compared to the total population the percentage of working population stands at 48.84 per cent on the whole. This indicates that the village is having a working force nearly half of its total population. Equal participation in works

both by men and women is quite common among almost all the tribal population in Arunachal Pradesh and in some cases participation of women in work is found to be more than the males. Both men and women start working at the age between 15 and 20 years and continue beyond 60 years. Except a single male and two females, there is no non-worker in Hatiduba among persons aged 15 years and above. Fuller participation in work by children below 15 years of age is not found. But 5 males and 2 females of the age group 10 - 15 years have returned as helpers. There is no helper among children below 10 years of age. The number of student helpers is 3 in the village, they generally help their parents during their vacations and in leisure time in cultivation as well as household works.



## CHAPTER FIVE

### Economic Resources and Activities

#### 1. Introduction :

1.1. The economic life of a village can be judged by an analysis of the available economic resources in the command of the inhabitants. Naturally, it would require an assessment of the resources which have been put to productive use. In this Chapter, an attempt is made to examine the economic resources at the disposal of the inhabitants of Hatiduba village.

1.2. Economic resources of a traditional tribal village generally include the land resources, forest products, livestock, agricultural tools and implements and some other allied economic resources which directly or indirectly contribute to the village income as a whole. Manpower is another important economic asset in the tribal economy.

1.3. Land is one of the most important resources of production for the cultivators. The pattern of village life and its socio-economic structure are considerably influenced by the pattern of land ownership and its utilization. Similarly, it is also a fact, that the power and prestige in the rural societies is primarily based on the size of land ownership.

#### 2. Land Holding Pattern :

2.1. The absence of cadastral survey is the main difficulty in giving a correct picture of land statistics of the village Hatiduba. On the other hand, most of the villagers do not have accurate idea about the land area



of the village as well as of their individual land. The local unit of measurement of land prevailed in the area is 'Pura' which is roughly equal to 0.57 hectares. However, utmost care has been taken to collect accurate data on land under possession of the villagers.

2.2. Agricultural land in the village may be classified into three classes, viz. (i) jhum cultivation land, (ii) high land and (iii) wet rice cultivation land. The tenancy system in the village is somewhat peculiar and not comparable to the system prevailed either in the hills or in the plains in the region. The land where jhum cultivation is done are actually elevated plain jungle land. A plot of the jungle land under individual possession is selected by the household concerned for reclamation and is first used for jhum cultivation. But this type of cultivation is not jhum cultivation in true sense as there is no rotation and abandonment of fields like other jhum fields and they are not situated in the hill slopes either. The operational methods are only similar to jhum cultivation. Jhum cultivation is carried on the selected plots of jungle land for three consecutive years. Along with the cultivation, levelling of the land to the possible extent goes on side by side. Thus after three years of jhum cultivation the land is made suitable for settled cultivation.

2.3. The reclamation works of the jhum land is done either by the owner by himself or by hired labours. Generally the villagers employ immigrant Nepali farm workers as hired labours in their agricultural farms. In doing so, the selected plot of jungle land is cleared by



cutting and uprooting the trees and groves with the use of dao and axe. Some of the big trees are left on border lines to serve as the mark of boundaries. When the trees and bushes are dried, fire is set to them. Then the unburnt logs are removed from the field. This operation of cutting and burning of the trees is not necessary for the subsequent two years. The plot of land thus prepared becomes ready for sowing. As the villagers are habitually accustomed to the traditional system of cultivation, i.e. jhuming, they prefer to use the reclaimed areas of jungle land for jhum type of cultivation. The plot of jungle land made ready for cultivation is sown either by broadcasting or by dibbling method. The same practice of cultivation is carried out for three years after reclamation. During the interval of harvesting and sowing of the next crop, uprooting of newly grown bushes and levelling the land to the possible extent continues. At the end of cultivation of three successive years the land is utilised for settled cultivation.

2.4. In the recent years a new trend has emerged. A number of villagers engage immigrant Nepali farm workers on contract basis for reclamation of portions of jungle land under their possession and to bring those into the state of arable land. As a result of such contract, the Nepali farm workers (tenants) are allowed to utilise the reclaimed plot for cultivation for three successive years. He owns all what he produces on the land during these years and he is not required to pay rent to the land owner. But the tenant has to surrender the land to the owner on termination of the stipulated period of three years.

2.5. The Nepalis serving as farm workers or tenants in the village hail from neighbouring areas and sometimes, as reported, from the neighbouring State. Those coming from the neighbouring State do not stay permanently in the village for a very long period. Most of them generally hold renewable 'innerline pass' for one year validity. A good number of the workers coming across the border get themselves engaged in the village for a crop season and stay within the village upto the completion of harvest.

2.6. The Nepali tenants use hoe and axe for uprooting and levelling the jungle land. In the initial years they do tilling operation with the help of hoe only.

2.7. As stated earlier the owner cultivators of the village invariably practise jhum type of cultivation in their respective jungle land. For settled wet rice cultivation and for high land cultivation they follow a unique system. Such lands are generally given to the immigrant Nepali farm workers for cultivation on share cropping basis but seeds and draught animals required for cultivation are generally supplied by the owner himself. The crops shared by the owner and the tenant are in the proportion of 50:50 basis. The landlord seldom participates in cultivation works on settled farm except occasional supervision. The women folk of the owner family occasionally take part in agricultural operations such as transplanting, seedling in wet rice fields and in harvesting wet paddy, Ahu paddy and other rabi crops. Because of inexperience of the owner cultivators in wet paddy cultivation as well as in tillage of land with draught animals, the immigrant tenants exploit and take upper hand over the owners. If a



owner fails to supply the seeds, the tenant claims<sup>2/3</sup> of the produce as his share. This has virtually, never happened in the village; the owner somehow manages to provide the necessary seed for such cultivation. The owners are aware of the danger and loss involved in the system of share cropping, yet nobody was found to show an aptitude for taking up settled cultivation by using draught animals. It is quite surprising to note that while the womenfolk of the village take active part in transplanting and harvesting of wet rice cultivation their malefolk have failed to learn ploughing and other operations of wet rice cultivation. Indifference on their part towards wet rice cultivation may be the only reason for this plight.

### 3. Ownership of Land :

3.1. Community ownership of land is the usual practice in most of the hilly areas of N.E. India. Of course, in some cases particularly in the case of urban land, land used for wet rice cultivation or any other settled form of cultivation individual ownership of land is recognised. In the case of Arunachal Pradesh also individual ownership on land is recognised in certain areas. This is the emerging phenomenon in the hilly areas of the region.

3.2. In the village Hatiduba ownership of land is recognised. Wet rice cultivation has been introduced in the village in the recent years in addition to jhum cultivation. The villagers have gradually converted their jhum land into plain high land.

3.3. The pattern of utilization of owned land in Hatiduba is shown in Table 5.1. The total land under the

possession of the 22 households of the village is 220.28 hectares. This land may be divided into four broad groups according to pattern of utilization. These groups are :

- (a) Cultivated land.
- (b) Land not available for cultivation.
- (c) Other uncultivated land; and
- (d) Fallow land.

Table 5.1

Pattern of Utilisation of Owned land in the village Hatiduba.

| Pattern of Utilisation                             | Area<br>(Hectare) | P.C. of<br>Grand<br>Total |
|--|-------------------|---------------------------|
| <u>A. Cultivated Land : (Area under Operation)</u> |                   |                           |
| 1. Wet Paddy Cultivation                           | 22.12             | 10.04                     |
| 2. High Land Cultivation                           | 91.94             | 41.74                     |
| 3. Jhum Cultivation                                | 29.98             | 13.61                     |
| 4. Horticultural Crop                              | 2.42              | 1.10                      |
| -----  |                   |                           |
| Sub-Total :  | 146.46            | 66.49                     |
| -----  |                   |                           |
| <u>B. Land Not available for cultivation:</u>      |                   |                           |
| 1. Homestead & Courtyard                           | 5.70              | 2.59                      |
| 2. Jungle Land                                     | 12.89             | 5.85                      |
| -----  |                   |                           |
| Sub-Total :  | 18.59             | 8.44                      |
| -----  |                   |                           |
| <u>C. Other uncultivated Land :</u>                |                   |                           |
| 1. Jhum land (Jungle)                              | 7.56              | 3.43                      |
| -----  |                   |                           |
| Sub-Total :  | 7.56              | 3.43                      |
| -----  |                   |                           |
| <u>D. Fallow Land :(Current Fallow)</u>            |                   |                           |
| 1. Wet Paddy land                                  | 15.95             | 7.24                      |
| 2. High land                                       | 31.72             | 14.40                     |
| -----  |                   |                           |
| Sub-Total :  | 47.67             | 21.64                     |
| -----  |                   |                           |
| GRAND TOTAL :                                      | 220.28            | 100.00                    |



3.4. The total cultivated land in the village is 146.46 hectares (66.49%). Out of this 15.10 per cent is under wet rice cultivation, 62.78 per cent under high land cultivation, 20.47 per cent under jhum cultivation and the rest 1.65 per cent is under horticultural crop. The highest percentage of cultivated land is attributed to high land cultivation which is due to gradual reclamation of available jhum land (jungle) into plain high land. On the other hand, somewhat low percentage (15.10%) of land is under wet rice cultivation because of recent adoption of this system of cultivation and non-availability of suitable land to reclaim in the vicinity.

3.5. Total land which is not available for cultivation is 18.59 hectares or 8.44 per cent of total land in the village and out of this 5.70 hectares are utilised for homestead and courtyard.

3.6. There are 7.56 hectares of jungle land in the village in the category of other uncultivated land and this is the only area at the command of the villagers which can be cleaned for jhum cultivation in future. This indicates that the continuance of jhum cultivation in Hatiduba will not last long. Similarly, current fallow land suitable for wet rice cultivation is also limited. There are only 15.95 hectares (7.24%) of land in this category. But there are sufficient current fallow high land (31.72 hectares) in the village. This is 14.40 per cent of total village land.

3.7. Table 5.2 shows the distribution of total owned land by size of ownership holding. Of 22 households only two households have possessed land between 2.00 - 4.00

Table 5.2

Distribution of Total Land owned by Size Group of ownership holding.

| Size group of No. of<br>owned land<br>(In hectares) | No. of<br>H.H. | Cultivable land                  |                    |                   |                            |                    |                        | Non-Cultivable land |                   |                    | Grand<br>Total   | Average<br>size of<br>holding<br>per H.H. |      |
|---|----------------|----------------------------------|--------------------|-------------------|----------------------------|--------------------|------------------------|---------------------|-------------------|--------------------|------------------|---|------|
|   |                | Wet paddy<br>cultivation<br>land | High<br>Land       | Jhum<br>Land      | Horti-<br>cultural<br>land | Total              | Homestead<br>& orchard | Jungle<br>Land      | Total             |                    |                  |   |      |
| Below 2 hec.  | -              | -                                | -                  | -                 | -                          | -                  | -                      | -                   | -                 | -                  | -                | -   | -    |
| 2.0 - 3.0   | 1              | -                                | 2.16<br>(1.75)     | -                 | -                          | -                  | -                      | 2.16<br>(1.07)      | 0.13<br>(2.28)    | -                  | 0.13<br>(0.70)   | 2.29<br>(1.04)                            | 2.29 |
| 3.0 - 4.0   | 1              | -                                | 3.24<br>(2.62)     | -                 | -                          | -                  | -                      | 3.24<br>(1.61)      | 0.20<br>(3.50)    | -                  | 0.20<br>(1.08)   | 3.44<br>(1.56)                            | 3.44 |
| 4.0 - 5.0   | -              | -                                | -                  | -                 | -                          | -                  | -                      | -                   | -                 | -                  | -                | -   | -    |
| 5.0 - 7.5   | 9              | 9.45<br>(24.82)                  | 23.76<br>(19.21)   | 14.05<br>(37.42)  | 0.80<br>(23.06)            | 48.06<br>(23.83)   | -                      | 2.22<br>(33.95)     | 4.32<br>(33.51)   | 6.54<br>(35.13)    | 54.60<br>(24.79) | 6.07                                      |      |
| 7.5 - 10.0  | 4              | 3.78<br>(9.93)                   | 16.20<br>(13.10)   | 8.64<br>(23.02)   | 0.54<br>(22.31)            | 29.16<br>(14.46)   | -                      | 0.94<br>(16.49)     | 5.94<br>(46.08)   | 6.88<br>(37.01)    | 36.04<br>(16.36) | 9.01                                      |      |
| 10.0 - 15.0   | 3              | 11.88<br>(31.21)                 | 11.34<br>(9.17)    | 6.21<br>(16.54)   | 0.68<br>(28.10)            | 30.11<br>(14.93)   | -                      | 0.60<br>(10.53)     | 2.63<br>(20.41)   | 3.23<br>(17.37)    | 33.34<br>(15.13) | 11.11                                     |      |
| 15.0 & above  | 4              | 12.96<br>(34.04)                 | 66.96<br>(54.15)   | 8.64<br>(23.02)   | 0.40<br>(16.53)            | 88.96<br>(44.10)   | -                      | 1.61<br>(23.25)     | -                 | 1.61<br>(8.66)     | 90.57<br>(41.12) | 22.64                                     |      |
| Total :   | 22             | 38.07<br>(100.00)                | 123.66<br>(100.00) | 37.54<br>(100.00) | 2.42<br>(100.00)           | 201.69<br>(100.00) | 5.70<br>(100.00)       | 12.89<br>(100.00)   | 18.59<br>(100.00) | 220.28<br>(100.00) | 10.01            |   |      |

N.B. :- Figures in the brackets are percentages of total.



hectares of size. It covers only 2.60 per cent of the total owned land in the village. Nine households in the farm size group 5.0-7.5 hectares have 24.79 per cent, while four households in the farm size group 7.5-10.00 hectares possess 16.36 per cent of the total village land. Three households in the farm size group 10.0-15.0 hectares, have 15.13 per cent of total land. Four households have owned land above 15 hectares with 41.12 per cent of total land. The average size of holding per household for the village is 10.01 hectares. The average size of individual land of seven households in the size group of 10.00 hectares and above is higher than the village average. 56.25 per cent of village land is concentrated within these seven (31.82%) households. On the other hand, 43.75 per cent of total land is owned by 68.18% households. The average size of land for four households in the size group 15.00 hectares and above is as high as 22.64 hectares and only one household possessing 2.29 hectares of land is the lowest size of holding in the village.

3.8. The two households in the size group 2.00-4.00 hectares possess neither wet paddy land nor jhum land. As one of these two households immigrated to Hatiduba only in 1974 they did not find any convenient virgin land to occupy. In the other case the head of the household is a Miju Mishmi woman who married a Nepali immigrant. The land under the possession of this family is provided by the father of the woman. So the size of land holding of these two families is much smaller than that of others.

3.9. Individual ownership of forest land also plays an important role in the village economy. The area under jungle lands owned by 16 households is 12.89 hectares. Two households in size group below 4.00 hectares have neither jhum land nor jungle land at all. The four households in the size group 15.00 hectares and above have no jungle land at all. This is because these households have already reclaimed and converted all their jungle land either to jhum land or to high land. These households have as much as 16.74 hectares of high land on average. At present there is no scope in and around the village for extension of wet paddy land because of limitation of suitable land for reclamation for the purpose. The average size (0.94 ha.) of wet paddy land for the four households in the size group 7.5-10.0 hectares is much smaller than that of their high land, jhum land and jungle land taken together (7.69 ha.). The average size of wet paddy land (0.95 ha.) for these households is smaller than that (1.05 ha.) of the households in size group 5.00 to 7.50 hectares.

