

RUPINI COMMUNITY IN TRIPURA

AN ANTHROPOLOGICAL STUDY



Manoshi Das



**Tribal Research and Cultural Institute
Govt. of Tripura, Agartala**

Rupini Community in Tripura

An Anthropological Study



Dr. Manoshi Das



TRIBAL RESEARCH AND CULTURAL INSTITUTE
GOVERNMENT OF TRIPURA

**TRIBAL RESEARCH AND CULTURAL INSTITUTE
GOVERNMENT OF TRIPURA, AGARTALA
Phone : 0381 2324389
e-mail : dir.trci-tr@gov.in, web : www.trci.tripura.gov.in**

**Rupini Community in Tripura
An Anthropological Study
© *Tribal Research and Cultural Institute*
Government of Tripura, Agartala**

First Published : 15th August, 2020

ISBN : 978-93-86707-57-4

Cover Design : Pushpal Deb

Type & Setting : Dhruva Debnath

Price : Rs. 100/-

Printed by :
Kalika Press Pvt. Ltd., Kolkata

Contents

Message	5
Foreword	7
Preface	9
1. CHAPTER-1	
INTRODUCTION	11-18
2. CHAPTER-2	
METHODOLOGY	19-23
3. CHAPTER-3	
SOCIO-CULTURAL ASPECTS	25-48
4. CHAPTER-4	
SOCIO-ECONOMIC ASPECTS	49-65
5. CHAPTER-5	
ANTHROPOMETRIC ASPECTS	67-78
6. CHAPTER-6	
MAJOR FINDINGS, SUMMARY, CONCLUSION	79-83
7. REFERENCE	85-86

Message

India has a high concentration of indigenous/tribal people. As per Census 2011, tribal constitute 8.6 percent of the total population of the country. It was 8.2 percent according to Census 2001. As many as 705 groups are identified as tribal across 30 states. Northeast India is the homeland of a large number of tribes. Out of more than 600 ethnic communities living in India, there are about 240 communities of which 78 are large each with a population of more than 5000. According to the 2011 Census, they constitute around 12 per cent of the total tribal population of India and 27.30 percent of the total population of North East India.

About 32 percent of the population is Scheduled Tribe in Tripura(Census 2011). There are 19 sub tribes among the Schedule tribes with their own cultural identity, namely (i) Tripuri (ii) Reang (iii) Jamatia (iv) Chakma (v) Lusai (vi) Mog (vii) Garo (viii) Kuki (ix) Chaimal (x) Uchai (xi) Halam (xii) Khasia (xiii) Bhutia (xiv) Kunda (xv) Orang (xvi) Lepcha (xvii) Santal (xviii) Bhil (xix) Noatia.

Halams are one of the major tribes in Tripura. According to 2011 census, Halams occupy the fifth position among the tribal communities of Tripura. According to Rajmala, Halams are divided into thirteen dafas-1. Morchhum or Molochh 2. Rangkhoh 3. Koloi 4. Kaipang 5. Rupini 6. Kap/Deb 7. Khulong 8. Chadai 9. Langai 10. Bongcher 11. Mochhrang 12. Korbong and 13. Phutilangla.

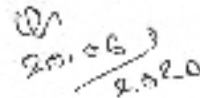
RUPINI COMMUNITY IN TRIPURA

Under this background Tribal Research & Cultural Institute intended to make an in-depth study on Rupini Community and awarded the task to Dr. Manoshi Das, Anthropologist.

I feel happy that Tribal Research and Culture Institute is publishing the book 'Rupini Community – An Anthropological Study' based on the empirical research study conducted by Dr. Manoshi Das and her team sponsored by Tribal Research and Cultural Institute, Government of Tripura.

I strongly believe that the study will provide immense insight about the importance of minor forest produce in Tribal Life in Tripura and the recommendations will be helpful to prepare the roadmap for development of tribal communities in the state.

I congratulate the author and wish her grand success of her work.


20.06.20

(D. Debbarma)

Director

Tribal Research and Cultural Institute
Government of Tripura

Place: Agartala

Date: 20/06/2020

Foreword

Tribal groups in India are considered to be the earliest inhabitants of a country. The self preferred term *Adivasi* is commonly translated as 'original inhabitants'. The Constitution Order 1950 declared 212 tribes located in 14 states as 'Scheduled Tribes (STs)'. The population of Scheduled Tribes (STs) in the country, as per Census 2011 is 10.45 crore. STs constitute 8.6 percent of the country's total population and 11.3 percent of the total rural population. There are over 700 Scheduled Tribes notified under Article 342 of the Constitution of India, spread over different States and Union Territories of the country.

Tribals have unique and ancestral cultures, traditions, languages, food systems and governance systems. They share a strong connection to their land and have developed a rich body of traditional knowledge on agro biodiversity and preservation of endangered plant and animal species. Their traditional knowledge and livelihoods depend directly on sustained access to their land, natural resources and territories.

The tribal population in India, though a numerically small minority, represents an enormous diversity of groups. They vary among themselves in respect of language and linguistic traits, ecological settings in which they live, physical features, size of the population, the extent of acculturation, dominant modes of making a livelihood, level of development and social stratification. They are also spread over the length and breadth of the country though their geographical distribution is far from uniform.

RUPINI COMMUNITY IN TRIPURA

Tripura is the 2nd smallest state in terms of area, but the 2nd most populous state in the North Eastern Region. Although the state is small with a population of only over three million, the social composition of the population of Tripura is diverse. In particular, around one-third of the population comprises people belonging to the Scheduled Tribes.

Ethnically Halam communities of Tripura belong to the Kuki-Chin tribes of Tibeto-Burmese ethnic group. Their language is also more or less similar to that of Tibeto-Burman family. Halams are also known as Mila Kuki, though they are not at all Kukis in terms of language, culture and living style. Halams are divided into several sub-clans which is referred as “Barki-Halam”. Major sub-clans of Halams are (1) Koloi, (2) Korbong, (3) Kaipeng, (4) Bong, (5) Sakachep, (6)Thangachep, (7)Dab or Nabin (8)Bongcher (9) Molsom, (10) Rupini, (11) Rangkhawl,(12) Chorai, (13) Lankai, (14) Kaireng(Darlong) (15) Ranglong (16) Marchafang & (17) Saihmar. As per 2011 Census their total population is 57,210 and distributed throughout the State. Koloi, Rupini, Molsom, Ranglong, Lankai have their colourful dances and also have specific dance related to Jhum culture. Hi-Hook dance of the Halams is the most popular among all.

The book named ‘Rupini Community in Tripura – An Anthropological study’ is mainly based on empirical study in West Tripura districts of Tripura in the year 2017 sponsored by Tribal Research and Cultural Institute, Government of Tripura. This book provides comprehensive and very useful insights into the socio-cultural, socio-economic and anthropometric aspects of Rupini communities in Tripura which, I believe, would be immensely valued and appreciated by all those who have interest in acquiring the ethnographic information on the tribes of north-eastern India.

Dr. R.R. Prasad
Former Professor & Head, NIRDPR, Hyderabad

Preface

The book named 'Rupini Community in Tripura – An Anthropological study' is mainly based on empirical study in West Tripura districts of Tripura in the year 2017 sponsored by Tribal Research and Cultural Institute, Government of Tripura.

The overall research study took shape of this book to disclose the socio-cultural, socio-economic and anthropometric aspects of Rupini communities in Tripura. The first chapter of the book introduces the tribes of Tripura with special emphasis on Halam tribe. The second chapter discusses the methodological issues for the present study. Chapter three entitled 'socio-cultural aspects' makes a thorough discussion about origin, physical structure, language, dress, ornaments, food & food habits, religions, God & Goddess, social administration, customary laws, marriage pattern, etc. The fourth chapter analyses and interprets the findings of socio-economic condition of Rupini Community. The chapter deals with the socio-economic aspects of the respondents like educational status, occupational pattern, household amenities, economic conditions, health status, decision making process in the family, etc. The fifth chapter assess various Anthropometric aspects of the Rupini community and the last chapter summaries major findings of the study.

RUPINI COMMUNITY IN TRIPURA

My sincere thanks go to the Sri. S. Debbarma, Former Director, Tribal Research and Cultural Institute, Government of Tripura for awarding me the study to conduct the study and also considering the research report to publish in book form. I am also thankful to all the members of Research Advisory Committee and Manuscript Committee of Tribal Research & Cultural Institute for keeping faith on me. Special thank goes to Sri. Bidyut Kanti Dhar, Research Assistant of TR& CI for his sincere efforts in various stages to bring the manuscript in book form.

I am thankful to Miss. Mumpi De and Mr. Subhrojit Sen for their necessary help during preparation of the report. I am indebted to the Miss. Jhuma Debbarma and Mr. Sento Debbarma-field investigators - for their hard work while data collection and documentation of this unexplored knowledge.

I am also thankful to Prof. A.R. Bandopadhyaya and team from Department of Anthropology, University of Calcutta, West Bengal for their support to conduct the socio-cultural and Anthropometric measurement for the present study.

Last but not the least I am thankful to all the respondents for their kind cooperation and sharing their valuable time during the study.

The study provides some suggestions and recommendations for possible consideration of the Government of Tripura. I hope Government of Tripura would consider the suggestions seriously.

However, I am responsible for any fault that may remain.

Date: 15/06/2020

Place: Agartala, Tripura

Dr. Manoshi Das



INTRODUCTION

The term Scheduled Tribes (STs) first appeared in the Constitution of India. Article 366 (25) defined Scheduled Tribes as “such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this constitution. In Article 342, procedure to be followed for specification of Scheduled Tribes is prescribed. However, it does not contain the criterion for the specification of any community as Schedule Tribe. A well-established criterion being followed is based on certain attributes such as -

- **Geographical isolation:** They live in cloister, exclusive remote and hills and forest areas.
- **Backwardness :** Livelihood based on primitive agriculture, low cost closed economy based on low level of technology which leads to their poverty. They have a low level of literacy and health.
- **Distinctive culture, language and religion :** They have developed their own distinctive culture, language and religion, community-wise.
- **Shyness of contact :** They have marginal degree of contact with other cultures and people.

RUPINI COMMUNITY IN TRIPURA

India has high concentration of indigenous/tribal people. As per Census 2011, tribal people constitute 8.6 percent of the total population of the country. It was 8.2 percent according to Census 2001. As many as 705 groups are identified as tribal across 30 states. The number was 461 before 1990. Among them, 75 groups have been identified as Particularly Vulnerable Tribal Groups (PVTGs) from 17 states. The first list of tribal was prepared in 1931 on the basis of primitiveness. In 1935 the list was prepared looking into backwardness and during 1950 and 1956 both primitiveness and backwardness was taken into consideration for enlisting tribal communities in the country. A large concentration of tribal communities is found in the central provinces of India, the middle belt and the north-eastern states. About 92 percent of the tribal people in India live in rural areas. Almost all of them live in areas which are dry, forested or hilly. Most of them depend on agriculture and minor forest produce to sustain their life.

North East India in the context of India occupies a distinctive place due primarily to its geographical, historical, social, cultural and political features. North East India comprises eight states: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. North East India is the homeland of a large number of ethnic groups who came from different directions at different historical times. These groups belong to different racial stocks, speak different languages and have varied socio-cultural traditions.

North East India is the homeland of a large number of tribes. Out of more than 600 ethnic communities living in India, there are about 240 communities of which 78 are large each with a population of more than 5000. According to the 2011 Census, they constitute around 12 per cent of the total tribal population of India and 27.30 percent of the total population of North East India. (ABVKA, 2015)

Tripura

Tripura - one of states in North East India - is third-smallest state in the country, covers 10,491 km² (4,051 sq mi) and is bordered by Bangladesh (East Bengal) to the north, south, and west, and the Indian states of Assam and Mizoram to the east. In 2011, the state had 36,71,032 residents, constituting 0.3% of the country's population. The Bengali Hindu people form the ethno-linguistic majority in Tripura. The Kokborok speaking Tripuri people are the major group among 19 tribes and many sub-tribes.

In the demographic profile, total population in the state of Tripura is 3,671,032 (Census, 2011). The annual exponential population growth rate is 1.46%, which is the lowest among the Northeast states, yet it is still the second most densely populated state in the region with 305 persons per square kilometer. The economy of the state is basically agrarian. It can be said that Tripura lives in villages as almost 83% of population with 66.81% poor families live in rural areas.

