

**Concept of Health, Disease and Treatment among The Totos of Totopara  
in Jalpaiguri District, West Bengal**

A Thesis submitted to the University of North Bengal  
For the Award of

Doctor of Philosophy

in **S80578**

Anthropology

**2014 JUN 20**



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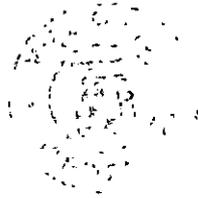
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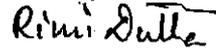
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## DECLARATION

I declare that the thesis entitled **Concept of Health, Disease and Treatment among The Totos of Totopara in Jalpaiguri District, West Bengal** has been prepared by me under the guidance of Dr. Pinak Tarafdar, Assistant Professor of Department of Anthropology, University of North Bengal. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

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CERTIFICATE

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## Abstract

'Health is of universal interest and concern' (Forest Clement,1932). Every society has cultural objectives to prove whether or not there is a case of illness and whether or not individual is healthy. The concepts of health, disease and treatment vary according to the culture of a particular area. Moreover a particular culture of tribal area is guided by the traditionally laid-down customs and each member of the culture is ideally expected to conform to it.

The traditional tribal societies in India as well as in the world differ from region to region due to various ecological settings, socio- economic and socio-cultural reasons. Present medical anthropological enquiry was made to explain the concept of health, disease, medical system, and medical belief related religious practices, diagnosis and traditional way of treatment among the Totos of District Jalpaiguri, West Bengal. It was also highlighted the issues of the modern health care facilities, infrastructure and implementation of different treatment procedure and introduced health care programmes among the said population and area.

The introducing chapter discussed about the basic components of health, disease and treatment along with the conventional idea about Medical Anthropology. This chapter also highlighted the role of cultural anthropology in studying health care practices. From this section one could get an idea about the outline of the health and different Government policies for the tribes along with the problems of its implementation. Analytical discussion was given on scope, objectives and hypothesis of the present study. Methodological section gave a detailed idea for understanding the framework of the study.

Understanding about the village and the people was the prime objective of chapter-2. A detailed idea about the studied village and people was given including the demographic profile of the people. From this chapter one could know about the socio- cultural life of the studied tribe. A short note on the state, district and block will also give a better interpretation. The chapter also discussed about location of study, geographical character of the village, historical background of the village, origin of Totos, ethnic character of the village, infrastructural facilities available in the village, food and drinking habit of the studied population, condition of village (with special reference to house, drinking water, sanitation, electrification), cultural festivals, demographic profile, socio-cultural life of the villagers.

Traditional concept of health and disease as well as the indigenous way of treatment among the studied tribe was discussed in chapter-3. In this chapter reader could go through the supernatural beliefs regarding health and well-being of the community member along with the procedure of appeasement of different deities for protection from various diseases. Role and activities of the traditional healers are also written in detail. Knowledge about the indigenous medicine occupied a crucial part in this chapter. Case studies of patients who availed the traditional medical system are also stated in detail. The chapter discussed about treatment by traditional medicines (selected case studies), life cycle related rituals and occasions, ethnomedicines and their administration process, health related religious belief as

well as supernatural belief, health and worship of various deities, concept of taboo and totem, magico-religious practices related with health and role and position of traditional healthcare practitioners.

Chapter-4 was framed in two separate divisions. In Section-A the health scenario of the country and the different Government policies formulated for the amelioration of socio-economic status of the Indian tribal population were discussed in detail. At a glance the health infrastructure of the country was given for understanding of the forth coming section of the entire study. A discussion was also made on the overall tribal health problem.

Detailed discussion about the health facilities and programmes of the studied areas was given in Section-B. Treatment by modern medical institution and practitioners (selected case studies), the actual condition of modern medical institutions such as Primary Health Centre (PHC), Sub-centre, Block Primary Health Centre (upgraded rural hospital), and the nearest State General Hospital were given in detail. Within this chapter a small section was allotted to evaluate and discuss the role and activities of the modern medical practitioners, nurses, staff, and health workers. Case studies of those patients were also given who availed the modern medical facilities in different circumstances. Child health care practices, health hygiene, water supply and sanitation, family planning particularly among the studied people were evaluated in detail.

The present study was exclusively made to explain the concept of health, disease, medical system, medical belief, related religious practices, diagnostic process and treatment among the Fotos of Totopara, Alipurduar Sub- Division, District – Jalpaiguri, West Bengal, India. The village Totopara was the only residence of the studied tribe. Supernatural belief is rooted in traditional customary ideas particularly prevalent in connection to health, disease and disease related symptoms and misfortunes. In terms of level of observances of different norms and regulations, differences were found between six various sectors. Understanding about the role of supernatural agencies behind the causation of misfortunes was also observed. Traditional healers have proved themselves worthy of trust. Prevalence of multiple therapeutic modes of traditional treatment makes the tribe distinct one. Pluralism is apparent in the therapy style by the healers. The studied tribe came under the umbrella of modern health care system after the establishment of Totopara Primary Health Centre in 1993. Almost 24 hours emergency service was provided by the PHC as reported by the villagers. Villagers from all the studied six sectors were reported to avail the facilities of Madarihat BPHC (upgraded rural hospital) and Birpara State General Hospital.

Simultaneous presence of pluralistic traditional treatment as well as modern medical treatment is reshaping the traditional concept of health, disease and treatment among the studied people. On many occasions, for the same problem, the traditional healers and doctors are consulted side by side. Wide acceptance of modern medical system among the studied people still needs time.

There are some possible recommendations for the well being of the community.

- Traditional concept of health, disease and treatment should be preserved and encouraged.
- Traditional medicine men using herbal medicine should be encouraged.
- Sub-centres and PHC should be more equipped and should be open in all working days.
- Government should be more careful to initiate any health scheme, keeping in mind the poor economic condition, education attainment, faith and of course distinct ideology.

## Preface

In pre-independent India, a senior civil servant of the Government of British India for the first time identified a small community Toto in the border of India and Royal Bhutan. They resided in a single village named Totopara. The village is situated nearly about 25km off from Madarihat railway station under Alipurduar Sub-division in Jalpaiguri District near the border of Bhutan. Totos are the smallest tribal community of West Bengal and one of the *seventy-five communities of India*, listed as 'Particularly Vulnerable Tribal Groups' by the Government of India. Partial isolation of their den by turbulent river, forest and mountains helps them to preserve their indiginity. In the era of globalization, it very difficult for any small community to sustain the indigenous culture of their own and Totos are also not the exception.

The traditional tribal societies in India as well as in the world differ from region to region due to various ecological settings, socio-economic and socio-cultural reasons. As part of the indigenous culture, the concepts of health, disease and treatment vary according to the culture of a particular area. Moreover a particular culture of tribal area is guided by the traditionally laid-down customs and each member of the culture is ideally expected to conform to it. Toto society has also some cultural objectives to prove whether or not there is a case of illness and whether or not individual is healthy. The present medical anthropological enquiry was made to explain the concept of health, disease, medical system and medical belief related religious practices, diagnosis and traditional way of treatment among the Totos. The author was also highlighted the issues of the modern health care facilities, infrastructure and implementation of different treatment procedure and introduced health care programmes among the said population and area.

The introducing chapter will discuss about the basic components of health, disease and treatment along with the conventional idea about Medical Anthropology and the role of cultural anthropology in studying health care practices. Understanding about the village and the people are the prime objective of chapter-2. A detailed idea about the studied village and people will be given including the demographic profile. Traditional concept of health and disease as well as the indigenous way of treatment among the studied tribe is discussed in chapter-3. In this chapter reader could go through the supernatural beliefs regarding health and well-being of the community member along with the procedure of appeasement of

different deities for protection from various diseases. Chapter- 4 is framed to discuss about the health facilities and programmes of the studied area. Treatment by modern medical institution and practitioners, the actual condition of modern medical institutions are given in detail. In the conclusive chapter a general observation and conclusions are made on the above said aspects along with the possible suggestive measures.

It was actually a great joy working in the six village sectors and interacting with the villagers. I owe them my profound gratitude for letting me into their personal lives and tolerating my presence. My special thanks go to Shri Dhoniram Toto, Bhabesh Toto, Bhakta Toto, Bakul Toto, Kalicharan Toto, Sugrib Toto, Shova Toto, Jhuma Toto and many other of the Totopara village for furnishing me the necessary materials for this study during field survey. I offer my sincere thanks particularly to Shri Dhoniram Toto, my main informant who never disappointed me regarding fulfill my requirements. I am also thankful to the traditional healers and modern medical practitioners for their co-operation during my field work.

Words fail me to express my heart-felt gratitude to my Supervisor Dr. Pinak Tarafdar, Assistant Professor, Department of Anthropology, University of North Bengal. He not only enriched my thesis with his academic excellence but also was always by my side whenever I needed his assistance in the minutest detail of my work. His constant encouragement, patience and endurance kept my spirit glow. I record again my sincere thanks for his genuine concern and guidance without which this thesis would not be possible. I must remember and pay gratitude to Professor A.P. Das, Department of Botany for his kind support for identification of some plants having medicinal value.

Last but not least I am grateful to my mother, brother and my husband Sanjib for their patience right from the initiation of the work to till date with full encouragement and support. The omission and commissions in the text are all my own.

*Rimi Dutta*  
Rimi Dutta

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CHAPTER – I  
INTRODUCTION

## 1.1 Introduction

'Health is of universal interest and concern' (Forest Clement, 1932). All human societies notwithstanding the scale of development have a concept of what makes a healthy living as well as conception of illness. In fact, all communities have their own concepts of health. As part of their culture; among the various the concept still preferred, probably the oldest is that health is the 'absence of disease'. According to Mukherjee and Nandy (1986) health is not only the result of interaction between an individual's hereditary contribution with his natural and cultural environment but it is largely determined by the biological and cultural adaptation and evolution of the society and the population (cited in Kaushal's paper, 2004). Landy (1977) defined a state of health as 'the condition of an organism that permits it to adapt to its environmental situation with relative minimal pain and discomfort, achieve at least some physical and psychic gratification and possess a reasonable of survival'. During the recent past, there has been reawakening that health is a fundamental human right and worldwide social goal; that it is essential to the satisfaction of basic human needs and to an improved *quality of life and that it has to be attained by all people and gradually the concept of public health care has emerged*. Finally the World Health Organization (WHO) gave a utopian definition of health as 'a state of complete physical mental and social well-being and not merely the absence of disease or infirmity' (WHO, 1948). In recent years this statement has been amplified to include the ability to lead a "socially and economically productive life".

As the concept of health had been perceived by mankind, eventually the concept of disease, illness, medicine and treatment has evolved simultaneously. Disease according to modern science is only a departure from a state of health and more frequently a kind of disturbance in the health of body to which any particular case of sickness is attributed. Disease, a biological and cultural universal is one of the most predictable of human conditions. A state of disease according to Landy, 'is a condition of the organism that seriously obtrudes against these adaptive requirements and cause of behavioural dysfunction'.

Disease and health are universal experiences which are as old as human is. In fact, health and illness are two polar concepts. As our primitive ancestors evolved into human forms, so were the disease they brought with them and those they acquired during the evolution became social and cultural facts as well as pathological states. Eventually human society has created an 'adaptive strategy' to counteract disease. Man in trying to learn how to treat disease has

gained, a 'vast complex of knowledge, beliefs, techniques, roles, norms values, ideologies, attitudes, customs, rituals and symbols that interlock to form a mutually reinforcing and supporting system'(Das, 2004).

Every society has cultural objectives to prove whether or not there is a case of illness and whether or not individual is healthy. The concepts of health, disease and treatment vary according to the culture of a particular area. Moreover a particular culture of tribal area is guided by the traditionally laid-down customs and each member of the culture is ideally expected to conform to it. Health and treatment reflect the social solidarity of a community. In a tribal community, for example, illness and the consequent treatment is not always an individual or familiar affair, but the decision about the nature of treatment is taken at the community level. For human being in a given set up, disease threatens not only one's state of well being and that of other people on the group, but also it threatens the very integrity of the community as a whole. An event like death and occurrence of the disease not only lead to the heavy expenses and adverse psychological effects but also reduces the strength of the people for life activities. Chief priest, shaman, sorcerers, *ojha* and the traditional medical practitioners have to find out a mean to reduce human suffering and vail the victim out of their misery. Particularly traditional way of treatment is found to be inevitable among the tribal people although western treatment is applied in some circumstances.

In last few decades the importance and utility of the study of the traditional medical system has evolved in a new way. The advantage in learning about the indigenous beliefs and practices of the community gives the insight view of the community people and their interpersonal relationship. By studying the traditional medical system, it is possible to study the social solidarity of a community. In case of some specific diseases, not only the affected person or his family but the whole village is expected to observe certain taboos or norms and food habits in some rural and tribal areas while the non observance of such practices often calls for action by the village council. So, the interpersonal relationship and psychology of community people in the context of health care in relation to social solidarity could be studied very properly in this way.

## SECTION- A

### A.1.1 Concept of Medical Anthropology:

Anthropology combines in one discipline, the approaches of both biological and social sciences. In short, anthropology is a well defined study of physical, social and cultural aspects of man. The relationship between anthropology, medicine and medical practice goes back a long way and is well documented (Comelles and Martinez, 1993). Medical anthropology is a subfield of social and cultural anthropology. It is a term which has been used since 1963 (Scotch, Norman A. (1963) Medical Anthropology. Introduction Biennial Review of Anthropology) as a label for empirical research and theoretical production by anthropologists into the social processes and cultural representations of health, illness and the nursing/care practices associated with these. Furthermore, in Europe the terms "anthropology of medicine", "anthropology of health" and "anthropology of illness" have also been used, and "medical anthropology", was also a translation of the nineteenth century Dutch term "medische anthropologie". This term was chosen by some authors during the 1940s to refer to philosophical studies on health and illness (See Laín Entralgo, Pedro (1968) El estado de enfermedad. Esbozo de un capítulo de una posible antropología médica. Madrid, Moneda y Credito).

### A.1.2 Definition of Medical Anthropology:

Etymologically, the word anthropology is derived from the Greek system Anthro (men) noun ending-logy (science). Its literal meaning therefore, is 'science of man' (Beal; 1971). Medical anthropology is the study of human health and disease, health care systems, and bio-cultural adaptation. The discipline draws upon the four fields of anthropology to analyze and compare the health of regional populations and of ethnic and cultural enclaves, both prehistoric and contemporary. Collaboration among paleopathologists, human biologists, ethnologists, and linguists has created a field that is autonomous from any single sub discipline, with strong potential for integration of physical and Cultural anthropology. The field is also highly interdisciplinary, linking anthropology to sociology, economics, and geography, as well as to medicine, nursing, public health, and other health professions.

Many definition of Medical Anthropology have been offered. One of the broadest yet most concise is contained within the mission statement of the society of medical anthropologist's journal, the medical anthropology quarterly. It defines medical anthropology as a field that includes:-....all enquiries into health, disease, illness and sickness in human individual and populations that are undertaken from the holistic and cross cultural perspective distinctive of anthropology as a discipline that is, with an awareness of species, biological, cultural, linguistic and historical conformity and variation. It encompasses studies of ethnomedicine, epidemiology, maternal and child health, population, nutrition, human development in relation to health and disease, health care providers and services, public health, health policy and language and speech of health and health care (Medical Anthropology Quarterly; September 2001, cited in Tarafdar's paper, 2008).

### **A.1.3 Theoretical Aspects of Medical Anthropology:**

Although the scope of anthropological enquiry into issues of human health, sickness and healing is very diverse and the subfields engaged in these enquires often overlap with one another, there are five identifiable basic approaches to medical anthropology: (a) biological and archaeological (b) culture ecological (c) ethnomedical (d) critical and (e) applied. The first two of these approaches focus on the interaction of human and their environment from a biosocial and bio-cultural perspective and also consider the interaction between biological and health questions and socio-economic and demographic factors. The other three approaches emphasize on the influence of culture on the thought pattern and behavioral characteristics of a group.

#### **A.1.3.1 Biological and Archaeological Approaches:**

The researches in biological and archaeological anthropology concerns important issues of human health, illness and often interest with the domain of medical anthropology. Researches under these domain help to explain the relationship between the evolutionary processes, human genetic variation and the different ways that human are sometime susceptible and other time resistant. The evolution of ancient human forms as well as their disease pattern helps us to better understand current health trends. The shift towards sedentary living patterns and subsistence based on plant and animal domestication, sometimes called the Neolithic Revolution, had a profound effect on human health. Skeletal evidence from populations

undergoing this transition indicates in overall deterioration in health consistence with the known relationship between infectious disease and malnutrition (Pelletier et al.1993). These issues have been attributed to increasing population density, social stratification, decreased nutritional variety, water and sanitation problems and close contact with domesticated animals (Cockburn 1971; Fenner 1970). A more recent threat to human health has come from chronic degenerative conditions and the so called outcome of these is heart disease, diabetes and cancer. Many of these disease share common etiological factors related to human adaptation over the last 100,000 years. Biological and archaeological anthropologists provide important information regarding the ethno-pharmacological aspects of traditional medical systems.

#### **A.1.3.2 Cultural Ecological Approaches:**

Ecology refers to the relationship between organisms and their total environment. Within medical anthropology, the ecological perspective has three major premises. First, the interdependent interactions of plants, animals and natural resources comprise an “ecosystem” with characteristics that transcend its component parts. Second, the common goal of species within an ecosystem is homeostasis: a balance between environmental degradation and the survival of living population. Third, modern human adaptations include cultural and technological innovations that can dramatically alter the homeostatic relationship between host and disease (Tarafdar, 2008).

#### **A.1.3.3 Ethnomedical Approaches:**

Horacio Fabrega defines ethnomedical science as the study of how members of different cultures think about disease and organize themselves towards medical treatment and social organization of treatment itself (Fabrega; 1975). As a domain of medical anthropology, ethnomedical research mainly focuses on five major areas viz. (a) ethnographic description of healing practices (b) comparison of ethnomedical system (c) explanatory models of health and sickness (d) health seeking behaviors and (e) the efficacy of ethnomedical systems (Tarafdar, 2008).

#### **A.1.3.4 Critical Medical Anthropological Approaches:**

The discipline of critical medical anthropology has emerged as a perspective in the 1980s and 1990s which combines some broad critiques and subsumes much theoretical diversity. Correctly attributing regional disparities in relation to larger political and global economic context, critical medical anthropology describes how large scale political, economic and cognitive structure constrains individual's decisions, shape their social behavior and affect their risk for disease. Critical medical anthropologists are trying to establish a new paradigm that views sickness not just an isolated event but as a product of complex interactions involving nature, society and culture (Tarafdar, 2008).

#### **A.1.3.5 Applied Medical Anthropological Approaches:**

Applied medical anthropology emphasizes the direct application of anthropological theories and method to particular social problems. Within this domain, applied approaches can be categorized into two general domains; applied anthropology in clinical settings and applied anthropology in public health programmes. Clinical applied anthropology focuses on health care within biomedical settings and analyzes the effects of cultural and socioeconomic factors on doctor-patient interaction, adherence to treatment and the experience of healing (Tarafdar, 2008).

#### **A.1.4 Traditional Medicine:**

For much of the twentieth century the concept of popular medicine, or folk medicine, has been familiar to both doctors and anthropologists. The concept of folk medicine was taken up by professional anthropologists in the first half of the twentieth century to demarcate between magical practices, medicine and religion and to explore the role and the significance of popular healers and their self-medicating practices. The term was also used to describe the health practices of aborigines in different parts of the world, with particular emphasis on their ethno-botanical knowledge. This knowledge is fundamental for isolating alkaloids and active pharmacological principles.

The study of indigenous medical features of a particular community is known as "ethnomedicine". It is also known as "folk medicine"; "popular medicine"; and popular

health culture (Polgar; 1962). Traditional medicine has a long history. The World Health Organization (1978) defines traditional medicine as ...the sum total of all the knowledge and practices, whether explicable or not, used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation whether verbally or in writing. Traditional medicine might also be considered as a solid amalgamation of dynamic medical knowledge and ancestral experience. In 2002 The World Health Organization again defines traditional medicine. Traditional medicines include diverse health practices, approaches, knowledge and beliefs incorporating plant, animal and or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being as well as to treat, diagnose or prevent illness. The same when adopted outside of its traditional culture traditional medicine is often called the complementary and alternative medicine by the Western medical system.

Various anthropologists have been involved in the study of ethno-medical systems since the last quarter of 19<sup>th</sup> century. Tylor, Saligman, and Frazer have described healing, shamanism, witchcraft, magic etc and related them to the concept of illness in preliterate societies. In the early part of the 20<sup>th</sup> century Rivers, Ackernecht and Clements have provided elaborate descriptions and analyses of ethno-medical systems.

The causation and grammar of folk medicine is unique and is based on wrath of God's evil spirits, magic and witch craft. It has its own diagnostic tools and techniques which can heavily depend on variation. Treatment is through propitiation of Gods, exorcism, and counter magic, use of charms and amulets and administration of herbal preparation.

#### **A.1.5 Traditional Indian Medicine:**

The medical systems that are truly Indian in origin are the Ayurveda, the Siddha, Yoga and Naturopathy. But the Unani system of medicine is very much cultivated and developed and occupied a respectable position in Great Traditional Indian Medicine. Apart from the Great Traditional Medical Systems there are various other little traditional folk medicines which are used locally and restricted to particular locality or society. All these systems are indigenous and through over the years become a part of Indian Tradition. Prior to the advent of modern medicine these systems had for centuries taken care of the health needs of people. These

systems are widely used even today because of their accessibility, acceptability as well as of their cost effective in nature.

#### A.1.5.1 The Ayurveda:

Ayurveda means the science of life. It is one of the oldest formulated systems of medicine. The Ayurveda is a subsidiary branch of the *Atharvaveda*. Different Hindu mythological stories claimed that Brahma composed it in one hundred thousand stanzas and a thousand chapters before creation of man.

*Charaka Samhita* and *Susruta Samhita* are the two ancient texts on which Ayurveda is based. In ancient India, the celebrated authorities in Ayurvedic medicine were *Atreya*, *Charaka*, *Susruta* and *Vagbhatt*. *Atreya* (about 800BC) acknowledged as the first great Indian physician and teacher. Ayurveda witnessed tremendous growth and development during the Buddhist time (226BC). *Charaka* (200AD) the most popular name in Ayurvedic medicine was a court physician to the Buddhist king Kaniska. Based on the teaching of *Atreya*, *Charaka* compiled his famous treatise on medicine the *Charaka Samhita* in which he mentioned about some 500 drugs. Father of Indian Surgery, *Susruta* stands out in prominence and compiled the surgical knowledge of his time in his classic *Susruta Samhita* probably between 800BC and 400AD.

Ayurveda is based upon certain fundamental doctrines known as the *darshanas* which encompasses all sciences- physical, chemical, biological and spiritual. So far as the function of the body is concerned the system considers the body mind and soul as complementary to one another. Everything is explained by the theory of *Tridosha*; *vayu* (wind), *pitta* (bile) and *kapha* (phlegm) and the seven *dhatu*s, body fluid, blood, muscular tissue, adipose tissue, bone tissue, nervous tissues, and bone marrow. Disease was explained as a disturbance in the equilibrium of the three humors. It can be said that Ayurvedic medicine is concerned with preserving and promoting total health with sophistication of ethical and moral doctrines of life rather than just curing any type of disease.

### A.1.5.2 The Siddha:

The system of medicine which is indigenous to the soil of Tamilnadu is Siddha system of medicine and is practised in the Tamil speaking areas of South India. The word Siddha is derived from the word *siddhi* which means an object to be attained or perfection or heavenly bliss. Siddhi generally refers to *Ashtama siddhi*, i.e. the eight great supernatural powers which have been enumerated as *Anima*. Those who have achieved these powers are called Siddhars.

According to the Siddha predictions or Siddha mythology it is known to the world that lord Shiva taught the Siddha principles and philosophies. All the Siddhars taught their principles along with their well experienced medicines to their disciples under Gurugulavasa. They brought the secrets in the palm leaves manuscripts with several code words for their understanding. It is handed down from Guru to disciples.

Most of the Siddha predictions are classified with several formulations which could be followed and adopted according to the land, climate, age, severity of disease, food and circumstances. In general, single and even compound medicines are advised for the patients by knowing the pulse diagnosis methods, the variations of *Naadi* in their hands by means of *Vali*, *Azhal*, *Aiyyan*, or in other words called *Vaatham*, *pitham* and *kapam*, respectively. Siddha system believes that all objects in the universe including human body are composed of five basic primordial elements, namely earth, water, fire, air and space.

The human body is a conglomeration of three humors and seven physical components. The Food is considered to be basic building material of human body, which gets processed into humors, tissues and wastes. The equilibrium of humors, body tissues and waste products is considered as health and its disturbance or imbalance leads to disease or pathologic state. Siddhars classified the diseases in different topics and accounted the total diseases for human body as 4448 diseases. They mentioned about the curable and incurable diseases along with the symptoms of the body and predicted the concerned, proper medicines also.

### A.1.5.3 The Unani:

The Unani system of Medicine owes, as its name suggests, its origin to Greece. The term 'Unani' is derived from the word 'Unan' which means Greece in Arabic. Hippocrates (Buqrat in Arabic) (460-377 BC) who freed Medicine from the realm of superstition and magic, and gave it the status of Science. After Hippocrates, a number of other Greek scholars enriched the system considerably. After him many scholars enriched the system of whom Jalinoos (Galen) 131-210 A.D., Al-Razi (Rhazes) 850-925 A.D. and Abu Ali Ibn Sina (Avicenna) 980-1037 A.D. are noteworthy.