#### 4. Operational Holdings :

4.1. Operational holdings are more meaningful in understanding the utilization of land resources. According to World Agricultural Census, "An operational holdings is the land which was used wholly or partly for agricultural production and was operated as a single technical unit by one person, alone or with others, without regard to title, legal form and size. An operational holding included land owned and self operated as also land leased in by the management of the operational holding but excluded the



land leased out".<sup>\*</sup>

4.2. But in the case of village Hatiduba it is rather difficult to follow the above definition of operational holding because of peculiar nature of tenancy system prevailed in the village. As the inhabitants of the village immigrated to the present site from interior hilly areas where only traditional jhum cultivation is practised for subsistence, they are not acquainted with wet paddy cultivation, ploughing the soil, using draught animals, etc. as practised in plains areas. During the years of their settlement in the present site which is almost a plain village, the villagers have acquired some knowledge of cultivation in plains areas. But upto now, they are not taking to tilling the soil, using draught animals nor do they practise wet paddy cultivation themselves. Whatever wet paddy land and high land they have at their command are given to the Nepali immigrants to cultivate. As owner of the land, a Miju Mishmi of the village provides the Nepali immigrants with bullocks, ploughs, seeds, etc. for cultivation. As mentioned earlier, the women of the Miju Mishmi help the Nepali cultivator in transplanting and harvesting as and when necessary. But the supervision of the field is done by the owner himself. The produce is shared equally between the Nepali cultivator and the owner. They do not like to call it share cropping system or leasing out of the land. According to them it is just a mutual agreement or at best it can be said to be a contract with the Nepali farmers.

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\* World Agricultural Census, Assam, 1970-71 - P. 39.

4.3. Because of the above factors we have not classified any land as "leased out land" in the village. We have included all land under cultivation in the reference year irrespective of the actual tiller as operational holding of the owner. Though the Nepali cultivator gets half of the produce yet he is simply considered as agricultural labour only. Of course, the jhum type of cultivation in newly cleared jungle land is invariably done by all the Miju Mishmi families of the village barring a few families who do not possess any jhum land.

4.4. Table 5.3 shows the distribution of operational holdings according to size group. The total operational holding for the village being 201.69 hectares, the average size of area under operation varies significantly from 2.57 hectares to 30.78 hectares per family. Concentration of operational land in the households of higher size groups i.e. 10.00 hectares and above is noteworthy. Only 27.27 per cent households in this higher size group has operated 54.98 per cent of total operated area against 45.02 per cent area operated by the rest 72.73 per cent households. The average size of operational holdings of these 72.73 per cent households is much lower than the village average. The wide variation in the average size of operational holding reveals the wide divergence of economic conditions of the families in the village. It must be added, of course, that the apparently higher size of operational holding for the village is due to heavy concentration of land with 6 households in the broad size group of 10.00 hectares and above.



Table 5.3

Distribution of operational holding according to size groups.

| Size group of operational holding (In hectares) | No. of H.H.    | Cultivable owned land |                    |                   |                    | Land in hectares          |  |
|---|----------------|-----------------------|--------------------|-------------------|--------------------|---------------------------|--|
|   |                | Wet paddy Cultivation | High land          | Jhum land         | Horticultural Land | Total operational holding | Average size of operational holding (per H.H.) |
| Below 2 hectares                                | -              | -                     | -                  | -                 | -                  | -                         | -  |
| 2.00 - 3.00                                     | 3<br>(13.64)   | -                     | 4.86<br>(3.93)     | 2.84<br>(7.56)    | -                  | 7.70<br>(3.82)            | 2.57   |
| 3.00 - 4.00                                     | 1<br>(4.55)    | -                     | 3.24<br>(2.62)     | -                 | -                  | 3.24<br>(1.61)            | 3.24   |
| 4.00 - 5.00                                     | -              | -                     | -                  | -                 | -                  | -                         | -  |
| 5.00 - 7.50                                     | 8<br>(36.36)   | 9.45<br>(24.82)       | 21.06<br>(17.03)   | 14.05<br>(37.43)  | 0.80<br>(33.06)    | 45.36<br>(22.49)          | 5.67   |
| 7.50 - 10.00                                    | 4<br>(18.18)   | 6.48<br>(17.02)       | 20.25<br>(16.37)   | 7.15<br>(19.05)   | 0.61<br>(25.21)    | 34.49<br>(17.10)          | 8.62   |
| 10.00 - 15.00                                   | 4<br>(18.18)   | 15.66<br>(41.14)      | 22.41<br>(18.12)   | 10.26<br>(27.33)  | 1.01<br>(41.73)    | 49.34<br>(24.46)          | 12.34  |
| 15.00 & above                                   | 2<br>(9.09)    | 6.48<br>(17.02)       | 51.84<br>(41.93)   | 3.24<br>(8.63)    | -                  | 61.56<br>(30.52)          | 30.78  |
| Total :   | 22<br>(100.00) | 38.07<br>(100.00)     | 123.66<br>(100.00) | 37.54<br>(100.00) | 2.42<br>(100.00)   | 201.69<br>(100.00)        | 9.17   |

N.B. :- Figures in the brackets indicate percentages of column total.

4.5. The land use pattern of the village by operational holding size is shown in Table 5.4. Of the total operational holding of 201.69 hectares, 55.23 hectares are current fallow land. This current fallow land includes wet paddy land (15.95 ha), high land (31.72 ha) and jhum land (7.56 ha). Thus the net area sown in the village is 146.46 hectares. The total area under double cropping in the village is 27.49 hectares which is 18.77 per cent of the net area sown.

4.6. Only 16 households of the village have wet paddy cultivation in 38.07 hectares of land which is 18.88 per cent of the total operational land. All the 10 households belonging to broad farm size groups 7.50 hectares and above have cultivated wet paddy. Almost all the households of the village have cultivated high land in the reference year. The total high land area is 123.66 hectares which is 61.31 per cent of the total operational land. The average size of high land under operation per household is 5.89 hectares. Seventeen households of Hatiduba practised jhum type of cultivation in 37.54 hectares (18.61% of total operational land), the average size of operated jhum land per household being 2.21 hectares.

#### 5. Livestock :

5.1. Apart from land, other important economic resources of the village are livestock and poultry birds. Cows, pigs, fowls etc. are important livestock population and poultry birds of the village Hatiduba.\*

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\* In the village, there were only two mithuns at the time of investigation, brought from hill village to meet some ritualistic function. As the mithuns are not habituated to live in the plains, people of the village do not rear it. However, it is learnt that some households are having their own mithuns in hilly villages of the district that are looked after by their relatives or clan members.



Table 5.4

Land use pattern by size group of operational holding.

| Size Group of Operational Holding (In Hectares) | No. of H.H. | (Area in Hectares) |             |                      |                    |                  |                       |           |                      |             |                  |   |   |   |   |
|---|-------------|--------------------|-------------|----------------------|--------------------|------------------|-----------------------|-----------|----------------------|-------------|------------------|---|---|---|---|
|   |             | Owned Land         |             |                      |                    |                  | Non-Cultivable        |           |                      |             |                  |   |   |   |   |
|   |             | wet Paddy Land     | High Land   | Cultivable Jhum Land | Horticultural Land | Total Cultivable | Homestead & Courtyard | Jungle    | Total Non-Cultivable | Total Owned | Total Cultivable |   |   |   |   |
| Below 2 hect.                                   | -           | -                  | -           | -                    | -                  | -                | -                     | -         | -                    | -           | -                | - | - | - | - |
| 2.00 - 3.00                                     | 3           | -                  | 4.86 (2)    | 2.84 (1)             | -                  | 7.70 (3)         | -                     | 0.60 (3)  | 8.10 (2)             | 3.70 (3)    | 16.40 (3)        | - | - | - | - |
| 3.00 - 4.00                                     | 1           | -                  | 3.24 (1)    | -                    | -                  | 3.24 (1)         | -                     | 0.20 (1)  | -                    | 0.20 (1)    | 3.44 (1)         | - | - | - | - |
| 4.00 - 5.00                                     | -           | -                  | -           | -                    | -                  | -                | -                     | -         | -                    | -           | -                | - | - | - | - |
| 5.00 - 7.50                                     | 8           | 9.45 (6)           | 21.06 (8)   | 14.05 (7)            | 0.80 (2)           | 45.36 (8)        | 2.02 (8)              | 1.62 (1)  | 3.64 (8)             | 49.00 (8)   | -                | - | - | - | - |
| 7.50 - 10.00                                    | 4           | 6.48 (4)           | 20.25 (4)   | 7.15 (4)             | 0.61 (3)           | 34.49 (4)        | 0.80 (4)              | 2.70 (2)  | 3.50 (4)             | 37.99 (4)   | -                | - | - | - | - |
| 10.00 - 15.00                                   | 4           | 15.66 (4)          | 22.41 (4)   | 10.26 (4)            | 1.01 (3)           | 49.34 (4)        | 1.28 (4)              | 0.47 (1)  | 1.75 (4)             | 51.09 (4)   | -                | - | - | - | - |
| 15.00 & above                                   | 2           | 6.48 (2)           | 51.84 (2)   | 3.24 (1)             | -                  | 61.56 (2)        | 0.80 (2)              | -         | 0.80 (2)             | 62.36 (2)   | -                | - | - | - | - |
| Total :   | 22          | 38.07 (16)         | 123.66 (21) | 37.54 (17)           | 2.42 (8)           | 201.69 (22)      | 5.70 (22)             | 12.89 (6) | 18.59 (22)           | 220.28 (22) | -                | - | - | - | - |

N.B. :- Figures in the brackets represents number of households.

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Table 5.4 (Contd).

Land use pattern by size group of operational holding.

| Size Group of Operational Holding (In hectares) | No. of H.H. Operational Area | Current Fallow |           |                    |            |                          | Net Area Sown (Including once Horticulture) |             | (Area in Hectares) |   |
|---|------------------------------|----------------|-----------|--------------------|------------|--------------------------|---|-------------|--------------------|---|
|   |                              | Wet Paddy Land | High Land | Jhum land (Jungle) | Total      | Area more than once sown | Gross Cropped Area                          |             |                    |   |
| Below 2 hectares                                | -                            | -              | -         | -                  | -          | -                        | -   | -           | -                  | - |
| 2.00 - 3.00                                     | 3                            | 7.70 (3)       | -         | -                  | -          | 7.70 (3)                 | 1.07 (1)                                    | 8.77 (3)    | -                  | - |
| 3.00 - 4.00                                     | 1                            | 3.24 (1)       | -         | -                  | -          | 3.24 (1)                 | 0.82 (1)                                    | 4.06 (1)    | -                  | - |
| 4.00 - 5.00                                     | -                            | -              | -         | -                  | -          | -                        | -   | -           | -                  | - |
| 5.00 - 7.50                                     | 8                            | 45.36 (8)      | 0.40 (1)  | 1.89 (8)           | 3.64 (5)   | 41.72 (8)                | 6.58 (3)                                    | 48.30 (8)   | -                  | - |
| 7.50 - 10.00                                    | 4                            | 34.49 (4)      | 1.08 (1)  | -                  | 1.08 (1)   | 33.41 (4)                | 5.12 (3)                                    | 38.53 (4)   | -                  | - |
| 10.00 - 15.00                                   | 4                            | 49.34 (4)      | -         | 4.05 (2)           | 14.33 (3)  | 35.01 (4)                | 13.90 (4)                                   | 48.91 (4)   | -                  | - |
| 15.00 & above                                   | 2                            | 61.56 (2)      | 30.24 (2) | 1.62 (1)           | 36.18 (2)  | 25.38 (2)                | -   | 25.38 (2)   | -                  | - |
| Total   | 22                           | 201.69 (22)    | 15.95 (8) | 31.72 (4)          | 55.23 (11) | 146.46 (22)              | 27.49 (12)                                  | 173.95 (22) | -                  | - |

N.B. :- Figures in the brackets represents number of households.



5.2. Table 5.5 shows that there are 55 bullocks and 26 cows in the village. The village have adopted cattle rearing in recent years mainly because of their growing tendency to use bullock power for tilling the soil. Some households do not possess any cattle population. Grazing facilities are available within the village. The cattle are let loose in the forest areas for grazing purposes where green grasses are abundant. Of course, there are many instances that cattle owned by the villagers are looked after by the Nepali immigrants.

5.3. The numbers of pigs and poultry birds in Hatiduba village are not so significant like other tribal villages. It was found that pigs and poultry birds were also not reared in many of the families of the village. They sacrifice of many animals and poultry birds for ritual purposes just before and during the time of investigation, might be an important factor of less number of animals and poultry birds in the village.

#### 6. Tools and Implements :

6.1. Next important resource in the sphere of economic activity in rural areas are agricultural tools and implements. The nature and quality of tools and implements indicate to some extent the mode of production and the nature of the material culture of a society. Table 5.6 shows the number of tools and implements in use in Hatiduba village by size group of operational holding. These tools are suitable for a highly labour intensive technique of production.

Table 5.5  
 Ownership of livestock population according to size group of operational holding.

| Size Groups<br>(In Hectares) | No. of<br>H.H. | Bullocks                  |                 | Cows                      |                 | Pigs       |                 | Fowls       |             | Mutton                    |                 |
|------------------------------|----------------|---------------------------|-----------------|---------------------------|-----------------|------------|-----------------|-------------|-------------|---------------------------|-----------------|
|                              |                | Below<br>3 yrs.<br>3 yrs. | Above<br>3 yrs. | Below<br>3 yrs.<br>3 yrs. | Above<br>3 yrs. | Piglings   | Above<br>3 yrs. | Chicken     | Fowl        | Below<br>3 yrs.<br>3 yrs. | Above<br>3 yrs. |
| 2.00 - 3.00                  | 3              | 6<br>(2)                  | 2<br>(1)        | 5<br>(2)                  | -               | 12<br>(2)  | -               | 28<br>(3)   | -           | -                         | -               |
| 3.00 - 4.00                  | 1              | -                         | 2<br>(1)        | -                         | -               | -          | 2<br>(1)        | -           | 10<br>(1)   | -                         | -               |
| 4.00 - 5.00                  | -              | -                         | -               | -                         | -               | -          | -               | -           | -           | -                         | -               |
| 5.00 - 7.50                  | 8              | -                         | 12<br>(4)       | -                         | 7<br>(2)        | 15<br>(4)  | 9<br>(5)        | 31<br>(3)   | 42<br>(5)   | -                         | -               |
| 7.50 - 10.00                 | 4              | 8<br>(2)                  | 6<br>(1)        | 2<br>(2)                  | 1<br>(1)        | 17<br>(4)  | 1<br>(1)        | 35<br>(3)   | 6<br>(1)    | 2<br>(1)                  | -               |
| 10.00 - 15.00                | 4              | -                         | 15<br>(4)       | 5<br>(3)                  | 6<br>(4)        | -          | 19<br>(4)       | 10<br>(1)   | 28<br>(4)   | -                         | -               |
| 15.00 & above                | 2              | -                         | 4<br>(1)        | -                         | -               | -          | 14<br>(2)       | -           | 30<br>(2)   | -                         | -               |
| Total :                      | 22             | 14<br>(4)                 | 41<br>(12)      | 12<br>(7)                 | 14<br>(7)       | 44<br>(10) | 45<br>(13)      | 104<br>(10) | 116<br>(13) | 2<br>(1)                  | -               |

Figures in the brackets are number of households.