As per Census (2011) 11,66,813 (31.75%) of the population is the Schedule Tribe in the State. There are 19 sub tribes among the Schedule tribes with their own cultural identity, namely (i) Tripuri (ii) Reang (iii) Jamatia (iv) Chakma (v) Lusai (vi) Mog (vii) Garo (viii) Kuki (ix) Chaimal (x) Uchai (xi) Halam (xii) Khasia (xiii) Bhutia (xiv) Kunda (xv) Orang (xvi) Lepcha (xvii) Santal (xviii) Bhil (xix) Noatia.

RUPINI COMMUNITY IN TRIPURA

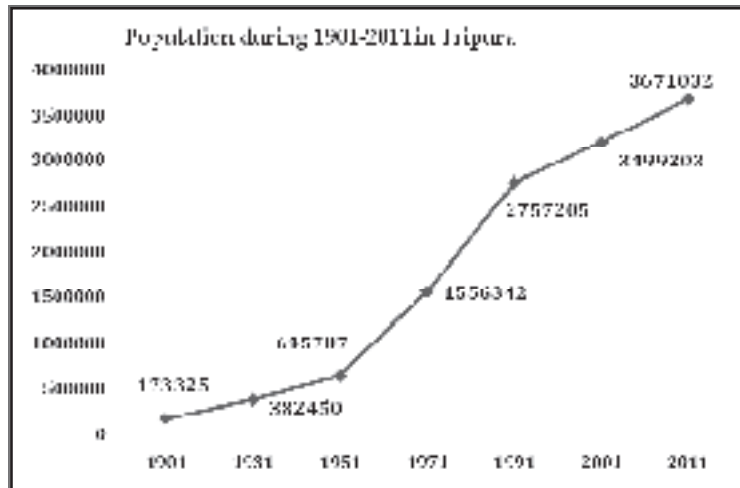


Table-1 : Tribes in Tripura during 1981 to 2011

Name of the tribes	Population (Census Years)			
	1981	1991	2001	2011
Tripuri-Tripura	3,39,872	4,01,591	5,43,345	5,91,235
Borng	84,024	1,11,626	1,65,106	1,85,220
Jaintia	15,531	20,531	31,310	33,317
Natia	7,133	9,133	6,633	14,299
Misai	1,338	1,637	2,113	3,617
Koki	5,931	10,622	11,927	10,900
abur	26,927	36,499	42,388	52,110
Lushai	5,754	6,917	4,777	5,754
Jburia	22	17	28	22
ajyaha	105	111	136	152
Khuping	157	156	630	766
Chakma	54,797	96,696	64,293	56,413
Meg	18,711	21,617	30,385	32,405
Sore	7,297	9,367	11,183	13,551
Masak Kaur	2,000	1,277	12,716	14,547
Nancha	2,726	2,751	2,151	2,913
Chung	5,217	6,751	6,223	12,511
Mhil	155	1,794	2,530	4,101
Chand	13	26	251	349
Others	0	0	7,026	18,326
Total Tribes Group	1,384,790	1,938,840	2,998,420	3,460,938

Source: Census Reports, RGI, New Delhi and Economic Review 2012-13

Ethnic Identities of Tripura Tribes

The tribes in Tripura could be divided into 2 (two) major groups as (i) Ab-original and (ii) Immigrants.

All the aboriginal tribes have been migrated in this territory from a place in between Tibbet, up hills of Burma like Arakan Hills Tracts and Shan State and adjacent to China.

- ┌ **Aboriginal tribes:** Tripuri, Reang, Jamatia, Noatia, Lusai, Uchai, Chaimal, **Halam**, Kukis, Garos, Mog and Chakma.
- **Immigrant tribes:** Bill, Munda, Orang, Santal, Lepcha, Khasia, Bhutias came and settled here for economic reasons. Most of them are Central Indian Tribes and came from Madhya Pradesh, Bihar, Orissa and West Bengal. Some of these tribes are however Northern-Frontier tribes came from Bhutan, Meghalaya, Sikkim and North Bengal. Chakmas and Mogs are Arakan Tribes entered Tripura through Chittagong Hills Tracts.

Halam communities

Halams are one of the major tribal communities in Tripura. According to 2011 census, Halams occupy the fifth position among the tribal communities of Tripura. The Halams call themselves Hre-em or Hriam, in the Kuki language, the term Hre-em means 'man'.

The Halams are considered to be a Kuki group. It is said that they came in contact with the King of Tripura, the Maharaja had given them the title Halam, which means in Tripura, (Ha-earth, lam-road) is the road to earth or country that is which tribal community obeyed the order of the king and rules of the kingdom were Halam community. They are also known as Mila Kukis. The Halam had collected taxes from the rest of the Kukis of Tripura and they had good relation with the Maharajas.

RUPINI COMMUNITY IN TRIPURA

It is very difficult to point out where they were inhabited. Different scholars and writers mentioned different theories about their migration in Tripura. The historical stories and literatures are also very rare. As they are the community which came from Kuki tribe, then it is relevant to determine the home land of Kuki at first. The tribes of North-Eastern region are all ancestors of Mongolian. A great portion Mongolians were concentrated in Tibet approximately 500 years B.C. They came from North-Western part of China. After the long days, the Mongolians left the Tibet and they migrated in the plain land of North and East Bengal and the plain and hilly areas of Tripura. Though the tribes of North East region like Naga, Mizo, Garo, Bhutia, Boro, Kuki etc. are originated from Mongolian race, they have different dialects, religion, socio-cultural behaviour, dresses, ornaments etc.

As our discussion is concentrated on Halam tribes, we have mentioned before that Halams originated from Kuki tribe's. The history of Kuki tribe is very old from pre-historic period, they have their existence. From Mahabharata, we all know about Kirata tribe. According to census (1340 Tripurabda) these Kiratas are the Kuki tribe. But they themselves do not mention them 'Kuki', but 'Rem' Manipuri call them as 'Khongi', at Chachar they are Lusai, and in Tripura they are Darlong and Tripuri tribe calls them as 'Sikam'. So, they are the mixed tribes with their different names.

According to Rajmala, Halam community migrated in Tripura before Tripuri community. As per their myths the Halams are said to have migrated from the hills just to the north of Manipur. In Kuki language 'Khur' means 'source', 'pui' is river, 'ta' stands for 'from'." Thus, it seems that their original home was perhaps near the source of a big river which may be the 'Surma river'. In Halam language 'Khurpui' means 'big caves' and 'Khurpuitabhum' stands for "many big caves near the river sides". Some people believe that their entrance way to Tripura was through Chittagong Hill tracts to Amarpur-Sabrum hilly areas and then they scattered

INTRODUCTION

away in the deep forest. Some people thought that they entered through west side of Lushai Mountain to Jampui hill and after that they scattered in different forests of Tripura.

“Belkumtang” was their last permanent residence. But it is very difficult to identify the place. Many people thought that “Belkumtang” was situated in the top of Longtorai hill. Their own independent kingdom was destroyed by the king of Tripura and many Halam soldiers had lost their lives, and then they surrendered themselves to the king of Tripura as Halam community.

Shri Alindalal Tripura in his historical poetry ‘Tripur Samhita’ mentioned that The “Garia God” of Tripuri and Jamatia Tribe was “Thanangchi”. “Thanangchi” was situated in “Belkumtang” the top of “Longtorai”. Shri Sudhansu Ghosh has also supported this in his literature “Kirat-Halam Gosthir Etikatha”.

From the above mentioned literature, it can be assumed that there was an independent land of Halam which was situated in the middle part of North border of presents Tripura state and Mizoram.

Dafas and clans of Halam community

There is a controversy in the number of dafas of Halam. How many clans and dafas were in the past, it is very difficult to find out as there are different concept about their clans and dafas. Sometimes in census some clans were included or excluded. In the past, there was a myth that the Halam have twelve dafas named “Baro Halam”. Later the numbers were divided into thirteen, then sixteen or nineteen dafas.

According to Rajmala Halams are divided into thirteen dafas-

1. Morchhum or Molochoh 2. Rangkhoh 3. Kolo 4. Kaipang 5. **Rupini** 6. Kap/Deb 7. Khulong 8. Chadai 9. Langai 10. Bongcher 11. Mochhrang 12. Korbong 13. Phutilangla etc.

Again in 1931 (1340 Tripura bda) census, there are 19 dafas.

These are as follows:-

1.Molchhom 2.Rangkhol 3.Korbong 4.Koloi 5.Kaipang
6.Kulu 7.Bakhulu 8.Kaireng 9.Chadai 10. Kap/Deb
11.Thangachep 12.Sakachef 13.Chaimal 14.Nabeen
15.Bongcher 16.Murasing 17.**Rupini** 18.Longai 19.Langsu etc.

Among them Bong, Koprbon, Kap/Deb, Thangachep, Sakachep, Morchhaphang, Longai, Chadai, Kaipeng, Ranglong and Chaimal introduce themselves as Halam i.e. they use Halam title. Others are using their dafa name as surname. The above dafas either bears the names of the leaders of Halam community or according to their profession.

Each dafa is divided into several gosthis or clans and each gosthis is further sub-divided into a number of lineages and families. Halam, Kaipeng are divided into the subgroups of Lungthung, Sengtoi, Singhass, Dourai, Sun-jung and Korser. Halam koloi are divided into clans such as Waplam, Rajogoi, Wabban, Kushu, Charai, Abil and Bukam. The molsom have several exogamous clans, namely Laurak, Sungphung, Lingman, Nokham, Tuisum, Mapu, Visha, Ronti, Nungpar, Achep, Lungthung and signar. The clans found among the Rupini are Puranrasti, Natunrasti, Thaithak, and Paithak. Ronglong Halam are divided into 18 sub-groups like, Sanghuiipu, Tansuri, Lankai, Banmehar, Tara, Saakaachep, Thangaachep, Tivol, Vangru, Kholapu, Ranglong Rupini, Vngai, Kamar, Kumar, Zantak, Chorai, Khongcho and Morsephang.

A gosthi or clan is generally named after a plant or animal. Many other gosthis or clans are also associated with flora or fauna. For example, among Koloi dafa the clans like Waplam (Wa=bamboo and plam=white, i.e. inner part of bamboo), Rajogoi (flower), Bukam (wild leaves) are derived from plants or flora and Abil (roe-beer), Charai (Sparrow) from animal or fauna.



METHODOLOGY

The present study was conducted to understand the status of Rupini community in Tripura. The status of Rupini has been studied from three different perspectives – socio-culture, socio-economic and anthropometric measurement.

2.1 Objectives

1. To study the socio-cultural status of Rupini community.
2. To find out the socio-economic status of Rupini community.
3. To measure the anthropometric aspects of the Rupini community.

2.2 Description of the Study Area

Present study has been done in West Tripura District of Tripura. Study area of this present study was Birgudas Bari and Waktuku Para situated under West District. Study areas were selected on the basis of highest concentration of Rupini family in the places of Tripura.

2.3 Sample Design

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design is determined before data are collected.

Designs are basically of two types, Non-probability sampling and Probability sampling.

Probability sampling: Probability sampling is also known as random sampling or chance sampling. Under this sampling design, every item of the universe has an equal chance of inclusion in the sample.

Non-probability sampling: Non-probability sampling is that sampling procedure which does not afford any basis for estimating the probability that each item in the population has of being included in the sample. Non-probability sampling is also known by different names such as deliberate sampling, purposive sampling and judgment sampling.

Present study used purposive sampling - kind of non-probability sampling. This sampling method focuses and fulfills the study objectives.

2.4 Sample Size Determination

Sample size determination is the act of choosing the number of observations or replicates to include in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is determined based on the expense of data collection and the need to have sufficient statistical power. For this study sample size is 200 collected from the Birgudas Bari and Waktuku Para in West Tripura.

2.5 Method of Data Collection

Data collection is the process of gathering and measuring information on targeted variables in an established systematic fashion which then enables one to answer relevant questions and evaluate outcomes.

2.5.1 Method of Primary Data collection

Primary data is original research that is obtained through first-hand investigation and information collected from interview, survey, questionnaire, focus group etc. For the present study Primary Data have been collected from Birgudas Bari and Waktuku Para situated in West District.

For understanding socio-cultural aspects qualitative data collection methods like focus group discussion, key informant interview (aged persons), observation, semi-structural interview with methods were applied.

To study the socio-economic status, questionnaire method and interview method was used for the present study. First sequence wise question had been prepared then the pilot survey in the field was done and then data collection was done through the interview method after modification of questionnaire.