In India Unani system of Medicine was introduced by the Arabs, and soon it took firm roots in the soil. The Delhi Sultans, the *Khiljis*, the *Tughlaqs* and the *Mughal* Emperors provided state patronage to the scholars and even enrolled some as state employees and court physicians. The system found immediate favour with the masses and soon spread all over the country particularly during the 13th and 17th century.

Unani medicine was the first to establish that disease was a natural process and that symptoms were the reactions of the body to the disease. It believes in the humoral theory which presupposes the presence of the four humors - *Dam* (blood), *Balgham* (phlegm), *Safra* (yellow bile) and *Sauda* (black bile) in the body. Each humor has its own temperament - blood is hot and moist, phlegm cold and moist, yellow bile hot and dry and black bile cold and dry. Every person attains a temperament according to the preponderance in them of the humors which represent the person's healthy state, which are expressed as sanguine, phlegmatic, choleric and melancholic. The diagnosis of diseases in Unani system of medicine is through *Nabz* (pulse) and examination of *Baul* (Urine) and *Baraz* (stool).

### A.1.5.4 Yoga:

Yoga is not a system of medicine but one attains a sound mind and a sound body through it. Yoga is a method by which one can develop one's inherent powers in a balanced manner. It offers the means to reach complete self realization. The literal meaning of Sanskrit word Yoga is to *yoke*. Accordingly yoga can be defined as a means for uniting the individual spirit with the universal spirit. Yoga is one among the six systems of Vedic philosophy, the earliest literature of Hindu civilization. *Maharishi patanjali*, rightly called the 'father of Yoga' compiled and refined various aspects of Yoga systematically in his 'Yoga sutras'

(aphorisms). He advocated the eight fold path of Yoga, popularly known as "Ashtanga Yoga" for all-round development of human personality.

These are - *Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhayana* and *Samadhi*. These components advocate restraint, observance of austerity, physical postures, breathing exercises, restraining the sense organs, contemplation, meditation and Samadhi. These steps are believed to have potential for the improvement of physical health by encouraging better circulation of oxygenated blood in the body, retraining the sense organs and thereby inducing tranquility and serenity of mind. The practice of Yoga prevents psychosomatic disorders/diseases and improves an individual's resistance and ability to endure stressful situations.

#### **A.1.5.5 Naturopathy:**

Nature Cure is a way of life which we find in a number of references in the Vedas and other ancient literatures. The morbid matter theory, concept of vital force and other concepts upon which Nature Cure is based are already available in old texts which indicate that these methods were widely practiced in ancient India. Although in the recent past the nature cure movement started in Germany and other western countries with hydrotherapy (water cure) popularized by Vincent Priessnitz (1799-1851) who is called 'Father of Naturopathy'. Nature cure movement gained its momentum in India as Mahatma Gandhi became interested on the nature cure treatment.

The science of natural therapeutics is based on the use of five elements that constitute the human body. They are water, earth, ether, sunlight and air. The rationale of naturopathy is that all healing comes from within the body itself. There are self therapeutic forces or powers inherent in the human body which helps to cure, preserve and promote health.

#### **A.1.6 Health and Indigenous knowledge:**

Anthropology has been going to live in other societies for nearly hundred years. Probably the idea was to add to our knowledge so that someday we might come to understand how human cultural behavior could vary so much and yet be so much the same at different times and in different places. Close to 2000 societies have now been described in the literature of

anthropology. This enormous knowledge of different societies enriches the wealth of modern science.

In most societies there does exist a rich body of scientific knowledge based on the demands of the concerned societies. This traditional knowledge or local knowledge is the wisdom held and shared by the people in our community and almost always passed down from one generation to next one. It could be the knowledge about medicine, technologies, the environment, the spiritual world or anything else that is important to a particular community people. The knowledge in medicine is the sum total of all the knowledge and practices whether explicable or not, used in diagnosis, prevention, and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation whether verbally or in writing. Such knowledge is in fact still used today in many areas all over the world in the day to day living of many indigenous people. In several parts of East Asia, South and South East Asia apart from the folk tradition there is also a parallel classical tradition of knowledge. These classical knowledge systems have very sophisticated theoretical foundations and are well documented in the thousand of manuscript. They represent non western knowledge systems. It is the holistic concept and is not only limited to the arena of treating disease but includes aspects of religion, socio cultural and economic domains. It can deal with the broad base of health problems from disease prevention to health promotion. This system includes usages of a wide range of biological resources using thousands of plant species, hundreds of animal species and animal parts and various minerals.

Unfortunately over the years this traditional knowledge and skills have been ignored and it was said to be primitive superstitious or unscientific; gradually the system was replaced by western knowledge. But now the deadly diseases like AIDS, cancer etc compel the modern science to rethink on its principle, as a result it is trying to rediscover the wisdom of indigenous knowledge.

## **SECTION- B**

### **B.1.1 Concept of Tribe, Primitive Tribal Groups (PTGs) and Vulnerable Tribal Group:**

The concept of tribe was a creation of the colonial period (Singh 1991 cited in Roy Burman's book, 2003). According to Basu (1994) the term "Tribe" is nowhere defined in the

constitution and there is no satisfactory definition anywhere. The definition of tribe most frequently quoted by anthropologist refers to the one presented by the Winick's dictionary of anthropology, "A tribe is a social group usually with a definite area, dialect, cultural homogeneity and a unifying social organization". I.M. Lewis (1968) provides more comprehensive characteristics of tribes; ideally tribal societies are small in scale, are restricted in spatial and temporal range of their scale, legal and political relations and possess a morality, religion and world view of corresponding dimensions"(cited in Roy Burman's book, 2003). There are 664 tribes located in the five major belts in India. They are the socially segregated disadvantaged autochthonous people of the land. After independence gradually the concept of reservation emerged and through that emerged the idea of scheduled tribe in the independent India in the year 1950. The schedule tribe is a purely administrative category set up by the Government to distinguish one category of people and due to their backwardness is provided with some affirmative benefits so as to be brought at par with sections of the population. Almost all of these people also do conform to the idea of tribe as usually conceived in the parlance of anthropology.

The Constitution of India, Article 366 (25) defines Scheduled Tribes as "such tribes or tribal communities or part of or groups within such tribes or tribal communities as are deemed under Article 342 to the scheduled Tribes (STs) for the purposes of this Constitution". In Article 342, the procedure to be followed for specification of a Scheduled Tribe is prescribed. However, it does not contain the criterion for the specification of any community as scheduled tribe. An often used criterion is based on attributes such as geographical isolation, backwardness, distinctive culture, language, religion and shyness of contact. The census of India (1991) enumerates 573 notified scheduled tribes in India and they form about 8.08% of the total population of the country. About 84,326,240 persons have been enumerated in the country as being members of Scheduled Tribes (According to Census 2011 data) (source: Government of India, Ministry of Home Affairs, Office of the Registrar General and Census Commissioner, India).

Dhebar Commission (1960-1961) observed different layers among tribes of which lowest layer needed utmost consideration. The study team on Tribal Development Programme (Shilu-Ao-Team, 1969) marked a large number of tribal communities continuing to be extremely backward; some of them are still in primitive food gathering stage. Among those Scheduled Tribes who were identified more backward communities among the tribal

population groups have been categorized as Primitive Tribal Groups (PTGs) by the Government at centre in 1975. So far 75 tribal communities have been identified as Primitive Tribal Groups (PTGs) in different states and UTs in India. These hunting, food gathering and some agricultural communities who have been identified as more backward communities among the various tribal populations need special programmes for their sustainable development. Among all the states and union territories Orissa (13) is found to possess the maximum number of PTGs; followed by Andhra Pradesh (12), Bihar (9), Madhya Pradesh (7), Tamilnadu (6), Gujrat (5), Kerala (5), Andaman and Nicobar Island (5), Maharashtra (3), West Bengal (3), Karnataka (2), Uttar Pradesh (2), Rajasthan (1), Manipur (1), Tripura (1). The three Primitive Tribal Groups (PTGs) of West Bengal are Birhor, Lodha and Toto. No new group was declared as PTG on the basis of the 2001 census. But in 2006 the Government of India proposed to rename Primitive Tribal Group as 'Particularly Vulnerable Tribal Group' (PVTG). Primitive Tribal Group has since been renamed 'Particularly Vulnerable Tribal Group' by the Government of India.

### **B.1.2 Health Status of the Tribal People Inhabiting India:**

Tribes in India, who constitute 15% of the geographical area and nearly 8.2% of the population, are truly disadvantaged and marginalized population of our country (source: Government of India, Ministry of Home Affairs, Office of the Registrar General and Census Commissioner, India). General health status of the tribal is poor as compared to the modern society. Due to a combination of societal attitudes, varying belief systems, and governmental neglect, tribal populations throughout India have long been denied basic healthcare. As a result, gaping disparities in health status of tribals, when compared to metropolitan areas, are evident. Genetic abnormalities and infectious diseases such as sickle-cell anemia, malaria, tuberculosis, leprosy, typhoid, and cholera are rampant in areas of Madhya Pradesh, Maharashtra, Tamilnadu, Orissa, and Assam states. Additionally, malnutrition, birth disorders, and gastrointestinal diseases are pervasive among tribal populations, and stark deficiencies have been detected in gross amounts of calcium, vitamin A, vitamin C, riboflavin, and animal protein. Certain tribal groups are even facing extinction due endemic diseases and an unusually low sex ratio (Paliwal, 2004).

Sometimes health status of the tribal population is marked by negative features that one may find in the morbidity and mortality. They may suffer from some distinct health problems, not because they have some specific type of health but because of specific placement in different

areas and circumstances in which they live. Poverty, illiteracy, malnutrition, lack of personal hygiene, unsanitary conditions and absence of health education, poor mother and child health services and poor coverage of national preventive programmes have been found responsible for the poor health of the tribal communities. Consanguineous marriage has also been found to affect the health status of the tribal adversely and also responsible for some specific illness including genetic disorders. Unfortunately, in one hand proper health services are not available in many of the tribal areas; on the other hand sometimes the common beliefs, customs and practices connected with health and disease will also influence their choice of treatment methods. Apart from the above said problems the gradual encroachment by the modern society on the natural resources of the tribal, depleting them of their habitat and exposing them to the alien aspect of globalization which is making a continuous mental stress on them.

### **B.1.3 Comparative Study on the Health Status between the Tribal People and the Main Stream Population:**

India occupies 2.4% of the world's land and supports over 17.5% of the world's population. The total population of the country is 1,210,193,422 (according to the Census 2011). The indigenous tribal population form about 8.2% of the total population (according to 2011 Census). About 84,326,240 persons have been enumerated in the country as being members of STs (according to 2011 Census). There are about 162 major tribes and 270 minor tribal communities. They occupy around 15% of the geographical area of India. The Census of India 2001 enumerates 573 notified Scheduled Tribes in India among which 75 different tribes have identified as Primitive Tribal Groups (PTGs) by Government of India.

Due to a combination of societal attitudes, varying belief system and to some extent governmental neglect, the tribal populations throughout India have long been devoid of availing basic health care. As a result, gaping disparities in health status of tribes when compared to metropolitan areas are evident. Certain tribal groups are even facing extinction due to endemic diseases and an unusually low sex ratio. The sex ratio has been found to vary from tribe to tribe and from region to region. Although the sex ratio of Indian population in general 943 but among the Scheduled Tribe it is 990 (Census 2011) in general.

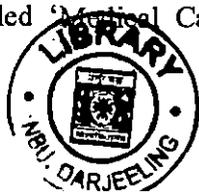
There are various other indicators which reflect the different socio- economic as well as health situation of the tribes. There are various other socio- economic indicators such as

literacy rate, unemployment rate, migration rate etc which indicates the socio-economic condition of the concerned population. It has been found low literacy rate among the Scheduled Tribe in comparison to the Indian national population of 61% (according to Demographics of India, 2011). The same has observed in case of unemployment rate. The unemployment rate is much higher in comparison to Indian national population 7.8%. The health status indicators such as birth rate death rate, life expectancy, infant mortality rate etc may also reflect the favorable and unfavorable social and cultural condition of the studied population.

#### **B.1.4 Health and Government Policies:**

Improvement of the health status of the population has been one of the major thrust areas for the social development programmes of the country. India is a signatory to the Alma-Ata declaration, 1978 and is committed to achieve the goal "Health for all by the year 2000 A.D." A separate Tribal Development Planning Cell has been functioning under the Ministry of Health Services since 1981 to co-ordinate the policy, planning, monitoring, evaluation etc. of the Health Care Schemes for welfare and development of Scheduled Tribes. The National Health Policy 1983 accordingly envisages high priority to provide health services to those residing in the tribal, hilly and backward areas as well as to endemic diseases affected population and vulnerable sections of the society. The Government of India in association with the states has developed a very comprehensive and useful policy on health that aims at achieving a phenomenal growth in this sector.

Keeping in view the far flung areas, forest land, hills and remote villages where most of the tribal habitations are concentrated the population coverage norms have been relaxed to one Primary Health Centre (PHC) for every 20,000 population and one Sub-centre for every 3,000 population in hilly/ tribal areas as against one PHC for 30,000 populations in general rural areas. Similarly Multipurpose Workers are appointed for 3,000 populations in tribal areas as against the norm of 5,000 populations for general. The states have been advised to set up at least 15% of the Sub- Centres in Scheduled Caste habitations or villages having 20% or more Scheduled Caste population (and 7.5 of their annual targets in tribal areas). The state Governments have been advised to give further relaxation for setting up Sub-Centres/ PHCs in the case of tribal hamlets which are 5 kms away from the available Health and Family Welfare delivery point. For the most disadvantaged population among the tribals i.e. for the PTGs a new scheme called 'Medical Care for Remote and Marginalized and Nomadic



Communities' was launched during the Ninth Five Year Plan with an approved layout of Rs 5 cror.

Under the Minimum Need Programme 20,972 Sub-Centres, 3,336 Primary Health Centres and 470 Community Health Centres have been established in tribal areas besides 1,122 Allopathic Dispensaries, 120 Allopathic Hospitals, 78 Allopathic Mobile Clinics, 1,106 Ayurvedic Hospitals, 24 Ayurvedic Hospitals, 251 Homeopathic Dispensaries, 28 Homeopathic Hospitals, 42 Unani Dispensaries, and 7 Siddha Dispensaries are functioning in the tribal areas in the country. Training of Dais (Traditional Birth Attendants) is being undertaken with emphasis on hands-on skill development for providing essential maternal and new born care ensuring clean delivery practices and promoting early referral of maternal complications and obstetric emergencies.

National Malaria Eradication Programme including Filaria Control, Japanese Encephalitis Control and Kala Azar Control are implemented by states/ UTs with 50% Central Assistance in tribal areas under TSP and SCP. 100% Central Assistance is being provided to North Eastern Tribal States from year 1994-95. National Leprosy Eradication Programme is 100% assisted for detection and treatment of leprosy cases. National Tuberculosis Control Programme is implemented with 100% Central Assistance for supply of anti-TB drugs, equipments etc in tribal areas under TSP. National AIDS Control Programme; a 100% centrally sponsored programme is implemented in tribal areas. A Central Planning Committee under the chairmanship of the Secretary, Ministry of Welfare has been constituted to review the health activities in the pockets of extremely backward tribal areas in the country. The committee has identified such pockets in 52 districts of 13 states (Andhra Pradesh- 6, Bihar- 6, Gujrat-3, Kerala- 5, Madhya Pradesh-4, Maharashtra-6, Manipur-1, Orissa-8, Uttar Pradesh 1, Rajasthan-2, Tamilnadu-2, Tripura-24, and West Bengal-1). (Ref:<http://planningcommission.nic.in/plans/planrel/fiveyr/7th/vol2/7v2ch11.html>)

Along with all the Government policies various other organizations make serious efforts to study on different health problems evident among the tribes. Such as, the Indian Council of Medical Research (ICMR), New Delhi have set up 5 Regional Medical Research Centers in the tribal areas in the country each at Jabalpur, Bhubaneswar, Jodhpur, Dibrugarh and Port Blair to carry out research on health problems of Scheduled Tribes.

### **B.1.5 Major Diseases Affecting Tribals:**

The culture of any community determines the health behavior of the community in general and individual members in particular. The health behavior of the individual is closely linked to the way he or she perceives various health problems along with access to various health care institutions. The tribal scenario is far from being uniform. For instance, the Jarawa of the Andaman Islands are generally healthy a lot with strong build and glistening skin, but on the other hand there are number of tribal groups in the main land whose members are manifested as under nourished and disease stricken. It has been found from various studies that the Primitive Tribal Groups (PTGs) in India have special health problems and genetic abnormalities like sickle cell anemia, G-6-PD, red cell enzyme deficiency and thalassemia. Both male and female are equally affected in the case of sickle cell anemia whereas males are more affected than females in G-6-PD deficiency cases. The sickle cell disease is found in 72 districts of central, western and southern India. There are more than 35 tribal population groups showing a frequency of more than 19 percent (Kshatriya, 2004). Some of the other problems indicated by investigations in tribal areas include endemic diseases like malaria, tuberculosis, influenza, dysentery, malnutrition and infant mortality. These diseases also reflect that there is high possibility of HIV infection as TB and STD (sexually transmitted diseases) are found in great numbers among the tribals. In case of nutritional deficiency, particularly anemia accounts for 15-30 percent of maternal deaths in India where 60-70 percent of women are found to be anemic (Kshatriya, 2004). This incidence is particularly greater among tribal women. It has also been found that the tribal diets are generally grossly deficient in calcium, Vitamin A, B, C riboflavin. Iodine deficiency disorders are also prevalent in the tribal areas falling in the goiter belt. Soil depletion of micronutrients is important to be aware of the fact that our soil on account of long years of repeated cultivation is being steadily depleted of important minerals which results in lower levels of these micronutrients in vegetation, giving rise to deficiencies of micronutrients such as zinc.

Besides all the above said problems alcoholism has always been a recognized problem in tribal populations affecting not only the men's health and productivity but indirectly also the women and children. Social approval for the use of alcohol and few drugs to both male and female as part of tradition is found to be responsible for various crude pathological disorders.

## **B.1.6 Some Important Definitions:**

### **B.1.6.1 Traditional medicine:**

Traditional medicine could be defined in a number of ways taking into account the concepts and practices; information about which could be gathered, analyzed, evaluated and documented for posterity (Mahanti,1994). The World Health Organization defines traditional medicine as “the health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines spiritual therapies, manual techniques and exercises applied singularly or in combination to treat, diagnose and prevent illness or maintain well-being (WHO, 2002). Traditional medicine (also known as indigenous or folk medicine) describes medical knowledge systems which developed over centuries within various societies before the era of modern medicine. The system is so comprehensive that it is very difficult to put the form in a particular slot of medical science. It mainly centres around two systems of traditional medicines broadly:

Small and indigenous traditional medicines which include mostly folk system based on socio-cultural aspects as well as magico-religious aspects of smaller groups of people.

The second system is called the great traditional medicine or system based on the concept of Ayurvedic, Unani, Sidh, Nature cure and Yoga medical system. This form of medicine takes into consideration Homeopathy as well as in the Indian context.

### **B.1.6.2 Ethnomedicine:**

Ethnomedicine, a sub-division of medical anthropology refers to ‘those beliefs and practices relating to disease which are the products of indigenous cultural development, and are not explicitly derived from the conceptual framework of modern medicine’ (Hughes, 1968). Etymologically speaking, the term refers to the medicines that are traditionally associated with specific ethnic groups. Thus, it can also be conceived of as Folk medicine, Traditional medicine or Indigenous medicine (Mibang and Choudhuri, 2003 cited in R.K.Kar’s paper, 2004). Generally ethnomedical knowledge and practices have orally been transmitted over the centuries.

The term ethnomedicine is used to refer to those belief and practices relating to disease which are the products of indigenous cultural development and are not explicitly derived from the

conceptual framework of modern medicine. It explores environmental, biological and socio-cultural factors as they impinge upon disease pattern and how people respond to it (Sinha and Banerjee 2004). The folk sector of the health care system comprises non-professional, non-bureaucratized “specialist”. Folk healing can be divided into sacred and secular subsectors, indicating its roots in both religious (e.g. Shamanism) and empirical (e.g. herbalism) [cited in Das’s paper 2004].

#### **B.1.6.3 Herbal Medicine:**

Herbal medicine or phytotherapy is the science of using herbal remedies to treat the sick. Herbalism is a traditional medicine or folk medicine practice based on the use of plant and plant extracts. Herbalism is also known as botanical medicine, medical herbalism, herbal medicine, herbology, and phytotherapy. The scope of herbal medicine is sometimes extended to include fungal and bee products, as well as minerals, shells and certain animal parts

#### **B.1.6.4 Medicine Man:**

In primitive societies, medicine man is same as the doctors of the modern societies. He acquired high status after priest and shaman. He used different kinds of herbs, plants, vegetables, fruits, grasses, stones soil and even blood, flesh, and skeleton of animals to cure the diseased man. The role of traditional medical practitioners of the rural and tribal communities is to provide health care to their community for years have stood the time test. In some societies medicine man coincide with priest and shaman.

#### **B.1.6.5 Sorcery and Witchcraft:**

Magic performed with anti-social or malicious intension is sorcery. The intension is always to harm others. Sorcery, like the other form of magic achieves its results indirectly by affecting the individual’s emotional status. The effectiveness of sorcery depends upon the awareness of the victim that a magical ritual is being performed against him or her.

Like sorcery, witchcraft is another magical device to harm another person through supernatural means. But unlike sorcery which is a cultivated art, in witches the supposed persons who are believed to have certain inherited or inborn supernatural powers inherent in their body itself. They tend to enhance their efficacy by consuming rubbish and performing culturally disapproved acts.

Witchcraft can be viewed as a belief in a supernatural, mystical power that develops in some (usually adult) people and enables them to work evil directly, without magic or spiritual assistance. The witchcraft power is regarded as a distinct category of supernatural agency. It may fly about by itself but is ineffective unless it has a human host (Stevens Jr., 1996 cited in A.K.Sinha and B.G.Banerjee's paper 2004)

#### **B.1.6.6 Shaman:**

Shamanism comprises a range of traditional beliefs and practices concerned with communication with the spirit world. A practitioner of shamanism is known as shaman. Usually a part-time make specialist, shaman have fairly high status in his community and is often involved in healing. The shaman like the physician tried to cure his patients by correcting the causes of his illness. In line with his cultures concept of disease, this cure may involve not only the administration of the therapeutic agents but have the provision of the means for confession, atonement, and restoration into the good grace of the family. A shaman is socially recognized as having special supernatural powers that are used for and on behalf of the clients for varieties of activities such as curing divination, sorcery and recording fortunes among others.

#### **B.1.6.7 Ojha:**

The term *Ojha* is used amongst speakers of Hindi, Oriya, Bengali, and Nepali as well as amongst the Santals. The term has been derived from Sanskrit overtime. Although literal translations vary, but one such example is "who controls the spirit on Earth". In the Indian villages and especially among the tribals, *ojha* is a kind of healer for coping with the misfortunes at different circumstances. *Ojha* belongs to the first caste, the spirit leaders and teachers placed even above the king. Remedy from the capturing of ghost and snake biting are the two major fields of working. There are many *Ojhas* who still practice astrology as their traditional occupation. They are specially trained by their ancestor and the whole knowledge is transmitted verbally from one generation to other generation.

#### **B.1.6.8 Tribe:**

The definition of tribe most frequently quoted by anthropologist refers to the one presented by Winick's dictionary of anthropology 'A tribe is a social group usually with a definite area,

dialect, cultural homogeneity and a unifying social organization'. Lewis (1968) provides a more comprehensive characteristics of tribes, 'Ideally tribal societies are small scale are restricted in special and temporal range of their scale, legal and political relations and possess a morality, religion and world view of corresponding dimension' (cited in Roy Burman's book, 2003). The members of the tribe acknowledge the authority of a chief and usually regard themselves as having common ancestors.

## SECTION – C

### C.1.1 Studies on Tribal Health:

#### C.1.1.1 International Studies:

Lewis (1959) had noted that advantage in learning about the indigenous belief and practices of the community is the insight they give into the total world view which is also reflected in other sphere such as agriculture, politics and interpersonal relations.

Leslie (1967) contrasts professional and popular health culture on a different basis. He uses professional health culture to refer to the realms of practitioners in both systems, but does not include the medical sphere of folk specialist. A distinction is made between professional health culture and popular health cultures.

Bruce (1997) in his book titled 'Soul Healing' describes the chapter shamanic healing and it reveals shamanism is a religious phenomenon, restricted to Siberia and Central Asia. Shaman is a psycho-pomp (who guides souls).

Rodrigues De Areia M.L. (1998) studied medicine and traditional doctor in Central Africa. In this work the researcher clearly distinguish between the three agents of traditional knowledge, namely the diviner, the curandero (herbalist doctor) and the sorcerer.

Kaja Finkler (1998) studied two system of healing-Spiritual and Biomedicine- as practiced in Mexico. As a participant and observer of both healing regimes and their patients, he noted similarities and dissimilarities between secular and sacred healing that broaden the grasp of the two medicinal systems and result in different impacts on patients.

Chaudhuri in 2003 explained how the ecological imbalance due to unplanned and uncontrolled use of insecticides and pesticides for agricultural sector may also affect the health condition of the population. This may also affect the nutritional status of people, particularly the tribals. In Thailand he found the indiscriminate use of insecticides and pesticides killed the small fishes in the paddy field and thus the poorer families, who generally consumed this protein, were deprived of it.

Sjaak van der Geest and Kaja Finkler (2004) studied about hospital ethnography where they tried to evaluate how modern medical institutions can both reflect and reinforce dominant social and cultural processes of their societies. The authors discussed also about how modern medical views and facilities get reshaped at the presence of a particular dominant culture.