6.2. Almost all the agricultural tools and implements used by the villagers are generally purchased at the local markets outside the village. The use of wooden dehusking implement (Dhenki) in the village is of recent introduction and there are only four numbers of 'Dhenki' in use in the village. But the village womanfolk are more accustomed to using their traditional mortar and pestle (Glong-Glaal) for husking paddy. There is only one bullock cart in the village owned by the village headman and this is used in carrying goods and agricultural products.

6.3. The important tools and implements used by the Miju Mishmis of Hatiduba in agricultural operations are spade, hoe, sickle and dao. Table 5.6 shows that each of the households possesses either a spade or a hoe or both. The Miju Mishmis prefer hoe to spade for tilling the land. This may be because of their personal and direct involvement in jhum type of cultivation. Most of the household own more than one hoe. Sickle is another important agricultural implement for harvesting of paddy crops and in the village Hatiduba the households possess sickles according to the number of workers in the family. The total number of sickles in the village is 66, the average number per household is 3. Similarly, every household owns one or more daos.

6.4. Though the Miju Mishmis do not till their soil with plough, they have to provide plough along with bullocks to the Nepali immigrants who cultivate the wet paddy land and high land of the Miju Mishmis on share contract system. Of course, some of the Nepali agricultural labours have their own ploughs and bullocks. Of the 22 households only 7 households possess 14 desi ploughs at the time of investigation.

Table 5.6

Ownership of Agricultural tools and Implements in use by size group of operational holding.

| Size Group<br>(In Hectares) | No. of<br>H.H. | Number of Agricultural Tools and Implements |            |            |            |            |            |                    |          |                 |   |   |          |   |
|-----------------------------|----------------|---|------------|------------|------------|------------|------------|--------------------|----------|-----------------|---|---|----------|---|
|                             |                | Deshi<br>Plough                             | Spade      | Hoe        | Dao        | Axe        | Sickle     | Mortar &<br>Pestle | Dhenki   | Bullock<br>Cart |   |   |          |   |
| Below 2 hectares            | -              | -   | -          | -          | -          | -          | -          | -                  | -        | -               | - | - | -        | - |
| 2.00 - 3.00                 | 3              | 4<br>(3)                                    | 3<br>(3)   | 3<br>(1)   | 4<br>(3)   | 2<br>(2)   | 9<br>(3)   | 2<br>(2)           | 1<br>(1) | -               | - | - | -        | - |
| 3.00 - 4.00                 | 1              | -   | -          | 2<br>(1)   | 1<br>(1)   | 1<br>(1)   | 3<br>(1)   | 1<br>(1)           | -        | -               | - | - | -        | - |
| 4.00 - 5.00                 | -              | -   | -          | -          | -          | -          | -          | -                  | -        | -               | - | - | -        | - |
| 5.00 - 7.50                 | 8              | 4<br>(1)                                    | 3<br>(3)   | 11<br>(8)  | 10<br>(8)  | 8<br>(8)   | 20<br>(7)  | 5<br>(5)           | 1<br>(1) | -               | - | - | -        | - |
| 7.50 - 10.00                | 4              | 3<br>(1)                                    | 4<br>(2)   | 10<br>(4)  | 6<br>(4)   | 3<br>(3)   | 15<br>(4)  | 3<br>(3)           | 2<br>(2) | -               | - | - | -        | - |
| 10.00 - 15.00               | 4              | 3<br>(2)                                    | 2<br>(2)   | 7<br>(4)   | 6<br>(4)   | 3<br>(3)   | 12<br>(4)  | 3<br>(3)           | -        | -               | - | - | 1<br>(1) | - |
| 15.00 & above               | 2              | -   | -          | 5<br>(2)   | 2<br>(2)   | 1<br>(1)   | 7<br>(2)   | 2<br>(2)           | -        | -               | - | - | -        | - |
| Total :                     | 22             | 14<br>(7)                                   | 12<br>(10) | 38<br>(20) | 29<br>(22) | 18<br>(18) | 66<br>(21) | 16<br>(16)         | 4<br>(4) | 1<br>(1)        | - | - | -        | - |

N.B. :- Figures in the brackets are number of households.



7. Economic Activities :

7.1. Economic activities with which the villagers are associated are dealt with in the following pages of this Chapter. Economic activities in the village Hatiduba mainly revolve around agriculture. Here Agricultural pursuits primarily include cultivation of paddy, mustard and maize and raising of horticultural plants. The villagers have subsidiary activities in animal husbandry, keeping of domestic birds, weaving, trade and commerce. As agriculture is the only major enterprise of the people, a discussion relating to the pattern of production, input in crop production and disposal of crops etc. is made in the following section.

8. Crop Production :

8.1. The agricultural pursuits of the people of Hatiduba are largely confined the jhun type of cultivation in the jungle land and partly to cultivation of wet paddy, maize, mustard and Ahu paddy. The owner cultivators take to jhun type of cultivation themselves for utilising their forest land.

8.2. The wet rice cultivation land is low lying flat damp land that retains water and is suitable for cultivation of Sali paddy. The high land is flat land higher in elevation than the wet rice cultivation land. Generally Ahu (autumn paddy), mustard and maize are cultivated on such high land.

8.3. For wet paddy cultivation the fields are ploughed in May-July. Land is generally prepared (for transplanting paddy) by ploughing it three to four times.



Seed beds are prepared prior to this and seeds are sown in May-June. The grown up seedlings are uprooted from the seed beds and carried to the fields already prepared for transplantation. Transplantation is done during June and July. Harvesting of wet paddy is done in November-December.

For Ahu paddy cultivation ploughing is done three times.

Seeds are sown by broad-casting method during the months of March, April and May and harvesting is done in August-September. Only local varieties of seeds are used in wet paddy cultivation. Some farmers grow high yielding varieties as Ahu paddy. Local varieties are largely used in Ahu paddy cultivation.

8.4. In the jungle land reclamation being done successfully, sowing operation starts in March and continues till May. Paddy, maize and mustard are sown on separate plots either by dibbling or by broadcasting method.

8.5. Ahu, mustard and maize are grown in high land. Maize and mustard fields are generally ploughed 3 to 4 times. Sowing in the case of mustard is done in September-October and harvesting is done in February-March. In the case of maize sowing operation starts in March and continues till April. A few villagers sow maize in July-August also. Harvesting is done in July-August in the former and in February-March in the latter case.

8.6. Weeding in Ahu paddy as well as in jhum paddy is done twice. Weeding in high land crops is generally done once only. No weeding is necessary for mustard.

#### 9. Area and Production of Crops :

9.1. The data representing area, production and yield per hectare of the crops grown in the village are given in



Table 5.7. Area under paddy (wet, Ahu and jhum) is 64.51 hectares or 37.49 per cent of the total cropped area in the village. Mustard (both high land and jhum) covers an area of 76.13 hectares or 39.01 per cent of the total cropped area.

Table 5.7

Area, Production and Yield per hectare of crops, Hatiduba

| Name of crop               | Area<br>(Hectares) | Production<br>(Quintals) | Yield per<br>Hectare<br>(Quintals) |
|----------------------------|--------------------|--------------------------|------------------------------------|
| Paddy (wet)                | 22.12              | 226.55                   | 10.24                              |
| Paddy (Ahu)<br>(High land) | 21.05              | 193.70                   | 9.20                               |
| Paddy (jhum)               | 21.34              | 161.61                   | 7.57                               |
| Paddy Total :              | 64.51              | 581.86                   | 9.02                               |
| Mustard (High land)        | 71.54              | 621.81                   | 8.69                               |
| Mustard (jhum)             | 4.59               | 50.76                    | 11.06                              |
| Mustard Total :            | 76.13              | 672.57                   | 8.83                               |
| Maize (High land)          | 26.84              | 318.00                   | 11.84                              |
| Maize (jhum)               | 4.05               | 66.44                    | 16.40                              |
| Maize Total :              | 30.89              | 384.44                   | 12.44                              |

9.2. A total of 30.89 hectares of the total cropped area comes under maize (both high land and jhum).

9.3. In the reference year, 581.86 quintals of paddy was produced in 64.51 hectares of land. This gives an average yield of 9.02 quintals per hectare. The yield of paddy per hectare is the highest (10.24 quintals) in wet rice land and the lowest (7.57 quintals) in the jhum type cultivation.

9.4. Mustard seed is the most important cash crop in the village. Mustard is a good source of cash to the villagers. A total of 76.13 hectares was cultivated with mustard. A total of 672.57 quintals of mustard was produced which gives a per hectare yield of 8.83 quintals.

9.5. Altogether 384.44 quintals of maize was produced in 30.89 hectares of land. The average yield per hectare of maize is 12.44 quintals.

9.6. Besides these crops some of the villagers grow some quantity of garden crops such as banana, papaya, pineapple, orange and small quantities of vegetables in the homestead.

9.7. Distribution of area, production and yield per hectare of the crops grown in the village according to size groups of operational holding is given in Table 5.8. Mustard and paddy are cultivated by almost all the household in the village. In the village 16 households (72.2%) cultivate paddy through the instrumentality of agricultural farm labours in 22.12 hectares of wet paddy land. It may be noted that no household having operational holding of less than 5.00 hectares has wet paddy land. The cultivation of Ahu paddy on high land is done by 13 (59.09%) households through agricultural farm labours and an area of 21.05 hectares is devoted to its cultivation. Paddy by jhum type of cultivation is produced by 15 (68.18%) households in 21.34 hectares of jhum land.

9.8. The cultivation of mustard occupies a dominant place in the village. Almost all (90.91%) of the households cultivate mustard through the agricultural farm labours and as much as 71.54 hectares of high land is utilised in the cultivation of mustard. It is mentioned earlier that



Table 5.8

Area, Production and Yield per hectare of Principal Crops by Size Group of Operational Holding.

A = Area in Hectares.  
P = Production in Quintals.  
Y = Yield per hectare in Kg.

| Size Group of Operational Holding (In Ha.) | No. of H.H. | wet Paddy Cultivation |        |       | High Land Cultivation |        |       | Mustard       | P      | Y     |
|--|-------------|-----------------------|--------|-------|-----------------------|--------|-------|---------------|--------|-------|
|  |             | A                     | P      | Y     | A                     | P      | Y     |               |        |       |
| Below 2 hectares                           | --          | --                    | --     | --    | --                    | --     | --    | --            | --     | --    |
| 2.00 - 3.00                                | 3           | --                    | --     | --    | 1.35<br>(1)           | 14.93  | 1,106 | 3.91<br>(2)   | 41.06  | 1,050 |
| 3.00 - 4.00                                | 1           | --                    | --     | --    | 2.44<br>(1)           | 38.07  | 1,560 | 1.62<br>(1)   | 22.39  | 1,382 |
| 4.00 - 5.00                                | --          | --                    | --     | --    | --                    | --     | --    | --            | --     | --    |
| 5.00 - 7.50                                | 8           | 8.10<br>(6)           | 33.23  | 1,028 | 3.63<br>(5)           | 37.32  | 1,028 | 16.33<br>(7)  | 135.11 | 827   |
| 7.50 - 10.00                               | 4           | 6.48<br>(4)           | 55.24  | 852   | 1.62<br>(1)           | 18.66  | 1,152 | 14.53<br>(4)  | 130.63 | 896   |
| 10.00 - 15.00                              | 4           | 5.38<br>(4)           | 64.94  | 1,207 | 6.86<br>(3)           | 27.99  | 407   | 22.41<br>(4)  | 175.42 | 783   |
| 15.00 & above                              | 2           | 2.16<br>(2)           | 23.14  | 1,071 | 5.13<br>(2)           | 56.73  | 1,106 | 12.69<br>(2)  | 117.20 | 924   |
| Total :                                    | 22<br>(16)  | 22.12                 | 226.55 | 1,024 | 21.05<br>(13)         | 193.70 | 920   | 71.54<br>(20) | 621.81 | 869   |

N.B. Figures within brackets are cultivating households.

Contd.

Table 5.8(Contd.)

Area, Production and Yield per hectare of Principal Crops by Size Group of Operational Holding.

A = Area in Hectares.  
P = Production in Quintals.  
Y = Yield per hectare in Kg.

| Size Group of Operational Holding(In Ha.) | No. of H.H. | High Land Cultivation |        |       | Jhum Land Cultivation |        |     | Maize       |       |       | Mustard     |       |       |
|---|-------------|-----------------------|--------|-------|-----------------------|--------|-----|-------------|-------|-------|-------------|-------|-------|
|   |             | Maize                 |        |       | Paddy                 |        |     | Maize       |       |       | Mustard     |       |       |
|   |             | A                     | P      | Y     | A                     | P      | Y   | A           | P     | Y     | A           | P     | Y     |
| Below 2 hecets.                           | --          | --                    | --     | --    | --                    | --     | --  | --          | --    | --    | --          | --    | --    |
| 2.00 - 3.00                               | 3           | 0.67<br>(2)           | 7.46   | 1,113 | 1.22<br>(1)           | 10.08  | 826 | 1.62<br>(1) | 13.44 | 830   | --          | --    | --    |
| 3.00 - 4.00                               | 1           | --                    | --     | --    | --                    | --     | --  | --          | --    | --    | --          | --    | --    |
| 4.00 - 5.00                               | --          | --                    | --     | --    | --                    | --     | --  | --          | --    | --    | --          | --    | --    |
| 5.00 - 7.50                               | 8           | 7.28<br>(6)           | 82.11  | 1,128 | 5.95<br>(5)           | 39.94  | 671 | 2.43        | 53.00 | 2,181 | 3.78<br>(2) | 50.01 | 1,323 |
| 7.50 - 10.00                              | 4           | 8.09<br>(4)           | 67.18  | 880   | 7.15<br>(4)           | 50.76  | 710 | --          | --    | --    | --          | --    | --    |
| 10.00 - 15.00                             | 4           | 7.02<br>(3)           | 115.71 | 1,648 | 5.40<br>(4)           | 53.37  | 983 | --          | --    | --    | 0.81<br>(1) | 0.75  | 93    |
| 15.00 & above                             | 2           | 3.78<br>(2)           | 45.54  | 1,205 | 1.62<br>(1)           | 7.46   | 460 | --          | --    | --    | --          | --    | --    |
| Total :                                   | 22<br>(16)  | 26.84<br>(17)         | 318.00 | 1,184 | 21.34<br>(15)         | 161.61 | 757 | 4.05<br>(3) | 66.44 | 1,640 | 4.59<br>(3) | 50.76 | 1,106 |

N.B. Figures within brackets are cultivating households.



wet rice and high land cultivation by using draught animals is done by immigrant Nepali farm workers. They invariably prefer the cultivation of mustard to other crops because of the net return in terms of money from a unit of land is much higher than that of other crops. Mustard as a cash crop has a high demand and can be disposed of immediately after harvest. Only 3 (13.64%) households raise mustard on jhum land.

9.9. Maize is cultivated through farm labours on 26.84 hectares of high land by 17 (77.27%) households. Cultivation of maize in the jhum is confined to 3 (13.64%) households the cultivated area being 4.05 hectares only.

9.10. Table 5.9 shows the distribution of areas under field crops and area shown more than once by size groups of operational holdings under different systems of cultivation. Only 19.08 per cent of the net area shown in the village comes under double cropping. In the village agricultural practices are still traditional and even the age old method of plough cultivation is also a new venture in the village. The area cropped more than once are the high land areas. Either Ahu or maize is raised as the first crop followed by mustard in the double cropped areas. Generally Ahu paddy is cultivated as the first crop. Of the total net sown area of 91.94 hectares, an area of 27.49 hectares is used for double cropping in the land classified as high land.