The following methods were adopted for anthropometric study -

Anthropometry for doing the body measurements includes linear and curvilinear and circumference. All measurements were taken using the anthrop meter, steel tape and sliding -spreading caliper. Here total body measurements along with segmental body measurements were considered. Anthropometric measurements namely stature, weight, skin folds at triceps, suscapular, suprailiac and calf, bicondylar hummers, bicondylar femur, upper arm circumference and calf circumference were taken following standard techniques (Tanner et al., 1969).

Body composition means the different components of body. it includes muscle, water, fat, bone and others. The fat part has two component i.e. essential fat and non essential fat. Non essential fat make the people obese. The obesity is one of the factors of non-communicable diseases. This parameter is

RUPINI COMMUNITY IN TRIPURA

very much ethnic specific and complex trait. Data on bone mass, fat mass, fat free mass, bone widths, hemoglobin, oxygen saturation and lung volume had been collected with the help of body scanner, spirometer, pulse oximeter, harem cue and Martin's sliding caliper. Two types of body scanner were used, Rossmax-WF260 and Karada-HBF362. In order to take the data on bone mass, fat and fat free mass, the participants were asked to stand on the body scanner and then the revealed values on the screen of the scanner were recorded in the questionnaire. Bone mass values were obtained directly from the body scanner, but the values of fat mass and fat free mass were calculated afterwards from the PBF (Percent Body Fat) values provided by the body scanner.

Bone widths (both humerus width and femur width), hemoglobin, oxygen saturation and lung volume of the participants were measured by using Martin's sliding caliper, harem cue, pulse oximeter and spirometer respectively. Simultaneously, the values were noted down in the questionnaire.

Somatotype : It is the measure of body shape from body size taken from anthropometry. Using above measurements, subjects were Somato typed following Heath-Carter method (Heath and Carter, 1967; Carter, 1980). Skin fold thickness measurements of the subjects were measured by slim guide skin fold caliper. Girths were taken with the steel tape to the nearest 0.5 cm. Widths of body parts were measured by using sliding caliper and anthropometric rod. Somato type was determined from the following equations (Heath and Carter, 1990):

$$(i) \text{ Endomorphy} = -0.7182 + 0.1451(X) - 0.00068(X)^2 + 0.000014(X)^3$$

METHODOLOGY

Where X = sum of supra-spinale, sub scapular and triceps skin fold and corrected for stature by multiplying the sum of skin folds by $170.18/\text{Body Height in cm}$.

(ii) Mesomorphy = $(0.858 \times \text{Humerus width}) + (0.601 \times \text{Femur width}) + (0.188 \times \text{Corrected arm girth}) + (0.161 \times \text{Corrected Calf Girth}) - (\text{Body Height} \times 0.131) + 4.5$ Where Corrected Arm Girth = Arm girth-Biceps skin fold, Corrected Calf Girth = Calf Girth-Calf Skin fold.

(iii) Ectomorphy = $(\text{HWR} \times 0.732) - 28.58$ [Where $\text{HWR} = (\text{Body Height in cm}) / (\text{weight in kg})$]

2.6 Methods of Data Analysis

Socio-cultural aspects have been discussed in descriptive manner while for analysis of socio-economic condition analysis has been done through Tabular representation.

For analysis of anthropometric measurement, statistical analysis (done in windows 10) and used SPSS (Version 16), mean, standard error and coefficient of variation for three somatotype components were computed using online statistical calculator and Microsoft excel. Values are presented as mean values and SD. Independent samples t tests were used to test if population means estimated by two independent samples differed significantly. Population and gender differences in all these variables were assessed using analysis of variance (ANOVA) as descriptive method of analysis study for the population sample.

For measurement and analysis of anthropometric aspects, support was taken from the team from Department of Anthropology, University of Calcutta, West Bengal.



SOCIO-CULTURAL ASPECTS

Rupini community

In ancient time there was no such tribe called Rupini, but as time passes due to some reason a tribe called Rupini emerges. According to one of such folk tale Raja Trilochan one of the ancient king of Tripura was a devote of lord Shiva but due to his late marriage which resultant in his late coronation there was a havoc among his people and when king realize it he gave his assent for marriage and decided to celebrate it in a grand way and he invited people who were proficient in different work from Kirat community and the people who had got his invitation had joined their work with great enthusiasm and after the completion of the marriage ceremony the king had given them different title according to their work as he was very much pleased to their work and also arrange their accommodation near the Royal palace (this differentiation according to the work done is known as “Panchi” at that time). But as the time passes the king has to change his capital from “Subraikhung” to “Surmahalong” and the kirat people who were staying with king since the time of King Trilochon also followed him but at the mean time many other new community who were comparatively more proficient than the kuki who were staying with king joined with the king and king become very impressed by the work of

RUPINI COMMUNITY IN TRIPURA

the new group of people and the old group of people were ignored and as the result they become hurt and decided to leave the Royal palace but a group of people among them did not agreed to go with them as they were habitant of leaving luxurious life of royal palace but to motivate them also to go with the rest the older people among them had recall the speech of the great Subrai (son of lord Shiva) king :

“Tangoi chakhaiche shag baithang shag bachai man’ Tanggoi cakhaiche maithai khulbar barboi/samong tangmani boini selemang ongoa/tangoy chamani boi-no kha’solak na nangoya” (Which means who rely on the hard work become successful. Paddy and cotton also grown from hard work only. Doing hard work is not a matter of shame. If you work hard you did not have to impress anyone by other means.)

By got motivated by his word the that group of people decided to leave the palace only a small group of people among them who were involved in iron related work in the palace deny to go with them as since then they were praised by the king rest of them leave the village and finally reach at a place called “Rupa”. in that place there was a hilly river called “Tai-Rupa” (Tai-Rupa has its presence in the Krisnamala) and by getting mesmerized of the rich natural beauty of the place had them decided to stay there permanently and were started recognized their self as “Rupini” from previously known “Payangpanchi”. But as the place Rupa was rich with natural beauty, apart from the group of people who first started, other communities (Kachari, Puran kuki) also started residing there and got the name “Rupini”.

There are some opposed opinion about the origin of this “ Payangpanchi” or Rupini as there is no such word or “panchi” in Halam, Kuki or Borok language according to Upendra Rupini they may be a group of people of Austric community called

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

“Pailang” who from the ancient time were distributed in India as well as in east region of Asia.

A part from this according to Upendra Rupini, before they were recognized themselves as Rupini they think themselves as an integral part of “Kirat”. According to Suniti Kumar Chattopadhyay, “The Kirat or Indo-Mongoloids speaking language of the Sino-Tibetan family were present in India as early in the tenth century BC when the Vedic Texts were composed. They were known to the Aryans as Kirats from Vedic times onwards in the Himalayan and Eastern India tracts.

The fact that the Rupini are not people of a common community can be clearly understood by the variation in their culture, habit, social life. Depending on their works, they are subdivided into different clans, but there are also some groups who joined the community in the later period but have no work-based division among them. They are- Kajari, Kerjang, Somjung, Sutborisha etc. As a result of the inclusion of new people and their linguistic differences, the Rupini language and culture got a new dimension but the influence of the core clan “Payang” was not fully lost as many words of their own language were used in different aspects such as in social life, rules and regulations and in daily life. So it can be said that as the core clan “Payang” is the majority in number so they had greater influence in their culture compared to other clans, and some of their eminent members led the whole community.

The Journey of Rupini from Tai-Rupini to different parts of Tripura

Ratna Manikya (first king of Tripura to attain the title Manikya) the youngest son of Dangarfa with the help of king of Gaur had attacked Tripura and conquered it due to which more than a year war the governance of Tripura was badly hampered

RUPINI COMMUNITY IN TRIPURA

(according to Rajmala) and after the death of Dangarfa the “Chikam kukis” got involved in revolt with king of Tripura which is resultant due to the exile of old habitant.

The first victim of this revolt were Rupini and they were looted and was driven away from their place, and they were divided into groups and scattered in different directions.

Since the ancient time it was heard that the Rupini were the people residing in the border area of Tripura king and as they never go against the King and supported the Kukis in the revolt so there are always some disturbances between them and in the time of Ratna Manikya the Kukis become very aggressive and had looted and killed many people of Rupini community near “Taiya Rupini”.

When the Chikam-Kuki attacked the Rupini they used to play a instrument called “Jangjung” and thereby puzzled the people and when become puzzled they attacked people looted and killed them and burn the houses, so that they could not reside there anymore. The whole incident is called “Chobakchak” and it occurred in the season of harvesting. Due to the repeated attacked by the Chikam-Kukis there arise a feeling of terror among the Rupini and there was a proverb “Chikam Kirie” that means to feel fear about the Chikam Kukis. There were always a feeling of insecurity among them as they reside in a area which is remote and far from the Kings place and there are no security arrangement.

Due to the fear of Chikam-kukis, the Rupini leave the place but after leaving place they were again attacked for the second time but the damage they bear in the second time is lesser than the former one as they were aware of the activities of Chikam-kuki’s. After the attack some of them leave the new place near the river and scattered in East and North west direction. Some of them who went to the east direction reached

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

in different parts of Manipur and the rest who went to the north west direction reached in the hilly place called “ HAICHAK” and started staying there. They were free from such attack because they were under the safe guard of Royal representative of Tripura. Some of them went along the river “Dhaleswar” in the northern direction and settled finally at “ Thanangchi” (the area was called “Thanangchi” as there was a Thana of King of Tripura) and some among the rest went to the nearby state “Mekhli” and started staying there while the rest settled down in a place along the river “Chathenga”. The area was controlled by the Rules and regulation of Puran-kuki and the people who did not obey this rule have to face rigorous punishment. Later one of the chief of Rupini community who stayed in “Thanangchi” was given the title “Rai”. But there are some controversy as there is no such evidences about the title “Rai/ Kamchikau” in the history of Rupini.

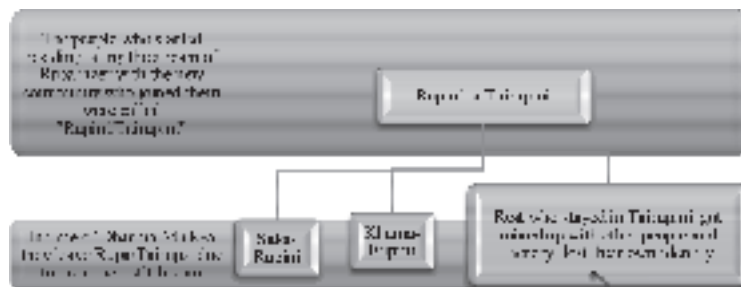
In the year 1724, during the time of second Dharma Manikya two royal representatives of Assam had entered Tripura though Barak River and had documented different information about their journey in Tripura. From there, it can be said that although the Rupini’s first residence was near “Rupa” river yet almost two hundred year, after that in the time of second Dharma Manikya there was no people in the area. Beside this, they have described the place of Rupini far from Tai- Rupini in the North west direction.

Since almost two hundred year had been passed so there were some obvious changes among them. They started calling themself as Tripuri in front of Tripura’s king as the chief of their community know that if they call themselves “ Tripuri” then they will surely get some advantage as the king will consider them as his own community people and most probably the descendant of the Royal representative and the chief of Rupini’s

RUPINI COMMUNITY IN TRIPURA

started using the surname “Tripura” after name. If we observe the recent Census of India it will be clear to us that a major part of Rupini has got recognition themselves as Noatia community. But it was also found that the part of people who were residing in “HAICHAK” are still using Rupini as their surname and the Chief of them were called “Rai/ Kamchikau” and were given the status equivalent to a king. Although a small part of them started residing in “Damchara” but a larger part of them were still residing in “HAICHAK”. It is also found that some of them had lost their identity and got mixed up with the people of Lalong, Barmon and Singh.