Kate Senior and Richard Chenhall (2013) studied a remote Arnhem Land Community in the Northern Territory of Australia where the authors discussed about how people perceive their health and their role in health care in their community. They also discussed about the involvement of the community members with the health clinic, traditional medicines and dependence on sorcery or witchcraft at the time of sickness.

#### **C.1.1.2 Indian Studies:**

E.T. Dalton (1872) compiled materials about the geographical settings, physical traits, economic, social and religious life of the Lepchas and Limbus of Sikkim and Darjeeling in the book 'Descriptive Ethnology of Bengal'.

Bodding made some remarkable studies on tribes. He (1940) had critically examined different traditional medicine and medical practices among the Santhals. He also observed different types of cultural norms and values behind those practices.

G.S. Ghurye found adequate place in tribal studies in his book 'The Aborigines, so called, and their feature' which was written in 1943. In the book he evaluated the status of the tribals in the Indian social structure.

B.S.Guha (1951) discussed about the overall tribal situation in India, their life, culture, economy and religion in the book 'The Tribes in India'.

Elwin (1955) tried to describe and analyze the relationship that exists between culture and tribal medicine. His study claims that there is an extremely close relationship between medicine and other sub-system like morality, religion and magic.

Marriot (1955) critically examined the cultural problems involved in introducing more effective technicians to the conservative Indian village of Krisangari. He took representative from different social strata and found out conflicts that were obstacles to the spread of western medicine.

A.K. Das and S.K. Banerjee (1962) wrote 'Impact of Industrialization on the life of the Tribals of West Bengal' which includes impact of industries on tribal culture as well as religious life among the tribes of West Bengal.

Sanyal (1973) wrote the book *The Meches and the Totos, Two Sub-Himalayan Tribes of North Bengal*. In his book author tried to emphasize the importance of the study of social, cultural, political, economic as well as religious life of numerically insignificant Sub-Himalayan Mongoloid tribe Toto.

L.P. Vidyarthi and B.K.Rai (1977) wrote an important book entitled 'Tribal Culture of India' which started with the importance of the study of Indian tribal life. That study gave a comprehensive idea of the economic, social, political and religious organization of the Indian tribes.

Buddhadeb Chaudhuri (1986) edited the book 'Tribal Health: Socio-Cultural Dimensions on Health' where the overall tribal scenario of India was discussed in detail; their problems, changing scenario, various type of developmental programme were also discussed.

Buddhadeb Chaudhuri (1990) edited the book 'Cultural and Environmental Dimensions on Health' where he compiled various socio-cultural aspects of health, food habit, socio-cultural dimensions of nutrition and growth, traditional and modern health care services, relation between health, nutrition and environment as well as health, culture and environment. Process of modernization of development in relation to health was also discussed.

Kar (1993) in a paper entitled 'Reproductive Health Behaviour of the Nocte Women in Arunachal Pradesh' attempted to enlight a qualitative appraisal of some relevant aspects of

reproductive health behaviour of Nocte women through a look at their social structure, culture, food habit, morbidity and traditional health seeking behavior.

Sarthak Sengupta (1999) edited the book 'Health, Healers and Healing: Studies in Medical Anthropology' where broad spectrums of medical anthropological perspectives were discussed. Studies on perception and conception of health and illness, traditional art of healing and the cure, medical pluralism were discussed in detail by various experts.

Buddhadeb Chaudhuri (2003) wrote an important book entitled 'Health, Forest and Development: The Tribal Situation' where socio-cultural dimensions of health, relation between environment and health, interaction of traditional and modern health care systems and concept of tribal medicine were discussed elaborately.

'Changing Tribal Life' edited book by Padmaja Sen (2003) made detailed discussion about the changing life style of the tribe. Philosophy of tribal life, concept of value and notion among the tribes were evaluated in various articles.

According to Tarafdar (2006) Rituals of different phases of life cycle (birth, marriage and death) are linked with health issues and health status of concerned population. He recorded that the use of different types of herbal ingredients, auspicious articles and special things in different rituals reflect the necessity of those in daily life for better health and protection. The Santals and the Koras are accustomed to use them not only in occasions but also for day-to-day survival.

In his study Tarafdar (2010) pointed out that the Santals and Koras of West Bengal inhabit in a close touch with adjacent dominant Bengalee culture. In terms of concept of health, disease and treatment a prominent influence of dominant culture take place and it is more intensified upon the Kora than the Santals. In various circumstances, the Kora are not even to remember or pursue their ways of traditional thinking regarding the causation of disease and nature of treatment as more exaggerate and regular interaction has been occur between the dominant culture and the Koras. Even some government initiated health care programmes also influence and alter the vision and ideas of both the tribal groups of West Bengal.

S.N. Chaudhary (2012) edited the book 'Tribal Health and Nutrition' where discussions were made on various issues related to tribal health and nutrition in India in specific context to their culture, local ecology, voluntary efforts and institutional intervention.

'Indian Tribal Life' was written by Dr. Ravi Shankar Prasad and Prof. Pramod Kumar Sinha (2012). This book included various dimensions of tribal life from health issues to developmental aspects provided by the state as part of National Policy.

### **C.1.1.3 Studies on Totos:**

Toto, a small mongoloid tribe is found to settle in a single pocket within the district of Jalpaiguri. The Totos were taken into account firstly by the British administrators. It was the British who for the first time made a serious attempt to know the socio-cultural as well as socio-economic life of different ethnic populations inhabited in the North –Eastern states of India. It was partly because of their colonial administrative policy. From their research work initially it was possible to know about the demographic profile, land holding pattern, language, economic, cultural, religious as well as social life of those secluded population. The Totos were also taken into account firstly by the British administrators during the second half of the 19<sup>th</sup> century. The existence of this small mongoloid population was revealed by a British land revenue employee Mr Krishna Kanta Bose in the year 1865 (Majumdar,1993). There after various anthropologists, sociologists, biologists made some serious work to know their livelihood along with their genetic constituents.

In course of research work regarding the early existence of the tribe, it could be asserted that the Totos were first mentioned by Babu Krishna Kanta Bose, a British Government employee of Rangpur collectorate. According to the history, this region (i.e. Totopara) was under the control of Bhutanese. The collectorate of Rangpur David Scott sent Babu Krishna Kanta Bose to Bhutan Government as an envoy in 1815. Bose however found people called Totos in a village called Lukepur under the Falakata tehasil of western Duars and not at Totopara, the present habitation of the Toto people. After the Bhutan war in 1865 the then British Government ultimately ceded the whole region to India and the Bhutan Duars Act was signed in 1868 to assume full control of the area. After revising various sources of previous work regarding the studied tribe it could be easily asserted that the only settlement of the Totos i.e. the present Totopara village was traced by D. Sunder, the settlement officer of

Jalpaiguri District. He was appointed for the settlement operations in Western Duars during 1889-1894, to take a stock of people, their lands and the crop (Sunder, 1895 cited in Bimalendu Majumder thesis, 1993). He for the first time made seven pages note about the habit and language of this small tribe.

After Sunder, J. Milligan settlement officer of Jalpaiguri District conducted the second survey during 1906-1916 among the Totos. His account on the Totos is very brief covering only two pages (Milligan, 1916). He differed with Sunder in some socio-economic aspect regarding the concerned tribe. G.A. Grierson (1909) for the first time studied Toto language; Vol: III Part I included a brief survey covering about six pages of the Toto dialect Jalpaiguri District Gazetteer, published in 1911, devoted only one page on the Totos. The third survey was conducted by B. Mukherjee during 1931-1935. He published a very brief note of only a half page on the Totos. These limited works were conducted and published in the pre-independent period.

In the post independent India there were several anthropological, sociological and biochemical enquiries which were conducted among the Totos. Among the various researchers Dr Charu Chandra Sanyal was probably the first who wrote two newspaper articles on the Totos in the year 1947. He conducted his field work during the year 1945 to 1953. In the year 1955 he again published an article on the Totos covering social and domestic life of the Totos in the journal of Asiatic Society. In 1968 Mr. Charu Chandra Sanyal wrote another report on the Totos which is known as Totos revisited (Banyajati, vol.xvi, No.4 October 1968). Language pattern of the tribe Toto was his prime area of attention. But the article was revised and republished in the year 1973 on the same journal of the Asiatic society. Later on finally in the year 1973 he published his famous book among the Totos viz. 'The Meches and The Totos: Two Sub-Himalayan Tribes of North Bengal' from the North Bengal University. Another serious publication was found in the District handbook of Jalpaiguri (1951) which was written by A. Mitra in-charge of Census operation in West Bengal (cited in Bimalendu Majumdar's thesis, 1993).

During mid 50's B.K. Roy Barman was the first who made the doctoral dissertation on the Totos. After appointing as a Tribal Welfare Officer of the District Jalpaiguri in the year 1955 he took his interest on this small forest dwelling tribe. He visited Totopara first time in the same year for some administrative purpose. Since then he continued his study on the Totos. Out of his studies he published different articles on the Totos viz. "Drama of Two Drums:

Mayu Festival of the Totos" in the year 1957; Brief Statement on the Socio- economic situation in Totopara and Perspective and Programme of Activities in Totopara Welfare Centre in the year 1957. He submitted his doctoral dissertation to the University of Calcutta in 1959 entitled 'Dynamics of Persistence and Change of a Small Community-The Toto'. After his doctoral submission he published two valuable articles; 'A Note on the Socio-Medical Survey among the Totos' in 1964, 'Hundred Years in a Tribal Village- Totopara' in 1969. Another important article viz. 'Some Aspects of Toto Ethnography' was published in the Bulletin of the Cultural Research Institute in the year 1964 which was appended by K. Chattopadhyay and P. Chakrabarty under the supervision of Dr. B.K. RoyBarman.

In the year 1969 another important monograph 'The Totos' was published by Amal kumar Das, Deputy Director of Cultural Research Institute. The article was published by the Scheduled Castes and the Scheduled Tribes Welfare Department of the Government of West Bengal. The history of the village, physical feature, demographic features religious and cultural life, village organization and also the disease pattern were briefly covered in that article.

Other than the above articles various Bengali articles were published about the Totos. In the year 1972 Santosh Kumar Bhattacharjee, the Welfare Organiser of Totopara published 'Totoder Katha'; 'Toto Upajatir Pujaparban O Samajik Riti Niti' was published by B. Majumdar in 1978; 'Toto Upajatir Samaskritik Pariprekshit- Vyadhi O Chikitsa' by Dr Bimalendu Majumdar in 1983; Debendranath Dhali published a small booklet 'Toto' in 1987; 'Uttar Banglar Toto Upajati O Annanno Prabandha' by Pabitra Gupta in 1988.

In 1990 Divisional Commissioner of Jalpaiguri district Smt Kalyani Chowdhuri seriously thought about the problems of the Toto community. Nitai Mukherjee gave a newspaper report on Totopara in 1994 ('Dainik Basumati' 14<sup>th</sup> August 1994). In response to Smt Chowdhuri's request Anthropological Survey of India send a research team in Totopara led by two famous anthropologists, B.N. Sarkar and Dr. R. Bhattacharjee. After a large investigation they concluded that the Totos were in a way of extinction, but there were no such crude genetical reason behind that. Their traditional cultural practices and the processes of livelihood were found to be responsible.

Bimalendu Majumdar is renowned for his research work on the Totos. After publishing various research articles on the Totos in different journals he published his book on the Totos

viz. 'A Sociological Study of the Toto Folk Tales' in the year 1991. He submitted his doctoral dissertation 'Cultural and Economic Transformation of a Small tribe in the Sub-Himalayas- a study of the Totos' to the University of North Bengal in the year 1993.

Manibrata Bhattacharya is another famous anthropologist who worked on the social transformation of the Toto society (Toto at the Cross Roads, 1998). In his book Dr. Bhattacharya went through a detailed demographic analysis. He also discussed about the land crisis and the changing scenario of the cultural practices of the Toto society.

Pinak Tarafdar worked on the traditional health care practices among the Totos (Traditional Healthcare Practices among the Totos of Totopara, District-Jalpaiguri, West Bengal, unpublished UGC Minor Research Project, 2008-2010). He made detail discussion about health, disease and traditional treatment procedure among the Totos. He also discussed about the relation between health, forest and nutrition particularly in the context of Totos.

### **C.1.2 Scope of the Study:**

The traditional tribal societies in India as well as in the world differ from region to region due to various ecological settings, socio- economic and socio-cultural reasons. The tribal communities of India differ considerably from one another in race, language, culture and beliefs in their myths and customs, and present a spectacle of striking diversity.

The social as well as biological functioning of the human being is much shaped by culture. Particularly in case of tribal societies the world of tribal medicine is largely non-classical and traditional. The main body of medical knowledge existing in the belief and practices is cultural, that is handed down from one generation to another. In nature, it is magico-religious, but always including some empirical elements. It not only gives an idea about the social solidarity of a community but it also gives an idea about the process of traditional way of treatment and how it differs from one community to other community.

So, the overall improved health situation of India can only be achieved through the improvement of the tribal health scenario of our country which contributes to the multiculturalistic attributes of our nation. This present medical anthropological enquiry is made to explain the concept of health, disease, medical system and medical belief related religious practices, diagnosis and traditional way of treatment among the Totos of District

Jalpaiguri, West Bengal. It will also highlight the issues of the modern health care facilities, infrastructure and implementation of different treatment procedure and introduced health care programmes among the said population and area.

### **C.1.3 Aim of the Study:**

- (a) To examine the condition of Primary Health Centre (PHC), Sub-centres, Block Hospitals, District Hospitals.
- (b) To find the actual health scenario along with the disease pattern of the concerned Primitive Tribal Group which will help the Government while formulating health policy for the primitive tribal people.
- (c) Documentation of traditional knowledge in health and medicine is urgently necessary. This knowledge could be proved helpful for further development of Ayurveda, Homeopathy and Allopathy in an integrated manner.
- (d) To find and access solution to reduce human suffering and minimize the cost of treatment (including diagnosis and prescribed medicine).
- (e) To put more emphasis on eradicating some diseases; especially malaria.
- (f) More seriousness should be taken for giving immunization programmes, vaccination programmes, and maternal care before and after delivery.
- (g) Studies will also enlighten the legal and policy formulation involving protection of traditional knowledge.
- (h) The study will also try to find out possible way which will help to eradicate the social as well as health problem without affecting the ideology of the studied community.

#### **C.1.4 Objectives:**

Objectives of any anthropological enquiry orient mainly through improving the quality of life of the community people, at the same time helping for initiating further developmental programmes. The present study deals with the health condition and treatment of different diseases among the Toto people of the Totopara village of District Jalpaiguri. All the data on different health aspects are collected by visiting Totopara. Along with the traditional medical practices the present study observed the impact of modern health care programmes. The objectives of present study are to organize and present the relevant data which establishes the correlation between different variables. The specific objectives of the present studies are as follows:

- (a) To collect and analyze the data on different types of conception about disease, healing practices and traditional medicine among the Primitive Tribe Toto.
- (b) To examine the different magico-religious healing practices prevalent among them and to understand the role of magico-religious healers in the village.
- (c) To reveal the ethno-medical implications of their herbal medicine.
- (d) To evaluate the role and working of the traditional medical practitioner.
- (e) To know the relation between herbal medicine and forest.
- (f) To know their acceptance and dependency towards modern medical system.
- (g) To examine the accessibility of modern medical system.
- (h) To assess the role of medical personal, quack, officers, and staff in the Sub-centres, PHC, Rural hospital, State General hospital in the health care programmes.
- (i) To study the different types of preventive and promotive health care services followed by the various Government agencies such as ICDS.

- (j) To study the actual condition of drinking water and sanitation of the area.
- (k) Special attention is given to the condition of family planning and its traditional and modern ways.
- (l) To evaluate the modern health care programmes provided by PHCs, Sub-centres, Block hospitals and Sub divisional hospitals.
- (m) To observe the health consciousness among the present generation.
- (n) To study the present health hazard faced by the population.
- (o) To evaluate the interaction between the knowledge of traditional health care practices and the modern medical facilities and programmes.
- (p) To evaluate the health facilities and communication factors of the sub divisional hospital.

#### **C.1.5. Hypothesis:**

Considering the objectives of the present study the following hypothesis can be framed;

- (a) Concept of health, disease and treatment among the concerned population may vary due to different age, sex, education, economy, environment and communication. Further, in various causes of "ailment" may leads to different categories of treatment procedures. The variation between male and female is also another important criterion.
- (b) Tribal patients may psychologically assured by the techniques of treatment applied by the traditional healers as both of them are sharing the same cultural milieu.
- (c) Dependence and assurance of traditional medical system and lack of proper infrastructure and less communication of modern medical system may influence the population to show deep concern about the former than the latter.

- (d) Imposition of different forest laws may restrict the accessibility of herbal medicines which adversely affect the traditional health care practices. Deforestation and commercial afforestation may be added criteria in this regard.
- (e) In the tribal areas the fruitful treatment of various disease by the modern medical practitioners are possible when they know the economic, educational and cultural background of the community.
- (f) Success of different health care programmes may depend upon the ideologies of the concerned population; some health care programmes may be accepted by the population while other may not succeed up to the desired level of the Government.

#### **C.1.6 Selection of the Field:**

As the present study was done exclusively on the health behavior among the tribal population; it was necessary to select a tribe which is not only the indigenous population of this country but who also fulfill all the other important characteristics to be a tribe. So, the Totos, one of the three Primitive Tribal Groups (now known as Particularly Vulnerable Tribal Group) in the state of West Bengal was chosen for its tribal dominating character as well as it's prolong inhabitation in the same region. A rich forest resource and ethnic composition of that region was helpful in studying the ethno-botanical knowledge of the said area and at the same time social transformation of the concerned population.

The village was selected considering the scope and objectives of the proposed study. Totos, the only PVTG of North Bengal are concentrated in the northern borders of the state under Madarihat block which is 96.56 km from the Jalpaiguri town. The village is known as Totopara. Presently they have a population of 1170 of which 635 are male and 535 are female i.e. having an unequal sex ratio (Tribal Welfare Society, Totopara). As they are living in the area since long before, so, it seems to be that an effective traditional health care practices support them to sustain in an inaccessible environment. The present work will orient through the health condition of the Toto population emphasizing specially on their traditional medical system, traditional belief towards good health, traditional medical practices, magico-religious belief and practices.

The Totopara Mouja is divided into six segments. These segments are 'Dhumci gaon', 'Mitran gaon' Puja gaon 'Mondal gaon', 'Panchayat gaon' and, 'Subba gaon'. All these six segments of Totopara were situated on the slop of the Teding hill. Dhumci gaon is situated at

the top of the hill and Mondal gaon and Panchayat gaon were situated in comparatively plain area.

Dhumci gaon was situated at the longest distance from the said market centre and health facilities were negligible in comparison to the other segments of the village. There were 33 number of Toto families resided in the Dhumci gaon. Very ill- equipped communication was observed. The absence of modern medical practitioner was another criterion.

Mitran gaon was situated at the West direction. The distance from the market place and PHC was shorter than Dhumci gaon but longer than the other segments of the village. Total 29 number of Toto families resided over there. There was no modern medical practitioner but quack and traditional medical practitioners were quite available. Ill equipped communication was observed.

Puja gaon was located at the North- East direction of the village. The distance from the market place and PHC was shorter than the Dhumci gaon and Mitran gaon but longer than Panchayat gaon, Subba gaon and Mondal gaon. The total numbers of Toto families were 22. There was no modern medical practitioner but quack and herbal medicine men were available. Communication was not good enough but better than above two sectors of the village.

Mondal gaon was situated at the South direction of the village. The market place and PHC was situated at the shortest distance. A small rivulet demarcated the Mondal gaon from Subba gaon. The total numbers of Toto family resided in Mondal gaon was 24. The inhabitants of the Mondal gaon could readily access the only medical practitioner of the village who was appointed in the local PHC.

Panchayat gaon was the southward directed section of the village. The highest numbers of Toto families were found to reside in the Panchayat gaon. Primary Health centre was located in the Panchayat gaon. The market place was situated at the shortest distance than that of Dhumci gaon, Puja gaon and Mitran gaon.

Subba gaon was the middle section of the village. The market place was situated at the shortest distance but the distance of PHC was longer than the Panchayat gaon and Mondal

gaon. The total numbers of Toto families were 68. Although modern medical practitioner was not available but quack, herbal medicine men were available.

### **C.1.7 Research Methodology used in the Present Study:**

Any scientific enquiry requires proper methodology for achieving exact goal. The scientific methodology should be specified, so that the other researcher could easily understand the desired result and propagate the research work.

The study was conducted in all the segments of the tribal village Totopara, Block Madarihat, District Jalpaiguri. The village was selected according to the previously selected criteria. The Primitive Tribal Group Toto was the target population in this study.

A pilot survey of the village was done during October-November, 2009. The Toto people have their own dialect but they do not have their own written language. It has been found that due to prolong interaction with the Nepalese a large segment of Toto population can speak in Nepali. They were unable to speak Hindi, Bengali or English. A small section of Toto population was found to speak Bengali. So, for conducting the field work in-depth it was necessary to take the help of an interpreter. The field work was conducted into various phases; it was started from the above mentioned time and date and extended up to December 2012. There were six divisions of the total field work. Two to four times of field work were done under each division as per the requirement.

Six village sectors were categorized into two categories depending on certain parameters like communication, distance from Primary Health Centre etc. Category-1 village sectors were located farthest from the said market place and from the only modern medical institution (Totopara Primary Health Centre). So, limited health facilities were available in close proximity. Very ill equipped communication was noticed to the local Primary Health Centre (PHC) or any other place. The absence of quack was also additional parameter. Three village sectors were chosen under this category viz. Dhumci gaon, Mitran gaon and Puja gaon.

Category-2 village sectors were nearest to the modern medical institution and market place. Communication was good in comparison to the category-1 village sectors. Three village sectors were chosen under this category viz. Mondal gaon, Panchayat gaon and Subba gaon.

### Categorization of the sectors:

Types	Sectors	Criteria
Category- 1	Dhumci gaon	1. Distant from market, PHC, Bank, school. 2. Less communicative.
	Mitran gaon	
	Puja gaon	
Category- 2	Mondal gaon	1. Close to market, PHC, Bank, school. 2. More communicative.
	Panchayat gaon	
	Subba gaon	

#### Division 1:

At the first time the general observation of the village was done along with the completion of Preliminary Scheduled Form (PSF). The details of that form are given in the forth coming sections of this writing.

#### Division 2:

Case studies of the disease affected persons were taken on the basis of sample and according to the pre-settled requirements. For the time constrains and limitations of the study only last five years diseases or related misfortunes affected persons were considered for evaluation.

**Sample Table**

Sex	Income Category	Traditional	Modern	Both
Male	Lower	1	1	1
	Higher	1	1	1
Female	Lower	1	1	1
	Higher	1	1	1

#### Division 3:

Detailed open structured interview was taken from the medical personal including the traditional medicine men, magico-religious practitioners, quack, and modern medical

practitioners (doctor appointed in the local Primary Health Centre, nurses of PHC, compounder, health workers of the PHC) of the village.

**Division 4:**

Evaluation of the Government projects and schemes viz. ICDS, Pulse Polio Programmes etc. detailed structured interview of the ICDS workers.

**Division 5:**

The actual infrastructure of the only Primary Health Centre of the village was studied in detail.

**Division 6:**

The actual situation of the Block Hospital, District Hospital and the other Government or non-Government institutions from where the studied population takes medical help was evaluated. Condition and situation of diagnostic centers and medical shops were also observed by the researcher during that phase of field work.

***Preliminary Schedule Form:***

There are seven sub sections in the Preliminary Schedule Form. At the first phase of field work the data were collected through the Preliminary Schedule Form. Each house hold of the village was covered while taking data through PSF.

The quarries of the form are as follows-

**1. General Information: (family level)**

(a) Serial No (b) House Hold Number (c) Village Segment Name (d) Informant Name (e) Age (f) Clan Name (g) Name of the Clan Deity (h) Date.

**2. Demographic Information: (individual level)**

(a) Name (b) Sex (c) Age (d) Relation with head (e) Civil Condition (f) Age at marriage (g) Occupation (h) Education.

### 3. Information Regarding Present Work: (individual level)

- Birth place ( home/ PHC/ hospital)
- Who attended ( midwives/ doctor/ nurse/ health worker/quack)
- Disease in last five years.
- Way of treatment ( traditional/ modern/ both)
- *Institution/ person consulted.*
- Distance of it.
- Procedure of treatment (traditional/ modern/ both )
- How long the treatment exists.
- Result ( cured/ not cured/ still treatment going on)
- Expense for the treatment.
- Vaccination.
- Pulse polio.
- Attended ICDS ( for pregnant mother and children)
- View regarding family planning (for married adult).

### 4. House Hold Information:

1. Number of rooms ( bed room/ kitchen/ worship place/ verandah)
2. Use of it.
3. Condition of the house (*kuccha/ pucca/ bamboo made/ wooden/ mixed*).
4. Place of keeping family deity.
5. Style of Iconography.
6. Electricity connection.
7. Sanitation.

### 5. Information Regarding Domestic Animal:

- (a) Type of domestic animal.
- (b) Their shelter.
- (c) Disease of domestic animal which directly affects the family members.
- (d) Diseases caused by the domestic animals.

## 6. Health Particulars:

- (a) Source of drinking water ( summer/ rainy season/ winter)
- (b) Sanitation (bathroom/ open field).
- (c) Source of water. (bathing purpose; washing and house hold work)
- (d) Daily food habit (morning/ afternoon/ evening) and food consumption practices.
- (e) Food pollution.
- (f) Food preservation.
- (g) Consumption of liquor; smoking habit; prevalence of tobacco and beetle nut (individual level)

## 7. Economic Information: (family level)

- 4. Land holding (home/ agriculture purpose)
- 5. Income.
- 6. *Expenditure.*
- 7. Economic help. (Given by Government/ Non Government agencies).