9.11. A few households grow pineapple and banana, in small number. The transition from shifting cultivation to settled cultivation has begun in Arunachal Pradesh very recently. In order to impart some momentum to this movement

Table 5.9

## Area Under Field Crop and Area Sown More Than Once by Size Group of Operational Holding.

| Size Group<br>(In hect.) | No. of<br>H.H. | ( Area in Hectare )   |                            |                       |                 |                       |                 |        |       |                                |    |    |
|--------------------------|----------------|-----------------------|----------------------------|-----------------------|-----------------|-----------------------|-----------------|--------|-------|--------------------------------|----|----|
|                          |                | Wet Paddy Cultivation |                            | High Land Cultivation |                 |                       | Area Under Crop |        |       | Area<br>sown more<br>than once |    |    |
|                          |                | Net Area<br>Sown      | Area under<br>Crop (Salix) | Net<br>Area<br>Sown   | Area<br>Mustard | Area<br>Under<br>Crop | Maize           | Total  |       |                                |    |    |
| Below 2 hect.            | --             | --                    | --                         | --                    | --              | --                    | --              | --     | --    | --                             | -- | -- |
| 2.00-3.00                | 3              | --                    | --                         | 4.86                  | 1.35            | 3.91                  | 0.67            | 5.93   | 1.07  | --                             | -- | -- |
| 3.00-4.00                | 1              | --                    | --                         | 3.24                  | 2.44            | 1.62                  | --              | 4.06   | 0.82  | --                             | -- | -- |
| 4.00-5.00                | --             | --                    | --                         | --                    | --              | --                    | --              | --     | --    | --                             | -- | -- |
| 5.00-7.50                | 8              | 8.10                  | 8.10                       | 20.66                 | 3.63            | 16.33                 | 7.28            | 27.24  | 6.58  | --                             | -- | -- |
| 7.50-10.00               | 4              | 6.48                  | 6.48                       | 19.17                 | 1.62            | 14.58                 | 8.09            | 24.29  | 5.12  | --                             | -- | -- |
| 10.00-15.00              | 4              | 5.33                  | 5.33                       | 22.41                 | 6.83            | 22.41                 | 7.02            | 36.81  | 13.90 | --                             | -- | -- |
| 15.00 & above            | 2              | 2.16                  | 2.16                       | 21.60                 | 5.13            | 12.69                 | 3.78            | 21.60  | --    | --                             | -- | -- |
| Total :                  | 22             | 22.12                 | 22.12                      | 91.94                 | 21.05           | 71.54                 | 126.84          | 119.43 | 27.49 | --                             | -- | -- |

Continued :



Table 5.9(Continued)

Area Under Field Crop and Area Sown More than Once by  
Size Group of Operational Holding.

| Size Group<br>(In hect.) | No. of<br>H.H. | Jhum Cultivation |                 |       |         | Horti-<br>cul-<br>tural<br>Land<br>Sown | Net<br>Area | Sali  |       |         | All<br>Area Under Crop |       |      | Area<br>Sown<br>More<br>Than<br>Once |         |       |       |
|--------------------------|----------------|------------------|-----------------|-------|---------|---|-------------|-------|-------|---------|------------------------|-------|------|--------------------------------------|---------|-------|-------|
|                          |                | Net<br>Area      | Area Under Crop |       | Mustard |   |             | Total | Sali  | Mustard | Maize                  | Total | Sali |                                      | Mustard | Maize | Total |
|                          |                |                  | Paddy           | Maize |         |   |             |       |       |         |                        |       |      |                                      |         |       |       |
| Below 2 hect.            | --             | --               | --              | --    | --      | --                                      | --          | --    | --    | --      | --                     | --    | --   | --                                   |         |       |       |
| 2.00-3.00                | 3              | 2.84             | 1.22            | 1.62  | 2.84    | 7.70                                    | --          | 2.57  | 3.91  | 2.29    | 8.77                   | 1.07  |      |                                      |         |       |       |
| 3.00-4.00                | 1              | --               | --              | --    | --      | 3.24                                    | --          | 2.44  | 1.62  | --      | 4.06                   | 0.82  |      |                                      |         |       |       |
| 4.00-5.00                | --             | --               | --              | --    | --      | --                                      | --          | --    | --    | --      | --                     | --    |      |                                      |         |       |       |
| 5.00-7.50                | 8              | 12.16            | 5.95            | 2.43  | 12.16   | 40.92                                   | 0.80        | 9.58  | 20.11 | 9.71    | 47.50                  | 6.53  |      |                                      |         |       |       |
| 7.50-10.00               | 4              | 7.15             | 7.15            | --    | 7.15    | 32.80                                   | 0.61        | 8.77  | 14.58 | 8.09    | 37.92                  | 5.12  |      |                                      |         |       |       |
| 10.00-15.00              | 4              | 6.12             | 5.40            | --    | 6.21    | 34.00                                   | 1.01        | 12.28 | 23.22 | 7.02    | 47.90                  | 13.90 |      |                                      |         |       |       |
| 15.00 & above            | 2              | 1.62             | 1.62            | --    | 1.62    | 25.38                                   | --          | 6.75  | 12.69 | 3.73    | 25.38                  | --    |      |                                      |         |       |       |
| Total :                  | 22             | 29.98            | 21.84           | 4.05  | 29.98   | 144.04                                  | 2.42        | 42.39 | 76.13 | 30.89   | 171.53                 | 27.49 |      |                                      |         |       |       |

and to attract people to horticultural farming the District Agricultural Department recently has persuaded the villagers to grow orange plants. As incentive the Agricultural Department has provided the six selected households of the village with orange sapling, fertiliser, pesticides and barbed wires for fencing. Each of these households was allotted with 109 nos. of sapling to be planted in one acre (0.40 hectares) of land. The plantation was done in 1980 under the supervision of experts from the Department. After plantation necessary fertilisers and pesticides were supplied free of cost through the local Village Level Extension Worker in the initial year. It is too early to comment on the prospects of orange cultivation in the village as the plants have not attained fruit bearing stage at the time of investigation.

10. Agricultural Inputs :

10.1. Agricultural inputs generally imply expenses made for the production of crops. These generally include cost of maintenance and hiring of draught animals, power tillers and tractors, seeds, fertilisers, manures, pesticides, hired human labour, agricultural tools and implements, irrigation and land improvement, rent on land etc. In the village Matiduba no household was found to use fertiliser and pesticide. Because of obvious difficulties in assessing the values of all the inputs, the input figures for seeds, hired human labour and bullock hired for ploughing are taken into account for the present study.

10.2. Inputs in agriculture are shown in Table 5.10. The practice of using hired human labour in cultivation is present in the village. There are some immigrant ex-tea



Table 5.10  
Input in Crop Cultivation by Size Group of Operational Holding.

| Size Group in Pectares) | No. of H.H. | Sali Paddy |               | Expenditure in Seed |               | Mustard    |                 | Maize      |               | Total Value     | Casual Labour Input | Expenditure in Bullocks hired | Total Input (Rs.)   |
|-------------------------|-------------|------------|---------------|---------------------|---------------|------------|-----------------|------------|---------------|-----------------|---------------------|-------------------------------|---------------------|
|                         |             | Q          | V             | Q                   | V             | Q          | V               | Q          | V             |                 |                     |                               |                     |
| Below 2 Pectares        | --          | --         | --            | --                  | --            | --         | --              | --         | --            | --              | --                  | --                            | --                  |
| 2.00-3.00               | 3           | --         | --            | 45                  | 47.00         | 29         | 82.00           | 34         | 23.00         | 152.00          | --                  | --                            | 152.00              |
| 3.00-4.00               | 1           | --         | --            | 40                  | 42.00         | 15         | 45.00           | --         | --            | 87.00           | --                  | --                            | 87.00               |
| 4.00-5.00               | --          | --         | --            | --                  | --            | --         | --              | --         | --            | --              | --                  | --                            | --                  |
| 5.00-7.50               | 8           | 143        | 145.00        | 172                 | 182.00        | 135        | 327.00          | 126        | 115.00        | 769.00          | 200.00 (1)          | 940.00 (1)                    | 1,909.00 (1)        |
| 7.50-10.00              | 4           | 216        | 235.00        | 213                 | 234.00        | 108        | 265.00          | 86         | 84.00         | 818.00          | 250.00 (1)          | --                            | 1,068.00            |
| 10.00-15.00             | 4           | 151        | 191.00        | 178                 | 183.00        | 204        | 537.00          | 105        | 96.00         | 1,007.00        | 1,060.00 (3)        | --                            | 2,067.00            |
| 15.00 & above           | 2           | 62         | 68.00         | 120                 | 131.00        | 114        | 246.00          | 96         | 85.00         | 530.00          | 500.00 (1)          | --                            | 1,030.00            |
| <b>Total :</b>          | <b>22</b>   | <b>572</b> | <b>639.00</b> | <b>768</b>          | <b>819.00</b> | <b>605</b> | <b>1,502.00</b> | <b>447</b> | <b>403.00</b> | <b>3,363.00</b> | <b>2,010.00 (6)</b> | <b>940.00 (1)</b>             | <b>6,313.00 (1)</b> |

Q = Quantity in Kg.  
V = Value in Rupees.

N.B. : Figures within brackets are no. of households.

garden labourer families near the village. The Miju Mishmi farmers use to employ such workers as hired labours. In the village 6 households reported to have used hired labours in agricultural works. Attention of the villagers are divided between settled cultivation and jhum type cultivation. Jhum being their first choice, family labour is mostly diverted to it. In the peak period of transplanting the wet paddy fields and harvesting of paddy and mustard, sometimes it so happens that number of workers engaged from the tenant side is insufficient to complete the work in appropriate time. In such a situation the owner cultivator engages family labour if possible, or engages hired labour to avert possible losses. Further, when family labour for normal routine weeding in Ahu paddy and maize falls short the owner cultivator takes resort to hired labourer for weeding. Unless weeding is done properly one cannot expect to have better yield specially in Ahu paddy and maize. Daily wage of a casual agricultural labour (male or female) was Rs. 5.00 in the village for the reference year.

10.3. From Table 5.10 it is seen that a great proportion (53.27%) of total value of input in cultivation in the village was incurred in the cost of seeds. Cropwise cost of mustard seed covers 23.79 per cent and cost of paddy seed covers 23.09 per cent of total inputs in the village.

10.4. The next higher input in agriculture involved in hired agricultural labours. The hired labour covers 31.84 per cent of the total inputs in the village. All the agricultural labours were casual labours except one cow-boy



Table 5.11

Per Household and Per Hectare Input Expenditure (Other Than Value of Seed) in Crop Cultivation by Size Group of Operational Holding.  
 X Area in Hectares  
 X Input in Rupees

| Size Group (Hectares) | No. of H.H. | Casual Labour Input  |                |                   | In Maize and Mustard |                |                   | Expenditure on Bullocks hired for ploughing Input per H.H. | Total Input per H.H. | Gross Area | Input per Hectare |
|-----------------------|-------------|----------------------|----------------|-------------------|----------------------|----------------|-------------------|--|----------------------|------------|-------------------|
|                       |             | Total Input per H.H. | Input per H.H. | Input per Hectare | Total Input per H.H. | Input per H.H. | Input per Hectare |  |                      |            |                   |
| Below 2               | 3           | --                   | --             | --                | --                   | --             | --                | --   | --                   | --         |                   |
| 2-3                   | 1           | --                   | --             | --                | --                   | --             | --                | --   | --                   | --         |                   |
| 3-4                   | 1           | --                   | --             | --                | --                   | --             | --                | --   | --                   | --         |                   |
| 4-5                   | 1           | --                   | --             | --                | --                   | --             | --                | --   | --                   | --         |                   |
| 5-7.5                 | 8           | 1,08                 | 200.00         | 200.00            | 185.00               | --             | --                | 4,82   | 940.00               | 213.00     |                   |
| 7.5-10                | 4           | 0.54                 | 50.00          | 50.00             | 93.00                | 10.26          | 200.00            | 200.00   | 19.00                | --         |                   |
| 10-15                 | 4           | 4.97                 | 500.00         | 167.00            | 101.00               | 6.75           | 200.00            | 200.00   | 30.00                | --         |                   |
| 15-20                 | 2           | 4.59                 | 180.00         | 180.00            | 39.00                | 7.83           | 320.00            | 320.00   | 41.00                | 360.00     |                   |
| 20 & above            | 2           | 11.10                | 930.00         | 155.00            | 84.00                | 24.24          | 720.00            | 240.00   | 29.00                | 360.00     |                   |
| Total                 | 22          | 11.10                | 930.00         | 155.00            | 84.00                | 24.24          | 720.00            | 240.00   | 29.00                | 360.00     |                   |
|                       |             | (6)                  |                |                   | (3)                  |                |                   |  | (1)                  | (1)        |                   |
|                       |             |                      |                |                   |                      |                |                   | 4.32   | 940.00               | 213.00     |                   |
|                       |             |                      |                |                   |                      |                |                   | (1)  |                      |            |                   |

N.B. Figures within brackets are number of households who made the respective expenditure.



engaged by one household on contract basis for maintenance of cattle in the household. Only 6 households with larger farms (above 5 hectares) spent the entire expenditure (Rs. 2010.00) on labour input in the village.

10.5. Expenditure on hired human and bullock labour per household and per hectare is given in Table 5.11. The average value of input on hired human labour per household and per hectare for paddy is Rs. 155.00 and Rs. 84.00 respectively. The highest amount (Rs. 200.00) on hired human labour was spent by a household in the size group of 5.00-7.50 hectares. In the cultivation of mustard and maize the average input on hired human labour per household and per hectare comes to Rs. 240.00 and Rs. 29.00 respectively. The highest amount of Rs. 320.00 on hired human labour for mustard and maize cultivation was incurred by one household in the size group of above 15.00 hectares.

10.6. Expenditure for maintenance of cattle was made by only one household in the highest size group of 15.00 hectares and above. Similarly, only one household in the size group of 5.00-7.50 hectares spent Rs. 940.00 on hired bullock labour, the input per hectare being Rs. 218.00.

#### 11. Production and Disposal of Crops

11.1. The total quantity and value of crops received by the farmers according to size groups of operational holding in Vatikuba village are presented in Table 5.12. The total production value of field crops and horticultural crops received by the farmers in the village stands at Rs. 164,263.00. It is observed that 99.82 per cent of the total value of production in the village is obtained from field crops.



Table 5.12

Total Quantity and Value of Crops Received by Farmers According to Size Group of Operational Holding.