Division of Rupini after living their origin Rupa/Tairupa’



Former and present Habitation of Saka- Rupini

First group of Rupini who previously reside near “Haichuk” hilly area, among them many had entered Tripura in different times and part. Presently they are residing mainly in Bairagibari, Madhuban, Ashidrone, Rajnagar 82 mile of Dharmanagar. There are different stories why they had entered from “Haichuk” to Tripura. According to Krisnamala (Krisnamala, 3rd part, page no-50-55) most probably in second half in the 18th century in the period of Prince Krisna Manikya there was a disturbances between the Prince and the Chikam-kukis in that time the Saka Rupini helped prince in suppressing

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

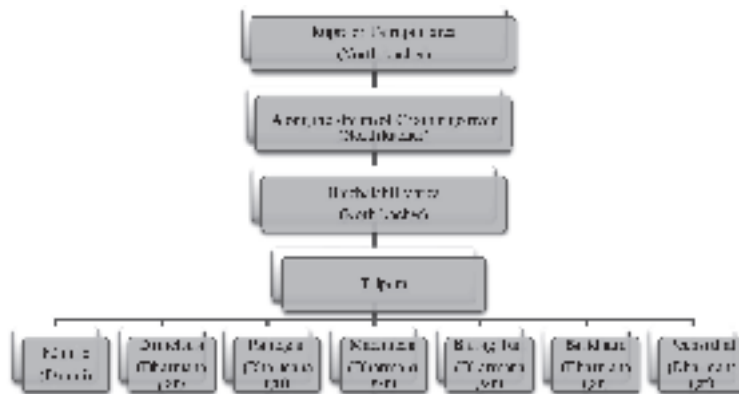
the Chikam-kukis and since then they started residing there, as it was not safe for them to reside “ Haichuk” as after the incidence they were totally against the Rupini.

Apart from historical evidences according to folk tale represents some different aspects. According to Arun Debbarma from his evidences depict, probably in the time of Lord Curzon, the British started pressurising the Rupini to leave Kachar and to enter Tripura (as Tripura was their native place). According to Jayanta Tripura (Rupini) and Arun Debbarma, approximately before 150-200 years ago there were two Rupini brothers called Purushrai and Poshram who had magical powers and even the British were afraid of them because when British tortured their community they used to turn into gold fish and took revenge upon the British but one day when they were going through the Rupini river they were almost captured by the British and having no way out they prefer to commit suicide other than to be captured by the British. After the death of the two brothers, there was no one to save the Rupini people from British so they had to leave the place.

From another story presented by Arun Debbarma revealed that once the king of Tripura had invited all his people in his capital to know their religion, culture and community at that time one of the village people who was present on the occasion got puzzled when the king asked him his community name and he replied that they are “Krisna mantri”. The king got angry when he heard this and after this incident the village people who were there got scared and went back to their native place. After this incidence, King Bir Bikram Manikya once visited the Rupini areas of Dharmanagar and seeing their lifestyle they call them “Nuatia” that means new tripura and ordered them to use Tripura as their title. Since then the people residing there started using Tripura or Debbarma as their title.

RUPINI COMMUNITY IN TRIPURA

Flow chart of the chronological change of residence over time (Saka-Rupini)



Former and present Habitation of Khama-Rupini

As stated above after the Rupini people left their origin place near Rupa river they got divided into three parts. The second group among them were called Khama- Rupini who change their place before they reach near “Cathanga” river and after that they again started their journey along the stream of “Dhalewar” river and finally reached at “Thanangchi” (Mizoram), although people of “Puran-kuki” were staying there before they reach the place but the Kukis of that place were not as dangerous as the Chikam-kukis so they decided to stay there.

According to a folk tale, the area was in endanger due to the presence of an white elephant and the elephant was caught by a Rupini young boy by his “Mayungarai” (trap for elephant) and when the Thanangchi king knew about the incidence he was very pleased and give them the responsibility to catch elephants. In that time Dhanya Manikya was the king of Tripura and when he heard about the white elephant caught by the Rupini boy he ordered the Thananchi king to handover it to him but

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

the Thananchi king denied and then Dhanya Manikya attacked Thananchi and concurred the land and the elephant. He also brought the Rupini people as they were involved for this elephant and give them shelter in “Mayani Halung”. The other people who were residing there prior to them were-Reang, Karbong, Malsom etc. But in the period of Amar Manikya they leave the place and settled in a hilly agricultural land there by.

Beside the Rupini eleven more clans were there residing in that place and were involved mainly in Shifting cultivation. The king of Tripura used to collect tax from them in the season of harvesting but his way of collecting tax was quite barbarous and due to this behavior they become reluctant and their chief decided to attack the king when the king come to them to collect the tax. But when the king came, none of them had attacked the King but the innocent Rupini people were unaware about the thing and attacked him but luckily the King somehow managed to survive as a widow old women give him shelter and medicine when he was injured. But coming back to his capital he ordered his soldiers to kill all the Rupini of that place. Following the King’s order the soldier attacked and started killing the people. Some people among them find way and escape from there. Some were killed and at last the soldiers caught one young boy and girl and bring them to the capital city. When they were represented before the King and his court, the Queen was sympathized for them and proposed that she want to adopt the boy and girl as her children as she didn’t have her own child and in substitute she could give something such as “Ria”, “Sebong pagri” etc. The court and the King accepted the Queen’s proposal and since then they were called “Julai” that means the own people of the Queen. Beside this they were also exempted from paying tax to the King instead they were started giving something to the Queen annually as a token of love. The Rupini after driven away from Mayani halong went to the north

RUPINI COMMUNITY IN TRIPURA

direction and reached at Maruk hadu (Presently the highest peak of Barmura) and started excavating salt for themselves as in that time salt was only distributed by the King as none but the King can excavate salt. But there were differences between them they started excavating than to depend on the king.

According to folk tale some of them when leaving “Mayani Halung”, a small group was parted with the major group and started staying in a place of the northern part of Amarpur. But when they reached the Maruk hadu their people had already left the place due to the scarcity of water and went to Taichangma which was in the northern direction from Maruk hadu. Finding no way out, they had decided to stay near a hilly area of Maruk hadu .

As the Saka Rupini did not know about the difficulties which the Kham Arupini had faced over time. Although previously given the title Debarma by the Tripura King but as time passes and due to the difference of their place from capital they lost their this identity and as given by king Birbikram Kishore Manikya they started using the title Tripura instead Debarma or Rupini. But till they cannot adopt the lifestyle of Naotia and failing to do this they started adopting the culture of Manipuris and till date they are practicing Manipuri culture. The Saka Rupini although known as Rupini from their origin but still they do not admit it which resultant in increase population of Tripuri community in census and thereby reduces the Rupini population.

On the other hand the Khama Rupini were more conservative as they always identify themselves as Tai Rupini and accepted that they are originated from Tairupa and although they had also live with other community but the influence of other community did never perished their tradition and culture instead they have enrich their own culture by accepting new tradition from other people.

3.1 Main occupation

Initially like the Kirat (The ancestors of Rupini) were used to live in caves and were unable to made house for residing and for food had to rely on forest as they did not know how to produce it.

In this regard the lines of G.P. Singh are given for reference. According to Mr. Singh “The oldest branch of Kiratas tribes and latter designated as Negritors and Tibeto Burman tribes are believed to have been both in the in the Polacolithic and in the Neolithic stage of culture. They were not equipped with the knowledge of agriculture and cattle breeding. They were food gather rathers them food produces. (Kiratas in Ancient India, PP 175). But due to the scarcity of food they realize that instead of searching for food they started sowing seed of their desirous crop production and from then they started practicing agriculture (shifting cultivation).

3.2 Process of Jhum Cultivation

First of all the senior most person of the family inspect the place and as soon as he find a desirable place for jhum he will try to know whether the land is already in possession of any other people or not. If it is not belong any other people possession then the family starts preparing the land. It is called ‘Hukdang’ in Rupini language. For jhum and burn the tree they grass of the land and wait for the rain and as the rain start they start sowing seed and after that comes the season of harvesting which is called “Huk-tangma” .

3.3 Collection of Food

When the Aryan people came to India they had captured the plain land and as a result the Kirat had to leave the plain land and started residing in the hilly areas. The food collection and the hunting become easier but the scarcity of fist occur. As

RUPINI COMMUNITY IN TRIPURA

stated above they were habituated of living in caves so they face no problem when they have to leave in rock cave instead it became more convenient for them. As depict by A. Smith “ The wild race or savage, covering themselves with the skins of beasts, having cloud like nails strong enough to rip up roa fish and split softer kinds of wood and ignorant of the use of iron”. From the statement it is clear that the Kirats previously did not know about the use of iron but in the later period they started using iron which is stated in a book called “KTESIAS THE KNIDIAM”. The sheep, oxen and assess of the Kiratas were very small. They also practiced primitive system of Agriculture. They began to produce crops, fruit and vegetables. Their food consisted of fruits vegetable, roots, nuts, wild pulse, cereals, flesh of animals, row fish, etc. The dresses which they used were the barks of trees and skins of animals.

The practice of Jum cultivation was started among the Kirats not from Aryns but for their need as they found it easier to grow their own food instead of collecting them. Although they have started Jhum but it fails to fulfill their all food requirement as durability of some vegetable and fruits was very low. So they had to rely on collecting fruits, vegetable which is considered as supplementary food from forest apart from practicing jhum.

The vegetable and fruits which they use as supplementary food were- Sibai, Muija, Dalupat and different type of flower and honey, meat, etc.

3.4 Hunting

Although Rupini use weapon for hunting but not in ancient time. As the habit of practicing agriculture started they started hunting by the help of trap. They haunt mainly when they disturbance done by the animal and birds in their place and in the farming land.

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

For hunting they use different type of traps among those the most modernized form of trap called “**DUK**”. Bamboo is mainly used to made a trap in this method.

“**MAYUNGYARAI**” is the method of trapping which used by the Rupini for hunting white elephant in this method.

“**KHAI**” this method is used mainly by the small children to trap birds.

3.5 Fishing Techniques

Fishing is one of the techniques of collecting food by Rupini. The time when they live in the hilly areas they mainly use dry fish as a substituent of fish and catch fish from mainly spring water. The technique used for catching fish are-Aro-Suma, Du-Chakmun, Usung Chakmun, Barai Somong, Barai Nukur,Thuya, etc.

3.6 Vegetable and Fruit collection Technique

Beside hunting and fishing, another most important part of their food collecting techniques is collecting fruits and vegetable and method was called “Muikokhoi- Thaithong-Rokhmoma”. Some of the fruits and vegetables collected by them are wild Brinjal, cucumber, wild Beans, Chili, sweet potato, Turmeric, Ginger, etc.

3.7 Handicraft and Handloom

3.7.1 Handicraft

As they started living a civilized life they realize the need of new items which they had to made by themselves and they started acquiring knowledge in different work require to fulfill their dailyneeds they started making cloths, utensils etc. As the time passes they become more proficient in their work and there by enrich the Handicraft. Starting from the ancient King to King Birbikram every one was very fond of handicraft.

RUPINI COMMUNITY IN TRIPURA

As stated above Rupini are the people residing in Tripura from the time of King Trilochon so the share of them in the enhancement and practice of handicraft is worth mentioning.

✚ Some of the product of Handicraft made up of Bamboo—

- **Nongkahi** (used in daily life)
 - **Taiyochang** (This is mainly used by women to carry the pot used to collect water, vegetable, paddy, etc.)
 - **Dingra** (It is used by both men and women to carry heavy weight)
 - **Khuturuk** (This is used to store items)
 - **Champai** (This is used mainly to carry food and equipment in the Jhum land)
 - **Khokre** (To carry seeds to the jhum land)
 - **Bailing** (looks like a plate)
 - **Suchang** (This is used for washing the keeping vegetable)
 - **Khumchari** (This is used to collect flower)
 - **Chamroi Khumbau** (This is most difficult to make among the other utensils and by this the skill of new son-in-law is evaluated and the evaluation of new son-in-law by the in laws is called “ Tangson Taison jora”.
- Bamboo is the main component of this Handicraft.

Handicrafts made with wood

According to the older people the use of wood for making different products started after some time of the initiation of bamboo made products. Along with this there are some references in the folktale about the use of wood. Beside this some of them also believe that the use of wood was started contemporary to the use of bamboo.

Apart from all this above mentioned view according to Upendra Rupini it is impossible to make anything without iron equipment and it is also said that the use of bamboo and wood

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

are contemporary to each other as bamboo made utensils cant hold water. So wood is used formally which in the later period had been used for other requirement along with the need of people.

Some of the product of Handicraft made up of wood are-

- **Dangkai** is a pot used to store water but along with this it is also used to wash cloth. (Measurement- height-6 inch and radius- 22 inch).
- **Charkha** literally meaning “wheel”. Spinning wheel or hand-cranked spinning machine used in handloom and mainly made up of “ Karali tree”
- Beside the above mentioned products wood is also used for making products for daily use and to make musical instrument.

3.7.2 Handloom

Handloom is the prior to all other forms of handicrafts Since the time of the ancient Kings. The handloom products is very famous. Among them the contribution of King Trilochon in this regard is more than any other King’s of Tripura. As a result of King’s efforts, the handloom of Tripura become more enriched day by day. Although the world is not aware of the life pattern of them but their Handloom work got recognition in the world.