## 8. Socio-Cultural and Religious Life Related Information: (family level)

- (a) Religious festivals
- (b) Marriage practices.

## Case Study: (Division 2)

According to the analysis of PSF the sample of the detailed case study of the patient in all the six segments of the village were chosen. Some important categories were taken for sampling the disease affected people (in last three years).

- (a) Sex (b) Age (c) Treatment procedure. ( traditional/ modern/ both) (d) Family income.

## *Division 3:*

For the collection of the traditional healing practices the author had to face various difficulties. The traditional healers did not trust the author and to some extent misunderstood

the author. At the initial stage they thought the author might have some connection with the medical practitioner of other community. In the fear that their knowledge would not be anymore a secret one they denied to explain their indigenous medical practices. But on clarification of the nature and objectives of the study they agreed to co-operate. Gradually rapport was established and the author was able to win their confidence. Although there was an open structured interview schedule but the author had to meet them several times for collecting detail information on disease; cause, nature and types of treatment and also to observe the result of the treatment. The author had also visited the adjacent area and forest for observing the medicinal plants; the process of collection and preservation.

Open structured interview was also conducted for taking data from the modern medical practitioner. The author did not face any difficulties at this section of work. As they were very much aware about the work, the author got friendly co-operation. In various contexts they also gave valuable suggestion which were found very useful/ fruitful.

Considering the cause of disease various religious belief, function, ceremonies in life time; commonly observed religious practices, rites, rituals to cure the disease; the magical beliefs within the community regarding well-being as well as for the death of the community people were also observed. The combination of herbal medicine and modern medicine with magico-religious healing processes had also been covered.

The role of traditional as well as modern three- tier Panchayat were important in the present study. The head of the traditional Panchayat *Gapu* and the other members gave valuable information regarding present work. The role of the Panchayat offices including pradhan, members, and staff were also conspicuous in the present study. The active participation and co-operation of the above said people helped the author to gather information regarding various aspects including various Governmental schemes and implementation, as well as constrains and drawbacks about Ballalguri Gram Panchayat. Interview with the concerned Block Development Officer were also added criterion in this phase of field study.

Focused Group interview was also taken at various phases of field study. The villagers gathered at least twice a week at the local market place. It was very good conductive time for researcher to collect data directly from them.

The researcher visited almost all the recreational place, meeting place, religious place (*Demsha*) several times for collecting detailed data. The researcher's participant observation in various magico- religious healing practices, rites and rituals enable her to gather various information regarding health issues of the community people. The researcher has also taken some herbal medicine given by the traditional healer for coping with some severe diseases like malaria, acute dysentery, jaundice etc.

#### **C.1.8 Data Analysis:**

Primary source of data regarding the present study were confined to Primary Schedule Form (PSF), open and close structured interview of the disease affected persons (last five years), open structured interview of the traditional medical practitioners as well as modern doctors, health officials of the block and district hospitals, nurse, health workers, ICDS workers, pharmacists and so on. Participant observation in the field diaries were also served as a primary data source.

Secondary sources were taken from Census of India (1991; 2001), District Gazetteers (Jalpaiguri), Totopara Welfare Society, Totopara, various valuable books, papers and journals on Medical Anthropology from the Library, Department of Anthropology, North Bengal University. The researcher visited various libraries in Siliguri, Jalpaiguri, Cooch Behar, Alipurduar for collecting relevant information from books, journals, encyclopedias, dictionaries, scientific journals. The researcher also took the help of various internet sites. Maps illustrating the location of the largest as well as only the studied area have also been included where ever needed.

The data were two types viz. qualitative and quantitative. All the data were analyzed and tables were analyzed and prepared manually.

### **C.1.9 Organization of the Thesis:**

The thesis is divided into five chapters.

#### **Chapter 1: Introduction**

This chapter mainly deals with the basic components of health, disease and treatment along with the conventional idea about Medical Anthropology. This chapter also highlights the role of cultural anthropology in studying health care practices. From this section one can get an idea about the outline of the health and different Government policies for the tribes along with the problems of its implementation. Analytical discussion is given on scope, objectives and hypothesis of the present study. Methodological section gives a detailed idea for understanding the framework of the study.

#### **Chapter 2: The Village and the People**

Understanding about the village and the people is the prime objective of this chapter. A detailed idea about the studied village and people is given including the demographic profile of the people. From this chapter one can know about the socio- cultural life of the studied tribe. A short note about the State, District and Block is also given for better interpretation.

#### **Chapter 3: Health and Disease: Traditional Way of Treatment**

Traditional concept of health and disease as well as the indigenous way of treatment among the studied tribe is given in this chapter. In this chapter reader can go through the supernatural beliefs regarding health and well-being of the community member along with the procedure of appeasement of different deities for protection from various diseases. Role and activities of the traditional healers are also demonstrated in detail. Knowledge about the indigenous medicine occupies a crucial part in this chapter. Case studies of those patients who avail the traditional medicine in different circumstances are also a vital portion of this chapter.

## **Chapter 4: Modern Health Care Facilities and Programmes**

This chapter is started with the discussion about the health scenario of the country and the different Government policies formulated for the upliftment of socio- economic status of the Indian tribal population. At a glance the health infrastructure of the country can be helpful for understanding the forth coming section. A discussion is also made on the overall tribal health problem.

The actual condition of the Primary Health Centre (PHC), Sub-centres, Block hospital and State General Hospital is discussed in detail. Within this chapter a small section is made to evaluate the role and activities of the modern medical practitioners, nurses, staff, and health workers. Case studies of those patients who availed the modern medical facilities in different circumstances are a vital portion of this chapter.

## **Chapter 5: General Observation and Conclusion**

In this chapter a general discussion is made on the above said aspects along with the possible suggestive measures.

## CHAPTER – II

# THE VILLAGE AND THE PEOPLE

## **2.1 Introduction:**

The first chapter represents a brief lesson on Medical Anthropology and its importance to study the health behavior of the tribal world. The aims and objectives of the present study were stated in detail to understand the scope of the present research. An overall view of the state, district and sub-division are also given for better understanding about the people and location of study.

It has been stated that the study was based on a single tribal village inhabited by the only Primitive Tribal Group (now known as Particularly Vulnerable Tribal Group) of North Bengal viz. Toto. To reveal the whole scenario according to the research enquiry, it is necessary to know about the basic information of the particular village and the people. This chapter will enlighten the background of the village Totopara and the life of the village people. The brief analytical description of the village and the people will provide better understanding of the upcoming chapters.

## **2.2 Locale of the Study:**

As the present study was conducted among the Totos of Totopara village of Madarihat Block, Alipurduar Sub-Division, District Jalpaiguri, West Bengal, so to apprehend the location and surrounding environment of the studied area, a discussion has been made on the basic feature of the State, District and the Sub-division.

### **2.2.1 The State: West Bengal**

West Bengal is on the eastern bottleneck of India, stretching from Himalayas in the North to the Bay of Bengal in the South. The state lies between 27°13'15" and 21°25'24" north latitudes and 85°48' 20" and 89°53' 04" east longitudes. To its north east lay the states of Assam and Sikkim and the country Bhutan and to its south west the states of Orissa. To the west it borders the states of Jharkhand and Bihar and to the North West Nepal. The state has a total area of 88,752 square kilometers. The Darjeeling Himalayan hill region in the northern extreme of the state belongs to the eastern Himalaya. The region contains Sandakfu (3,636 metres/ 11,929 feet) - the highest peak of the state. The narrow Terai region separates this region from the plains, which in turn transitions into the Ganges delta towards the south. The

*Rarh* region intervenes between the Ganges delta in the east and the western plateau and high lands. A small coastal is in the extreme south, while the Sundarban mangrove forests form a remarkable geographical landmark at the Ganges delta.

An agriculture dependent state, West Bengal occupies only 2.7% of the India's land area; though it supports over 7.8% of the Indian population and is the most densely populated state in India (population density is 904 person / square kilometer). There are 19 districts, 341 blocks and 40, 782 villages. According 2001 census, the population of the state is 80,221,171 consisting of 41,487,694 males and 38, 737,477 females. There are 11, 132, 84 children belonging to (0-6) age groups. Total rural and urban populations are 57, 734, 690 and 22,486, 481 respectively. The decadal growth rate of the state is 17.77% (against 21.54% for the country) and the population of the state is growing at a slower rate than the national rate.

**Table: 2.A Demographic, Socio-economic profile of West Bengal State as compared to India figures:**

Sl. No.	Items	West Bengal	India
1.	Total Population(Census 2001) (In millions)	80.18	1028.61
2.	Sex Ratio(Census2001)	934	933
3.	Scheduled Caste Population (in millions)	18.45	166.64
4.	Scheduled Tribe Population (in millions)	4.41	84.33
5.	Population Below Poverty Line (%)	27.02	26.10
6.	Crude Birth Rate (SRS 2007)	17.9	23.1
7.	Crude Death Rate (SRS 2007)	6.3	7.4
8.	Infant Mortality Rate (SRS 2007)	37	55
9.	Total Fertility Rate (SRS2007)	1.9	2.7
10.	Maternal Mortality Ratio (SRS 2004-2006)	141	254

Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI

**Table: 2.B. Health Infrastructure of West Bengal**

Sl. No	Particulars	In position
1.	Medical college	09
2.	District hospitals	15
3.	Ayurvedic hospitals	04
4.	Ayurvedic dispensaries	295
5.	Unani hospitals	01
6.	Unani dispensaries	03
7.	Homeopathic hospitals	12
8.	Homeopathic dispensaries	1220
9.	Sub-Centres	10,356
10.	Primary Health Centres	924
11.	Community Health Centres	349
12.	Multipurpose Health Worker(male)/ANM at Sub-centre and PHC	6051
13.	Health Worker (male) MPW (M) at sub-centres.	4215
14.	Health Assistant (female)/LHV at PHCs	300
15.	Health Assistant (male)/at PHC	225
16.	Doctors at PHCs.	810
17.	Obstetricians and Gynecologists at CHCs	38
18.	Physicians at CHCs.	107
19.	Pediatricians at CHCs	25
20.	Total specialists at CHCs	186
21.	Radiographers	127
22.	Pharmacist	830
23.	Laboratory technicians	441
24.	Nurse/ Midwives	5215

Source: RHS Bulletin, March 2008, M/O Health &amp; F.W., GOI

### 2.2.2 The District:

Ethnically diverse and culturally rich, the largest district of North Bengal Jalpaiguri was formed on 1<sup>st</sup> January 1869. The district is geographically located between 26°16' and 27°00' North latitude and 88°4' and 89°53' East longitudes. The total area of the district is 6,245 sq. km. The district has an average length of 144 km from East to West and an average breadth of 40 km from North to South. It is situated in the northern part of the West Bengal bordering Bhutan and Bangladesh in the North and South respectively. The major rivers of the district are Teesta, Torsha, Jaldhaka, Dyna, Sankosh. Maximum temperature in the summer is 30.9 degree centigrade and minimum temperature varies from 8 to 10 degree centigrade, average rainfall 3160 mm (varying between 2500-3500 mm). The average relative humidity is about 82%. The population density was 450. The district Jalpaiguri was poorly served considering the number of PHCs per 100 inhabited villages (only 7.08 numbers of PHCs per 100 inhabited villages in the District of Jalpaiguri)

The major harvested crops in the district are rice, jute and sugar cane. Jute pressing, saw-milling and match manufacturing are the major industries. Jalpaiguri is also agricultural distribution centre of West Bengal. The district is also well-known for Tea, Timber, and Tourism. 1790 sq km. area of this district is covered by forest. Gorumara, Chapramari, Chalsa and Jaldapara are the main tourist attraction places.

**Table: 2.C Important Demographic Features of the District Jalpaiguri**

Sl No.	Demographic Feature	Number and Percentage
1.	Population	3,403,204
2.	Density of Population	547(per sq.km)
3.	Male	1,753,278
4.	Female	1,649,926
5.	Total Rural Population	2,799,357
6.	Total Urban Population	603,847
7.	Scheduled Caste	36.71%
8.	Scheduled Tribe	18.87%
9.	Sex Ratio	953
10.	Literacy Rate	54.03%

Source: Census of India 2001

The district has total thirteen (13) numbers of hospitals, seven (07) welfare centres. The district is well connected by rail, road. The important and major roads are NH 31, NH 34. By road it is well connected with rest of the country. Air travel is available up to Bagdogra (Siliguri) and from there the district town is well connected by road. All the sub divisions are connected by the above said roads. The North Eastern Frontier railway is an important train route, which is passing through the district. The district is the gateway to the North Eastern states and Bhutan.

**Table: 2.D A List of Medical Institutions (District- Jalpaiguri)**

Sl No.	Category	Numbers
1.	District Hospital.	01
2.	Sub- Divisional Hospitals	02
3.	Rural Hospitals.	05
4.	Block Primary Health Centres	09
5.	Primary Health Centres.	38
6.	Sub- Centres	537
7.	Blood Banks	01

Source: Field Survey, 2012

There is another hospital, Birpara State General Hospital which is neither a Sub-divisional hospital nor a rural hospital.

### 2.2.3 The Sub- division:

The total area of Alipurduar Sub-division is 3,010 sq km. Alipurduar is a Sub-divisional municipal town of Jalpaiguri District. It is situated in the north bank of Kaljani river on the foothills of Himalayas. Alipurduar is located at 26°29'N 89°34'E. It has an average elevation of 93 metres (305 feet). There are two rivers flowing across the town namely Kaljani and Nonai.

As of 2001 India Census Alipurduar had a population of 73,047. Males constitute 51% of the population and females 49%. 10% of the population is under 6 years of age. The density of the population is 352. Alipurduar has an average literacy rate of 78%, higher than the national average of 59.5%; with 54% of the males and 46% of females literate.

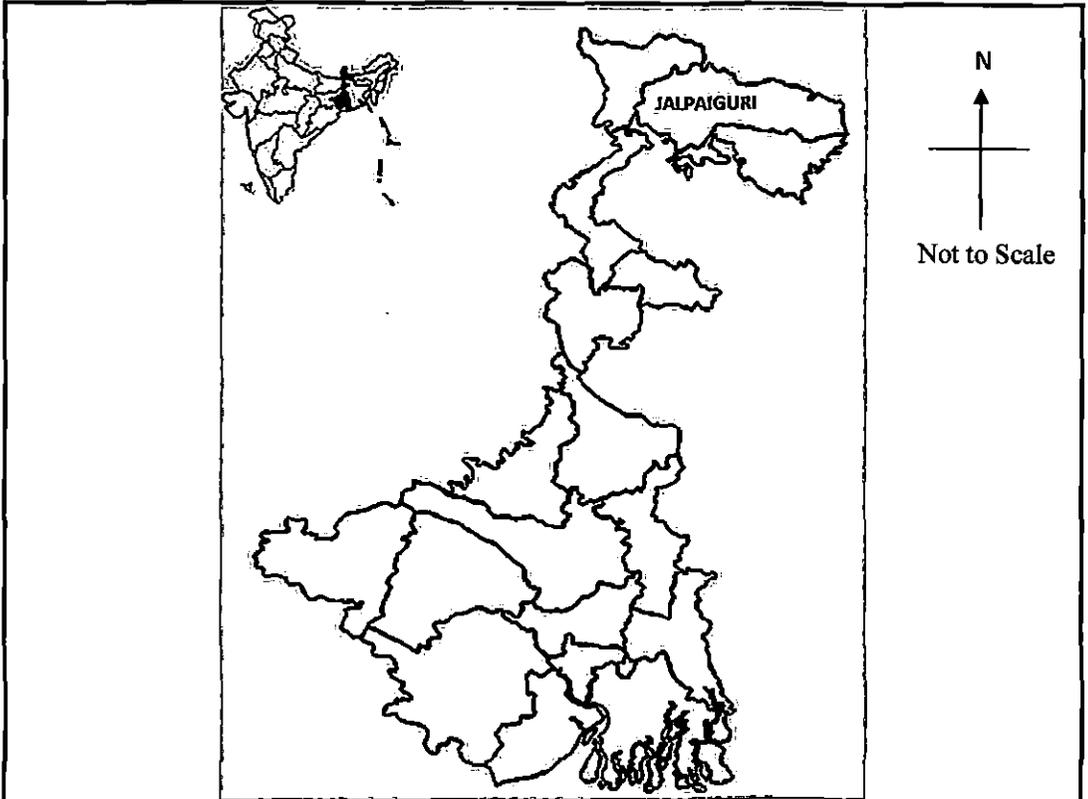
Topography of this Sub-division and its environment is characterized by uneven elevation of this region varies from 62m to 350m. The altitude falls from 350m to above mean sea level at the foot of the Himalayas to 150m above mean sea level over a distance of 25km and then falls to above 60m above mean sea level over a distance 110km further south. The climate of this area is characterized by a sub tropical and humid, the maximum, minimum temperature 37°C and 6°C respectively. The average annual rainfall is 110-130 mm. The storm rainfall is of hydro-meteorological significance inundation and flood of the area.

For a pretty longtime, a number of tribal communities have been found to migrate to this area and became the autochthones of this area. The Sub-division has high percentage of migrated populations of different cultural groups (Rajbanshis, Rabhas, Totos, Mech, Santhals, Oraons) which have created a unique cultural harmony.

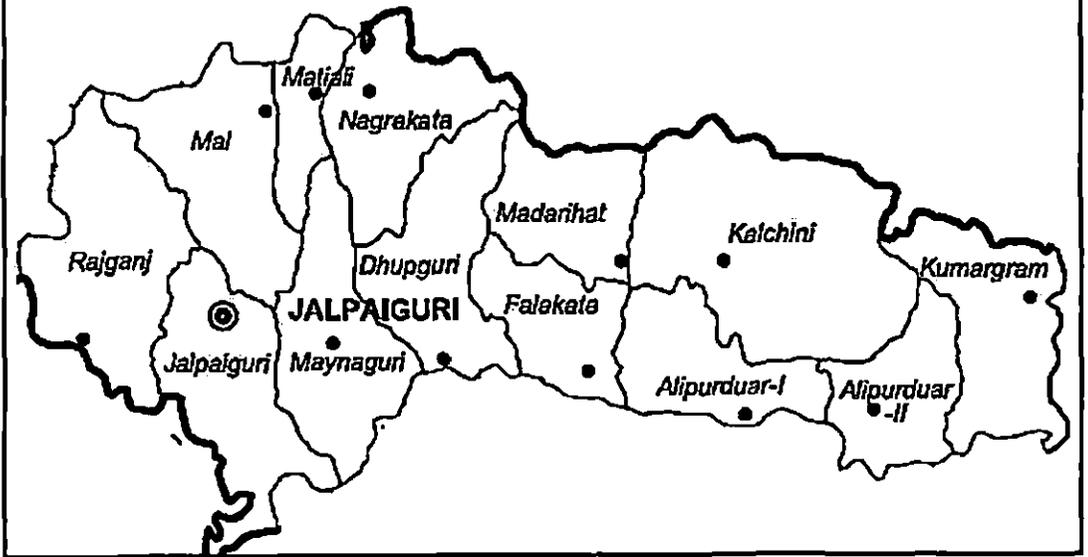
#### **2.2.4 The Block:**

The district Jalpaiguri comprises of three Sub-divisions; Jalpaiguri Sadar, Malbazar and Alipurduar. Alipurduar Sub-division comprises of six community development blocks. Madarihat- Birpara Community Development Block of Alipurduar Sub-division consists of rural areas only with 10 gram panchayats and Totopara-Ballalguri gram panchayat is one of those ten.

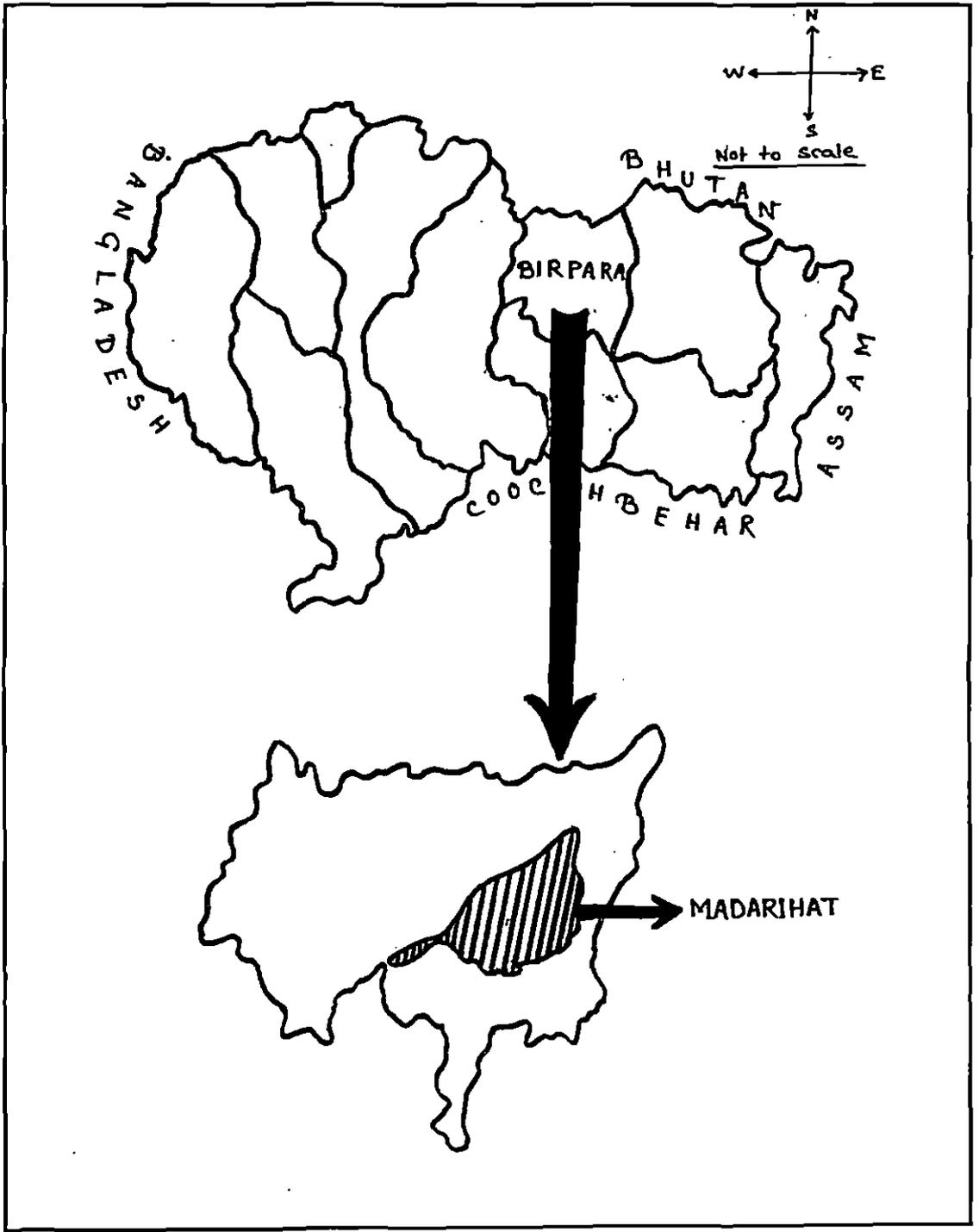
Madarihat Birpara Block is located at 26°42'00"N 89°17'00"E. The block has 47,187 populations. Rural area under Madarihat Birpara Block consists of 10 gram panchayats viz. Bandapani, Hantapara, Madarihat, Totopara Ballalguri, Birpara-I, Khayarbari, Rangalibajna, Birpara-II, Lankapara and Shishujhumra. There is no urban area under this block. Madarihat and Birpara police stations serve this block. Headquarters of this block is in Madarihat.