Q = Quantity in Quintal  
V = Value in Rupees

| Size Group of Operational Holding (In hect.) | No. of H.H. | Wet Paddy      |           | Field Crop     |          | High Land Cultivation |            | Maize          |           |
|--|-------------|----------------|-----------|----------------|----------|-----------------------|------------|----------------|-----------|
|  |             | Q              | V         | Q              | V        | Q                     | V          |                |           |
|  |             |                |           |                |          |                       |            |                | Ahu Paddy |
| Below 2 hect.                                | --          | --             | --        | --             | --       | --                    | --         | --             |           |
| 2.00-3.00                                    | 3           | --             | --        | 7.46<br>(1)    | 800.00   | 29.85<br>(2)          | 7,200.00   | 5.60<br>(2)    | 500.00    |
| 3.00-4.00                                    | 1           | --             | --        | 21.65<br>(1)   | 1,160.00 | 11.20<br>(1)          | 3,900.00   | --             | --        |
| 4.00-5.00                                    | --          | --             | --        | --             | --       | --                    | --         | --             | --        |
| 5.00-7.50                                    | 8           | 40.30<br>(6)   | 4,265.00  | 18.66<br>(5)   | 2,000.00 | 67.54<br>(7)          | 22,040.00  | 41.04<br>(6)   | 3,220.00  |
| 7.50-10.00                                   | 4           | 27.62<br>(4)   | 2,838.00  | 9.33<br>(1)    | 1,000.00 | 63.30<br>(4)          | 21,700.00  | 33.58<br>(4)   | 3,130.00  |
| 10.00-15.00                                  | 4           | 32.46<br>(4)   | 3,470.00  | 15.68<br>(3)   | 1,680.00 | 87.70<br>(4)          | 27,830.00  | 57.85<br>(3)   | 4,500.00  |
| 15.00 & above                                | 2           | 11.57<br>(2)   | 1,240.00  | 30.60<br>(2)   | 3,280.00 | 58.58<br>(2)          | 18,840.00  | 22.77<br>(2)   | 2,030.00  |
| Total :                                      | 22          | 111.95<br>(16) | 11,863.00 | 103.33<br>(13) | 9,920.00 | 313.17<br>(20)        | 101,510.00 | 160.84<br>(17) | 13,430.00 |
| %  |             | 7.22           | 6.04      |                |          |                       | 61.80      |                | 8.17      |

N.B. Figures in the brackets represent number of households.

Continued :

Table 5.12 (Continued)

Total Quantity and Value of Crops Received by Farmers According to Size Group of Operational Holding.

Q = Quantity in Quintal  
V = Value in Rupees.

| Size Group of Operational Holding (In hect.) | No. of H.H. | Field Crop  |           |                  |          |           |          |       |    |             |           | Total Paddy |    |    |
|--|-------------|-------------|-----------|------------------|----------|-----------|----------|-------|----|-------------|-----------|-------------|----|----|
|  |             | Paddy       |           | Jhum Cultivation |          | Mustard   |          | Maize |    | V           |           |             |    |    |
|  |             | Q           | V         | Q                | V        | Q         | V        | Q     | V  | Q           | V         |             |    |    |
| Below 2 hect.                                | --          | --          | --        | --               | --       | --        | --       | --    | -- | --          | --        | --          | -- | -- |
| 2.00-3.00                                    | 3           | 10.08 (1)   | 1,080.00  | --               | --       | 6.72 (1)  | 540.00   | --    | -- | 17.54 (2)   | 1,880.00  | --          | -- | -- |
| 3.00-4.00                                    | 1           | --          | --        | --               | --       | --        | --       | --    | -- | 21.65 (1)   | 1,160.00  | --          | -- | -- |
| 4.00-5.00                                    | --          | --          | --        | --               | --       | --        | --       | --    | -- | --          | --        | --          | -- | -- |
| 5.00-7.50                                    | 8           | 19.78 (5)   | 2,120.00  | 25.00 (2)        | 8,300.00 | 36.58 (3) | 3,000.00 | --    | -- | 78.74 (8)   | 8,385.00  | --          | -- | -- |
| 7.50-10.00                                   | 4           | 50.75 (4)   | 5,440.00  | --               | --       | --        | --       | --    | -- | 87.70 (4)   | 9,328.00  | --          | -- | -- |
| 10.00-15.00                                  | 4           | 53.36 (4)   | 5,720.00  | 0.75 (1)         | 250.00   | --        | --       | --    | -- | 101.50 (4)  | 10,870.00 | --          | -- | -- |
| 15.00 & above                                | 2           | 7.46 (1)    | 800.00    | --               | --       | --        | --       | --    | -- | 49.68 (2)   | 5,320.00  | --          | -- | -- |
| Total :                                      | 22          | 141.43 (15) | 15,160.00 | 25.75 (3)        | 8,550.00 | 43.80 (4) | 3,540.00 | --    | -- | 356.76 (21) | 36,943.00 | --          | -- | -- |
| %  |             |             | 9.23      |                  | 5.20     |           | 2.16     |       |    |             | 22.49     |             |    |    |

N.B. : Figures in the brackets represent number of households.

Continued :



Table 5.12(Continued)

Total quantity and Value of Crops Received by Farmers According to Size Group of Operational Holding.

IX = quantity in Quintal  
XV = Value in Rupees.

| Size Group of Operational Holding (In hectare) | No. of H.H. | Field Crop     |            |                |           | Total Value | Value of Receipt from Horticulture | Total Value |
|--|-------------|----------------|------------|----------------|-----------|-------------|------------------------------------|-------------|
|  |             | Mustard        |            | Maize          |           |             |                                    |             |
|  |             | Q              | V          | Q              | V         |             |                                    |             |
| Below 2 hect.                                  | --          | --             | --         | --             | --        | --          | --                                 |             |
| 2.0-3.00                                       | 3           | 29.85<br>(2)   | 7,200.00   | 12.32<br>(3)   | 1,040.00  | --          | 10,120.00                          |             |
| 3.0-4.00                                       | 1           | 11.20<br>(1)   | 3,900.00   | --             | --        | --          | 5,060.00                           |             |
| 4.00-5.00                                      | --          | --             | --         | --             | --        | --          | --                                 |             |
| 5.00-7.50                                      | 8           | 92.54<br>(8)   | 30,340.00  | 77.62<br>(7)   | 6,220.00  | --          | 44,945.00                          |             |
| 7.50-10.00                                     | 4           | 63.30<br>(4)   | 21,700.00  | 33.58<br>(4)   | 3,180.00  | 90.00       | 34,293.00                          |             |
| 10.00-15.00                                    | 4           | 88.45<br>(4)   | 23,080.00  | 57.85<br>(3)   | 4,500.00  | 200.00      | 43,650.00                          |             |
| 15.00 & above                                  | 2           | 58.58<br>(2)   | 18,840.00  | 22.77<br>(2)   | 2,030.00  | --          | 26,190.00                          |             |
| Total  | 22          | 343.92<br>(21) | 110,060.00 | 204.14<br>(19) | 16,970.00 | 290.00      | 164,263.00                         |             |
| %  |             |                | 67.00      |                | 10.33     |             | 99.82                              |             |
|  |             |                |            |                |           | 0.18        | 100.00                             |             |

N. B. : Figures in the brackets represent number of households.

11.2. A substantial portion (76.01 per cent) of total crop value received by the farmers is from crops produced in the high land. Crops produced by jhum type of cultivation in the village is valued at Rs. 27250.00 or 16.59 per cent of the total value of crops. Cropwise, mustard is the major cash earner and it covers 67.00 per cent of total production value. An amount of Rs. 290.00 was earned from horticultural crops which is an insignificant portion (0.18 per cent) of total production value.

11.3. Residual agricultural income of the village by size groups of operational holdings is given in Table 5.13. In estimating the residual income direct cash expenditures on inputs like seeds, hired agricultural labours, hired bullocks, etc. were deducted from the gross agricultural income. The total residual agricultural income in the village thus stands at Rs. 157,950.00 the major portion of which is contributed by the eight households in the size group of 5.00-7.50 hectares. Table 5.13 also indicates that the aggregate residual agricultural income per household, per capita and per worker in the village are Rs. 7179.54, Rs. 1224.42 and Rs. 2507.14 respectively. The average residual agricultural income per person increases with the increase in the size of operational holding.

11.4. The receipt and disposal of crops by size groups of operational holding in the village are presented in Table 5.14. The production figures of paddy include output obtained from both settled farming and jhum type cultivation. The total receipt of paddy in the village is 356.76 quintals. In the case of mustard and maize the production figures relate to the total output obtained from jhum type cultivation and the share received from high land.



Table 5.13

Residual Agricultural Income by Size Group of Operational Holding.

| Size Group<br>(In hectares) | No. of<br>H.H. | Gross<br>Income<br>(Rs.) | Total<br>Input<br>(Rs.) | Residual<br>Income<br>(Rs.) | Residual Income (Rs.) |               |               |
|-----------------------------|----------------|--------------------------|-------------------------|-----------------------------|-----------------------|---------------|---------------|
|                             |                |                          |                         |                             | Per<br>H.H.           | Per<br>Capita | Per<br>Worker |
| Below 2 hect.               | --             | --                       | --                      | --                          | --                    | --            | --            |
| 2.00 - 3.00                 | 3              | 10,120.00                | 152.00                  | 9,968.00                    | 3,322.67              | 553.78        | 1,424.00      |
| 3.00 - 4.00                 | 1              | 5,060.00                 | 87.00                   | 4,973.00                    | 4,973.00              | 552.55        | 828.88        |
| 4.00 - 5.00                 | --             | --                       | --                      | --                          | --                    | --            | --            |
| 5.00 - 7.50                 | 2              | 44,945.00                | 1,309.00                | 43,636.00                   | 5,379.50              | 1,265.76      | 2,689.75      |
| 7.50 - 10.00                | 4              | 34,298.00                | 1,068.00                | 33,230.00                   | 8,307.50              | 1,384.58      | 2,556.15      |
| 10.00 - 15.00               | 4              | 43,650.00                | 2,067.00                | 41,583.00                   | 10,395.75             | 1,385.10      | 3,465.25      |
| 15.00 & above               | 2              | 26,190.00                | 1,030.00                | 25,160.00                   | 12,580.00             | 1,797.14      | 2,795.56      |
| Total :                     | 22             | 164,263.00               | 6,313.00                | 157,950.00                  | 7,179.54              | 1,224.42      | 2,507.14      |

Table 5.14

Receipt and Sale of Agricultural Production by Size Group  
of Operational Holding.

(Q = quintal.)

| Size Group<br>(In hectare) | No. of<br>H.H. | Paddy                   |                      | Mustard                 |                      | Maize                   |                      | Percentage of Sale (%) |                  |
|----------------------------|----------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|------------------------|------------------|
|                            |                | Total<br>Receipt<br>(Q) | Total<br>Sold<br>(Q) | Total<br>Receipt<br>(Q) | Total<br>Sold<br>(Q) | Total<br>Receipt<br>(Q) | Total<br>Sold<br>(Q) | Paddy                  | Mustard<br>Maize |
| Below 2 hect.              | --             | --                      | --                   | --                      | --                   | --                      | --                   | --                     | --               |
| 2.00 - 3.00                | 3              | 17.54<br>(2)            | --                   | 29.85<br>(2)            | --                   | 12.32<br>(3)            | --                   | --                     | --               |
| 3.00 - 4.00                | 1              | 21.65<br>(1)            | --                   | 11.20<br>(1)            | --                   | --                      | --                   | --                     | --               |
| 4.00 - 5.00                | --             | --                      | --                   | --                      | --                   | --                      | --                   | --                     | --               |
| 5.00 - 7.50                | 8              | 78.74<br>(8)            | 6.75<br>(1)          | 92.54<br>(8)            | 53.75<br>(5)         | 77.62<br>(7)            | 59.72<br>(5)         | 0.95                   | 58.08            |
| 7.50 - 10.00               | 4              | 87.70<br>(4)            | --                   | 63.30<br>(4)            | 35.46<br>(2)         | 33.58<br>(4)            | 26.13<br>(2)         | --                     | 56.02            |
| 10.00 - 15.00              | 4              | 101.50<br>(4)           | --                   | 88.45<br>(4)            | 64.20<br>(2)         | 57.85<br>(3)            | 29.86<br>(1)         | --                     | 72.53            |
| 15.00 & above              | 2              | 49.63<br>(2)            | --                   | 58.58<br>(2)            | --                   | 22.77<br>(2)            | --                   | --                     | --               |
|                            | 22             | 356.76<br>(21)          | 0.75<br>(1)          | 343.92<br>(21)          | 153.41<br>(9)        | 204.04<br>(19)          | 115.71<br>(8)        | 0.21                   | 44.61            |
|                            |                |                         |                      |                         |                      |                         |                      |                        | 56.68            |

N.B. : Figures in the brackets represent number of households.



Table 5.15  
Total Value of Receipt and Sale by Size Group of Operational Holding.

| Size Group<br>(In hectare) | No. of<br>H.H. | (Value in Rupees)      |                     |                        |                     |                        |                     |                        |                     |                        |                     |                        |                     |
|----------------------------|----------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|
|                            |                | Paddy                  |                     | Mustard                |                     | Maize                  |                     | Value of Sale          |                     | Value of Receipt       |                     | Total                  |                     |
|                            |                | Value<br>of<br>Receipt | Value<br>of<br>Sale | Value<br>of<br>Receipt | Value<br>of<br>Sale | Value<br>of<br>Receipt | Value<br>of<br>Sale | Value<br>of<br>Receipt | Value<br>of<br>Sale | Value<br>of<br>Receipt | Value<br>of<br>Sale | Value<br>of<br>Receipt | Value<br>of<br>Sale |
| Below 2 hect.              | --             | --                     | --                  | --                     | --                  | --                     | --                  | --                     | --                  | --                     | --                  | --                     | --                  |
| 2.00 - 3.00                | 3              | 1,830.00               | --                  | 7,200.00               | --                  | 1,040.00               | --                  | 10,120.00              | --                  | --                     | --                  | --                     | --                  |
| 3.00 - 4.00                | 1              | 1,160.00               | --                  | 3,900.00               | --                  | --                     | --                  | 5,060.00               | --                  | --                     | --                  | --                     | --                  |
| 4.00 - 5.00                | --             | --                     | --                  | --                     | --                  | --                     | --                  | --                     | --                  | --                     | --                  | --                     | --                  |
| 5.00 - 7.50                | 8              | 3,385.00               | 60.00               | 30,340.00              | 17,040.00           | 6,220.00               | 4,590.00            | 44,945.00              | 21,690.00           | --                     | --                  | --                     | --                  |
| 7.50 - 10.00               | 4              | 9,328.00               | --                  | 21,700.00              | 11,900.00           | 3,130.00               | 2,500.00            | 34,258.00              | 14,400.00           | --                     | --                  | --                     | --                  |
| 10.00 - 15.00              | 4              | 10,870.00              | --                  | 28,080.00              | 20,220.00           | 4,500.00               | 2,250.00            | 43,450.00              | 22,470.00           | --                     | --                  | --                     | --                  |
| 15.00 & above              | 2              | 5,320.00               | --                  | 18,840.00              | --                  | 2,030.00               | --                  | 26,190.00              | --                  | --                     | --                  | --                     | --                  |
| Total :                    | 22             | 36,943.00              | 60.00               | 110,060.00             | 48,160.00           | 16,970.00              | 9,340.00            | 163,973.00             | 58,640.00           | --                     | --                  | --                     | --                  |

11.5. The villagers are found to preserve almost all the production of paddy for home consumption. Only nine households are self-sufficient in paddy and a few of them are surplus paddy growers. Only one household is reported to have sold 0.75 quintal of paddy.

11.6. Mustard and maize are produced almost exclusively for sale. A good portion of mustard is generally sold immediately after harvest. Except in a few cases no attempt is made to hold back the produces except the seeds in the expectation of high prices. In the case of maize a portion of the produced is kept for home consumption and the rest is disposed of as early as possible after harvest. During the year under reference out of the total receipts 44.61 per cent of mustard, 56.68 per cent of maize and only 0.21 per cent of paddy were reported to be sold in the village at the time of field investigation.

11.7. Table 5.15 shows the total value of agricultural receipts and sales by size groups of operational holding in the village Watiduba. The total value of paddy produced in the village is Rs. 36,943.00 and paddy worth of Rs. 60.00 only was sold. The total receipts from mustard was Rs. 110,060.00 while Rs. 49,160.00 was received on disposal of a good portion of this cash crop upto the time of investigation. The total receipt of maize is valued at Rs. 16,970.00 and an amount of Rs. 9,340.00 was earned by selling a portion of it. It is to be noted that at the time of investigation none of the households of broad size groups of below 5 hectares and above 15 hectares was found to have sold paddy, mustard and maize.