Some of the Handloom Products are enlisted below

- **Rigounai** also called “ekoinai” is available in red, black and white colors and artistic pattern are there in this garment. To make this garment in white color is easier than any other color as the color of cotton itself is white. Apart from this to make it in red or black color the roots of plant are used.

RUPINI COMMUNITY IN TRIPURA

- **Echa or Richa** is the main cloth of the women of Rupini clan and different artistic pattern are available in this type of garments. Some of this artistic pattern are- Mafuikhitung, Ranglung, Jongkotok, Sorbobonki, etc. This are available in only three colors.
- **Pokri** length wise looks like echa. It is used in the head to hold or carry something and mainly used to carry this when they go to Jhum land. This is available only in black color and no artistic pattern is made in this cloth.
- **Etrak** is simple cloth piece available mostly in only white color without any artistic pattern and used in various work of household.
- **Bachak** is comparatively smaller in size than Etrak and much larger and havier than Echa and mainly used to carry the baby.
- **Kachaurourai** is the garment used by the males and although is made up of white colour but the borders used in this type of garment are basically in red or white in colour.

These are not used by the Rupini people very frequently but scarcely used by them in different works and oceation. But although the use of traditional garments become scarce among the Rupini but there are still some similarities among the clothing of the modern women clothings and the clothing of women previously used by Rupini women.

3.8 Food habit

Rice is common diet for the people living in Tripura. So nothing is different for the Rupini people too. Like the other Borok people their eating and cooking procedure of food are overall same. Some of the common curries Godak, Mosdeng, Chatang, Chakhwi, Awandru, etc. They also eat pork, chicken, mutton, fish, Bamboo shoot and also some other green leafy

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY

vegetables and herbs that are found in forest, Jhum and around their home. Apart from fresh fish, rotten fish and dry fish are the two common items they usually use in their curries. Beside this, like the other Tripuri people mostly in free time they also go for hunting deer, yak, wild pigs, bore, buffaloes, etc.

3.9 Drink

In Rupini Society there are five types of drink available at present namely:- Chuak, Rupini Brandi, Langi Butuk, Gora Kasla, and Guhama.

3.10 Family Structure

Earlier, like the people of other community they do lived in joint family. But at present some family broke down into nuclear family.

3.11 Religious belief

The religious belief of Rupini clan is same like rest of Tripuri people with little bit of variations. The concept of god and spiritual belief are simple like their own life. They have the faith on the almighty god, also on the evil spirit. Like the other clans of Tripuri people, their ultimate and greatest god is Sibrai or Subrai. Other gods are also similar to those of other community. These are Thupnairau/Thumnairok, Bonirau/Boonirok, Burasa, Noksupma /Noksuma Gorla, Khulumgma, etc. apart from these there are like gods of sun, water or Twibukma and fire etc. are being worshipped.

3.12 God & Goddess

The people of Rupini Society mainly worship Lampra Wathop. Lampra (God Siri koro Rai and God Siri kara rai) puja is being performed also in every important occasion like Birth, Marriage, Death, etc.

3.13 Festival

Mailuma khulum mung or Hojagiri: On this day the mailuma mutai or the goddess of paddy is worshipped. When the new paddy just arrives from the jhum, it is time to celebrate the Hojagiri on the full moon day of *Aswin* or *Kartik* of Tripura calendar or the October-November month. It is generally given in the evening when the full moon rises in the sky. Somehow it coincides with the Hindu Hojagiri Laxmi puja, which probably might have been influenced by Tripuri Hojagiri. Pot full of new harvest rice is symbolized as goddess of paddy or Laxmi. Generally a hen or she goat is sacrificed for the Mailuma. Now a day rice flakes, banana and other sweets are also offered.

Kermwtai or Kerpuja: Like other clan of Tripuri people this rituals is performed collectively at the community level among Rupini clans. Generally whole of the village is brought under the coverage of the Ker that is purification of villages. Generally in the month of November-December this festival is performed. To prevent any unto wards incidence like death, births, etc. which is considered as non-suspicious, pregnant ladies, patients etc. are taken out side of the village to a secure place. The road coming to and going from the villages are blocked, till the puja is over, which may run for days together. On this it is the Lampra which is worshipped; a pair of fowl is sacrificed on the occasion.

Hangrai: This festival coincides with the Sankranti of the main stream Hindu, held on the last day of the Pous month which is generally 14th of January. On this day the remains of the deceased parents or the relatives are immersed in the sacred water which is generally in the confluence of two streams or any flowing river. Lots of cakes, sweets, delicious dishes of meats of different kinds, of fishes are prepared by every family. Here is also no limit of rice beer on this day. The younger people pay tributes and respects by touching the feet of the elder in presence of burning lamps and incense sticks.

3.14 Ornaments

1. Rangtang (godona kan mani) Necklace made for silver coin.
2. Swrang (Khachwr ni swrang) Ornaments for hair.
3. Khwnchwr (Khwnchwr ni Kanphor) Ornaments for ear.
4. Mathiya (Jaktok ni mathiya) Ornaments for Wrist.
5. Ganhi (Jaktok ni Ganhi) Ornaments for arms.
6. Kharo(Jakung ni kharo) Ornaments for ankle.
7. Bwkwng bailik (Bwkwng go kanmani) Ornaments for nose.

3.15 Dress

The traditional dress of Rupini Society Women wear are Rignai, Risa (isa), Riborok. For man pokri (Turban), Oti Kansrai (Dhuti), Borki (itrak), Karchri Borok (Shirt made of Borok Clothes)

3.16 Dance

Some of the cultural dances are 1) Yakung Kudima, 2) Tangblani mwsamung, 3) Pandani mwsamung, 4) Mamita mwsamung, 5) Batolmwn mwsamung, etc.

3.17 Music

Some of the musical instruments that are used during these dances are Sranda, Chongpreng, Duitala, Tongteama, Khamgwdao, Missip Bwkwrrwng, etc.

3.18 Relation With Other Community

Mog, Chakma, Darlong, Molsom, Hallam, Garo, Losai, Kuki out of 19 tribes of Tripura, Rupini people can easily socialized and inhabit with 12 tribes who speaks Kokborok.

3.19 Social Structure and the Community Administration

To administer the law and order of the community in the villages of Rupini, they have developed a systematic social or community assembly called 'Lok' which is equivalent to Hoda of Jamatia clan. The member are elected by selection-cum-election within the community. The highest of the hierarchy is the Rai, previously 'Kamchakau' used to be the highest in order. They are selected for five years beginning with the lowest rank of the 'Lok'. The village assembly is assigned to settle disputes of minor crimes like theft, disputes of property, land, and unaccepted relation ship between men and women. The punishments given are in terms fine of money, rice beer and wine and public beating, either or both.

SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY



Sarinda



Chongprang



Daitala, Chongprang, sarinda



Khangudao



Tengrama



Chongprang

RUPINI COMMUNITY IN TRIPURA



Rupajoni Borek (or wovoni)



Rijun



Fetri



R trak (trak)



Ri Borek

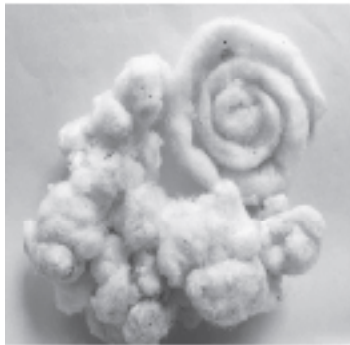
SOCIO-CULTURAL STUDY OF RUPINI COMMUNITY



Charkhi (Lac for made yarn)



Yarn



Jhum Gullvat an Cocten



Khufrak (The clothes are kept)



Alva kora (Make up Box)



Rangla (Ornament for necklace)

RUPINI COMMUNITY IN TRIPURA



Ganthi (Ornaments for Wrist)



Khwanchwr (Ornaments for ear)



Surang (Ornaments for hair)



Surang (Ornaments for hair)



Ganthi (Ornaments for Arms)



Khare (Ornaments for ankle)

4

SOCIO-ECONOMIC ASPECTS

This chapter socio-economic condition of Rupini community based on the primary survey conducted in Rupini dominated habitats in different parts of Tripura

Table – 1: Type of family

Type of family	Rupini	
	Nos.	Percentage (%)
Joint	41	22
Nuclear	158	78
Total	200	100

Source: Field Survey, 2017

From the table 1, it can be said that 22 percent of the Rupini respondents lived in joint family whereas rest 78 percent Rupini lived in Nuclear family.

Table - 2: Scenario of income from primary and secondary occupation

Scenario of income from primary and secondary occupation	Rupini	
	Nos.	Percentage (%)
Family having only one occupation	129	64.5
Family having more than one occupation	71	35.5
Total	200	100

Source: Field Survey, 2017

RUPINI COMMUNITY IN TRIPURA

The table 2 shows that only 35.5 percent Rupini respondents had more than one occupation but 64.5 percent families had only one occupation.

Table – 2.1: Family income from Primary Occupation

In Rs.	Rupini	
	Nos	Percentage (%)
500-2000	26	13
2001-3000	77	38.5
3001-4000	40	20
4001-7000	25	12.5
7001-10000	12	6
10000 and above	20	10
Total	200	100

Source: Field Survey, 2017

Table 2.1 shows that the income distribution of Rupini respondent from primary occupation. 38.5 percent families earned between Rs 2001-3000 followed by 20 percent families who's monthly income were between Rs 3001-4000, 13 percent had between Rs.500-2000, 12.5 percent families earn between Rs.4001-7000 and 10 percent families monthly income were above Rs.10000.

Table – 2.2: Family income from Secondary occupation

In Rs.	Rupini	
	Nos	Percentage (%)
250 -1000	13	18.31
1001-2000	34	47.89
2001-3000	13	18.31
3001 and above	11	15.49
Total	71	100

Source: Field Survey 2017

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

Table 2.2 depicts that among the Rupini respondents who had secondary occupation the highest percentage was 47.89 percent earned between Rs.1001-2000 followed by 18.31 percent of percent each who earned between Rs. 250-1000 and Rs.2001-3000, and only 15.49 percent Rupini respondents who earned above Rs. 3000 from secondary occupation.

Table -- 3: Monthly Family Expenditure

Monthly Family Expenditure In Rs,	Rupini	
	Nus.	Percentage (%)
500-3000	16	8
3001-5000	73	36,5
5001-7000	29	29,5
7001-9000	28	14
9001-11000	3	4,5
11001 and above	15	7,5
Total	200	100

Source: Field Survey, 2017

Table 3 is about the monthly family expenditure of Rupini respondents. About 36.5 percent respondents monthly expenditure were between Rs. 3001-5000 and 29.5 percent respondents expenditure between Rs. 5001-7000. About 7.5 percent respondents expenditure were above Rs. 11000.

Table – 4: Savings Pattern

Scenario of savings Family wise	Rupini	
	Nus.	Percentage (%)
Yes	182	91
No	18	9
Total	200	100

Source: Field Survey 2017

RUPINI COMMUNITY IN TRIPURA

From table 4 it can be said that the habit of saving prevails among the Rupini respondent is 91 percent.

Table – 4.1: Savings Amount

Savings Amount (Rs.)	Rupini	
	Nos.	Percentage (%)
No Savings	18	9
Less than 1000	52	26
1001-1500	83	41
1501-2000	28	14
2001-2500	11	5.5
2501-3000	3	1.5
3001-3500	1	0.5
3501 and above	5	2.5
Total	200	100

Source: Field Survey 2017.

Table 4.1 discusses that 41 percent of respondents had savings amount between Rs. 1001-1500, 26 percent of respondents had savings less than Rs. 1000, 14 percent respondents had monthly savings amount between Rs.1501-2000.

Table – 4.2: Institution/Place of Savings

Institution/Place of Savings	Rupini	
	Nos.	Percentage (%)
Home	18	9
Bank	179	89.5
Cooperative societies	3	1.5
Credit fund	0	0
Other	0	0
Total	200	100

Source: Field Survey 2017.

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

The table 4.2 mainly reflects the financial inclusion of the Rupini community. From the table it can be seen that 89.5 percent respondents used to save all bank and 9 percent respondents used to save at home and only 1.5 percent respondents were savings at Cooperative societies..

Table - 5: Scenario of Indebtedness

Scenario of Indebtedness among the Tribe	Rupini	
	Nos.	Percentage (%)
Loan Taken	39	19.5
Loan not Taken	161	80.5
Total	200	100

Source: Field Survey, 2017

The table 5 depicts the indebtedness among the tribe and reveals that only 19.5 percent Rupini people had taken loan from various sources.