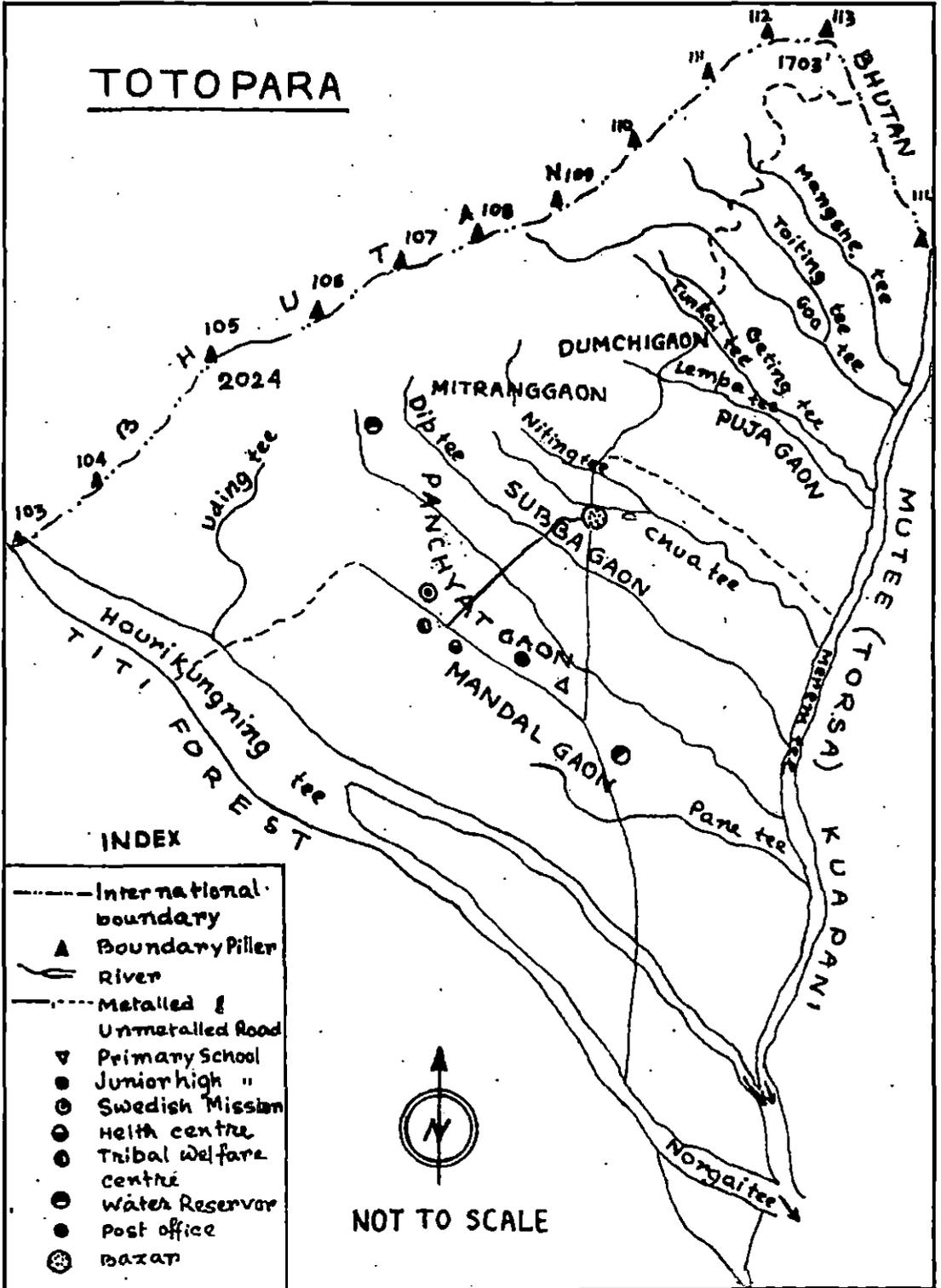
Maps of India and West Bengal  
(Source: [www.mapsofindia.com](http://www.mapsofindia.com))



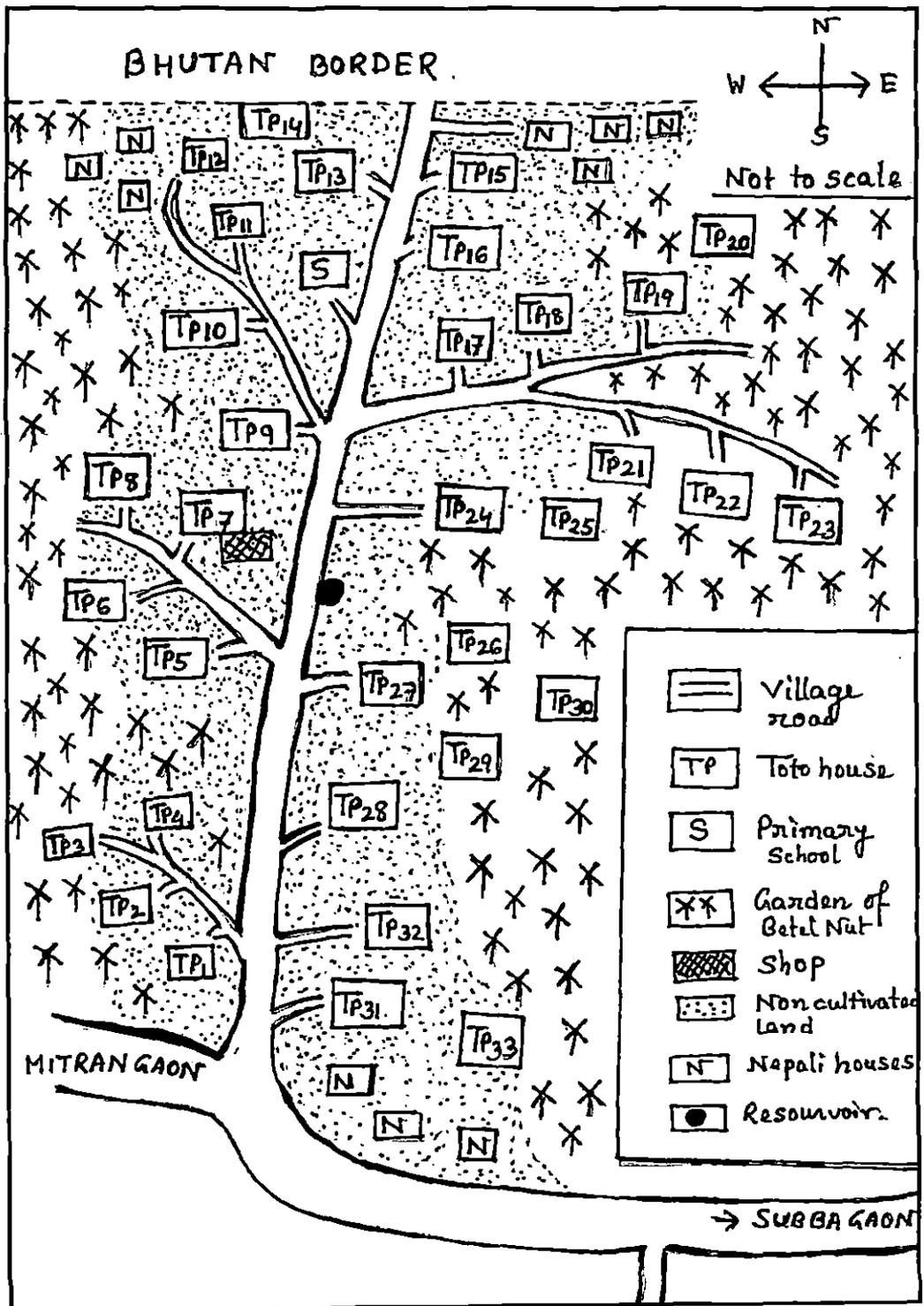
Map of Jalpaiguri District  
(Source: [www.mapsofindia.com](http://www.mapsofindia.com))



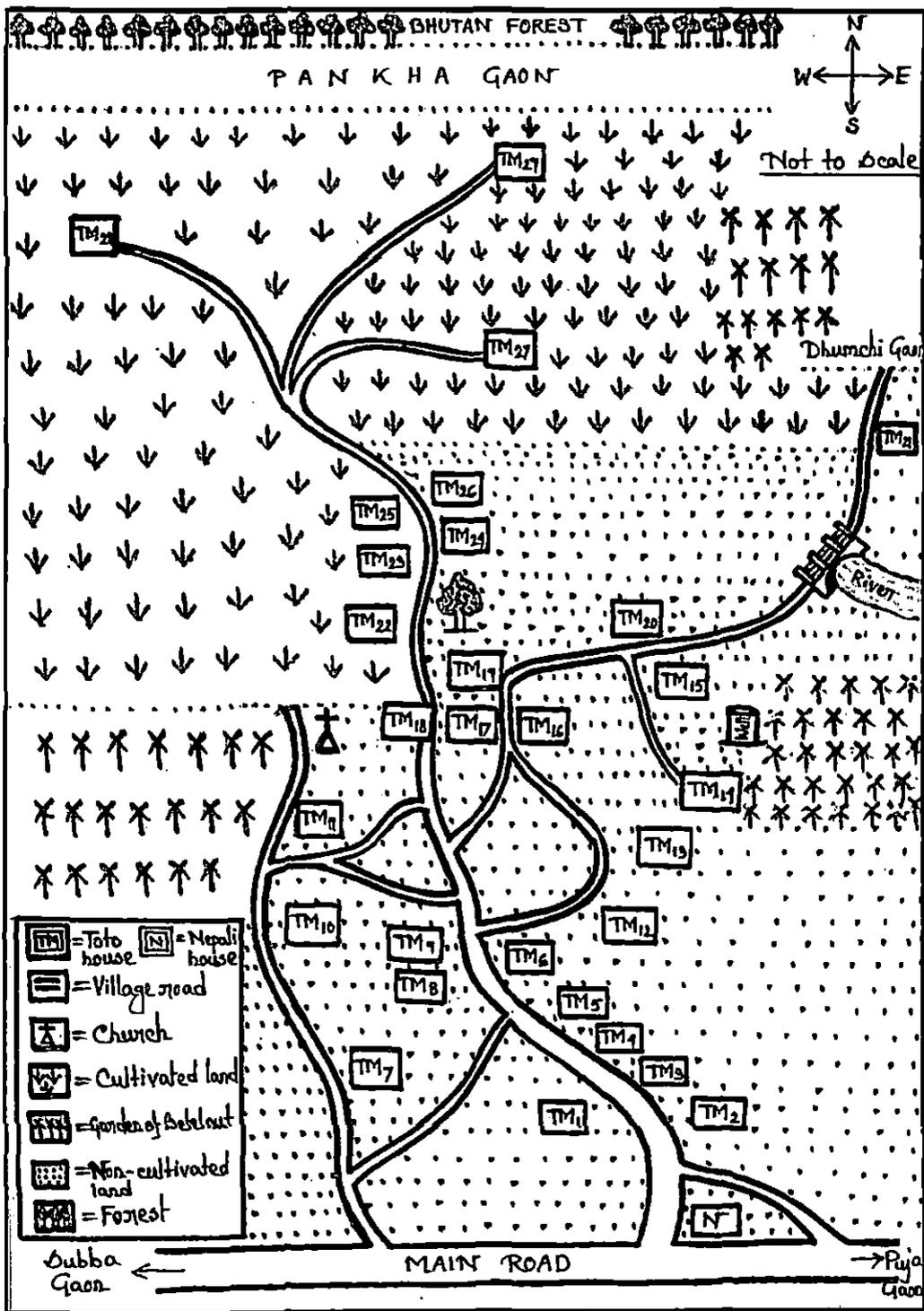
Layout of District Jalpaiguri showing the Block Madarihat



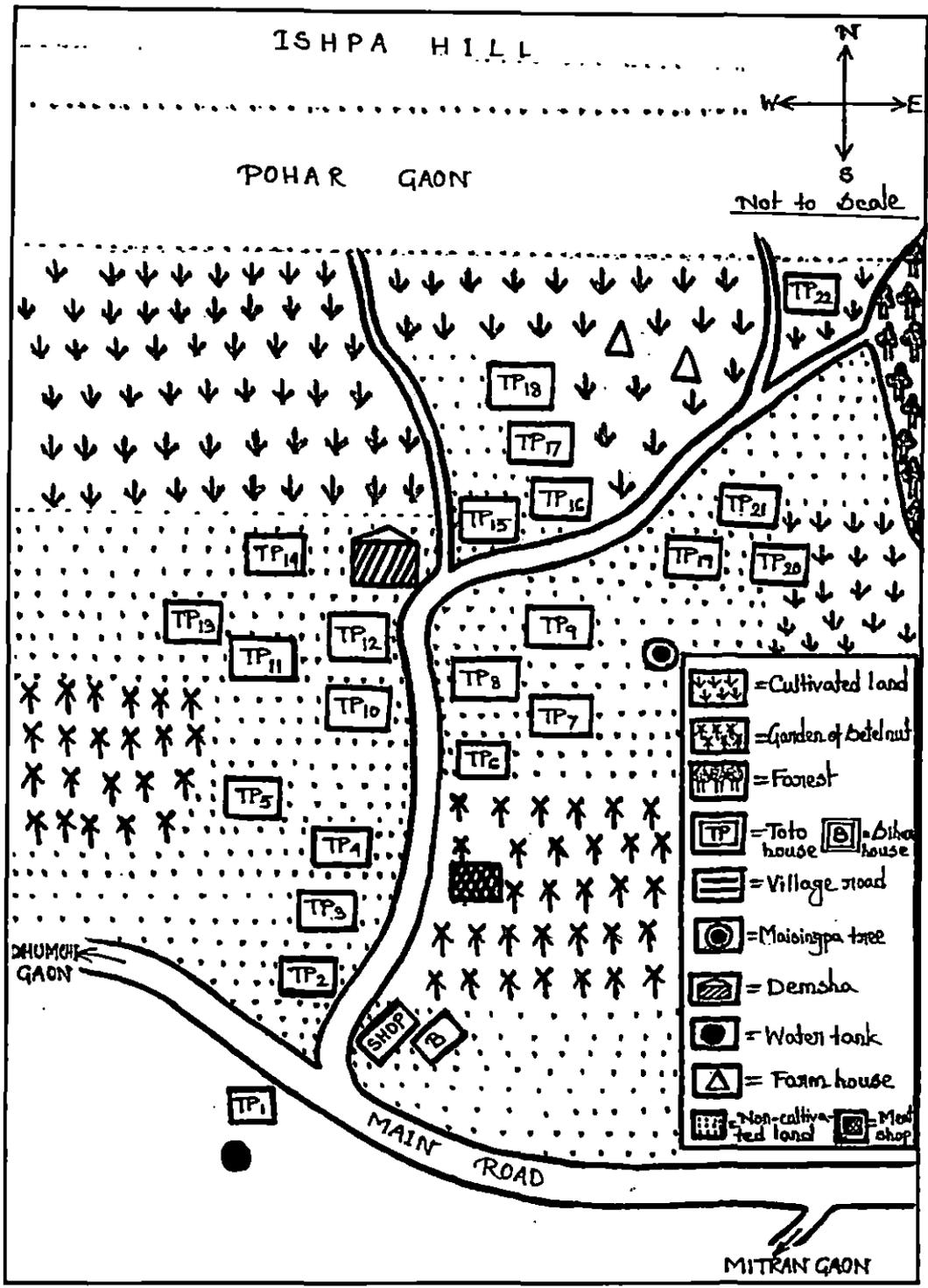
Layout of Totopara (Source: Majumdar, 1993)



Layout of Category-1 Village Sector Dhumci gaon

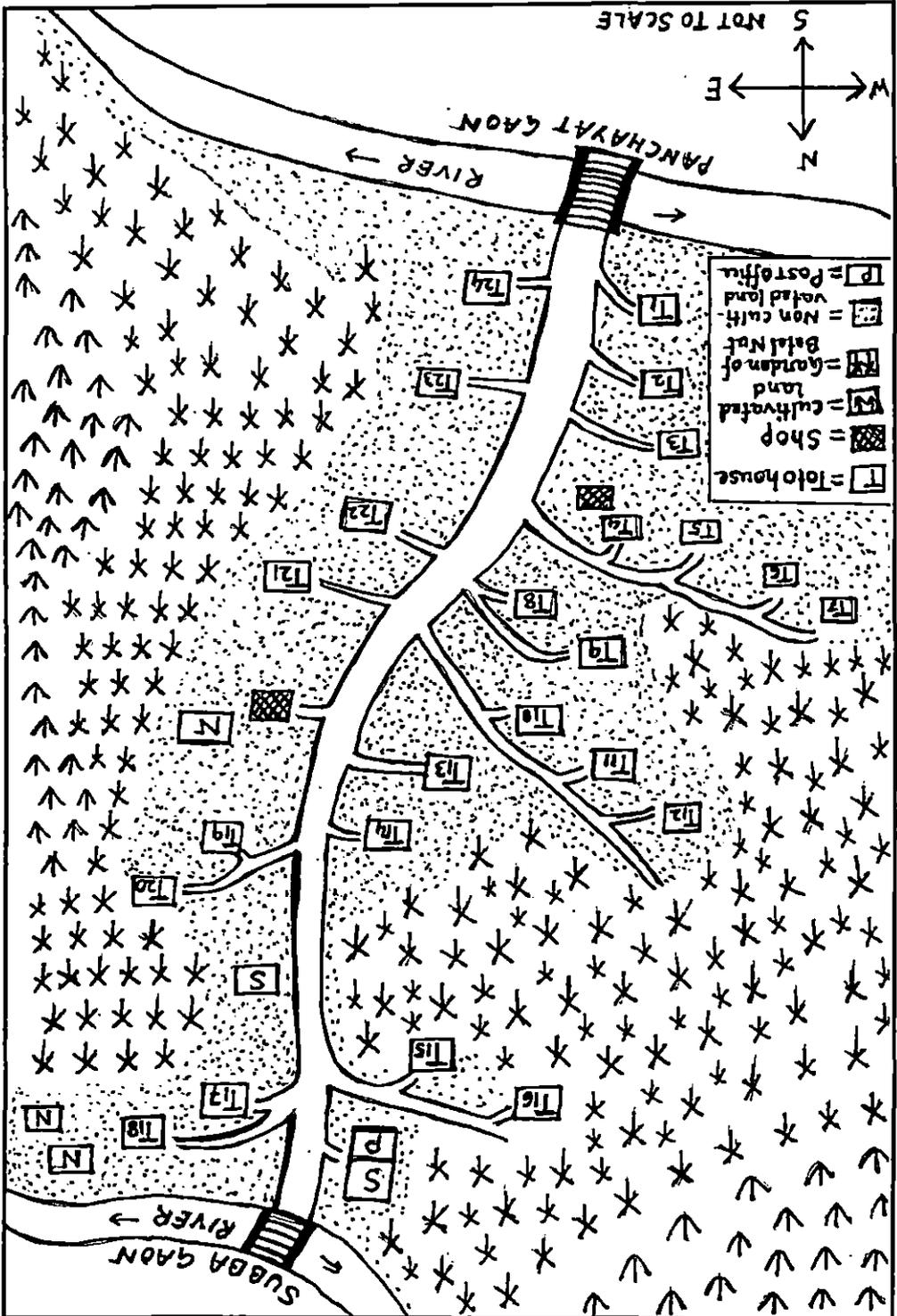


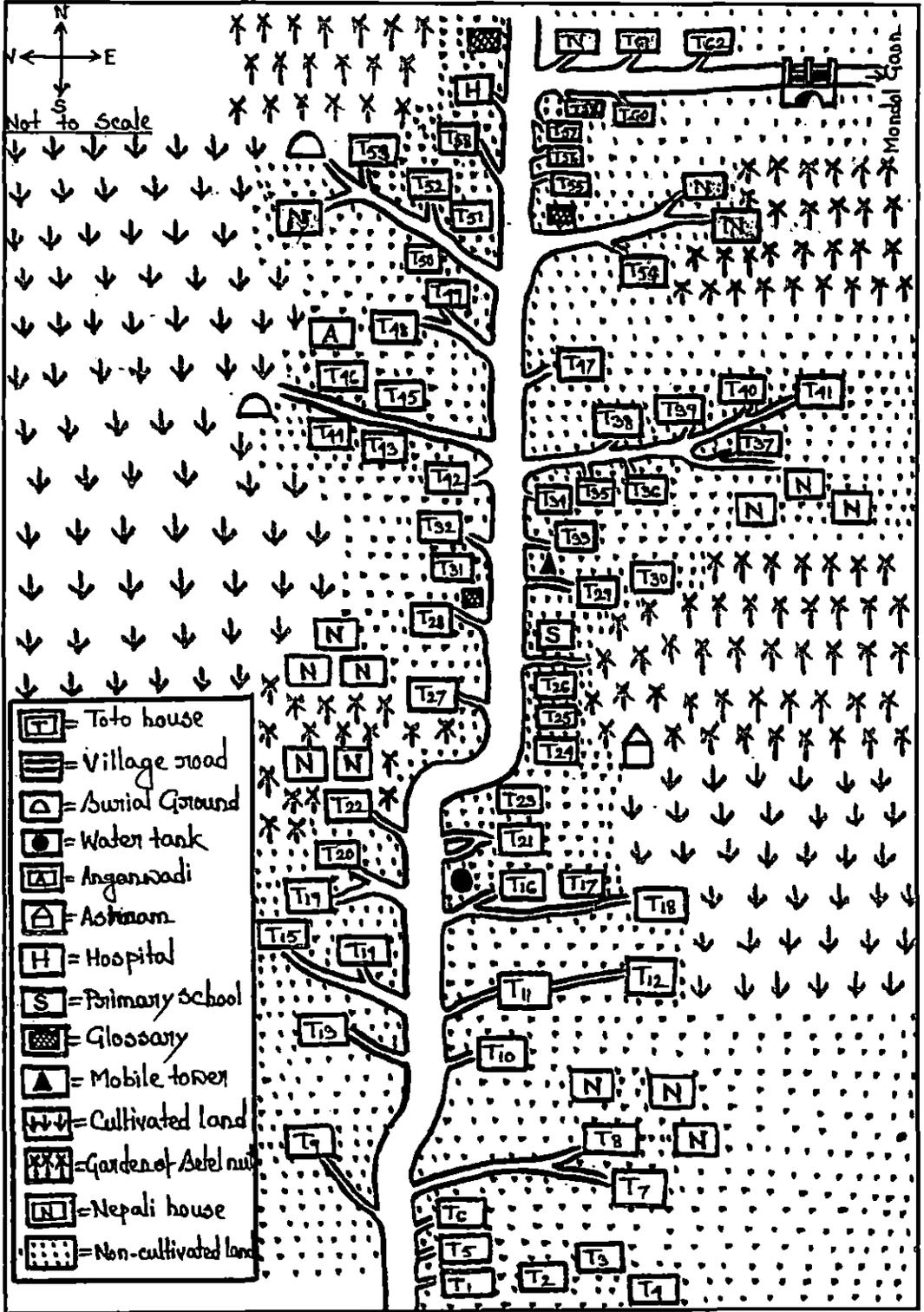
Layout of Category-1 Village Sector Mitran gaon



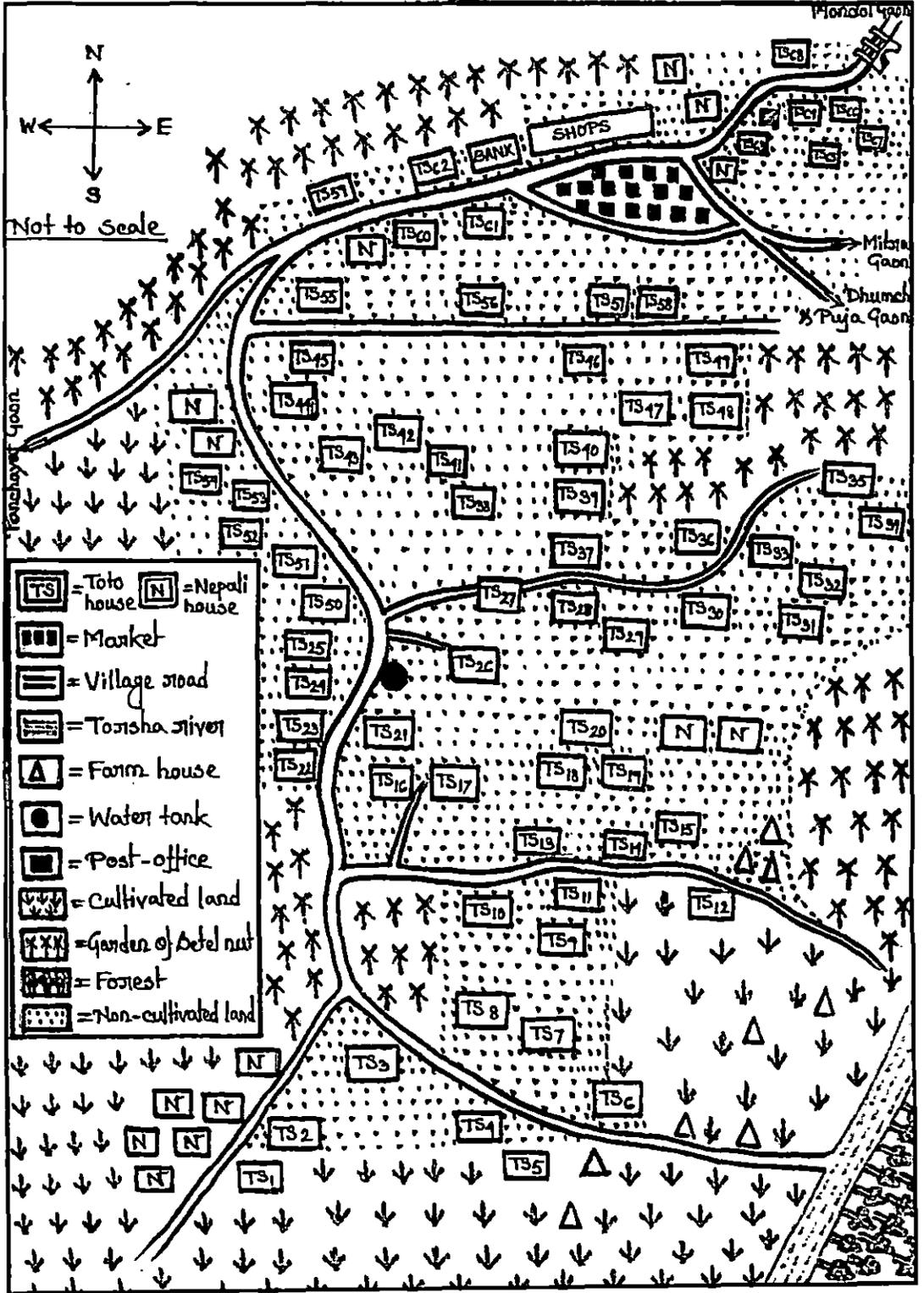
Layout of Category-1 Village Sector Puja gaon

Layout of Category-2 Village Sector Mondal gaon





Layout of Category-2 Village Sector Panchayat gaon



Layout of Category-2 Village Sector Subba gaon

## **2.3 The Village:**

### **2.3.1 Administrative Location:**

The Totos are one of the three Particularly Vulnerable Tribal Groups in the state of West Bengal. They live in the northern border of the state under Madarihat block of Jalpaiguri District. This tiny Himalayan hamlet is located at the foothills of Bhutan Himalayas (Tading hill). The administrative location of this small village can be stated in the following way.