11.8. The average sale value for a quintal of paddy mustard and maize was Rs. 80.00, Rs. 314.00 and Rs. 81.00 respectively.

Although there is no important market place for disposal of agricultural products near the village, the producers can easily dispose the cash-crops within the village. There are three shop keepers in the village who procure the cash crops from the villagers. These shop keepers are not local licensees. They have taken the shops on rent from the three licensees of the village. Each of the keepers pay monthly rent of Rs. 50.00 to the respective local licensees. These shop keepers usually invest almost all of their deposits in procuring the cash crops, specially mustard seeds of the village. At times, in the deal in mustard, they also act as procuring agents, for two wholesale traders from Sunpura and Na-gaon. These two businessmen are financier to the shop keepers who are making wholesale purchase for them in the village.

The shop keepers purchase maize from the villagers at variable rates in between Rs. 62.00 to Rs.100.00 per quintal and sell them to the wholesalers at a price varying from Rs. 80.00 to Rs. 120.00 per quintal.

11.9. The purchasing price of mustard seeds by the shop keepers varies from Rs. 300.00 to Rs. 340.00 per quintal and the mustard seeds thus purchased from the villagers by the shop keepers are supplied to the wholeseller at a higher price ranging from Rs. 350.00 to Rs. 370.00 per quintal. The total quantity of mustard seeds thus collected are stocked by the shop keepers and they are generally disposed of in a lot, to the concerned wholeseller by carts.

As reported by the shop keepers, they usually earn an average net profit of Rs. 12.00 to Rs. 18.00 per quintal of mustard seeds thus supplied to the wholesalers.

12. Weaving :

12.1. Besides cultivation and rearing of livestock, weaving is an important cottage industry. Almost all the Miju Mishui women are expert weavers. All the looms in the village are loin looms. There are altogether 21 looms in the village. The women prepare most of their dresses at their looms.

12.2. Table 5.16 shows the number of looms, estimated value of output and input and income from weaving. The total out turn of handloom in the village is valued at Rs.2936.00. The total value of inputs includes Rs. 1715.00 spent on purchasing of yarns. The average income per loom in the village stands at Rs. 58.14.

Table 5.16

Households with number of looms, total input, total output and net income from weaving.

| H.H. No. of looms | No. of H.H. | Total Input (Rs) | Total Output (Rs) | Net Income (Rs) | Income per loom (Rs) | Income Per H.H (Rs) | Income Per Capita (Rs) | Income Per Workers (Rs) |
|-------------------|-------------|------------------|-------------------|-----------------|----------------------|---------------------|------------------------|-------------------------|
| One               | 15          | 1245.00          | 2206.00           | 961.00          | 64.06                | 64.06               | 10.56                  | 22.34                   |
| Two               | 3           | 470.00           | 730.00            | 260.00          | 43.67                | 86.67               | 10.40                  | 21.66                   |
| Total             | 18          | 1715.00          | 2936.00           | 1221.00         | 58.14                | 67.83               | 10.52                  | 22.20                   |

12.3. Table 5.17 shows the production of handloom cloth and their estimated values. It shows the quantity of handloom



Table 5.17

Production and value of products from weaving.

| Name of Products | Total Production of Output<br>(No) | Gross value of Output<br>(Rs) | Average Value of Output<br>(Rs) |
|------------------|------------------------------------|-------------------------------|---------------------------------|
| Gukhana          | 9<br>(9)                           | 295.00                        | 32.78                           |
| Tapei            | 15<br>(12)                         | 329.00                        | 21.93                           |
| Bran             | 5<br>(5)                           | 50.00                         | 10.00                           |
| Dal              | 36<br>(18)                         | 1,317.00                      | 36.59                           |
| Tangran          | 33<br>(18)                         | 945.00                        | 28.67                           |
| Total Value :    |                                    | 2,936.00                      |                                 |

Figures within brackets are no. of households.

fabrics produced in the reference year. The articles thus produced are meant for domestic use by the members of the family. No weaver in the village produce handloom products for sale.

## Chapter Six

### Income, Expenditure and Level of Living.

#### 1. Introduction :

1.1. In this chapter the economic condition of the people of Hatiduba village is analysed particularly with reference to income and expenditure. The consumption pattern, indebtedness, housing condition, possession of durable consumer goods etc. are also discussed in this chapter.

1.2. There are certain limitations on the collection of data relating to quantum of income and pattern of expenditure by interview method. The villagers do not keep the daily household accounts. So they could not remember the incomes and expenditures in details for a whole year. Moreover, the tendency of under estimation of income or over-estimation of expenditure by the respondents is also observed. Because of obvious limitations the estimates of income and expenditure cannot be said to be accurate. However, utmost care has been taken to get reliable estimates so as to represent the real situation.

#### 2. Village Income :

2.1. The village income is the aggregate of the values of goods and services produced by the villagers during the reference period. In estimating the village income the value of home produced goods and agricultural products, income from trade and commerce etc. are taken into account. The items like home-collected fuel or fish, domestic birds and animals used for home consumption are omitted from the assessment of both income and expenditure. The annual village



income assessed for the study is residual income rather than net income. As data on family labour and other indirect cost items, depreciation etc. could not be ascertained, the net income could not be worked out.

2.2. Table 6.1 shows the percentage distribution of village income from different sources.

Table 6.1  
Percentage Distribution of Village Income  
from Different Sources: Hatiluba.

| Source of Income                            | Total Annual Income<br>(Rs.) | Percentage |
|---|------------------------------|------------|
| 1. Wet Rice Cultivation                     | 9,934.00                     | 5.69       |
| 2. High Land Cultivation                    | 1,21,567.00                  | 69.64      |
| 3. Wet Jhum Cultivation                     | 26,159.00                    | 14.98      |
| 4. Horticulture                             | 290.00                       | 0.17       |
| <hr style="border-top: 1px dashed black;"/> |                              |            |
| Agricultural Income                         | 1,57,950.00                  | 90.48      |
| <hr style="border-top: 1px dashed black;"/> |                              |            |
| 5. Arts & Crafts                            | 1,221.00                     | 0.70       |
| 6. Trade, Commerce &<br>Transport etc.      | 15,400.00                    | 8.82       |
| <hr/>                                       |                              |            |
| Non-Agril. Income                           | 16,621.00                    | 9.52       |
| <hr/>                                       |                              |            |
| Total :                                     | 174,571.00                   | 100.00     |

2.3. During the reference year agriculture contributed 90.48 per cent of the total village income of which only 0.17 per cent was derived from horticulture. The residual agricultural income is estimated on the basis of cash sales plus imputed value of production in excess of sale at farm harvest price. The income from high land cultivation (69.64%) is much higher than that from jhum type cultivation (14.98%) and wet paddy cultivation (5.69%). The higher return from

Table 6.2

Income from different sources by size group of operational holding.

| Size group of operational holding.<br>(In hectares) | No. of H.H. | Income from             |                      |                                  | Total                   |           | Income per Household Capita |   |
|---|-------------|-------------------------|----------------------|----------------------------------|-------------------------|-----------|-----------------------------|---|
|   |             | Agriculture             | Arts & crafts        | Trade, commerce & Transport etc. | Total                   | Household | Capita                      |   |
| Below 2 Hectares                                    | -           | -                       | -                    | -                                | -                       | -         | -                           | - |
| 2.00 - 3.00   | 3           | 9,968.00<br>(6.31)      | 105.00<br>(8.60)     | -                                | 10,073.00<br>(5.78)     | 3,357.67  | 559.61                      |   |
| 3.00 - 4.00   | 1           | 4,973.00<br>(3.15)      | 31.00<br>(2.54)      | -                                | 5,004.00<br>(2.86)      | 5,004.00  | 556.00                      |   |
| 4.00 - 5.00   | -           | -                       | -                    | -                                | -                       | -         | -                           | 1 |
| 5.00 - 7.50   | 8           | 43,036.00<br>(27.24)    | 339.00<br>(27.76)    | 3,500.00<br>(22.73)              | 46,875.00<br>(26.35)    | 5,359.38  | 1,376.68                    | 9 |
| 7.50 - 10.00  | 4           | 33,230.00<br>(21.04)    | 366.00<br>(30.14)    | 5,600.00<br>(36.36)              | 39,196.00<br>(22.45)    | 9,799.50  | 1,633.25                    | - |
| 10.00 - 15.00                                       | 4           | 41,583.00<br>(26.33)    | 233.00<br>(19.03)    | 1,300.00<br>(8.44)               | 43,116.00<br>(24.70)    | 10,779.00 | 1,437.20                    | - |
| 15.00 and above                                     | 2           | 25,160.00<br>(15.93)    | 145.00<br>(11.83)    | 5,000.00<br>(32.47)              | 30,305.00<br>(17.36)    | 15,152.50 | 2,164.64                    | - |
| Total :   | 22          | 1,57,950.00<br>(100.00) | 1,221.00<br>(100.00) | 15,400.00<br>(100.00)            | 1,74,571.00<br>(100.00) | 7,935.04  | 1,353.26                    | - |

N.B. :- Figures in the brackets are percentages of column total.



high land cultivation is because of the fact that mustard and maize grown in the high land give better yield and fetch good price. Only 9.52 per cent of the total village income was earned from non-agricultural sources. Of the non-agricultural income the significant share of 8.82 per cent was earned from trade, commerce transport, etc. Three persons of the village Hutiaba were reported to be dealing in forest products like timber and cane. The village headman (Gaonbura) reported to have earned an annual income of Rs.700.00 as milling charges from his rice hauler mill.

2.4. The distribution of income from different sources by size groups of operational holding is presented in Table 6.2. The average per household and per capita income for the village are found to be Rs.7,935.04 and Rs.1,353.26 respectively. Table 6.2 shows that the household income varies directly with the size of operational land. The household income increases with the increase in the operational holding. The highest average income per household in the village (Rs.15,152.50) is derived by two households in the operational holding group of 15.00 hectares and above. <sup>Altogether</sup> 54.54 per cent households in the village has the average per household income lower than the village average. The rest of the households have higher average per household income than the village average because these households besides having bigger sizes of operational holding earn a significant portion of income from trade and commerce, etc.

2.5. In the village both the per household and per capita income appear to be quite satisfactory. The overall per household and per capita income for the village is quite high as compared to other tribal villages of Arunachal Pradesh surveyed by the Agro-Economic Research Centre, Jorhat

Table 6.3

Income from different sources according to Total Income Groups.

| Total Income Group (Rs.) | No. of H.H.    | Income from            |                     |                                  |                         | Total Income | (Income in Rupees) |  |
|--------------------------|----------------|------------------------|---------------------|----------------------------------|-------------------------|--------------|--------------------|--|
|                          |                | Agriculture            | Arts & Crafts       | Trade, Commerce & Transport etc. | Household               |              | Capita             |  |
| 1,000 - 2,000            | 1<br>(4.54)    | 1,562.00<br>(1.00)     | 60.00<br>(4.91)     | -                                | 1,642.00<br>(0.94)      | 1,642.00     | 243.67             |  |
| 2,000 - 3,000            | 1<br>(4.54)    | 2,061.00<br>(1.31)     | 45.00<br>(3.68)     | -                                | 2,126.00<br>(1.22)      | 2,126.00     | 265.75             |  |
| 3,000 - 4,000            | 1<br>(4.54)    | 3,069.00<br>(1.93)     | -                   | -                                | 3,069.00<br>(1.76)      | 3,069.00     | 3,069.00           |  |
| 4,000 - 5,000            | 3<br>(13.63)   | 13,453.00<br>(8.43)    | 237.00<br>(19.41)   | -                                | 13,690.00<br>(7.84)     | 4,563.33     | 805.29             |  |
| 5,000 - 6,000            | 2<br>(9.09)    | 10,732.00<br>(7.20)    | 114.00<br>(9.34)    | -                                | 10,846.00<br>(6.21)     | 5,423.00     | 638.00             |  |
| 6,000 - 7,000            | 5<br>(22.73)   | 28,766.00<br>(18.13)   | 160.00<br>(13.10)   | 3,500.00<br>(22.73)              | 32,426.00<br>(13.57)    | 6,485.20     | 1,706.63           |  |
| 7,000 - 8,000            | -              | -                      | -                   | -                                | -                       | -            | -                  |  |
| 8,000 - 10,000           | 4<br>(13.19)   | 34,661.00<br>(21.85)   | 310.00<br>(25.39)   | -                                | 34,971.00<br>(20.03)    | 8,742.75     | 1,345.04           |  |
| 10,000 - 15,000          | 2<br>(9.09)    | 20,853.00<br>(13.15)   | 150.00<br>(12.29)   | -                                | 21,003.00<br>(12.03)    | 10,501.50    | 1,400.20           |  |
| 15,000 - 20,000          | 3<br>(13.64)   | 42,753.00<br>(26.95)   | 145.00<br>(11.83)   | 11,900.00<br>(77.27)             | 54,798.00<br>(21.39)    | 18,266.00    | 2,739.90           |  |
| Total :                  | 22<br>(100.00) | 157,950.00<br>(100.00) | 1221.00<br>(100.00) | 15,400.00<br>(100.00)            | 1,74,571.00<br>(100.00) | 7,935.04     | 1,353.26           |  |

N.B. :- Figures in the brackets are percentages of total.



at different points of time. The per household and per capita income respectively were Rs.1,676.96 and Rs.264.78 in Pakam (1972); Rs.2,394.55 and Rs.563.87 in Bamin(1978). However, the average operational holding was only 1.41 hectare in Pakam and 0.63 hectare in Bamin. The higher average income per household and per capita for the village Hatiduba is mainly due to availability and utilisation of proportionately higher sizes of land holdings by the villagers. It is to be noted that the average operational holding per household in the village stands at 9.17 hectares. The other contributing factor for higher income in the village is the income from non-agricultural sources.

2.6. Taking into account the income structure from various sources the households are stratified into different income groups. Income from different sources according to income groups is given in Table 6.3. Annual income per household varies from Rs.1,642.00 to Rs.18,266.00. The variability in the case of average income per capita is significant among the different income groups.

### 3. Expenditure :

3.1. The annual expenditure refers to consumption and capital expenditure incurred by a household. In estimating total annual expenditure, home produced items for home consumption are taken at their imputed value at prevailing market prices. Data on items of consumption such as food, fuel, lighting, intoxicants etc. are based on the expenditure incurred for the month prior to the time of field investigation. The annual expenditure on cloths, education, medical, entertainment and ceremonials etc. are based on the statements of the respondents. As indicated earlier, some items like home-collected fuel, home produced birds

and animals or fish caught for home consumption etc. are excluded from both income and expenditure.

3.2. The cereal consumption (Paddy) in the village Hatiduba is under two forms i.e. in the form of rice and rice beer (Chee). Chee is a popular drink of the villagers which is also used for entertaining guests.