Table – 5.1: Source of Loan

Source of Loan	Rupini	
	Nos.	Percentage (%)
Bank	26	66.67
Cooperative Societies	11	28.21
Money lender	2	5.12
Total	39	100

Source: Field Survey, 2017

From the above table it can be seen that there was presence of money lenders (5.12 %) among the Rupini. Apart from this

RUPINI COMMUNITY IN TRIPURA

most of them (66.67 %) had taken loan from Banks and 28.21 percent respondents had taken loan from cooperative societies which offer them loan with lower rate of interest.

Table – 5.1.1: Purpose of Loan

Purpose of Loan	Rupini	
	No.	Percentage (%)
Purchase land	3	7.70
Purchase agricultural equipment	23	58.98
Construction	8	20.51
Education children	3	7.69
Fisheries	2	5.12
Total	39	100

Source: Field Survey, 2017

From the table 5.1.1 it can be said that 5.12 percent of respondents had taken loan for fisheries, 7.69 percent respondents had taken loan for their children education purpose, 7.70 percent respondents had taken loan to purchase land, 20.51 percent respondents had taken loan to construct their home. Majority (58.98 %) respondents said that they had taken loan for purchasing agricultural equipments.

Table – 5.1.2: Rate of Interest per annum

Rate of Interest per annum	Rupini	
	No.	Percentage (%)
Below 1 percent	13	33.33
1-5 percent	18	46.15
6-10	21	53.85
More than 10 percent	11	28.21
Total	39	100

Source: Field Survey 2017.

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

From the table 5.1.2 it can be said those respondents who had taken loan 53.85 percent of respondents had to pay, 6 - 10 percent per annum and 46.15 percent respondents paying below 5 percent rate of interest mainly borrowd from Cooperative Societies.

Table - 6: Financial Support from Government

Financial Support	Rupini	
	No.	Percentage (%)
Yes	126	63
No	74	37
Total	200	100

Source: Field Survey 2017.

From the table 6, it can be said that 63 percent Rupini community were getting financial support from government.

Table - 7: Land Holding

Having own land Holding	Rupini	
	No.	Percentage (%)
Yes	171	85.5
No	29	14.5
Total	200	100

Source: Field Survey, 2017

Table 7 describes that the land holding among the Rupini community and it reflects that 85.5 percent people had their own land.

RUPINI COMMUNITY IN TRIPURA

Table – 7.1: Type of Land Holding

Type of Land Holding	Rupini	
	Nos.	Percentage (%)
Tilla (Elevated land)	73	42.69
Lunga (Plain land)	27	15.79
Both	71	41.52
Total	171	100

Source: Field Survey, 2017

The table 7.1 depicts the type of land holding among Rupini community. About 42.69 percent of Rupini respondents had Tilla land, 41.52 percent respondents had both Tilla land and Lunga and 15.79 percent of respondents having only lunga land of their own.

Table - 8: Living Place

Living Status	Rupini	
	Nos.	Percentage (%)
Living in own house	175	87.5
Rented house	25	12.5
Total	200	100

Source: Field Survey, 2017

From the Table 8, it can be said that most of the respondents (87.5 %) lived in their own house and 12.5 percent respondents were living in rented house.

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

Table - 9: Source of Drinking Water

Source of Water	Rupini	
	Nos.	Percentage (%)
Well	2	1
River	0	0
Pond	0	0
Hand pump	43	21.5
Water Supply	155	77.5
Other	0	0
Total	200	100

Source: Field Survey, 2017

Table 9 shows that the respondents of Rupini community mostly (77.5 %) used to collect drinking water from water supply, followed by hand pump (21.5 %).

Table – 10: Type of Houses

Type of House	Rupini	
	Nos.	Percentage (%)
Pacca	8	4
Kutcha	139	69.5
Semi-Pacca	53	26.5
Total	200	100

Source: Field Survey, 2017.

Around 70 percent Rupini peoples were living in kutcha houses and 26.5 percent people were living in Semi-Pacca houses and only 4 percent people were living in Pacca houses.

RUPINI COMMUNITY IN TRIPURA

Table – 11: Type of Toilets

Type of Toilet	Rupini	
	Nos.	Percentage (%)
Open pit	2	1
Pacca	120	60
Kutcha	78	39
Total	200	100

Source: Field Survey 2017.

The table 11 shows that type of toilet used by the Rupini respondents which can be related with the hygiene level and they maintain in their daily life. About 60 percent respondents replied that they were using Pacca toilets followed by kutcha toilets (39 %). From the above table it can be said that none of them practices open defecation which is a good habit indeed.

Table - 12: Source of Lighting

Type of House	Rupini	
	Nos.	Percentage (%)
No-lighting	2	1
Electricity	196	98
Oil/ kerosene	2	1
Total	200	100

Source: Field Survey, 2017

Table 12 clears that 98 percent of Rupini households were electrified.

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

Table - 13: Type of Fuel Used*

Type of Fuel Used	Rupini	
	Nos.	Percentage (%)
LPG	52	26
Electricity	5	2.5
Fire wood	163	81.5
Other	14	7
Total	234	100

Source: Field Survey, 2017.

*Multiple Response

Table 13 describes types of fuel used by the Rupini respondents. About 81.5 percent respondents were mostly dependent on firewood for cooking. It may be due to the lack of supply or due to lack of money for purchasing LPG. While 26 percent respondents were depends on LPG and other 2.5 percent respondents were depends on Electricity for their cooking purpose.

Table -14: Participation in Organization

Participation in Organization	Rupini	
	Nos.	Percentage (%)
Association	5	2.5
Union	8	4
SHG	27	13.5
No Participation	160	80
Total	200	100

Source: Field Survey 2017.

Table 14 shows that the participation among the Rupini people in various social organisations. About 2.5 percent of respondents were involved with different Associations, 4 percent with different Unions and 13.5 percent respondents with SHGs. But most of the (80 %) respondents were not associated with any Organization.

RUPINI COMMUNITY IN TRIPURA

Table - 15: Place of Child Delivery

Place of Child Delivery	Rupini	
	Nos.	Percentage (%)
Home	22	11
Hospital	155	77.5
Both	23	11.5
Total	200	100

Source: Field Survey, 2017

The place of child delivery of the Rupini community presented in table- 15. From this table it can be said that 77.5 percent of delivery of children were in hospital (Institution) and 11 percent respondent said that delivery of children were at home.

Table - 16: Method used to Cure Health Problems

Method used in Cure Health Problems	Rupini	
	Nos.	Percentage (%)
Modern Method	159	79.5
Traditional Method	26	14
Spiritual Healing	13	6.5
Total	200	100

Source: Field Survey 2017.

From table 16 it can be said that the majority of Rupini community (79.5 %) used to prefer modern method for health related issues and traditional method and spiritual healing by 14 percent and 6.5 percent respectively.

Major Health Issues

Among the 200 sample respondents, only 13 respondents were suffering from major health issues among which most of them were suffering from stomachache related issues followed

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

by heart problem , Typhoid, Brain Tumor, Cancer, Diabetics ranging from 15 days to 2 years. Among the 13 number of respondents, 11 used Modern treatment technique.

Table - 17: Hand Washing Before Eating

Hand Washing Before Eating	Rupini	
	No.	Percentage (%)
Only water	35	17,5
Soap	162	81
Mud	1	0,5
Ash	2	1
Total	200	100

Source: Field Survey, 2017

Table 17 shows that 81 percent Rupini respondents used to wash hand by soap before eating and 17.5 percent respondents used to wash hand by water only before eating.

Table - 18: Hand Washing After Defecation

Hand Washing After Defecation	Rupini	
	No.	Percentage (%)
Only water	24	12
Soap	174	87
Mud	1	0,5
Ash	1	0,5
Total	200	100

Source: Field Survey, 2017

For maintaining the good health washing hand after defecation plays a key role but using only water hardly make any difference in preventing diseases. Table 18 shows that

RUPINI COMMUNITY IN TRIPURA

among Rupini respondents 87 percent used soap and 12 percent used only water to wash their hands.

Table - 19: Decomposing of Garbage

Decomposing of Garbage	Rupini	
	Nos.	Percentage (%)
Yes	191	95.5
No	9	4.5
Total	200	100

Source: Field Survey, 2017

Table 19 depicts the habit of decomposing of garbage among the Rupini community. It can be said that most of them (95.5 %) had habit of decomposing garbage.

Table - 20: Disposal of solid /liquid Waste

Disposal of solid /liquid Waste	Rupini	
	Nos.	Percentage (%)
Pit	7	3.5
Away from House	33	16.5
Outside the House	160	80
Total	200	100

Source: Field Survey, 2017

The table 20 shows that the way of disposal of garbage. It can be said that a good number of respondents (80 %) disposed the garbage just outside of the house. About 16.5 percent respondents disposed the garbage away from house. Only 3.5 percent respondents had habit to dispose garbage in pit.

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

Table - 21: Rearing of Live Stock

Rearing of Live Stock	Rupini	
	Nus.	Percentage (%)
Yes	158	79
No	42	21
Total	200	100

Source: Field Survey, 2017

Table 21 shows that 79 percent of Rupini respondents used to rear livestocks - mainly pig.

Table – 21.1: Purpose of rearing Livestock

Purpose of rearing Livestock	Rupini	
	Nus.	Percentage (%)
Income	117	74.05
Own use	41	25.95
Total	158	100

Source: Field Survey, 2017

The table 21.1 depicts that 74.05 percent respondents used to rear livestock mainly to enhance their income and 25.95 percent respondents rear livestock for domestic purposes.

Table – 21.1.1: Income from Livestock (Per Annum)

Income from Livestock	Rupini	
	Nus.	Percentage (%)
Less than 5000	51	43.99
5000-10000	19	16.24
10000-15000	18	15.38
15000-20000	21	17.95
20000 and above	8	6.84
Total	117	100

Source: Field Survey 2017.

RUPINI COMMUNITY IN TRIPURA

Table 21.1.1 discusses that 43.59 percent of Rupini respondents earned from livestock less than Rs.5000 while 17.95 percent said that income from livestock was between Rs. 15001-20000 and 16.24 percent respondents reported that income from livestock between Rs. 5001-10000.

Table - 22: Bank account of the female members of the Family

Bank account of the female members of the Family	Rupini	
	No.	Percentage (%)
Yes	198	99.5
No	1	0.5
Total	200	100

Source: Field Survey, 2017

From the above table, it can be said that almost all female members of the family had their Bank Account.

Table – 22.1: Type of Bank Account of the female members of the Family

Type of Bank Account of the female members of the Family	Rupini	
	No.	Percentage (%)
Single Account	141	70.5
Joint Account	54	27
Both	5	2.5
Total	200	100

Source: Field Survey 2017.

SOCIO-ECONOMIC STUDY OF RUPINI COMMUNITY

The table 22.1 depicts that the type of Bank Account of the female members of the family. About 2.5 percent of female respondents reported that they had both joint and single account while 27 percent said that they had joint account only. Majority of women (70.5 %) had their single account.

Table - 23: Female share in Decision making in the Family*

Female share in Decision making in the Family	Rupini	
	Nos.	Percentage (%)
About daily expenditure	170	85
About child education	194	97
Marriage of children/ family members	190	95
In purchasing major goods for the household	197	98.5

Source: Field Survey, 2017

*Multiple response

The table - 23 potraits the decision making power among Rupini women. It reflects that women were playing important role in decision making process in family related issues.

Table - 24: Decision taken household in various matter

Decision taken household in various matter	Rupini	
	Nos.	Percentage (%)
Male	15	7.5
Female	14	7
Jointly	171	85.5
Total	200	100

Source: Field Survey 2017.

From table 24, it may be found that among the Rupini community, household related decision usually taken jointly.



ANTHROPOMETRIC ASPECTS

5.1. The study Based on Obesity and Body Composition

Obesity and osteoporosis are growing concerns worldwide and both are attributed to a poor diet, excess caloric intake or lower physical activity (Shapes and Sukumar, 2012). Obesity has been associated with a positive influence on bone mass (Shaikh, Crabtree, Kirk and Shaw, 2014). A low body mass index (BMI) has been identified as an important risk factor for lower BMD and predicts greater bone loss in older age and in younger persons in the absence of menses or an eating disorder (Shapes and Sukumar, 2012). A low BMI is an important risk factor for osteoporosis by predisposing to lower peak bone mass and accelerated bone loss (Castro et al. 2005).