Name of the village: - Totopara

Gram Panchayat: - Ballalguri

Block: - Madarihat

Police Station: - Madarihat (JL No.33/ Old No. 13)

Sub-division: - Alipurduar

District: - Jalpaiguri

State: - West Bengal

Country: - India

### **2.3.2 Geographic Location:**

Geographically, the village of Totopara is located within latitude 89° 20' and longitude 26° 50'. The village Totopara, the only settlement of the Toto population, has a total area of 1996.76 acre (3.12 sq. miles) of land. The northern end of the village touches Bhutan (on the south); the Torsha flows on the eastern side of the village. The village is bounded in the north by the Teding hills; Titi Reserve forest is situated at the West. The altitude of the village varies from 500ft to 2024ft from the south to north up-to the Indo- Bhutan Border. The shape of the village is trapezoid intercepted by number of rivulets. The length of the village is 2.5 miles from North to South, while the East West breadth is about 1 mile.

Madarihat is the nearest important trade centre which is located at a distance of 32 km from Totopara. The road is mainly unmetalled, spiral and it pieces through the tea gardens, forest and riverbed. To reach Totopara from Madarihat one has to cross seven rivers viz. *Titi, Bangri, Ratee, Kalikhola, Doyamara* and *Hauri*. The nearest Railway station Madarihat (32

km) and Hasimara lying at a distance of 16km. Dalgaon (Birpara) railway station is about 29km away from Totopara.

The village can be approached both from eastern and western sides. From Madarihat regular bus service is in operation through Hantapara, Ballalguri, Holapara. On the eastern side by crossing the river Torsha there is a route which is about 5km away from Totopara. There is another route on the upper stream near Bhutan border and one has to cross the Torsha river to reach the village passing through deep forest.

### **2.3.3 The Area:**

The entire area covering the Totopara was measured by various officials at different period of time. From the writing of Dr. Charu Chandra Sanyal it has been known that Totopara was stated to be 1,027.36 acres in 1866 by O'Donnell and Hodgson; 1,116.74 acres in 1889-94 by D. Sunder; 2,003 acres in 1906-1916 by J.Milligan; 1996.96 acres in 1951 by Census Survey under the Government of India.

Before 1968 total 1996.96 acres of land was recorded in the name of Toto headman Late Dhonopoti Toto. In the year 1968 only 346.25 acres of land were distributed among 89 Toto families and recorded against individual name. The rest amount of land was declared vested by the Government.

### **2.3.4. Geographical Feature of the Village:**

The Toto localities of the village was sub divided into six segments viz. Dhumci gaon, Mitran gaon, Puja gaon, Mondal gaon, Panchayat gaon and Subba gaon. The areas inhabited by the Nepalese were demarcated by Nepali names like *Mongar gaon*, *Poar gaon*, *Raigaon*, *Simadara* (or *Singadara*). The village Totopara was intercepted by various small rivulets viz. *Hauri*, *Dating-tee*, *Dip-tee*, *Kiting-tee*, *Choa-tee*, *Neeting-tee* and *Goa-tee*.

Dhumci gaon, the oldest settlement of the Totos was situated at the slop of the Tading hill. The extreme north section of the village was designated as Dhumci gaon. The Dhumci gaon segment of the village Totopara lied at the maximum altitude comparing the other segments

of the village. The total area was 275 acre. The houses situated at Dhumci gaon were sparsely distributed. The roads were mainly semi concrete or not concrete.

Mitran gaon section of the Totopara village is situated at the West. The total area of Mitran gaon is approximately 200 acre. In the Mitran gaon segment of Totopara village all the houses were constructed by making steps in the hill. The village could be said as zig-zag shaped. The main road to reach Mitran gaon was concrete but rest of inter- connected roads were not concrete. There were 2 water reservoirs to serve the purposes of water need. All the houses of Mitran gaon were sparsely distributed.

Puja gaon section of the Totopara village was situated at the North East direction. Puja gaon segment of the village acquired the name as the religious place *Demsha* was situated over there. The village could be said as 'Y' shaped. The total area was approximately 450 acre. The roads were not concrete. Recently few metal roads are constructed by the PWD. Houses were found to locate on both sides of the road. Initially two water reservoirs were constructed for the solution of water crisis. Another two reservoirs were constructed at the extension of Puja gaon viz. Poar gaon. There were two ICDS centres working in the sector.

Mondal gaon was situated at the south. The total area of the segment Mondal gaon is approximately 175 acre. All the houses of Mondal gaon were linearly arranged on both side of the main road. The main road of Mondal gaon was concrete. There were only one water reservoir and three grocery shops.

Panchayat gaon was also situated at the South direction. The total area of the segment Panchayat gaon is approximately 550 acre. Panchayat gaon was most densely populated segment of Totopara village. All the houses of Panchayat gaon were linearly arranged on both side of the road. The settlement was 'I' shaped. The main road was concrete. There were three water reservoirs, two grocery shops, Primary Health Centre, Totopara Welfare Centre and library were situated at Panchayat gaon.

Subba gaon was situated at the North East direction but it was the middle section of the village. Total area of Subba gaon was approximately 320 acre. This section was ended by agricultural land. The houses of Subba gaon were arranged in linear fashion on both side of

the road. The main road to reach Subba gaon was concrete but rest of roads was still not concrete. There were three water reservoirs to solve the problem of water crisis.

The areas inhabited by the Nepalese were demarcated by Nepali names like *Mangar gaon*, *Puar gaon*, *Raigaon*, *Simnadara*.

### **2.3.5 Geography and Physical Features:**

Although the village Totopara was under the Alipurduar sub-division of Jalpaiguri district but it experiences a little bit different climate. The Bhutan Himalayas plays an important role in the climatic condition of Totopara. The average temperature of that area was 30.9 degree Celsius 32.5 degree Celsius maximum in the summer and in the winter 8 degree Celsius minimum. The humidity of the village varies from 100-50%. Relative humidity 82% and average annual rainfall 3160mm. maximum rainfall occurs from June to September. In comparison to the surrounding places Totopara experiences much higher rainfall. The presence of Titi forest, Torsha river and Bhutan Himalayas made the climate of Totopara village very much pleasant. As the village is situated at the hilly region, the villagers follow the step cultivation and depend on rainy water for agriculture purpose.

### **2.4 Historical Background of the Village:**

The place Totopara was first time recorded by the British administrators during the second half of the nineteenth century. According to the history, this region was under the control of the Bhutanese and ultimately the then British Government ceded it to India after the Bhutan war in 1865. Bhutan Duars Act 1868 assumed full control of the area. O'Donnel and Mr. Hodgson, two British administrators for the first time covered Totopara and estimated the land as 1027.36 acres. The second survey was conducted by D.Sunder. D.Sunder, settlement officer of Jalpaiguri was deputed to survey the Western Duars in 1889-94 and estimated the area of Totopara as 1,116.74 acres. He declared the Totopara mouza as reserved and restricted for the Totos and the land was given to the *Mondal* (headman) Dhonopati Toto of the Toto community. He published some notes and articles about the people, land status and the settlement pattern of Western Duars in 1895. The third survey was conducted by Mr. J. Milligan during 1906-1916. He wrote some short notes on Totos and recorded an area of 2003 acres for Totopara where 235 individuals lived in 60 households. He also fixed a

capitation tax of an amount of Rs120 per year on the basis of sixty adults living in the sixty separate households. Gradually Totos of Totopara were brought into limelight by the British colonial administration without much interference of their tribal way of living.

After independence, in the year 1951, it was recorded that the total land of Totopara mouza was 1,996.96 acres. During the settlement operation in 1969 individual ownership of land was introduced and as per record it was noted that 89 Toto families had only 300 acres of land. The residual land which was more than 1600 acres was marked as 'khas' land. As a result, traditional land ownership system (community land) has been deleted. During 1921 census year Toto population was 271 and was living in 60 different households. In 1951 census year their population was increased to 321 individuals with 69 different houses. During 1971 census year Toto population was increased into 544. The first non-Toto settlement at Totopara was started during late twenties and by 1952 one third population of the village were non-Totos.

The Totos had a trial of migration from one place to another before them settling down in the present village Totopara (Sanyal, 1973). By examining the genealogical method it was ascertained that the present Totos migrated and have been living in this geographically isolated and culturally secluded area at least eight to ten generations ago. Their subsistence economy was depended on Sweden cultivation of millets and maize. This piece of land has become the part of Bengal with British annexation since 1868 as a revenue village of Jalpaiguri district.

Census report 1901 revealed that there were only 171 number of Toto population living in 36 different household; among them 72 were male and 99 were female. In the year 1911 the number of Toto families was increased upto 60 and the population was increased 235 individuals.

## **2.5 Origin of Totos:**

The Scheduled Tribe groups who were identified as more backward communities among the tribal population groups have been categorized as Primitive Tribal Groups (now known as Particularly Vulnerable Tribal Group or PVTG) by the Government at the Centre in 1975. So far 75 tribal communities have been identified as PTGs in different states in India. Totos are a

small Primitive Tribal Group (now PVTG) of Jalpaiguri district, West Bengal. Several available scraps of information may give a clue to the origin of the Totos. The existence of the small Toto tribe was first mentioned by a British Government employee Rangpur collectorate Babu Krishna Kanta Bose in 1815. During his journey Duars he identified a small population called Toto at a village Lukepur under Falakata Tahasil in Western Duars. This was probably the firsttime official identification of this small forest dwelling primitive tribe Toto.

There is various anthropological and sociological works done to discover the origin of the Totos. During 1889-94 Settlement Officer D. Sunder surveyed western duars. In his seven page report regarding the socio-cultural life of Totos, he wrote that the Totos were unable to say when they came, but claimed that they have been at Totopara for many generations. He also opined that they were different from the Bhutias in many respects and had a language of their own.

After D. Sunder in 1911 John F.Grunning recognized the existence of the same tribe. He wrote, "The Totos are a curious race whose village is built on a hill called Badoo, about 5miles from the Huntapara tea garden. There are only forty houses left and they do not know when they came, nor of what race they spring, though they allege that they have been at Totopara for many generations. They have a language of their own and they associate little with other races, they can only speak a few words of Bengali and it is very difficult to communicate with them" (Grunning, 1916).

In 1916, J. Milligan came to Totopara for land operation work although made no comment on the origin of the tribe while B. Mukherjee (1931) wrote in his report that Totos are "allied to Bhutias" (cited in Majumdar's thesis, 1993).

After independence, in course of census work A. Mitra (1951) wrote in his article ".....belonging to a very rare race; it lives in only one village in the wide world, has a spoken language of its own". At that time they were only 325 members. They were different from Bhutias, the Garo, the Mech, the Rajbansis among whom they lived. He also wrote that the Totos claimed Totopara as their ancestral home, at the same time they had a tradition of migration from one place to another. A. Mitra himself did not disseminate any view about the place of origin of the Totos.

From the careful scrutiny of various research works it could be asserted that anthropologists are still in dilemma regarding the origin and the migration of the tribe Toto. Probably before the Indo-Aryans reached North Bengal and Assam, a branch of Tibeto Burman group came as far as the foot of the Bhutan hills and settled in Nepal, Sikkim and Bhutan. During that period a branch of Indo-Mongoloids of Assam Burmese group speaking Tibeto-Burman language came to Assam and North Bengal and spread themselves from the Himalayas up to the seas. These two groups came into conflict several times for the political supremacy of the hills and the plains. Thus in that historical period a tribe called Tephu, probably a branch of the Bodo group took possession of Cooch Behar and then conquered Bhutan. By the middle of the Fifteenth century A.D. they were driven of the hills and a part of the plains below called the Duars, by the Tibetans who took possession of the whole Bhutan and Duars. These Tibetan rulers were called Bhutias (Hunter, Statistical Account of Jalpaiguri; and Statistical Account of Cooch Behar, 1872).

In search of political history of the region Totopara, it has come to know that this place was under the domain of Bhutan kingdom. Krishna Kanta Bose in his account of Bhutan in 1815 reported that he arrived at Poonakha in Bhutan where he came to know that at one time the place was ruled by a Raja of Cooch Behar. Dhurun Raj of Bhutan defeated the Cooch king. That political transition created an admixture between Bhutanease and Cooch population. Their descendants were called 'Thep', the son of a Bhutia and a Cooch parent (Bose, Political Mission To Bhutan, 1815, cited in Majumdar's thesis, 1993).

By taking advantage of the unsettled Government in Bengal the Bhutias carried on out rages on the people of the plains below. Since the beginning of the 18<sup>th</sup> century and by the 1765 Bhutan was supreme in Cooch Behar and required their sanction in all the administrative works (Milligan, Final Report on the Survey and Settlement Operation in Jalpaiguri District, 1919).

In 1772, Bhutan took actual possession of Cooch Behar, captured the Raja and carried him off to Bhutan. The Cooch Behar Raja appealed for help to the East India Company in charge of Dewani of Bengal, Bihar and Orissa. A treaty was signed between the Cooch Behar state and East India Company. Captain Jones was appointed to drive the Bhutias out of Cooch Behar. The Bhutias were defeated by British in Buxa and Dalimcote and were drove out of

Bengal. A treaty was concluded between the DebRajah of Bhutan and East India Company on the 25<sup>th</sup> of April 1774 by which the Raja of Cooch Behar Durdjindranarain was restored to Cooch Behar. But the Bhutias soon forgot to implement the terms and conditions of the treaty and started trouble in Bengal, Eastern Duars (also called Assam Duars) and Western Duars. They plundered the habitations or carried them off as slaves (Sunder, 1895). The oppressions of the Bhutia frontier officers had driven the inhabitants of Bengal Duars to open rebellion which was known as *Bhutan War of 1864-65*. The whole of Western Duars, then under Bhutan was annexed to India by the British by the proclamation of Annexation issued on 12<sup>th</sup> November 1865. T.H.O. Donnel demarcated the boundary between Bhutan and British India in 1866-1867 (Milligan, 1919).

The Totos cannot say anything about their origin or previous migration or the meaning of their ethnonym. A Tibetologist and author Dr. S.K. Pathak had once opined that the Totos might have migrated from Tromo-valley near the Jelep-la while famous Toto researcher and anthropologist/sociologist Charu Chandra Sanyal was tried to discover the similarities between the Sub Himalayan tribe Totos on the one hand and the Lokhe or the Bhutanese proper on the other hand. He was of view that the Totos might be a mixture of them or a different or distinct tribe (Sanyal, 1973). Michael Aris some extent also supported C.C. Sanyal. In his book on Bhutan he also narrated about a small group of similar people who lived in West Bhutan. They were known as Tak-Top and lived in the two permanent villages south of Spagra called upper and lower Toktokha. He suggested that the Totos might have ancestral link with the Bhutanese tribe Taktop (Majumdar, 1993).

After his long time research on the Totos famous Toto researcher RoyBarman came to the conclusion that before coming to Totopara, the Totos used to live in different areas in the neighborhood of Deingcho garden inside Bhutan. They did not have any territorial affiliation. They used to gather occasionally for performing different worship at *Deingcho*. After indepth genealogical study Roy Barman opined that the Toto settlement commenced at present Totopara village at least eight to ten generations ago, that approximately places the time to the middle of the 18<sup>th</sup> century. According to the historical record Bhutia domination was established on the adjacent plains of Totopara on the same period. Before the Bhutia domination the area was under Cooch kingdom. Roy Barman wrote that “.....the Bhutia used to plunder the inhabitants of the plains and carry them off as slaves. It is therefore unlikely that the Bhutia were able to maintain peaceful supply-line, through a hostile land,

especially when it was not under their control. Southward journey of the Toto for bringing rice salt etc can therefore be ruled out at that period. It was only after the Duars came under the control of the Bhutia that the problem of maintaining a peaceful supply line arose. The shift of the Totos from Deingcho area to Totopara, with in a generation of Bhutia domination of the southern plains therefore seems to have been dictated by practical necessity of the Bhutia rulers” (Roy Barman, 1961). Roy Barman also wrote that “My answer is that no traditional structure of the Toto existed at all. Toto was a new tribe- a child of Bhutia state craft” (Majumdar, 1993).

According to Bimalendu Majumdar, famous Toto researcher, Totos might have ancestral link with the Bhutanese tribe ‘Doya’. Both tribes share similar physical feature, dress pattern as well as way of living. Bimalendu Majumdar also described in detail the meaning of their ethnonym.

Sometimes the name of a community is derived from the name given to them by their neighbors. Majumdar also tried to find out the meaning of the word ‘Toto’ in surrounding ethnic environment. The word Toto in Bhutia language means an image. But the link between image and the name of the community is too far because Totos are never known to be a painter or sculpture.

The word ‘Toto-fong’ in Limbu language means roasted meat or burnt meat and from this word the name of the community could be derived i.e. the roasted meat eaters. As the meaning of the word suggests Totos also take roasted meat.

*In Rabha language ‘Tapta: P’ means quickly (district census hand book 1961) or the people who walk quickly. Again in Toto language there is a verb ‘Totowa-wang’ which means come quickly. The Totos are also well known to move fast and topography of that region also compelled them also to do so.*

From the writing of Bimalendu Majumdar we can come to know about the myth of the Totos. They were the earlier inhabitants of Cooch Behar State and used to lead a nomadic life. On those old days Toto people never used to cultivate land. They managed their livelihood on seasonal jhoom cultivation and hunting in the hills and collect gold and coppers from the stones. They bartered their collection with other villages and collect their necessities. Even at

times they paid the taxes to the king in terms of copper. Once a day, the Totos set out for hunting, but did not find any animal through out the day. Just before sun set they were able to kill a *Sambar* and returned to their shelter. Returning to their hutments a great feast was arranged and they consumed the meat of *Sambar*. They ate and drank with rice, meat and *eu* (liquor). But before going to bed their *Mondal* (headman) hung the head of the *Sambar* at the top of a big bamboo pole for the consumption of next morning. During the night the headman of the Totos was ordered by their supreme deity *Senja* to offer the same animal which they had kept in the evening. On the very next morning, the headman surprisingly found that the head of *Sambar* which had they preserved was replaced by a head of a cow. According to the instruction by their supreme God, the headman, in consultation with the community members decided to offer the cow to their God (cited in Majumdar's thesis, 1993). Probably from that period onwards offering of cow to their supreme deity was started among the Totos.

Offering of cow was restricted in Cooch Behar kingdom. As a result Totos were expelled from the state of Cooch Behar and they took shelter at Bhutan. They started living there permanently. After a few years the Totos were out raged by the Bhutias also and were taken as *zapo* (slave).

“Then one day 17 Totos managed to escape under the veil of darkness late in the night. They hide themselves for a few days to escape from being captured by the Bhutias. There after they proceeded further, and attacked a small village on the way in the night. The male members of the village were killed on the encounter. The Totos occupied the houses and captured the women of the village without much resistance. Then they started a new life on that village. According to the village elders that particular village is the present Totopara, the only existing Toto settlement in India” (Majumder, 1998). According to Majumdar, out of the 17 Totos who were able to escape from Bhutan, 13 Totos were alive after war. According to the name of that 13 Totos, 13 different clans were introduced in Toto society.

Other than Totopara there were four other villages in Jalpaiguri district viz. ‘Totopara’ (Falakata), ‘Totpara’ (Alipurduar), ‘Totapara’ (Dhupguri) and ‘Totgaon’ (Mal). D. Sunder reports of a taluk named ‘Totgaon’ in ‘Chengmari pargana’ within tahasil Mynaguri at present under P.S. Mal (Jalpaiguri). It is situated on the eastern bank of the river Teesta near its confluence with a tributary, the river Leesh, just opposite Champasuri Teesta ferry (Sanyal, 1973). ‘Totgaon’ is known as ‘Sundari basti’. Nearly 70 years ago this village was

washed because of the Teesta flood. According to Sushmita Bhattacharya there were 92 individuals lived in 17 different households. From the writing of Sushmita Bhattacharya (1995) it has come to know that among the four other villages one was situated 'Lukepur' village within tahasil Falakata on the bank of the river 'Duduwa'. Now this village is known as 'Totpara'. Charu Chandra Sanyal in his investigation came to the conclusion that areca nut cultivation was initiated by the Totos.

According to Sunder's land survey report during India Bhutan war 1864-65 Totos used to live in 'Bhatibari' village with in Alipurduar Sub-division. The third settlement of the Toto people was Totapara which was situated in Moraghat talukgram within Dhupguri Block. After his long research work Charu Chandra Sanyal came to the conclusion in 1953, once upon a time Toto people used to live in the bank of river 'Ravati', gradually were dislodged by the Meches and established a new settlement at 'Dynapari' region in Bhutan.

## **2.6 Surrounding of the Village:**

Totopara is a patch of undulating terrain situated at the foot hills of Eastern Himalayas in Western Duars. The village is about 23km north of the Madarihat police station. The Torsha is the main river flowing to the east and Jaldapara sanctuary surrounded some portion of the village at the south. The western side is guarded by a hillock locally known as 'Pudua pahar'. At the north Bhutan- India international border line starts. The nearest police station as well as railway station is situated in Madarihat at about 23km distance.

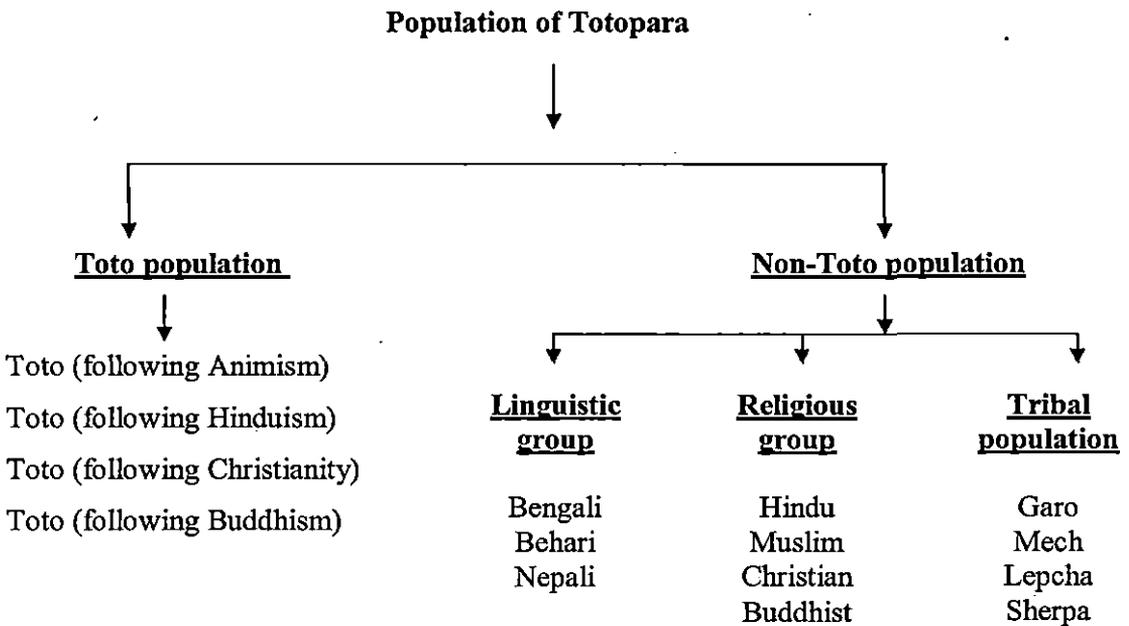
### **2.6.1 Area:**

In official records the village is recorded having GL No.117 and Mouza No.117 under Madarihat police station of Jalpaiguri district. The entire area covering Totopara was recorded 1,027.36 acres in 1866 by O'Donnel and Hodgson; 1,116.74 acres in 1889 1894 by D.Sunder; 2003 acres in 1951 by census survey under the Government of India. But after the introduction of Land Ceiling Act by the Left Front Government in West Bengal, the Amount of the land for the Totos decreases into the 374.43 acres.

## 2.7 Cultural or Ethnic Environment of the Village Totopara:

Ethnic collection at Totopara is quite heterogeneous in nature from the Anthropological point of view. It was found that all the major religious groups are living at Totopara. Although majority of the Totos claim themselves as Hindus, they represent a tribal form of religion 'animism'. Some Totos adopt Christianity and Buddhism. Apart from the Totos, there are other communities who live in Totopara viz. Hindus, Muslims.

On the basis of religion the population of Totopara can be divided into following category.



The Nepali speaking castes are numerically dominant in the Totopara village. The socio-cultural life of the Toto people is influenced by the dominant Nepali culture. Majority of the Toto population is able to speak in Nepali and many Nepali words and vocabularies get acceptance in Toto dialect.

## 2.8 Physical Environment:

The physical environment of the area includes the study of climatic condition, soil composition, availability of flora and fauna etc.

### **2.8.1 Climate:**

The Bhutan Himalayas play an important role in the climatic condition of Totopara like the other foot hill areas of Duars. Although the village Totopara was under the Alipurduar Sub-Division of Jalpaiguri district but it experience a little bit different climate. The Bhutan Himalayas play an important role in the climatic condition. The village experiences a humid and cold climate in comparison to other parts of Duars. Winter season starts from the month of November and lasts up to March. During winter temperature ranges from 5 degree to 12 degree centigrade. Summer is from the month of April to May and the temperature ranges from 25 to 38 degree centigrade. Rainy season is from June to September while spring is partially observed last of March to mid of April. The average temperature of this area is 18 to 25 degree, maximum in summer 38 degree and minimum in winter is 5 degree. The humidity of this village varies from 100-50% (while the relative humidity is 82%). Average annual rainfall 3160mm. maximum rainfall occurs from June to September/August. In comparison to the surrounding places Totopara experiences much higher rainfall. Titi forest, Torsha River and Bhutan Himalayas play an important role in regulating the temperature and rainfall in this region. Apart from that, as the village is situated at the hilly region; the villagers follow the step cultivation and depend on rainy water for irrigation or agriculture purpose. Global warming and environmental pollution also affects the climatic condition of Totopara. As a result, now a day's spring and autumn is not properly observed as it was observed in previous days.