Table 6.4

Annual Expenditure under different Heads  
in the village Hatiduba.

| Head of Expenditure                   | Value in Rupees | Percentage |
|---------------------------------------|-----------------|------------|
| 1. Food :                             |                 |            |
| (a) Cereals                           | 32,244.00       | 26.27      |
| (b) Non-cereals                       | 4,164.00        | 3.39       |
| Sub-Total :                           | 36,408.00       | 29.66      |
| 2. Fuel & Lighting                    | 1,119.00        | 0.91       |
| 3. Intoxicant                         |                 |            |
| (a) Rice Beer                         | 11,196.00       | 9.12       |
| (b) Opium                             | 22,104.00       | 18.01      |
| (c) Cigarette, Bill,<br>Tobacco, etc. | 9,084.00        | 7.40       |
| 4. Toilet soap etc.                   | 810.00          | 0.66       |
| 5. Clothing and Footwear              | 7,368.00        | 6.00       |
| 6. Education                          | 30.00           | 0.02       |
| 7. Entertainments &<br>ceremonials    | 29,185.00       | 23.78      |
| 8. Travelling                         | 5,300.00        | 4.32       |
| 9. Services                           | 78.00           | 0.06       |
| 10. Others                            | 72.00           | 0.06       |
| Sub-Total :                           | 86,346.00       | 70.34      |
| Total :                               | 1,22,754.00     | 100.00     |



3.3. The annual village expenditure under different meals is presented in Table 6.4. Food items cover 29.66 per cent of the total annual expenditure of the village. Next to food items, expenditure on entertainments and ceremonials accounts for 23.78 per cent of the total expenditure. Expenditure on entertainments and ceremonials includes expenses incurred in festivals, various social rites and rituals for curing illness, appeasing of spirits and death ceremonies etc.

3.4. Expenditure on intoxicants holds a very significant position and 34.53 per cent of the total expenditure was incurred in intoxicants. Villagers consume a large quantity of rice beer throughout the year. On festive and ritualistic occasions the people drink a lot of rice beer. Expenditure on rice beer covers 9.12 per cent of the total expenditure. The most important item of the intoxicants is opium. Almost all the elderly males and a few youths of the village take opium regularly. A huge amount of Rs.22,104.00 (18.01 per cent of the total annual expenditure) was reported to be spent on opium.

3.5. Opium eating and smoking is detrimental to mental and physical health. The government have adopted certain measures such as displaying of wall-posters, distribution of hand bill etc. to convince the people of the evils of opium eating. There are two opium De-addiction centres, one at Tezu and the other at Lathoo with 6 to 10 beds respectively. But none of the opium addicts of the village Hatiduba has ever gone to the nearest centre at Tezu for consultation or treatment. The opium-addicts of the village not only like opium eating for its intoxicating quality but also consider opium-eating as an item of

luxury for the rich. Usually the addicts smoke opium by using "hooka" (a traditional smoking pipe). But at times they also eat opium by dissolving in warm water or in tea. As reported by the respondent villagers, the supply of this contraband to the village is made by secret traders both from the hills and the plains. Opium-eaters were reported to be present in 13 households. Thus the average annual expenditure on opium per household stands at Rs.1700.31. The annual per household expenditure on rice beer and on cigarette, Bidi, tobacco, are Rs.508.91 and Rs.432.57 respectively. Rice beer is common in all the households while smokers and tobacco chewers were reported to be present in 21 households.

3.6. The other items of expenditure of importance are clothing and foot wear and 6.00 per cent of the total annual expenditure comes under these items. The annual per capita expenditure on these two items is Rs.57.12 only. The elderly people largely use home produced apparels, but the younger generation use mill-made modern clothes. The most popular foot wear in the village is the "Hawai Chappal". Next to it, a reasonable portion (4.32%) of the total annual expenditure is incurred in travelling. The villagers generally visit their relatives at far off places during leisure time and the youths occasionally visit the nearest town Tezu where they like to stay for two to three days in some hotels, if and when time and money permit.

3.7. Cash expenditure on Kerosene and match boxes comes under the item fuel and lighting. Only 0.91 per cent of the total expenditures was on this item. Expenditure on education is very nominal. Only one household was reported to spend Rs.30.00 only for purchasing books, etc. No



Table

Distribution of Annual Expenditure in different

national holding groups.  
(Expenditure in Rs.)

| Size Group of Operational Holding (In Hectares) | No. of H.H. | Food      |            | Fuel & Lighting | Rice Beer | Intoxicants |               | Toilets, etc. | Clothing & Footwear | Education |
|---|-------------|-----------|------------|-----------------|-----------|-------------|---------------|---------------|---------------------|-----------|
|   |             | Cereal    | Non-Cereal |                 |           | Opium       | Tobacco, etc. |               |                     |           |
| Below 2 hect.                                   | -           | -         | -          | -               | -         | -           | -             | -             | -                   | -         |
| 2.00 - 3.00                                     | 3           | 2,964.00  | 774.00     | 156.00          | 2,040.00  | 1,728.00    | 1,500.00      | 204.00        | 818.00              | -         |
| 3.00 - 4.00                                     | 1           | 1,980.00  | 12.00      | 36.00           | 240.00    | -           | 360.00        | 30.00         | 525.00              | -         |
| 4.00 - 5.00                                     | -           | -         | -          | -               | -         | -           | -             | -             | -                   | -         |
| 5.00 - 7.50                                     | 8           | 10,476.00 | 1248.00    | 372.00          | 3,408.00  | 12,864.00   | 3,064.00      | 258.00        | 2,360.00            | -         |
| 7.50 - 10.00                                    | 4           | 6,024.00  | 918.00     | 195.00          | 2,280.00  | 4,320.00    | 1,728.00      | 180.00        | 1,415.00            | -         |
| 10.00 - 15.00                                   | 4           | 7,560.00  | 924.00     | 258.00          | 2,448.00  | 2,592.00    | 1,452.00      | 90.00         | 1,550.00            | 30.00     |
| 15.00 & above                                   | 2           | 3,240.00  | 282.00     | 102.00          | 780.00    | 600.00      | 960.00        | 48.00         | 700.00              | -         |
| Total :   | 22          | 32,244.00 | 4164.00    | 1,119.00        | 11,196.00 | 22,104.00   | 9,084.00      | 810.00        | 7,363.00            | 30.00     |

Contd./-

Table 6.5 (Contd)

Distribution of Annual Expenditure in different items by operational holding groups.

| Size Group of Operational Holding (In Hectares) | No. of H.H. | Entertainments & Ceremonials | Travelling | Services | Others (house-tax) | (Expenditure in Rs.)   |          |                        |
|---|-------------|------------------------------|------------|----------|--------------------|------------------------|----------|------------------------|
|   |             |                              |            |          |                    | Total Expenditures     | H.H.     | Expenditure per Capita |
| Below 2 hect.                                   | -           | -                            | -          | -        | -                  | -                      | -        | -                      |
| 2.00 - 3.00                                     | 3           | 3,500.00                     | 590.00     | -        | 24.00              | 14,598.00<br>(11.89)   | 4,866.00 | 811.00                 |
| 3.00 - 4.00                                     | 1           | 2,400.00                     | 100.00     | 12.00    | -                  | 5,695.00<br>(4.64)     | 5,695.00 | 632.78                 |
| 4.00 - 5.00                                     | -           | -                            | -          | -        | -                  | -                      | -        | -                      |
| 5.00 - 7.50                                     | 8           | 10,800.00                    | 1,690.00   | 6.00     | -                  | 46,566.00<br>(37.94)   | 5,820.75 | 1369.59                |
| 7.50 - 10.00                                    | 4           | 4,950.00                     | 840.00     | 20.00    | 48.00              | 22,918.00<br>(18.67)   | 5,729.50 | 954.92                 |
| 10.00 - 15.00                                   | 4           | 4,635.00                     | 1,200.00   | 10.00    | -                  | 22,749.00<br>(18.53)   | 5,687.25 | 758.30                 |
| 15.00 & above                                   | 2           | 2,600.00                     | 880.00     | 30.00    | -                  | 10,228.00<br>(8.33)    | 5,114.00 | 730.57                 |
| Total :   | 22          | 29,185.00                    | 5,300.00   | 78.00    | 72.00              | 122,754.00<br>(100.00) | 5,579.73 | 951.58                 |

N.B. :- Figures in the brackets are percentages.



expenditure on medical was reported during the investigation.

3.8. Table 6.5 shows the distribution of total annual expenditure under different heads according to size groups of operational holding. The bulk (37.94%) of the total annual expenditure in the village concentrates with the eight households of the operational holding size group of 5.00 - 7.50 hectares. As such per household (Rs.5,820.75) and per capita (Rs.1,369.59) expenditure is the largest in this operational holding group.

3.9. Three households of the smallest operational holding size group and two households of the largest size group have incurred per household annual expenditure below the overall village average. The former households spent 25.61 per cent, 35.89 per cent and 26.03 per cent of their total expenditure on food, intoxicants and entertainments and ceremonials respectively. For the latter households expenditure on these items were 34.49 per cent, 22.88 per cent and 25.42 per cent respectively of their total expenditure. The per capita annual expenditure of 12 households (54.54%) in the broad operational holding group of 5.00 - 10.00 hectares is higher than the village average.

3.10. The distribution of total annual expenditure by levels of income is given in Table 6.6. This shows that 14 (63.65%) households having annual income of above Rs.6,000.00 spent 65.19 per cent of the total annual expenditure of the village. Barring the households of income groups Rs.2000 - 3000, Rs. 6000 - 7000 and Rs.8000 - 10,000 all the households in the village had per capita expenditure below the village average.

Table 6.6

Distribution Expenditure According to  
Total Income Group.

| Total Income Group<br>(In Rupees) | No. of<br>H.H. | Total<br>Expenditure   | ( Expenditure in Rs.) |          |
|-----------------------------------|----------------|------------------------|-----------------------|----------|
|                                   |                |                        | H. H.                 | Capita   |
| 1,000 - 2,000                     | 1<br>(4.54)    | 5,033.00<br>(4.10)     | 5,033.00              | 838.83   |
| 2,000 - 3,000                     | 1<br>(4.54)    | 6,173.00<br>(5.03)     | 6,173.00              | 771.63   |
| 3,000 - 4,000                     | 1<br>(4.54)    | 5,169.00<br>(4.21)     | 5,169.00              | 5,169.00 |
| 4,000 - 5,000                     | 3<br>(13.64)   | 15,736.00<br>(12.82)   | 5,245.33              | 925.65   |
| 5,000 - 6,000                     | 2<br>(9.09)    | 10,622.00<br>(8.65)    | 5,311.00              | 624.82   |
| 6,000 - 7,000                     | 5<br>(22.73)   | 27,232.00<br>(22.19)   | 5,446.40              | 1,433.26 |
| 7,000 - 8,000                     | --             | --                     | --                    | --       |
| 8,000 - 10,000                    | 4<br>(18.19)   | 25,952.00<br>(21.14)   | 6,488.00              | 998.15   |
| 10,000 - 15,000                   | 2<br>(9.09)    | 12,693.00<br>(10.34)   | 6,346.50              | 846.20   |
| 15,000 - 20,000                   | 3<br>(13.64)   | 14,144.00<br>(11.52)   | 4,714.67              | 707.20   |
| Total :                           | 22<br>(100.00) | 122,754.00<br>(100.00) | 5,579.73              | 951.58   |

N. B. Figures in the brackets are percentages of total.

4. Family Budget :

4.1 . A comparative estimate of family income and expenditure is indicative of the financial position of the different households. The distribution of annual income and expenditure and the surplus or deficit households according to the income-level of the household are given in Table 6.7. The overall surplus per household in the village stands at Rs.2,255.31. All the six households with annual income of



Table 6.7

Distribution of Annual Income and Expenditure by Total Income Groups.

| Total Income Groups (In Rs.) | No. of H.H. | Income      | Expenditure | Surplus (+) or Deficit (-) (Rs) |  | (Income and Expenditure in Rupees) |                            | No. of Households |
|------------------------------|-------------|-------------|-------------|---------------------------------|--|------------------------------------|----------------------------|-------------------|
|                              |             |             |             | Surplus (+) or Deficit (-) (Rs) | Per H.H. Surplus (+) or Deficit (-) (Rs) | Surplus (+) or Deficit (-)         | Surplus (+) or Deficit (-) |                   |
| 1,000 - 2,000                | 1           | 1,642.00    | 5,033.00    | - 3,391.00                      | - 3,391.00                               | -                                  | -                          | 1                 |
| 2,000 - 3,000                | 1           | 2,126.00    | 6,173.00    | - 4,047.00                      | - 4,047.00                               | -                                  | -                          | 1                 |
| 3,000 - 4,000                | 1           | 3,069.00    | 5,169.00    | - 2,100.00                      | - 2,100.00                               | -                                  | -                          | 1                 |
| 4,000 - 5,000                | 3           | 13,690.00   | 15,736.00   | - 2,046.00                      | - 682.00                                 | -                                  | -                          | 3                 |
| 5,000 - 6,000                | 2           | 10,846.00   | 10,622.00   | + 224.00                        | + 112.00                                 | + 112.00                           | + 112.00                   | 1                 |
| 6,000 - 7,000                | 5           | 32,426.00   | 27,232.00   | + 5,194.00                      | + 1,038.80                               | + 1,038.80                         | + 1,038.80                 | 2                 |
| 7,000 - 8,000                | -           | -           | -           | -                               | -  | -                                  | -                          | -                 |
| 8,000 - 10,000               | 4           | 34,971.00   | 25,952.00   | + 9,019.00                      | + 2,254.75                               | + 2,254.75                         | + 2,254.75                 | 4                 |
| 10,000 - 15,000              | 2           | 21,003.00   | 12,693.00   | + 8,310.00                      | + 4,155.00                               | + 4,155.00                         | + 4,155.00                 | 2                 |
| 15,000 - 20,000              | 3           | 54,793.00   | 14,144.00   | + 40,654.00                     | + 13,551.33                              | + 13,551.33                        | + 13,551.33                | 3                 |
| Total :                      | 22          | 1,74,571.00 | 1,22,754.00 | + 51,817.00                     | + 2,255.31                               | + 2,255.31                         | + 2,255.31                 | 13                |
|                              |             |             |             |                                 |  |                                    |                            | 9                 |

less than Rs.5,000.00 per household are deficit households. Of the seven households with annual income in the range of Rs.5,000.00 to Rs.7,000.00, only four households are surplus households. The surplus households comprise of 59.09 per cent of the total households in the village. The extent of deficit per household ranges between Rs.1682.00 to Rs.4,047.00. On the other hand the magnitude of surplus per household varies in between Rs.112.00 and Rs.13,551.33. This indicates that there exists great inequality of wealth in the village.

4.2. Households with surplus budgets were found to utilise their surplus mainly in purchasing durable consumer goods like bicycle, watch, gun, utensil, etc. Only one household of the income group of Rs.15,000 - Rs.20,000 reported to invest Rs.8,000.00 in construction of a residential house.

#### 5. Housing Condition :

5.1. All the residential houses in Matiduba have a common traditional structural pattern made of wood and bamboo and with thatched roofs. The only exception is the house of the headman (Goen bura) which has been constructed on semi-permanent structure with C.I. sheet roofs and was on the stage of completion at the time of investigation.