- The present study aims to find out the association of obesity with bone mass among three ethnic groups (Rupini, Kaloi and Tripuri) of Tripura.
- To find out the association of hemoglobin content with bone mass among the females.

No previous studies appear to have systematically evaluated the association of bone mass with obesity in these three Ethnic groups.

RUPINI COMMUNITY IN TRIPURA

- Both fat and bone cells originate from the same bone marrow stem cells and physical inactivity and aging induces both obesity and osteoporosis. In addition, these two disorders synergistically induce functional impairments and physical disabilities which suggest a complex effect of obesity on bone health (Salamat, *et al.*, 2016). Obesity has been associated with a positive influence on bone mass (Shaikh, Crabtree, Kirk and Shaw, 2014). Osteoporosis is a systemic skeletal disease characterized by low bone mineral density (BMD) and micro architectural deterioration of bone tissue leading to an increased risk of developing spontaneous and traumatic bone fractures (Gonnelli, Caffarelli, and Nuti, 2014). Osteoporosis is also often referred to as a silent disease and therefore contrasts the high visibility of obesity (Shapes and Sukumar, 2012).

Findings

- Bone mass and fat mass were significantly ($p < 0.05$) correlated in Tripuri males ($r = 0.7376$).
- Bone mass and fat free mass are correlated significantly ($p < 0.05$) in Kaloi male ($r = 0.9276$) and Tripuri male ($r = 0.8498$).
- Significant ($p < 0.05$) correlation between bone mass and fat mass was observed in Rupini ($r = 0.788$) and Tripuri ($r = 0.6124$) females.
- Bone mass and fat free mass were significantly ($p < 0.05$) correlated in females in all the three communities.
- Significant correlation between hemoglobin and bone mass was observed only in Rupini ($r = 0.9374$) females.
- Bone mass differed significantly ($p < 0.05$) in both sexes within all the three communities.

ANTHROPOMETRIC ASPECTS OF RUPINI COMMUNITY

- Significant ($p < 0.05$) difference has been observed between both the sexes on the basis of fat mass, in only Kaloï.
- Significant ($p < 0.05$) differences has been observed between both the sexes on the basis of fat free mass and humerus width in Kaloï and Tripuri.
- Difference in mean BMI between male and female participants within the community was observed to be significant ($p < 0.05$) only in Kaloï participants.

5.2. The Study Based on the Somatotype

- The study was conducted with 17 male and 33 female of Tripura community and 28 male and 39 female of Hranghwal community, 18 males & 20 females, of Debbarma community, 8 males & 12 females of Rupini community, 11 males & 11 females of Kaloï community & 1 male & 10 female Singha community that leads 208 individuals from the six communities, more specifically, 83 males and 125 female individuals were taken for the study. The data was collected on during the time period 31.03.2017-05.04.2017 using the convenience sampling procedure from the upper northern hilly area of the state Tripura. They are listed among the Other Backward Class (OBC) and receive benefits from the government accordingly.
- Anthropometric measurements namely stature, weight, skinfolds at triceps, suscapular, suprailiac and calf, bicondylarhumerus, bicondylar femur, upper arm circumference and calf circumference were taken following standard techniques (Tanner et al., 1969). Using above measurements, subjects were somatotyped following Heath-Carter method (Heath

RUPINI COMMUNITY IN TRIPURA

and Carter, 1967; Carter, 1980). Skin fold thickness measurements of the subjects were measured by slim guide skin fold calliper. Girths were taken with the steel tape to the nearest 0.5 cm. Widths of body parts were measured by using sliding caliper and anthropometric rod. Somatotype was determined from the following equations (Heath and Carter, 1990)

- (i) Endomorphy = $- 0.7182 + 0.1451(X) - 0.00068 (X)^2 + 0.0000014(X)^3$
- Where
- X = sum of supra-spinal, subscapular and triceps skin fold and corrected for stature by multiplying the sum of skin folds by
- $170.18/\text{Body Height in cm}$
- (ii) Mesomorphy = $(0.858 \times \text{Humerus width}) + (0.601 \times \text{Femurwidth}) + (0.188 \times \text{Corrected arm girth}) + (0.161 \times \text{Corrected Calf Girth}) - (\text{Body Height} \times 0.131) + 4.5$
- Where
- Corrected Arm Girth = Arm girth-Biceps skin fold, Corrected Calf Girth = Calf Girth-Calf Skin fold.
- (iii) Ectomorphy = $(\text{HWR} \times 0.732) - 28.58$
- [Where HWR = (Body Height in cm) / (weight in kg)]

Findings

- The studied community Tipura, Hrangkhal, Debbarma, Rupini, Kaloi, & Singha were very distinctive with their somatotypic characteristics but also differed from each other with the basis of sexual dimorphism.
- Both the groups within Tipura, Hrangkhal, Debbarma, Rupini, Kaloi & Singha community showed their distinct pattern of physique whereas, Hranghwal community may had an equal distribution within the

ANTHROPOMETRIC ASPECTS OF RUPINI COMMUNITY

groups but they were the most to lose the level of significance (0.01).

- While comparing with one another between the six communities, they showed that somewhat equal kind of distribution into the population. The study also revealed that male and female group maintains their unique form of distribution which may does not overlap with any of it.
- Thus, the F-ratio was computed to see if the communities were well associated enough to hold the population pattern universal, the result showed, Endomorphism come up with the value of F-ratio i.e 222.196 which showed the significant value which was higher than Ectomorphism, F-ratio value 1.92433 and Mesomorphism i.e 2.12267.

5.3. Study Based on the Body composition and Bone Mass

Bone mass is indicator of skeletal growth process which is determined by peak bone mass(Bonjour *et al.*, 2017). Before puberty, no substantial gender difference has been reported in bone mass of the skeleton when adjusted for age, nutrition and physical activity (Crowder *et al.*, 2010). From those studies it is hypothesized that there must be an association between bone mass and age. The present study try to understand the association between age and other anthropometric and physiologic variable related with bone mass. There are ample number of studies which tried to understand the relationship of bone mineral density and other diseases. Those are given below:

Studies have been showed that bone involvement is a frequent clinical manifestation of sickle cell disease, and it has clinical associations between bone involvement and sickle cell disease (Baldanzi *et al.*, 2011). There is vast effect of physical

exercise on bone mass in type I diabetics with osteopenia (Vichinsky *et al.*, 2012). Another study suggests that up to 70% of adults with thalassemia major (Thal) have low bone mass (Fazeli *et al.*, 2013). In type 1 diabetes, the risk is increased by <“6 times and is due to low bone mass. Despite increased bone mineral density (BMD), in patients with type 2 diabetes the risk is increased (which is about twice the risk in the general population) due to the inferior quality of bone (Jackuliak *et al.*, 2014). There are lack of studies which shows the evaluation between bone mass and age among those ethnic population of Tripura.

Materials and methods

- The present study was conducted in Tripura, in between several ethnic groups viz. Rupini, Tripuri, Kalai and others ethnic group. Subjects were 121 individuals, 75 females and 46 males aged from 20 to 85.
- Data has been collected on anthropometric measures following standard procedure and instrument manuals and physiological variables (Weiner and Lourie, 1981).
- Assessment of bone mass from different aspects of the body were done using bioelectrical impedance analysis using body scanner (Rossmax Glass Body Fat Monitor with scale model WF260 and Omron Body Composition Scanner Monitor with scale Karad Scan model H6f362) strictly following the manufacturer manuals.
- Assessment of physiologic variables from different aspect of body were done using Hudson-Spyrometer (Lung Volume), HemoCue 201(for haemoglobin level) which was also strictly following the manufacturer manuals.
- Verbal consent was obtained from participants. Socio-demographic characteristics were collected through schedule questionnaire. Data has been computed,

ANTHROPOMETRIC ASPECTS OF RUPINI COMMUNITY

checked and then analyzed for significance at $P < 0.05$. The necessary descriptive and inferential statistics has been applied using MS Office – Excel, Windows-7, and Statistical Package for Social Science (SPSS, Inc., Chicago, IL; version, 18.00).

Findings

- A significant ($p < 0.05$) positive relationship has been found between weight and bone mass are in three ethnic groups.
- A significant ($p < 0.05$) positive relationship also has been found between weight and bone mass in case of three ethnic groups.
- A negative correlation has been found, which is statistically significant ($p < 0.05$) between bone mass and percent body fat in Tripuri.
- A significant relationship ($p < 0.05$) has been found between age and bone mass .This is negatively correlated with each other in Kaloi and Tripuri ethnic group.
- A significant relationship ($p < 0.05$) has been found between bone mass and fat free mass in three ethnic groups.
- A significant relation ($p < 0.05$) also been found between visceral fat and bone mass in Tripuri and Rupini ethnic groups.
- A significant relationship ($p < 0.05$) has been found in lung volume and bone mass among three groups.
- A significant ($p < 0.05$) relationship has been found between haemoglobin and bone mass are in Tripuri.

5.4. Study Based on Anthropometry, Distribution of Fat and Body composition

Controversy exists as to whether Body Mass Index, WC, FMI, FFMI, NC, RMR WHR, Percent Body Fat, conicity index, WHtR, or a combination of these measures serves best to assess obesity. The intention of the obesity measurement is an important consideration in determining the appropriate measuring method. The measure may be used to assess an individual or a population, to predict a particular outcome, or to classify risk. Currently, there are many measures for diagnosing obesity at population level but most frequently to be used diagnostic tool to get the accurate result in the current classification system of obesity is yet to be defined.

The present study provides crucial insights regarding the obesity indicator of tribal groups (Rupini, Kaloi, Tripuri) in Tripura, India and no previous studies are reported.

- Obesity is a disease process associated with the development of serious medical Complication and increased mortality in adulthood. (Samiran Bisai *et al.*, 2013.)
- BMI is at a controversy level due to its inability to distinguish between fat and fat free mass. Furthermore many evidences suggest that BMI tends to underestimate obesity (Kelly, Wilson & Heymsfiels, 2009).
- Several studies in adults have reported a strong positive association between cardiovascular risk factors as hypertension, lipid and glucose concentrations and abdominal adiposity when measured by WC and WHR than overall adiposity i.e. measured by BMI. (Nooyens C.J. *et al.*, 2007 and Visscher T.L. *et al.*, 2006).

ANTHROPOMETRIC ASPECTS OF RUPINI COMMUNITY

- There is now a growing evidence that WHtR can be used to predict risk in children (Savva. et al.,2000) and across all age groups (McCarthy & Ashwell 2003)
- Fat Free Mass is the major factor which determines Resting Metabolic Rate, RMR. (Weinser.*et al.*,1992; Cunningham, 1991; Fukagawa, 1990) with some studies finding an additional contribution of Fat Mass, FM (Nelson, et al, 1992), but others failing to find such an effect (Bogardus, 1986; Segal,1987).
- True body fatness may be better evaluated by assessment of body fat and fat free mass (Thibault R.*et al.*, 2012).
- In the northern Indian population Body Mass Index was found to be positively related to the increased prevalence of elevated blood among younger individuals aged 18-44 years and the association of BMI with hypertension depends upon age and sex (Deng WW.*et al.*2013).
- In another study on the northern Indians the conventional cut off level of the BMI underestimates overweight and obesity, when percent body fat is used as the standard to define overweight (Dudeja V. *et al.*,2001).
- The present study was conducted in Agartala, Tripura, India. Present study was consisted on 76 adult participants (age range-22- 85 years) of three communities, Rupini, Kaloi and Tripuri(Debbarma).
- Data has been collected on anthropometric measures following standard procedure and instrument manuals and physiological variables (Weiner and Lourie, 1981).
- Derived measures regarding fat patterning and obesity were calculated using standard equations.

RUPINI COMMUNITY IN TRIPURA

- Assessment of body composition in terms of fat patterning from different aspects of the body were done using bioelectrical impedance analysis.
- Data has been computed, checked and then analyzed for significance at $P < 0.05$.
- The necessary descriptive and inferential statistics has been applied using MS Office – Excel, Windows – 7, and Statistical Package for Social Science (SPSS, Inc., Chicago, IL; version, 16.00).