### **2.8.2 Soil Condition:**

The structure of the soil is single grained sand mixed with gravels. The color of the soil is gray with loose texture. The nature of the soil is porous. As the topography of the land is undulating in nature, it has no power to retain water, there by affecting the crop production. Villagers adopt step cultivation depending on rain water.

## Soil type of Totopara –Hantapara plateau

### Main Soil ingredients

- Coarse sand
- Fine sand
- Silt
- Fine silt
- Clay
- pH of soil water extract

Source: District Census Hand book, Jalpaiguri, 2010

### 2.8.3 Flora and Fauna:

The richness and variety of vegetation of the region Totopara were the number of physiographic and climatic factors. Till the fifties of 20<sup>th</sup> century the areas was covered with lush green tropical forest. The configuration of the mountain and strong moisture laden monsoon winds greatly influence the character of the vegetation of Totopara. The natural plants which covered the major parts of the forest are Khair (*Acacia catechu*), Sissoo (*Dalbergia sissoo*), Chilauni (*Schima wallichii*), Sal (*Shorea robusta*), Simul (*Salmalia malbarica*), Lali (*Acacia sp*), Tuni (*Quercus spp*), Lampati (*Duabanga grandiflora*), Sirish (*Albizia sp*), Mango (*Mangifera spp*), Kathal (*Artocarpus heterophyllus*), Neem (*Azadirachta indica*), Bohera (*Terminalia bellerica*), Chatim (*Corynocarpus laevigatus*), Simul (*Bombax spp*) etc. Bamboo (*Arundinaria racemosa*), Betel nut (*Areca catechu*), Ginger (*Zingiber zemurbet*) were cultivated as the main cash crop. Various types of grass and shrubs and groves were also found as an undergrowth of the forest.

Like the other parts of Duars, the surrounding forest areas of Totopara shared the same species of terrestrial, aquatic and avian population. Important mammals were tiger (*Panthera tigris*), leopard (*Panthera panda sp*), elephant (*Elephas maximus*), sambhar (*Rusa unicorn*), spotted deer (*Axis axis*), hog deer (*Hyelaphus porcinus*), barking deer (*Muntiacus muntijak*), sloth bear (*Melursus ursinus*), monkey (*Macaca mulata*), fishing cat (*Prionailurus viverrinus*), the tiger civet (*Prionodon pardicolor*), Himalayan jackel (*Canisaur Eus indicus*), fox (*Valpes bengalensis*), Indian sloth bear (*Melursus u.ursinus*) etc. Among the reptiles the

cobra (*Naja naja*), the lesser black krait (*Bungarus lividus*), greater black krait (*Bungarus niger*) were the commonest. Dark green cattle leech (*Dinoddella ferox*) was found in this locality. The common domesticated animals were cow, goat, pig, dogs and fowls. Wide varieties of birds like parrot, peacocks etc were found in the surrounding forest areas.

## 2.9 Settlement Pattern:

The settlement of Totopara village consists of several roughly defined territories depending on various ethnic concentrations. Toto population is distributed in six different segments of the village viz. Dhumci gaon, Puja gaon, Mitran gaon, Mondal gaon, Panchayat gaon and Subba gaon. All the gaons are structural units based upon the territorial principles. Each and every area occupied by respective clan members. Toto society is divided into 13 different clans viz. *Bangobei*, *Boudhubei*, *Budubei*, *Dankobei*, *Dantrobei*, *Dirinchankobei*, *Lenkaijibei*, *Mankobei*, *Mantrobei*, *Manchingbei*, *Nubibei*, *Nurinchankobei* and *Pisichankobei*. Toto houses exist in clan wise demarcated areas. For example Dhumci gaon is much occupied by *Boudhubei* clan, Mondal gaon is occupied by *Dantrobei* clan, and Mitran gaon is occupied by *Boudhubei*, *Budubei*, *Dankobei* clan. The areas inhabited by the Nepalese are demarcated by Nepali names like 'Mongar gaon', 'Puar gaon', 'Rai-gaon', 'Simnadara' etc.

The village Totopara which is located on the southern shed of the Tading hill is intercepted by 12 streamlets. These streamlets are (1) *Mangshe-tee* (2) *Toiting-tee* (3) *Goa-tee* (4) *Tunka-tee* (5) *Lampa-tee* (6) *Niting-tee* (7) *Chua-tee* (8) *Dip-tee* (9) *Dating-tee* (10) *Pane-tee* (11) *Uding-tee*.

Depending on the distribution of the cultivable land various names are given to various sectors viz. *Airungpa*-line, *Gaitring* line, *Chandba* line, *Amring* line etc. in all these areas they made a farm house which is known as *Niyankosha* to protect the crop.

Toto houses are distributed in asymmetric fashion. Toto houses are not properly arranged in any particular fashion but scattered in all the six sectors. Sometimes the houses are arranged linearly, sometimes clustered together. In Dhumci gaon all the houses are scatterly distributed while in Mondal gaon the houses are arranged lane wise. Toto houses are clustered together in Mitran gaon. The entrance of the two adjacent houses is not always in same direction but

could be opposite. Previously the people belonging to the same clan tend to live together. But now a day due to scarcity of land this practice is not strictly followed.

The market place of the village is located at the centre of the village at the junction of Mitran gaon, Puja gaon, Subba gaon and Mondal gaon. The only Primary Health Centre (PHC) is located in Panchayat gaon.

The community right over the land was abolished in 1969 and was replaced by the individual ownership of land. Up to 1968, 2000 acre land was allotted to the Toto community in the name of Toto headman Late Dhonopati Toto. After the introduction of individual ownership of land right the amount of land decreased into 300 acres. Equigeniture is practiced among them.

### **2.9.1 Village Cremation Ground:**

There is no fixed selected place which acts as burial ground. The cremation ground is selected at outskirts of the village. There is no socio-cultural marker to demarcate the crematorium. Generally the dead bodies are buried in the deceased persons own land.

Totos believe in various strange ideas regarding the journey of the departed soul. They avoid the burial ground in a belief that would disturb the peace of the deceased ancestor.

### **2.10 Infrastructural Facilities:**

Infrastructural facilities include educational institutions, medical facilities, religious institutions, village road and transportation system, water supply, electrification, bank, post office and other Government and non-Government agencies.

#### **2.10.1 Educational Institutions:**

Educational attainment among the Totos was not up to the mark in comparison to average National educational status. The Swedish missionaries established the first primary school in Totopara in 1983. At present there were four schools in Totopara. Among those four schools three schools were primary and one was junior high school. Junior High School also provides

Ashram Hostel facilities for the tribal students. Among the three primary schools two are Bengali medium and one is English medium. One Bengali medium school was established in 1992 and the English medium school was established in 2006. Both the Toto and non-Toto teachers were working in all these schools.

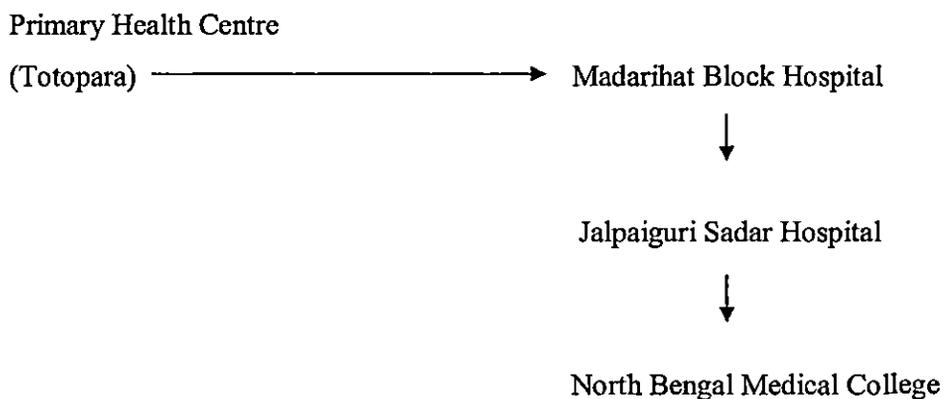
One rural library was established in 1992 at Totopara and one librarian was appointed (Bimal Toto) for looking after the library. Six adult education centres were also present in Totopara which were run by the Toto Kalyan Samiti.

### **2.10.2 Medical Institution:**

The modern medical facilities provided by the Government for the Totos firstly include the Primary Health Centre (PHC). The only Primary Health Centre (PHC) was established at 1993 located at Panchayat gaon. One doctor, one pharmacist, one group D staff and two nurses were appointed at the time of survey. The PHC was 10 bedded. Ambulance facility was available. There was no provision for Operation Theatre (OT) in the hospital. All the medical facilities were given at free of cost.

Apart from the allopathic medical facility one homeopathy doctor was also available in PHC twice a week (Tuesday and Friday). There were two Sub-Centres under the PHC.

### **Referral System**



### **2.10.2.1 Health Facilities:**

Common fever, cough and cold, tuberculosis, diarrhea, malaria patients were mainly treated in PHC. Immunization programmes of pregnant women and children were conducted. Infrastructure of PHC permitted the normal delivery; other cases were referred to Birpara or Jalpaiguri Sadar Hospital.

### **2.10.3 Religious Institutions:**

Totos are animistic in nature. They live in isolated hilly forest village Totopara. Their forest dependent life some extent compels them to trust on supernatural world. They worship their supreme deity *Senja* or *Ishpa* once a year. Their community religious institution is *Demsha* which is situated in Puja gaon. Toto people celebrate all the religious as well as cultural occasions in *Demsha*.

In present day some of the Totos adopt Christianity instead of animism and to them Church is their main religious institution. There are two churches in the village. Baptist church was situated at Mitran gaon and Catholic Church was located at Panchayat gaon. Every Sunday, prayer is conducted by the father in both the Churches.

### **2.10.4 Roads and Transport System:**

There was only one road which connects the Totopara with Madarihat. Some portion of the road was made by pitch, remaining was mud road. During the field study the concrete portion of the road found damaged due to heavy erosion, land slide and water courses. Apart from Torsha, Howri Rivers there were number of streamlets which criss- cross the way to reach Totopara. During monsoon due to over flowing of water Totopara get detached from outside world. There was no direct route to reach directly Totopara. There was only one bus and 5-6 trekkers to link Totopara and Madarihat. There was no direct bus service available to reach Hasimara or district town Jalpaiguri.

The roads within the village were both concrete and mud. As the region was hilly, the roads were undulating and zig-zag in nature. The main road which connects all the six sectors was concrete. Majority of the roads in Mondal gaon, Panchayat gaon, Subba gaon and Puja gaon

were concrete. During field work the main roads towards Dhumci gaon were under construction. Among the six sectors Mitran gaon was the most hardly accessible sector and were connected by mud road to main market place.

Some well to do Toto families have their own private vehicles but the number was very small. Due to geographical hardship and hilly nature of the village Toto people generally prefer to walk to reach one place to another.

#### **2.10.5 Bank and Post Office:**

There was only one Gramin Bank which was situated in Subba gaon. The bank was established in the year of 1995. During the field work Bhokto Toto was appointed as branch manager. There was only one staff. Both the Toto and non-Toto can access the banking facilities provided by the bank.

There was only one post office in Totopara which was situated in Subba gaon. The only person working in the post office was Sachin Toto. Although post office provides all the facilities, simple minded Toto people do not able to avail all those facilities.

#### **2.11 Food:**

The Totos depended on various cereals during different parts of the year. Majority of the Totos considered *maize* as their staple food. In addition to that they took *kaoni* and *marua*. These three cereals were mainly produced by them and almost covered whole year. Only a few families engaged in services took rice throughout the year as their staple food. Meat was their favorite food item. They frequently took flesh of cow, buffalo, pig, fowl, pigeon etc. They also preferred dried meat after preserving three to five days. They did not take fish regularly, though dry fish was one of the favorite food items. In preparation of curry or even meat, oil was rarely used. They mostly preferred boiled food with a little salt and chillies. They took green tea with salt. Chewing of betel nut was very common among the Totos irrespective of sex.

## **2.12 Drink:**

*Eu*, a country made liquor was the most favorite drink of the Totos. They took *eu* almost every day irrespective of sex. *Eu* was prepared from fermented rice, or maize, or *marua* or *kauni*. The brewing was done in every household and they welcome their guests by serving them *eu*. Now a day's younger generation particularly the educated one did not prefer to take *eu*. They took green tea with salt. In earlier days they did not take milk or any milk product. But, during field study it was observed that younger generation preferred to take milk and various milk products.

## **2.13 Condition of Village:**

**(With special reference to Houses; Drinking Water; Sanitation; Electrification and Health Facilities)**

### **2.13.1 Houses:**

**(House Structure and Settlement Pattern)**

It is already stated that Toto population was distributed among the six sectors viz. Dhumci gaon, Mitran gaon, Puja gaon, Mondal gaon, Panchayat gaon, Subba gaon, and extended section of Puja gaon i.e. Poar gaon and they preferred to settle according to their clan.

- Dhumci gaon is mostly populated by *Boudhubei* clan (both the sub groups *Digbe* and *Badangpa* are present)
- Puja gaon is mostly populated by *Boudhuei* and *Bodubei* clan.
- Mitran gaon is populated by *Bangobei* clan.
- Mondal gaon is populated by *Dankobei* and *Dantrobei* clan.
- Panchayat gaon is populated by *Dankobei*, *Dantrobei* and *Nubeibei* clan.
- Subba gaon is populated by *Dirinchankobei*, *Nurinchankobei*, *Lenkaijibei*, *Mantrobei*, *Manchingbei* clan.
- Poar gaon (i.e extension of Puja gaon) is mostly populated by *Budhubei*, *Boudhubei* and *Bangobei* clan.

According to the clan type and totem name Toto people construct their houses. For example *Dantrobei*, *Dankobei*, *Manthrobei*, *Mangchingbei* clan members construct their huts east facing, whereas *Boudhubei*, *Bangobei*, *Nubeibei*, *Lenkaijibei*, *Pisichankobei* clan members made their huts south facing. No clan member is allowed to make north facing houses.

Traditional and unique type of Toto houses was still prevalent in the village. Toto houses were called *Nako-sha*. These houses were built on wooden polls in bamboo frame about five to six feet above the ground. The platform of the huts was made up with bamboo while walls were made up of bamboo splits. The roof was generally two sloped and thatched with grass held by means of bamboo splits tied at regular intervals. The binding was done with *odla* bark or green bamboo strips. In every house about inches below the floor of living room there was open bamboo fencing which is called *Dui*. Each hut had only one room which was divided into several parts-

*Jindu*, sleeping place of the family members

*Tongsha*, extension of the sleeping place

*Daichi*, sleeping place of the guest

*Nereng* or *Merring* is kitchen

*Chimal Jiri*, place of house hold deities

Outsiders were not allowed to enter into *Jiri* or *Merring*. Only same clan members could enter into *jiri* or could touch the totem symbol. Clan wise totem symbol were placed into the *jiri*, a cup of country liquor i.e. *eu* was placed over a wooden frame. In every fifteen days interval *eu* was replaced by a new cup and purification was done by *dhungchu* leaf.

For climbing of the bamboo platform a tree trunk or a thick piece of wooden was noticed, which is called *Kaibu* and the support was called *Wadoi*. Railing of the platform was called *Padong*. They prepared a wooden rack to keep the cooked food was called *Dongdoi*. There was no separate cattle shed nor any separate granaries. The portion below the platform was used for keeping pigs, goats, fowls, and other live stocks.

During study days it was found that C.I. sheets were used for roof and in few cases brick houses were under construction under Indira Abas Yojona. They generally lied on the straw mattresses and gunny bags. Only a few well- to- do families used bedding and blankets.

### **2.13.2 Water Supply:**

The region was in the rain shaded area where nature pours down water during monsoon. Scarcity of drinking water was a problem in the village. In 1971 Swedish Missionaries (Luther and World Service) established the first water reservoir at Panchayat gaon (specifically Pakha gaon) in Totopara. After that, there was two another tanks made by ITDP through Department of PHE, Government of West Bengal. The water came from Tading khola of Bhutan and reserved in those tanks for future use. Those tanks were the main source of drinking water. There was no proper scientific water purification system, only bleaching powder was used to purify the water. But that was also applied very rarely. During the rain many small springs sprout through the hills. The Totos put in split bamboo strips into the opening of those springs for the supply of water.

There was no proper irrigation system for cultivation of crops. They were found to depend entirely on rain water. As the soil of Totopara had low water retention capacity, they cultivated some selective crops in absence of proper irrigation system.

There was a long term demand of pure drinking water by the people. Only a very few families had filter or any water purifying device. There was no tube well or well found in Totopara.

### **2.13.3 Hygiene and Sanitation System:**

According to various research articles, in earlier days the concept of hygiene was very poor among the Totos. The level of personal hygiene was still extremely poor. Regular bath was not their common habit except few families. Due to scarcity of water they did not able to clean their cloths regularly. Now a day they were using body soap and also detergents for washing the cloths.

The drainage system of the village was not systematic enough. There was not a single concrete drain seen for the disposal of used domestic water. In their traditional houses there was no separate bathroom or toilet. But the modern houses were found to have both the bathroom and toilet facilities. Most of the toilets were given by Government. Through Indira

Abas Yojona number of Toto families was given new modern houses along with bathroom and toilets.

Personal hygiene and sanitation system among the Totos could not be considered as up to the mark in comparison to the main stream population of the country and required much more attention.

#### **2.13.4 Electrification:**

Among the six sectors under study, except Dhumci gaon all the sectors had the electricity connection during the field study. Dhumci gaon was situated at the outskirts of the village Totopara and density of the population was very low. These could be the probable reason for not reaching the electricity connection. Although the other five sectors had electricity connection but that was not also 100 percent. In Mitran gaon 55.17 percent houses, Puja gaon 72.72 percent houses, Mondal gaon 100% houses, Panchayat gaon 95.16 percent houses and Subba gaon 85.29 percent houses, had the electricity connection (table.2.12). In the village Totopara there was no street light facility. Power cut, low voltage, load shedding in electricity supply were the most common problem of Totopara. Some affluent Toto families can afford television, CD player radio depending on their economic status.

#### **2.13.5 Cultural Festivals:**

The studied tribe Toto observes a number of religious festivals in a year. The worship of their supreme deity *Senja* was performed three times in a year at the village level but the name varies. All the Toto villagers took part in all the festivals; no question of failure to do so. As all the festivals occurred at the village level, there was no question of clan distinction regarding the participation in the festivals. Only those families could not take part in those rituals who were excommunicated. In this context one point should be mentioned here that in case of clan deity worship (i.e. the name of the worship was *Choirra*) only the same clan members were allowed to participate; girl married to other clan even was not allowed to take part in the clan deity worship of her parent's house.

The three main festivals of the Totos were *Ongchu*, *Mayu* and *Sordee*. *Ongchu* was the first celebrated festival at the village level among the Totos. *Ongchu* was celebrated in rainy

season, particularly at the end. Two pigs were required; one was sacrificed at *Goatikhola* and another was sacrificed at evening or night. Representative of each family must bring *eu* and contribute Rs 20/- for organizing the whole festival. In the evening, about 3 pm they assembled at *Demsha* (religious place) and took pork and *eu*. The two head man *Kaiji* and *Gapu* must be present over there. Traditional dance and songs were performed by the priests and elderly persons of the community. In this festival they remember/appeased their supreme deity *Senja* and prayed to him. According to the villagers, *Ongchu* was performed to stop flood in the village.

*Mayu* was celebrated in winter season. In this festival river was worshiped as there was lack of fish and lack of water in winter. Pig was the essential requirement for this worship. One pig was sacrificed in *Goatikhola* (one small rivulet) by the *paw*. All the villagers participated in the festival. In the evening, all the Toto villagers assembled together at *Demsha*. In *demsha* there were two houses; one was new (i.e. *natur*) and another was old (i.e. *purano*). At least one representative of all the families must be present over there. Some selected members from each of the clans were found to actively participate in the religious procedure/ process of the festival. Present villagers were divided into two groups; one was presided by *Kaiji* and another one was presided by *Gapu*. *Kaiji* presided over five clan viz. *Dantrobei*, *Dankobei*, *Nubebei*, *Bangobei*, *Baudhbei*. The rest eight clans viz. *Budhubei*, *Lenkaijibe*, *Nuruchankobei*, *Dhirinchankobei*, *Mantrobei*, *Mankobei*, *Manchingbei*, *Pisichankobei* were presided by *Gapu*. Group of *Kaiji* assembled together in new house and group of *Gapu* assembled together at old house. Pig was sacrificed by both the groups. The first pig had to be sacrificed by *Kaiji* group. Pig was sacrificed by thrashing with baton. There was a group of singers to sing the traditional songs. New members were also selected in this festival. To get recognition the new members must perform some specific tusk in front of all the villagers, particularly in front of the aged persons of the Toto community. Ritual was started by remembering the name of *Senja*. Then traditional songs and dances were performed. One cannot take orange and lemon until *Mayu* was celebrated. If anyone violets this rule, he or she has to give penalty for the work by sacrificing hen or pig.

*Sordey* festival was celebrated in spring. In this festival training was given to newly formed dance group by the senior dancers. In this festival also, two pigs were sacrificed at *Goatikhola* in the very morning in presence of *Kaiji* and *Gapu*. The head priest (i.e. *paw*) must be present there but sacrifices were not made by the head *paw*. The sacrificed pigs were

cooked and distributed among the villagers. Women were not allowed to participate in the rituals performed at *Goatikhola*. In the evening all the rituals were performed same as the rituals performed in *Ongchu* and *Mayu*. After celebrating *Sordey*, no one was allowed to take lemon and oranges up to the celebration of the festival *Mayu*. If anybody violates the rule the person has to go for penalty considering his economic strength.

## **2.14 The Population:**

A society is composed of people. Until and unless people reside permanently in any habitation there can be no village. The Totos are the original inhabitants of Totopara. In the past, the village Totopara was purely mono-ethnic in nature, but it has been converted into multi ethnic with the passage of time. The first ever information about the existence of the non-Totos in Totopara are available at the Census Report 1911. But the number was very small, a bare 35 only which again declined to only 6 heads in 1931. The size and fluctuation in the figures indicated that the nature of the non-Toto settlers in Totopara was migratory and temporary during that period. Infact, the settlement of the non-Totos in a large number was recorded for the first time in the Census 1951. Presently, apart from the Totos there are various other communities viz. Nepali, Bihari, Bengali and some other tribes like Garo, Mech, Oraon, Lepcha etc resides in Totopara.

### **2.14.1 Totos: The Primitive Tribal Group (PTG)**

**(Now known as Particularly Vulnerable Tribal Group)**

The first list for the Scheduled Caste (SC) and Schedule Tribes (ST) was prepared by the Government of India containing the names of 62 castes and 14 tribes based on the Government of India Act, 1935. The 1941 Census returns however enumerated a total number of 118 castes and 17 tribes as scheduled. This was the scenario of pre-independent India.

After the independence of the country, it is found from the official records that a total of 15 Presidential orders have been issued till 1984 for specifying the Scheduled Caste and Scheduled Tribes in relation to various states and union territories under the provisions of Article 341 and 342 of the 'Constitution of India'. The first order was issued on the 6<sup>th</sup> September 1950 as 'Constitution (Scheduled Tribes) Order 1950'. But the name of the Totos

was not included in that schedule. The seven communities whose names were included as Scheduled Tribe in West Bengal were Bhutia, Lepcha, Mech, Mru, Munda, Oraon, Santal. The Scheduled Castes and Scheduled Tribes lists (Modification) Order, 1956 was issued on 29<sup>th</sup> October 1956. The name of the Toto tribe was accommodated in that list for the first time but was clubbed together in one category as under Bhutia (including Sherpa), Toto, Drukpa, Kagatay, Tibetan and Yolmo. Due to this categorization, the Census reports no longer show the figures pertaining to the Totos separately since 1961. During the preparation of the Sub-plan for the tribal areas, the Government of India stressed the need of taking special care for the primitive and isolated tribal groups. As per the definition agreed at the Delhi Workshop, the Birhors were identified as the 'Primitive Tribe' and the Totos were identified as the 'isolated tribe' in West Bengal. While preparing the Draft Sub-plan for the Tribal Areas of West Bengal the Government had categorized initially eight tribal communities as the underdeveloped tribes of West Bengal. But finally five tribal communities' viz. Birhor, Toto, Rabha, Lepcha and Lodha were finally selected as the underdeveloped tribes of West Bengal.

Thereafter, several subsequent lists were prepared by the Ministry of Home Affairs taking into account the primitive isolated or underdeveloped condition of the tribes. The Ministry of Home Affairs, Government of India, prepared such a list during the Seventh Five Year Plan (in December 1984) on the basis of the report of the working group on development of tribes during the Seventh Five Year Plan (1985-90). During that period among the five underdeveloped tribal communities, three Scheduled Tribe communities in West Bengal have been identified as Primitive Tribes viz. Birhor, Lodha and Toto.

### **2.15 Demographic Profile:**

To understand a society, it is important to know the size of its membership and its distribution in terms of age, sex, family structure, place of residence and other important socially significant characteristics such as marital status, education, occupation, religious affiliation and so on. This should be recognized as a demographic profile of any community.

### **2.15.1 The Population:**

The earliest figure for the Totos was available from the Official Census Report of 1901. During that period Totopara was entirely mono-ethnic village and only Totos constitute the whole population of the village. In 1901, Toto population was 171, male were 72 and female were 99. But after 1951, no census figure for them is directly available because the Totos were enumerated under one head along with Bhutia, Sherpa, Drukpa, Kagatay, Tibetan, Yolmo etc.