5.2. Table 6.8 shows the distribution of residential houses and other structures in the village by size groups of operational holdings. There are altogether 22 residential houses 26 granaries and 3 shops in the village. The average residential accommodation in terms of floor space available per household and per capita for the village are 706 sq.ft. and 120.45 sq.ft. respectively. Some relationship is evident between floor space of the households and operational holding sizes as the available floor space per household increases with the increase in the operational



Table 6.8

Distribution of Residential Houses and Other Structures by Size Group of Operational Housing.

| Size Group of Operational Housing (In Hect.) | No. of H.H. | Residential Accommodation (Floor space) (Sq. ft.) | Granny (Floor Space) (Sq. ft.) | Others (Floor space) (Sq. ft.) | Residential Accommodation (Floor space) (Sq. ft.) | Per H.H. | Per Capita |
|--|-------------|---|--------------------------------|--------------------------------|---|----------|------------|
| Below 2 hect.                                | --          | --  | --                             | --                             | --  | --       | --         |
| 2.00-3.00                                    | 3           | 1,838<br>(3)                                      | 158<br>(3)                     | --                             | 610   | 101.67   |            |
| 3.00-4.00                                    | 1           | 600<br>(1)  | 50<br>(1)                      | --                             | 600   | 66.67    |            |
| 4.00-5.00                                    | --          | --  | --                             | --                             | --  | --       |            |
| 5.00-7.50                                    | 8           | 4,980<br>(8)                                      | 388<br>(8)                     | --                             | 622   | 146.47   |            |
| 7.50-10.00                                   | 4           | 3,200<br>(4)                                      | 262<br>(5)                     | 336<br>(1)                     | 800   | 133.33   |            |
| 10.00-15.00                                  | 4           | 3,260<br>(4)                                      | 322<br>(6)                     | 360<br>(1)                     | 815   | 108.66   |            |
| 15.00 & above                                | 2           | 1,668<br>(2)                                      | 294<br>(3)                     | 360<br>(1)                     | 834   | 119.14   |            |
| Total :                                      | 22          | 15,538<br>(22)                                    | 1,474<br>(26)                  | 1,056<br>(3)                   | 706   | 120.45   |            |

N. B. Figures in the brackets are number of units.

6. Durable Consumer Goods :

6.1. The number of durable consumer goods possessed by the villagers are shown in Table 6.9. The possession of bicycle, watch, gun, radio etc. in a tribal village like Tatiuba indicates that a process of change has occurred in the village. In the village, 2 households own radio sets, 7 households possess bicycles and 8 households own guns. All the eight guns in the village are muzzle-loaders. Tables, chairs and cots are the only items of modern furniture used by a few households.

Table 6.9

Durable Consumer Goods in Use in Hatiluba.

| <u>Items</u>     | <u>No. of household</u> | <u>No. of goods in use</u> |
|------------------|-------------------------|----------------------------|
| Radio/Transistor | 2                       | 2                          |
| Bicycle          | 7                       | 7                          |
| Guns             | 8                       | 8                          |
| Watch/Clock      | 14                      | 15                         |
| Torch            | 10                      | 10                         |
| Table            | 5                       | 5                          |
| Chair            | 5                       | 13                         |
| Cots             | 1                       | 1                          |
| China Crockery   | 4                       | 13                         |
| Brass Utensils   | 22                      | 129                        |
| Lantern          | 4                       | 4                          |
| Umbrella         | 16                      | 17                         |
| <u>Mondong</u>   | 6                       | 10                         |
| Hauler Mill      | 1                       | 1                          |

7. Indebtedness :

7.1. Although there are 9 households running with deficit family budget, the majority of the households are economically sound. There is no professional money lender in and around the village and no household was reported to borrow money from such source. The poor farmers sometimes borrow food stuff mainly paddy in small quantity from surplus growers or collect edible tubers roots, shoots and fruits from the jungles for mere subsistence during the hard times. The borrowers have to return the same quantity of paddy as borrowed at the time of harvest. No interest is demanded by the lender.



7.2. As stated earlier no borrowing of money from sources other than an institutional source was reported. In 1978, 12 (54.54%) households took agricultural loans of Rs.500.00 each advanced by the Agricultural Department.

Table 6.10  
Distribution of Indebtedness by Levels of Income.

| Total Income Group<br>(Rs.) | No. of<br>H.H. | Principal<br>Borrowed<br>(Rs.) | Principal<br>Repaid with<br>Interest<br>(Rs.) |
|-----------------------------|----------------|--------------------------------|---|
| 1,000 - 2,000               | 1              | --                             | --  |
| 2,000 - 3,000               | 1              | 500.00<br>(1)                  | 157.50<br>(1)                                 |
| 3,000 - 4,000               | 1              | --                             | --  |
| 4,000 - 5,000               | 3              | 1,000.00<br>(2)                | 315.00<br>(2)                                 |
| 5,000 - 6,000               | 2              | 1,000.00<br>(2)                | 315.00<br>(2)                                 |
| 6,000 - 7,000               | 5              | 1,500.00<br>(3)                | 472.50<br>(3)                                 |
| 7,000 - 8,000               | -              | --                             | --  |
| 8,000 - 10,000              | 4              | 500.00<br>(1)                  | 157.50<br>(1)                                 |
| 10,000 - 15,000             | 2              | 1,000.00<br>(2)                | 315.00<br>(2)                                 |
| 15,000 & above              | 3              | 500.00<br>(1)                  | 157.50<br>(1)                                 |
| <b>Total :</b>              | <b>22</b>      | <b>6,000.00<br/>(12)</b>       | <b>1,890.00<br/>(12)</b>                      |

7.3. Table 6.10 shows the extent of borrowings of the villagers by levels of income. The total amount borrowed by the twelve households stands at Rs.6,000.00. Repayment of Rs.1,890.00 as a part of capital and interest accrued was made by the borrowing households at the time of investigation.

## Chapter Seven

### Summary and Conclusion

#### A. Summary :

1. In the foregoing Chapters, the socio-economic life of the Miju Mishmis of Hatiduba village of the Lohit District of Arunachal Pradesh is depicted. The village is situated at a distance of 25 kms. from Tezu, the headquarters of the Lohit District. The field investigation for the study was done in the month of March, 1981, and the basic data relate to the year, 1980-81.
2. The Miju Mishmis or Kaman, is the numerically dominant group among the three groups of the Mishmis, their total population being 8,233 according to 1971 Census. Hatiduba is inhabited by the Miju Mishmis. The village is situated in the Lohit plains and is under the jurisdiction of the administrative unit of Tezu C.D. Block. The village is on the south of Sadia-Tezu Road and the river Lohit is flowing at a distance of about 6 kms. from the village. An all weather road known as Block Road runs around the village in a semi-circular way and touches the Sadia-Tezu Road at two points.
3. There are altogether 22 households in Hatiduba village with a total population of 129 of which 54 are males and 75 females. The average size of a household is 5.86 which is somewhat low because of predominance of small-sized nuclear families.
4. Hatiduba is inhabited by people belonging to eight exogamous clan groups. Of the total population 41.86 per cent are married, 55.03 per cent unmarried and 3.11 per cent widowed. There is no divorced and separated



individuals in the village. Moreover, remarriage as well as widow-marriage is permitted among them. They do not practise child marriage, even early marriage of girls is now disfavoured. In Mishmi marriage, the bride-price, which usually consists of a number of mithuns, cows, pigs and sometimes buffaloes is compulsory. However, the magnitude of bride-price depends upon the economic condition and social status of the bride's parents.

5. The overall rate of literacy in the village is only 8.53 per cent. This poor rate of literacy may be due to the facts that the villagers do not lay due importance in education and that there is no educational facilities within the village. Of the total population, the percentage of working population stands at 48.84.

6. The village Hatiduba is situated in the Lohit plains almost adjacent to the plains of Assam. Agricultural land in the village may be classified into three classes, viz. (i) jhum land, (ii) high land and (iii) wet rice cultivation land. The land where jhum cultivation is done are actually elevated plain jungle land. This type of cultivation is not jhum cultivation in true sense as there is no rotation and abandonment of fields like actual jhum cultivation and they are not situated in hill slopes. The operational methods are only similar to jhum cultivation. After three consecutive years of jhum type cultivation the land is made suitable for settled cultivation. The reclamation works of jhum land is done either by the owner himself or by immigrant Nepali farm workers as hired labours. The owner cultivators of the village invariably practise jhum type of cultivation in their respective

jungle land. For settled wet rice cultivation and for high land cultivation the villagers follow a system which is not congenial for their economy. Such lands are generally cultivated by the immigrant Nepali farm workers on mutual agreement that seeds and draught animals required for cultivation be supplied by the owner and the produce be shared equally between them.

7. The land utilization pattern of the village Hatiduba may broadly be divided into four groups (i) cultivated land (ii) land not available for cultivation (iii) other uncultivated land and (iv) fallow land and each of these groups covers 146.46 hectares (66.49%), 18.59 hectares (8.44%), 7.56 hectares (3.43%) and 47.67 hectares (21.64%) respectively. Out of the total cultivated land (146.46 hect) 15.10 per cent is under wet rice cultivation, 62.78 per cent under high land cultivation, 20.47 per cent under ihum type cultivation and the rest 1.65 per cent is under horticultural crop. The highest percentage of cultivated land is attributed to high land cultivation which is due to gradual reclamation of available ihum land into settled cultivation land. On the other hand, somewhat low percentage (15.10%) of land under wet rice cultivation is because of its recent adoption and non-availability of suitable land for wet paddy cultivation.

8. The average size of holding per household for the village is 10.01 hectares. It is to be noted that 56.25 per cent of village land is concentrated with seven households (31.82%) in the size group of 10.00 hectares and above. On the other hand, 43.75 per cent of total land is owned by 68.18 per cent households.



9. The total operational holding for the village is 201.69 hectares and the average size of area under operation varies significantly from 2.57 hectares to 30.78 hectares per family. Only 27.27 per cent households in the higher size group (10.00 hectares and above) have operated 54.98 per cent of total operated area against 45.02 per cent area operated by the rest 72.73 per cent households.

10. The agricultural pursuits of the people of Hatiduba are largely confined to jhum type of cultivation in the jungle land and partly to cultivation of wet paddy, maize, mustard and Ahu paddy (Autumn Paddy). Sali paddy (Winter Paddy) is produced on the wet paddy fields. Ahu paddy, mustard and maize are cultivated on high land. In the village agricultural practices are still traditional and even the age-old method of plough cultivation is also a new venture to the village. Of the total net area sown (91.94 hectares) an area of 27.49 hectares is used for double cropping. Either Ahu paddy or maize is raised as the first crop followed by mustard in the double cropped areas.

11. The inputs in agriculture consist mainly the cost of seeds and hired agricultural labours. 53.27 per cent of input in cultivation is the cost of seeds. The hired labour wages covers 31.84 per cent of the total inputs.

12. The total production value of field crops and horticultural crops received by the farmers stands at Rs. 164,263.00. A substantial portion (76.01%) of the total cropped value received by the farmers is from crops produced in the high land. The mustard crop is the major cash earner and it covers 67.00 per cent of total production value.

Crops produced by jhum type of cultivation in the village is valued at Rs. 27,250.00 (16.59%). The average sale value for a quintal of paddy, mustard and maize was Rs. 80.00, Rs. 314.00 and Rs. 81.00 respectively.

13. The major source of village income is the agriculture. Of the total village income, 90.48 per cent is derived from agriculture. The income from high land cultivation (69.64%) is much higher than that from jhum type of cultivation (14.98%) and wet paddy cultivation (5.69%). The higher return from high land cultivation is because of the fact that mustard and maize, the two important cash crops are grown in the high land and give better yield and fetch good price. Only 9.52 per cent of the total village income is derived from non-agricultural sources. The non-agricultural sources include arts and crafts and trade, commerce and transport, etc. The average per household and per capita income are found to be Rs. 7,935.04 and Rs. 1,353.26 respectively. The annual income per household is unevenly distributed and it varies from Rs. 1,642.00 to Rs. 18,266.00.

14. Of the total annual expenditure of the village 29.66 per cent is incurred in food items. Next to food item, expenditure on entertainments and ceremonials accounts for 23.78 per cent of the total expenditure. Expenditure on intoxicants (34.53%) holds a very significant position. Expenditure on rice beer covers 9.12 per cent of total expenditure. The most important item of the intoxicants is opium, which is taken regularly by the elderly males and a few youths of the village. A huge amount of Rs. 22,104.00 which covers 18.01 per cent of



the total village expenditure was reported to be spent on opium. Expenditure on clothing and foot wear constitutes 6.00 per cent only. Expenditure on education is very negligible in the village.

15. From the analysis of income and expenditure it was found that in the village 13 households were surplus households. Yet no investment of this surplus income on productive purposes was reported. It appears that investment of such surplus is mostly made on durable consumer goods.

16. There are altogether 22 residential houses, 26 granaries and 3 shop-houses in Hatiduba village. All the residential houses of the village are constructed in the traditional pattern and wood, bamboo and thatches are the building materials with the exception of a semi permanent house with C.I. sheet roofs. The possession of modern consumer goods like bicycle, radio set, gun, watch, table and chairs in the village indicates that a process of change has already occurred in the village.

B. Conclusion :

1. Marked development in some aspects of economic activities of the people of the village Hatiduba is evident in the recent years. These people have gradually switched over from shifting cultivation to sedentary type. But sedentary cultivation involves improved technology almost new to a jhum based community. The shifting cultivators need understanding and careful handling to make them familiar with sedentary or settled form of cultivation. In the village Hatiduba the villagers

adopted settled cultivation but are mostly dependent on outsiders for this type of cultivation. They will be immensely benefited if they themselves take up sedentary cultivation. Now the villagers are practising settled cultivation with the help of Nepali farm-workers who receive a larger share of the agricultural produce. Yet, compared to the past, a remarkable change in cultivation is noticed in the village at present.

2. Agriculture is not only the mainstay of the tribesmen of the village but also an economic pivot around which all their social and economic activities rotate. If socio-economic development of these tribal people is to be achieved agriculture should get priority over other items of development. For attaining all-round development the activities relating to agriculture, mithun-rearing, livestock, poultry, adult education training etc. are to be integrated to form a strong socio-economic infrastructure in the village. Further, to accelerate economic development programme for active participation of the weaker section of population agro-based industry, farm forestry, bee-keeping and other ancilliary occupations are necessary.

3. Moreover, adoption of improved method of cultivation in cash crops as well as horticultural crops can be increase the productivity of the soil. Multiple cropping on already developed land under intensive method can be taken up by the people to optimise production per unit area.

4. The administration can arrange to train the people in adopting improved method of cultivation and allied pursuits. Education increases awareness and awareness



implies expectations. As for example, the development strategy are working out well among the Khamptis of Arunachal because of their advancement in education. The Khamptis have used improved agricultural implements like tractors and minor irrigation to get better agricultural production.

5. In the village Hatiduba only one eighth children of school-going age group (5 - 15 years) has enrolled in school. The non-enrolment of the children in schools are largely due to apathy of the parents, physical and mental handicaps and social prejudices, engagement of children for domestic works and non-availability of schooling facilities within easy reach of the children. Considering the above, it is felt that provision of a primary school should immediately be made within the village to facilitate the children for acquiring the basic education.

6. As a good portion of cereals is used in preparation of beer, the poor families remain under-fed during the lean season. Moreover, some of the Kaman Mishmis are reported to take opium as intoxicant. Reference may be made that at a public meeting at Emphum on 26th February, 1980, Shri Sobeng Tayeng, M.P. for Arunachal Pradesh advised the Singphos to avoid taking opium.<sup>1</sup> The opium addicts of Hatiduba spent as much as 12.66 per cent of the total annual village income on this item in the year under reference. Not only a good portion of hard cash is wasted away on opium, but also opium-eating and smoking is injurious to both mental and physical health of the people.

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1. The Arunachal News, Vol.No.9, February-March, 1980, No.1, Page 39.

Indian Village Studies

Village Survey No. 19

# HATIDUBA

Socio-Economic Survey of a Miju Mishmi Village in  
Lohit District of Arunachal Pradesh

NARENDRA RANJAN GOSWAMI  
SATYENDRA NATH BURAGOHAIN

AGRO-ECONOMIC RESEARCH CENTRE FOR NORTH EAST INDIA  
ASSAM AGRICULTURAL UNIVERSITY  
JORHAT 785 013, ASSAM

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