Findings

- The mean height and Resting Metabolic Rate is found higher among the males than the females in all the three groups. And the mean WHR and Subcutaneous fat distribution across arm, trunk, body and leg is found to be higher in female than males through all groups.
- The predictor for Body fat distribution is seen to differ among communities.
- The analysis of variance (ANOVA) was done among but no significant difference was found among the groups.
- The coefficient of determination shows that fat mass index is more associated with percent body fat than the rest of the predictors among Kaloi male and subcutaneous fat distributed across body among the Kaloi female. Among Rupini male, fat mass and fat mass index and total body water among the Rupini female. Among Tripuri male, fat mass and subcutaneous fat distributed across trunk among the Tripuri female.
- The best predictor for obesity is seen to be same for Kaloi and Tripuri male.

ANTHROPOMETRIC ASPECTS OF RUPINI COMMUNITY

- Componential analyses for the predictors of obesity resulted into a division of four compartments for the Rupini tribes and a division of six compartments was seen for the Kaloi and Tripuri tribes.
- The percentile ranks are found to be similar and often same across the groups (Rupini, Kaloi, Tripuri).
- None of the categorical variables have significant level of $P < 0.05$, when compared among male and female of the same group and when compared among males of different groups and females of different groups.
- Among Rupini male, fat mass, fat mass index and visceral fat is seen to be positively correlated with MAP.
- Among Rupini female, Kaloi male, Kaloi female as well as tripuri male none of the significant predictors are showing correlation with MAP (mean arterial pressure).
- Among Tripuri female, weight and fat free mass index is seen to negatively correlate with map (mean arterial pressure).
- To validate the body scanner monitor, a significant correlation at 0.05 levels is seen only in Kaloi and not in Rupini and Tripuri.

5.5. Study based on Basis polymorphic genetic markers

- ABO, RhD blood groups: Identified by antigen-antiserum agglutination test
- Haptoglobin (serum protein): Identified by Polyacrylamide gel Electrophoresis
- Hemoglobin variants: Identified by Agarose gel electrophoresis

Brief Results

The distribution of and allele frequency estimation of ABO blood group the four groups (Kaloï, Rupini, Tripuri and Hranghwals) revealed significant ($p < 0.05$) difference in the distribution of ABO blood group phenotypes. But for RhD blood group and Haptoglobin (serum protein), these four groups did not demonstrated any such differences. High frequency of HbEE phenotype and carrier (HbAE) phenotypes was found among the Tripuris and Hranghwals. However, Tripuris showed higher frequencies of carriers of HbE.

Examination of Subpopulation genetic structure estimated by F_{ST} statistics on the basis of the above mentioned genetic marker traits revealed low value (F_{ST} approximately < 0.05) delineates higher possibility of endogamy in the four groups (Tibeto- Burman speakers) and thus indicating no admixtures between these Tibeto Burman speaker population. In other words, these four populations are still maintaining traditional system of marriage i.e. marriage within the tribal groups.

Genetic distance analysis (G^2) revealed interesting features of highest distance between Tripuri and Hranghwal and least distance between Rupini and Kaloï. Further analysis also revealed both Rupinis and Kaloï are closer to Tripuris and Rupinis and Kaloï are very close. It might be possible that Rupini and Kaloï split is recent one.

Analysis on social structure and organization, it appeared that Rupinis are more traditional and conservative on the aspects of socio-religious behaviours.



MAJOR FINDINGS, SUMMARY, CONCLUSION

1. The study found that 78 percent Rupini respondents lived in Nuclear family.
2. Among the Rupini respondents 35.5 percent had more than one occupation and 64.5 percent had only one occupation.
3. Rupini respondents Among the 38.5 percent people earned between Rs. 2001-3000 and only 6 percent of Rupini respondents were from primary occupation earned between Rs.7001-10000.
4. Among the Rupini respondents who have secondary occupation, 47.89 percent earned between Rs.1001-2000 only 15.49 percent Rupini respondents who had earned while Rs. 3000 from secondary occupation.
5. The study found that 36.5 percent of respondents monthly expenditure were more than between Rs. 3001-5000 while 4.5 percent of respondents expenditure were between Rs. 9001-11000.
6. This study said that the habit of saving prevails among the Rupini respondents were 91%.
7. The study found that 41 percent of respondents have savings amount between Rs. 1001-1500 and 14 percent respondents had monthly savings amount between Rs.1501-2000.

RUPINI COMMUNITY IN TRIPURA

8. 89.5 percent respondents used to save all bank and 9 percent respondents save at home.
9. Only 19.5 percent Rupini people had taken loan mainly from various sources.
10. About 66.67 % respondents had taken loan from bank and about 28.21% had taken loan from co-operative societies.
11. There are 5.12 percent of respondents had taken loan for fishery, 7.69 percent respondents were taken loan for their children education purpose, 7.70 percent respondents had taken loan to purchase land, 20.51 percent respondents had taken loan to construct their home and 58.98 percent respondents said that they had loan taken for purchasing of agricultural equipments.
12. Respondents who had taken loan 53.85 percent of respondents has to pay 6 - 10 percent per annum and 33.33 percent respondents paying below 1 percent, and 12.82 percent of respondents paying 1 - 5 percent which reflects that it is helping the tribe for productive purpose which intern enhancing their income.
13. There are 63 percent of Rupini community were getting financial support from government.
14. The study said that 85.5 percent people have their own land holding.
15. The study found that there are about 42.69 percent of Rupini respondents had Tilla land, 41.52 percent respondents had both Tilla land and Lunga and 15.79 percent of respondents had Lunga of their own.
16. Most of the respondents 87.5 percent lived in their own house and 12.5 percent respondents were living in rented house.

MAJOR FINDINGS, SUMMARY, CONCLUSION

17. About 77.5 percent of Rupini Community mostly used to collect drinking water from water supply, followed by hand pump water user 21.5 percent.
18. The above study said that around 70 percent Rupini peoples were living in kutchha houses and 26.5 percent people were living in Semi-Pacca houses and only 4 percent people wereliving Pacca houses.
19. Type of toilets used by the Rupini respondents, 60 percent respondents replied that they were using Pacca toilets followed by kutchha toilets 39 percent and open pit toilets. Noe of the Rupini community people practices open defecation which is a good habit indeed.
20. About 98 percent of Rupini households were using electricity as a source of lighting.
21. From this study it was found that 81.5 percent respondents were mostly dependent on firewood for cooking it may be due to the lack of supply or due to lack of money for purchasing of LPG, 26 percent respondents were depends on LPG and other 2.5 percent respondents were depends on Electricity for their cooking purpose.
22. Among the Rupini peoples 2.5 percent of respondents were involved with different Associations, 4 percent respondents were participate in different Unions, 13.5 percent respondents with SHGs, and most of the 80 percent respondents were not associated with any organizations.
23. There are 77.5 percent of delivery of child were in hospitals, 11 percent respondents said that delivery of child were at home and 11.5 percent said that delivery of child were at Both Home and Hospital.
24. Among them 79.5 percent Rupini community were used to prefer Modern method and 14 percent were used Traditional method and 6.5 percent were used Spiritual Healing.

RUPINI COMMUNITY IN TRIPURA

25. From the study found that, 81 percent Rupini respondents were washing hand before eating by soap, 17.5 percent respondents were washing hand before eating by only water, 1 percent respondents used Ash and only 0.5 percent respondents were washing hand by mud before eating.
26. For maintaining the good health washing hand after defecation plays a key role. Among the Rupini respondents 87 percent use only soap, 12 percent use only water to wash their hand after defecation and 0.5 percent respondents use Mud and Ash after defecation.
27. The habit of decomposing of garbage among the Rupini community were 95.5 percent.
28. The way of handling of garbages although a good number of respondents 80 percent Rupini community disposed the garbages just outside the house, 16.5 percent respondents were through the garbages away from house and 3.5 percent respondents werethrough the garbages in pit.
29. There are 79 percent of Rupini respondents rear livestock - mainly pig and 21 percent of respondents were not rearing livestock.
30. Among them 74.05 percent of Rupini respondents rear livestock mainly to enhance their income and 25.95 percent respondents were rear livestock for domestic purposes.
31. From this study found that, 43.59 percent of Rupini respondents earned from livestock less than Rs.5000, 17.95 percent said that income from livestock was between Rs. 15001-20000, 16.24 percent respondents reported that income from livestock was between Rs. 5001-10000, 15.38 percent respondents said that income from livestock was between Rs. 10001-15000 and 6.84 percent are also said that they earned from livestock above Rs.20001.

MAJOR FINDINGS, SUMMARY, CONCLUSION

32. Among them 99.05 percent of female respondents had their own Bank Account.
33. The above study said that about 2.5 percent of female respondents reported that they had both joint and single account while 27 percent said that they had joint account only. Majority of women (70.5 %) had their single account.
34. Decision making of females among the Rupini tribes more than 80 percent in decision making which reflects the females were playing important role in decision making.
35. Among the Rupini respondents there were 85.5 percent of both male and female were taking decision jointly about the various household matters. 7.5 percent male respondents were handling the household matters and only 7 percent female respondents were handle household matters individually.
36. Among the 200 Sample collected 13 such respondents were found whose family member were suffering from major health issues among which the most of them 7 have stomachache related issues followed by heart problem 2 nos. Among the 13 nos. of respondents 11 used Modern treatment technique where 2 used Traditional Technique and the remaining 1 used Spiritual technique for treatment of the fatal disease.

Conclusion

From socio-cultural and anthropological study, it may be found that Rupini community are closer to Tripuri community rather than Halam community and again Rupini and Kaloi are genetically very closer. It might be possible that Rupini and Kaloi split is recent one.

Reference

1. ABVKA (2015). Vision Document for the Janjatis (STs) of North East India, Guwahati.
2. ActionAid (2014). Recommendation for High Level Committee on Status of Tribes in India, Delhi.
3. Banerjee, S. (1976). Videotape- a handy- dandy Communication tool. *Media Asia* , 107.
4. Berger, A. A. (1995). *Essential of Mass Communication*. New Delhi, Delhi, India: Sage Publications.
5. Berger, A. A. (2012). *Media Analysis Techniques* (Fourth ed.). New Delhi, India: Sage publication.
6. Berger, J. (1972). *Ways of Seeing*. London, England: British Broadcasting Corporation and Penguin Books.
7. Bhattacharjee, P. n. (2002). *The Kalai in the light of people's History*. Agartala, Tripura, India: Tribal Research Institue.
8. Butcher, C. B. (1999). Introduction: Image Journeys. In C. B. Butcher (Ed.), *Image Journeys* (p. 10). India : Sage Publication India Pvt Ltd.
9. CharlesTaylor. (2009). *Modern Social Imaginaries*. New Delhi, Delhi, India: Critical Quest.
10. Choudhury, J.& Ghosh, R, (2016): Tribal Development In Tripura: An Assessment of Tribal Sub-Plan, Tribal Research & Cultural Institute, Govt. of Tripura, Agartala

RUPINI COMMUNITY IN TRIPURA

11. Das, M & Choudhury, J. (2011). *Halam Tribe in Tripura- A Situational Analysis*, Tribal Research & Culture Institute, Tripura.
12. Croce, B. *Aesthetic*. Calcutta, India: Rupa and Co.
13. Haan, A. D. (2008). *Social Exclusion*. New Delhi, Delhi, India: Critical Quest.
14. Horkheimer, M. (2009). *Traditional and Critical Theory*. New Delhi, Delhi, India: Critical Quest.
15. Kurup, A. (2014). *Tribal Law in India*. New Delhi, Delhi, India: Critical Quest.
16. Media Asia. (1975). *Understanding the camera*. Media Asia.
17. Nayak, P. (2012). *Economic Development and Social Exclusion in India*. New Delhi, Delhi, India: Critical quest.
18. Rose, G. (2012). *Visual Methodologies*. New Delhi, Delhi, India: Sage publication india Private Ltd.
19. Rose, G. (2012). Content Analysis: An Assesment. In G Rose, *Visual Methodologies* (3rd ed., p. 101). Delhi, Delhi, India: Sage Publication India Pvt Ltd.
20. Said, E. (1993). *Culture and Imperilism*. London, Great Britain: Vintage Publication.
21. SCHENDEL, W. V. (2002). A Politics of Nudity: Photographs of the 'Naked Mru' of Bangladesh . *Modern Asian Studies* , 36 (2), 341–374. .
22. Thapar, R. (1998). *Imagined Religious Communities*. New Delhi, India: Critical Quest.
23. Williams, R. (1989). *Marx on Culture*. New Del, India: Critical quest.
24. Woods, T. (2011). *Begining Postmodernism* (Second ed.). UK: Manchester University Press.

Tribal Research and Cultural Institute



978-93-86707-54-4

ISBN : 978-93-86707-54-4

Price : Rs. 100/-