In the present study, the total population of the Totopara was 2711. Among them 1170 from the Toto community and 1540 belongs to the non-Toto population.

Total Toto population of the village Totopara was 1170, which included 635 males and 535 females. So, it can be said that there were 842 female per thousand male at village level.

The Totos live in six sectors or *gaons* of Totopara village. There are six sectors and their population size was as follows:

### **2.15.2 Age – Sex Composition:**

The total population i.e. the total Toto population in the village Totopara during the field study were 1170 of which 635 constitute the male members and 535 were the female members.

In category 1, the number of males were 236 i.e. 53.39 percent of the total population where as the number of females were 206 i.e. 46.61 percent of the total population. In category 2 the number of males were 399 i.e. 54.81 percent of the total population where as the number of females were 329 i.e. 45.19 percent of the total population. In both, category-1 and category-2 village sectors male proportion was higher than the female. Among the six sectors only the exception was Mondal gaon where the female percentage was higher than the male (table no 2.1).

#### Category-1:

In Dhumci gaon total population were 158 of which 53.16 percent were male and 46.835 percent were female forming an unequal sex ratio. Among the male 10-14 age group showed the maximum population and among the female 20-24 age group showed the maximum population.

In case of Mitran gaon, total population was 152. Among the total population 51.97 percent constitute the total male and 48.03 percent constitute the total female population i.e. male percentage was higher than the female. There was only one person found in the age group of 65 and above.

In Puja gaon total Toto population were 132 of which 53.30 percent were male and 44.70 percent were female. There was only one person found in the age group of 65 and above.

#### Category-2:

Mondal gaon showed some differences in comparison to other five sectors of Totopara. The total Toto population in Mondal gaon was 105 of which 48.57 percent were male and 51.43 percent were female i.e. female ratio was found higher than the male. But remarkably there was no person (both male and female) found above the age of 64.

The total Toto population of Panchayat gaon was 296 of which 55.41 percent were male and 44.59 percent were female. There were one male found in the age group of 70 and 70+.

In Subba gaon total Toto population were 327 of which 56.27 percent were male and 43.73 percent were female.

From the above study, it has been found that the life span of Toto population is not very high irrespective of sex and sectarian differences.

### **2.15.3 Families:**

The family may be defined as a basic fundamental and smallest social grouping, the members of which are united by bonds of kinship. The primary or elementary family consists of mature adults of opposite sex who live together in a (union) marriage recognized by the society along with their children. The kinship ties which unite the individual of family are the relations that exist between the married pair and the children (parent children relationship) and the relation exists between the children of the married pair (sibling relationship).

Murdock defines family as “a social group characterized by common residence, economic co-operation and reproduction. It includes adults of both sexes atleast two of whom maintain a socially approved sexual relationship, and one or more children, own or adopted of the sexually cohabiting adults” (Murdock 1949).

Different types of families are as follows:

**Simple, Elementary or Nuclear family:**

It is composed of a man, his wife and unmarried children. Consisting of husband, wife and their children, the nuclear family is a two-generation family formed around the marital union.

**Joint family:**

If two or more nuclear families live together under a common shelter, share a common hearth, and a common purse then the family type is known as joint family.

**Extended family:**

When the nuclear family is found to be extended on all sides by certain adhesions in the form of relatives of both sides i.e. husbands and wives side then it can be declared as extended family. Extended families consist of two or more nuclear families that are linked by blood ties (Ferraro and Andreatte, 2010).

In the present context the total studied families are categorized into two ways-

- (a) Family size wise categorization
- (b) Family type wise categorization.

According to the size of the family there are six categories viz. (i) single member family (ii) double membered family (iii) 3-4 membered family (iv) 5-6 membered family (v) 7-8 membered family (vi) 9 and above 9 membered family.

In category-1, among the three sectors viz. Dhumci gaon, Mitran gaon, Puja gaon total studied families were 84, among them 2.38 percent (single membered), 3.57 percent (double membered), 32.14 percent (3-4 member), 36.90 percent (5-6 member), 17.85 percent (7-8 member), 7.14 percent (9-9+ member).

In category-2, among the three sectors viz. Mondal gaon, Panchayat gaon, Subba gaon total studied families were 154, among them 1.29 percent (single membered), 7.79 percent (double membered), 35.71 percent (3-4 member), 45.45 percent (5-6 member), 7.14 percent (7-8 member), 2.59 percent (9-9+ member).

The analysis reflected that majority of the Toto families were 5-6 membered family. Size wise distribution of the families is given in the table number 2.2.

According to the type of the family there are six categories viz. (i) single unit family (ii) nuclear family (iii) joint family (iv) extended family (v) broken family (vi) other.

In category-1, among the three sectors Dhumci gaon, Mitran gaon, Puja gaon total studied families were 84; among them 56 number i.e. 66.66 percent families were nuclear family. In category-2, among the three sectors viz. Mondal gaon, Panchayat gaon, Subba gaon total studied families were 154, among them majority of the families were extended family and constituted 38.31 percent of the total.

Considering the total studied 238 number of Toto families, it could be said that the nuclear family type was more common among the tribe. Table 2.3 represents the tribe, village and sector wise break up of different types of families.

#### **2.15.4 Marital Status:**

For better understanding about the marital status of the studied population five different categories were considered (i) unmarried (ii) married (iii) widow (iv) widower (v) separated

(females only). Type, sector, sex wise breakup are given in the table 2.4.-2.4.6. After analyzing the table one point should be mentioned here that percentages of divorcee population (both male and female) were very low; only one female was found from the Panchayat gaon sector.

#### **2.15.5 Education:**

Education in the tribal areas has always been a matter of great concern and the lack of it has always had a negative impact on the development of tribal people. Primary education as well as continuation of education in high school standard in the rural and remote tribal belt like Totopara has always been suffered due to lack of institutional facilities, non viability and absence of teachers in the primary schools, lack of text books and other physical facilities in the primary, secondary and high schools. The literacy rate amongst the boys and girls in tribal areas has always been governed by two major factors viz. the poor socio- economic conditions of tribal people and secondly the lack of political will and administrative commitment to provide adequate primary and secondary education in remote tribal village Totopara was also not the exception.

As there is a relation between better health and better education, so an overall understanding about the educational status of the studied population could help to realize the forth coming situation concerning to health and its allied issues. There are so many initiatives taken by both the state and central Government for the betterment of illiterate tribal folk of our country. This endeavor can be seen through the percentage of literacy among the studied people but not so much satisfactory as desired.

For understanding the educational status of the studied people in better form some relevant categories were created which are as follows (i), can't sign [illiterate] (ii) can sign, (iii) without any standard, (iv) I-IV [primary], (v) V-VIII [junior high] (vi) IX-X [secondary] (vii) XI-XII [higher secondary] (viii) graduate (ix) other [any other educational qualification].

In the village Totopara, mostly the younger generation and children are found to be educated. There were strong sectarian differences found regarding the educational status of the village people. Educational attainment of the category-2 village sectors (viz Mondal gaon, Panchayat gaon, Subba gaon.) is much higher than the category-1 village sectors (viz. Dhumci gaon,

Mitran gaon, Puja gaon). There was no person found to study in the degree courses among the three sectors of category-1. Only one male was found to study in higher secondary level, while the scenario was quite different in remaining three sectors of the village Totopara. Numbers of students were studying in secondary, higher secondary and degree level (table no 2.5.-2.5.6.). But the overall scenario of the studied tribe was not at all satisfactory and requires much more attention at the administrative level.

#### **2.15.6 Village Economy:**

Economic activity is concerned with all such activities of man as are designed to secure physical survival. The concept of physical survival gets extended according to whether the technological base is broad enough and if the habitat pressed on men less closely. The basic function of all economic systems is to maximize satisfactions through an economical allocation of various resources that are limited for the satisfaction of various needs which are unlimited.

In the past life was comparatively uniform among all the Totos. Before the annexation by the Government of British India, Totos were mainly dependent upon porterage duties under Bhutanese administration, long trade tours, and short trade tours mainly for barter purposes, food gathering and slash and burn cultivation. As such there was no occupational division among the Totos.

However with the passage of time occupational diversification had taken place. Settled agriculture was one form or another had become the most important occupation for most of the Totos. Even the Totos who were primarily engaged in service or business were directly or indirectly connected with agriculture. Besides agriculture some of the Totos were trying to adapt themselves with other non-traditional occupations like business.

#### **2.15.7 Occupation:**

Presently Totos were settled agriculturist and consider agriculture as their main economic pursuit. The occupations of Toto society were mainly two type viz. primary occupation and secondary occupation. Among the Totos irrespective of sex both male and female were

closely related with agriculture either primarily or secondarily and there were no sectarian differences.

Considering the primary occupation, Toto males were mainly engaged in agriculture, business, agricultural labor, 100 days worker and Government service. Among the females primary occupations were house hold work, fuel and fodder collection and sometimes 100 days work.

In case of secondary occupation, Toto males preferred portorage in Bhutan, 100 days work, animal husbandry and house hold work. As their secondary occupation females were engaged in agricultural work, 100 days work and rarely work as porter.

During the study days, some twenty Totos including seven women were employed in different Government services within the village itself. It is known that average income of any studied village depends upon the number of people engaged in services. The average *income of a village is found higher when greater number of service holder is recorded. But in this study all the three sectors of category-1 (viz. Dhumci gaon, Mitran gaon, Puja gaon) showed a greater family number those had less income than the average income of the village. Mainly the service holders were found in category-2 sectors viz. Mondal gaon, Panchayat gaon and Subba gaon. Average income of these sectors was much higher than the other three sectors. So, a distinguishable higher and lower economic class was recorded among the studied six sectors of Totopara village. One point should be mentioned here that although the females were not confined within the home, but still male were the main earning member of any type of family. So the total economy of the studied six sectors depends much upon the male's economic pursuit (table no 2.6-2.7.6).*

#### **2.15.8 Place of Work:**

Although Totos were settled agriculturist and considered agriculture as their primary occupation but majority of them had secondary occupation as an alternative livelihood. Oranges had been originally a natural product of Bhutan (mainly southern Bhutan) and Totos engaged themselves as carrier of oranges between Bhutan and India. This was their main secondary occupation. In category-1 village sectors, 54.24 percent men answered that their place of work was only within Totopara whereas 30.08 percent male carried out their

occupational life both in Totopara and Bhutan. In category-2 village sectors, 76.69 percent male told that their place of work was only within Totopara. But irrespective of sectors females were found to concentrate mainly within household activities (89.91 percent). Only 0.37 percent female was found who occasionally visit Bhutan for their economic life. (Table 2.8- 2.8.6)

#### **2.15.9 Monthly Income and Expenditure:**

According to the table 2.9 it is found that out of 84 families in the category-1 village sectors (viz. Dhumci gaon, Mitran gaon, Puja gaon) 41.67 percent families had their family income between Rs 2001-3000. There was no person found who earned above 5000 per month.

While in the category-2 village sectors (viz. Mondal gaon, Panchayat gaon and Subba gaon) there were various economic classes. All the Government service holders lived in these three village sectors. There were number of persons who earned above 10,000 per month.

Regarding the expenditure in all these six sectors, it was found that the families maintain their expenditure according to their monthly income. This study showed the regular earning and expenditure of the community people but did not include the expenditure of big family occasions like marriage (table 2.9-2.10).

#### **2.15.10 Language:**

Totos had their own dialect which is known as Toto language. Regarding intra-community level conversation, they generally communicate in their mother tongue. But in case of inter-community level conversation they generally preferred Nepali language as the tribe was mainly surrounded by the Nepali speaking population. Nepali was found to be the language of wider communication. Nepali was known to almost all the people of Totopara village. However, the Totos had acquired a large number of vocabularies from the languages of the neighboring people. Present generations, who were taking education (particularly in Bengali medium schools) from outside of Totopara, they could speak in Bengali and even Hindi and English. Missionary impact was also found among the Totos which results in the introduction of English in the Toto society. Most of the Toto adults could also understand Bhutia language because of the longtime co-habitation with the Bhutias (table 2.11-2.11.6).

## 2.16 Socio-Cultural Life of the Villagers (Totos):

As the studied population was the Totos, the only Primitive Tribe of North Bengal, it is needed to represent the socio-cultural life among the Totos in the present study.

The Totos belong to the Mongoloid group of people. Their mother tongue is Toto. The language of the Totos has been classified by Hodgson and Grierson as belonging to Tibeto-Burman family of sub-Himalayan group. The language is stated to be 'non-pronominalised'. The language has no script.

In the present study all the Toto villagers of the studied six sectors were observed to speak Toto language as their main mother tongue at the family and the community level and also could speak Nepali with outsiders. But in very rare cases they could communicate or understood Hindi. Practice of English as a language was not observed but some villagers for pursuing their higher education and official work used it. Medium of education was mainly Bengali. As a result younger school going generation could speak Bengali. Kids were facing problems to read and right through a language at the preliminary level of education, which is not their mother tongue.

The Totos are divided into thirteen clans like *Budubei*, *Baudhubei*, *Dankobei*, *Dantrobei*, *Nubebei*, *Mangchingbei*, *Linkaijibei*, *Diringchancobei*, *Mankobei*, *Bangobei*, *Pisichankobei*, *Nurinchankobei*, and *Mantrobei*. These clans are patrilineal, totemic. This tribe is endogamous in nature but strictly follows clan exogamy. The member of each clan shows their respect to their respective clan totem that is inevitably non-human in nature. Animal, birds, fish, trees, flowers or even inanimate objects might be their clan totems. The clan name descends through the male line i.e. from father to sons. They believed in a mysterious relation with these totemic objects. Unmarried daughters may retain their father's clan till their marriage. Married women are found to imbibe the clan names of their husbands belonging to different clans. Some the clans are reported to split up into number of sub-clans.

The Totos are very much traditional in their religious observances. The worship can be categorized depending on the participation at the family, clan or community level. *Sha-ding-pa* is the deity of the house or the family; *Chimadora* is the ancestral deity of lineage (Majumdar, 1991), *Chaisung* is the ancestral deity of the clan and *Senja* or *Ishpa* or *Itsipa* is

the supreme God of the Toto community. Each clan or a cluster of clans has a separate *Chaisung* which is worshipped by the clan members united or individually under the guidance of an elderly clan member with the help of a priest by offering particular ingredients and sacrifices of animals according to their unique. Besides the *Chaisung* the Totos have separate totems for each of their clans. *Chaisungs* are also represented by different plants, animals or other natural objects. The totemic symbols are related to their livelihood and to the day to day functioning of the Toto tribe. There is no restriction against eating or killing the totemic symbols among the Totos (Majumdar, 1991).

As said earlier same clan members have the tendency to live in close proximity. The religious interaction between the intra- clan villagers were prominent than the inter-clan. But their clan distribution had no impact upon the village solidarity character. Specific clan festivals (like *Chaisung, Choira*) are observed in between the same clan when they worship the same clan deity. In this context, it is important to note that, despite steady growth of the Toto population as a whole, the number of two clan members viz. *Mangchingbei* and *Pisichancobei* have declined. There is a significant increase in the number of families belonging to *Budhubei, Dantrobei* and *Nurinchankobei* clan.

The Totos are endogamous at the tribe level and generally exogamous at the clan level with certain variations. The practice of endogamy has helped the Totos to maintain their separate identity. Marriages between the ceremonially made brotherly clans are prohibited. In terms of marriage Totos usually follow monogamy though polygamy is observed in some rare cases. Polyandry is not permitted among the Totos. Marriages take place only after attaining puberty. Adult marriages are also common. Divorce and remarriage of both widows and widowers are fairly common and permitted. Divorce is allowed on the ground of quarrelsome nature, mal adjustment, and barrenness on part of both husband and wife. Women folk enjoy considerable liberty while taking their own decision.

General traditional rule of Toto marriage is obeyed by the studied villagers. Practice of dowry is not allowed in the Toto society while in some cases gift exchanges take place. Both love marriage and negotiation marriages are welcomed by the society members, although they prefer love marriages. Among the Totos marriage is the final stage of formation of a family, though the betrothed couples are allowed to live together for years as husband and wife before the final solemnization of marriage ceremony. According to the traditional custom,

marriage is finally solemnized at the fifth, seventh or nine month of pregnancy. A Toto girl has full liberty to change her betrothed match for any number of times if she does not conceive by him within a certain period. During the interim period both the families of bride and groom would exchange food, drinks and dress at the time of their ceremonial occasions. One notable feature of Toto marriage is that in many cases the bride is found considerably older than the bride groom. Regarding the marriage rule there were no sectarian differences found among the Totos.

The Totos have two types of councils, one on village level community council and another one on extra village level administrative council. The first one is their own traditional council and exclusively participated by the Totos. The second one is the extra village level Government formulated administrative council i.e. panchayat. Among the Totos at the top of the village organization there is a general council called *Latchi-jangoa*. According to the traditional social custom of the Totos an individual attaining adult hood is automatically included as the member of the *Latchi-jangoa*. This *Latchi-jangoa* or the community council is the decision making body of the Toto community regarding both the religious and secular matter. The council is headed by *Kaiji* and *Gapu*. The religious organization is headed mainly by *Kaiji* and secular or civil part is guided by *Gapu*. Elderly persons also play important role in taking community level decisions. *Kaiji* has one helper called *Naongpoin*. *Kaiji* is mainly selected from the *Dirinchankobei* clan while *gapu* is selected from the *Dankobei* clan. Three clans are regarded as the priestly clan viz. *Dantrobei*, *Baudhubei* and *Nubeibei*. The priestly class plays an important role in *Latchi-jangoa*. All kinds of civil and criminal disputes within the community are generally settled in different meetings at *Demsha* (the only religious place). The offenders must have to receive punishment. The nature of punishment depends upon the committed crime. The extra village level or the extra community level disputes are settled in three-tire panchayat and the Totos also participate in Gram panchayat.

Regarding the dress pattern of the studied population, the dress was much simple and primitive. One piece of cotton cloth is worn to cover the upper part and the other one is for lower part. Men wear the cloth up to the knee. Cotton belt is worn near the waist for keeping knife. In recent time change has been noticed and the younger generation is generally using shirts and pants. The women folk use four pieces of cloth. One piece of cloth tied at waist, one piece is to cover front and back portion of the body, one piece is hanged up to knee and the other piece is used to cover the head. At present due to contact with the outsiders they

wear saree and blouses and also salwar kamij. They prefer silver ornaments but also wear glass, copper, zinc made ornaments.

### **Chapter Summary**

Understanding about the village and the people was the prime objective of this chapter. A detailed idea about the studied village and people were given including the demographic profile of the people. From this chapter one could know about the socio- cultural life of the studied tribe. A short note on the state, district and block will also give a better interpretation. The chapter also discussed about location of study, geographical character of the village, historical background of the village, origin of Totos, ethnic character of the village, infrastructural facilities available in the village, food and drinking habit of the studied population, condition of village (with special reference to house, drinking water, sanitation, electrification), cultural festivals, demographic profile, socio-cultural life of the villagers.

**TABLE: 2.1 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX**

Name of the Sectors		Male	Female	Total
Category: 1	Dhumci gaon	84 53.16	74 46.83	158 100.00
	Mitran gaon	73 53.30	59 44.70	132 100.00
	Puja gaon	79 51.97	73 48.03	152 100.00
	<b>Total</b>	236 53.39	206 46.60	442 100.00
Category: 2	Mondal gaon	51 48.57	54 51.43	105 100.00
	Panchayat gaon	164 55.41	132 44.59	296 100.00
	Subba gaon	184 56.27	143 43.73	327 100.00
	<b>Total</b>	399 54.81	329 45.19	728 100.00
<b>Grand Total</b>		635 54.27	535 45.72	1170 100.00

**TABLE: 2.1.1 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX IN DHUMCI GAON**

<b>Age- groups</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>0-4</b>	14 63.63	08 36.36	22 100.00
<b>5-9</b>	05 33.33	10 66.67	15 100.00
<b>10-14</b>	18 69.23	08 30.77	26 100.00
<b>15-19</b>	12 54.54	10 45.45	22 100.00
<b>20-24</b>	06 33.33	12 66.67	18 100.00
<b>25-29</b>	11 57.89	08 42.11	19 100.00
<b>30-34</b>	04 57.14	03 42.86	07 100.00
<b>35-39</b>	01 16.67	05 83.33	06 100.00
<b>40-44</b>	03 60.00	02 40.00	05 100.00
<b>45-49</b>	02 66.67	01 33.33	03 100.00
<b>50-54</b>	02 50.00	02 50.00	04 100.00
<b>55-59</b>	01 50.00	01 50.00	02 100.00
<b>60-64</b>	03 50.00	03 50.00	06 100.00
<b>65-69</b>	02 66.66	01 33.33	03 100.00
<b>70 and 70+</b>	-	-	-
<b>Total</b>	84 53.16	74 46.84	158 100.00

**TABLE: 2.1.2 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX IN MITRAN GAON**

Age- groups	Male	Female	Total
0-4	12 54.54	10 45.46	22 100.00
5-9	09 39.13	14 60.87	23 100.00
10-14	13 54.17	11 45.83	24 100.00
15-19	09 56.25	07 43.75	16 100.00
20-24	04 40.00	06 60.00	10 100.00
25-29	07 43.75	09 56.25	16 100.00
30-34	05 50.00	05 50.00	10 100.00
35-39	05 50.00	05 50.00	10 100.00
40-44	07 100.00	—	07 100.00
45-49	02 40.00	03 60.00	05 100.00
50-54	01 100.00	—	01 100.00
55-59	02 66.67	01 33.33	03 100.00
60-64	02 50.00	02 50.00	04 100.00
65-69	01 100.00	—	01 100.00
70 and 70+	—	—	—
<b>Total</b>	79 51.97	73 48.03	152 100.00

**TABLE: 2.1.3 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX IN PUJA GAON**

Age-groups	Male	Female	Total
0-4	13 68.42	06 31.58	19 100.00
5-9	14 51.85	13 48.15	27 100.00
10-14	12 48.00	13 52.00	25 100.00
15-19	11 73.33	04 26.67	15 100.00
20-24	02 25.00	06 75.00	08 100.00
25-29	06 66.67	03 33.33	09 100.00
30-34	03 60.00	02 40.00	05 100.00
35-39	-	02 100.00	02 100.00
40-44	04 57.14	03 42.86	07 100.00
45-49	04 40.00	06 60.00	10 100.00
50-54	02 100.0	-	02 100.00
55-59	-	-	-
60-64	01 50.00	01 50.00	02 100.00
65-69	01 100.00	-	01 100.00
70 and 70+	-	-	-
<b>Total</b>	73 55.30	59 44.70	132 100.00

**TABLE: 2.1.4 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX IN MONDAL GAON**

Age- groups	Male	Female	Total
0-4	01 50.00	01 50.00	02 100.00
5-9	10 58.82	07 41.18	17 100.00
10-14	03 23.08	10 76.92	13 100.00
15-19	06 46.15	07 53.85	13 100.00
20-24	10 66.67	05 33.33	15 100.00
25-29	03 33.33	06 66.67	09 100.00
30-34	03 33.33	06 66.67	09 100.00
35-39	05 71.43	02 28.57	07 100.00
40-44	03 60.00	02 40.00	05 100.00
45-49	01 25.00	03 75.00	04 100.00
50-54	02 40.00	03 60.00	05 100.00
55-59	02 100.00	-	02 100.00
60-64	02 50.00	02 50.00	04 100.00
65-69	-	-	-
70 and 70+	-	-	-
Total	51 48.57	54 51.43	105 100.00

**TABLE: 2.1.5 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX IN PANCHAYAT GAON**

Age- groups	Male	Female	Total
0-4	18	13	31
	58.06	41.94	100.00
5-9	20	12	32
	62.50	37.50	100.00
10-14	21	19	40
	52.50	47.50	100.00
15-19	23	19	42
	54.76	45.24	100.00
20-24	20	13	33
	60.61	39.39	100.00
25-29	15	08	23
	65.22	34.78	100.00
30-34	07	13	20
	35.00	65.00	100.00
35-39	07	11	18
	38.89	61.11	100.00
40-44	10	12	22
	45.45	54.55	100.00
45-49	14	08	22
	63.64	36.36	100.00
50-54	03	-	03
	100.00		100.00
55-59	02	02	04
	50.00	50.00	100.00
60-64	03	01	04
	75.00	25.00	100.00
65-69	-	01	01
		100.00	100.00
70 and 70+	01	-	01
	100.00		100.00
Total	164	132	296
	55.41	44.59	100.00

**TABLE: 2.1.6 DISTRIBUTION OF POPULATION ACCORDING TO AGE AND SEX IN SUBBA GAON**

Age- groups	Male	Female	Total
0-4	12 50.00	12 50.00	24 100.00
5-9	35 57.38	26 42.62	61 100.00
10-14	29 63.04	17 36.96	46 100.00
15-19	25 64.10	14 35.90	39 100.00
20-24	15 57.69	11 42.31	26 100.00
25-29	16 51.61	15 48.39	31 100.00
30-34	11 45.83	13 54.17	24 100.00
35-39	15 53.57	13 46.43	28 100.00
40-44	07 46.67	08 53.33	15 100.00
45-49	08 57.14	06 42.86	14 100.00
50-54	05 62.50	03 37.50	08 100.00
55-59	02 66.67	01 33.33	03 100.00
60-64	03 50.00	03 50.00	06 100.00
65-69	01 50.00	01 50.00	02 100.00
70 and 70+	-	-	-
Total	184 56.27	143 43.73	327 100.00

**TABLE: 2.2 DISTRIBUTION OF HOUSEHOLD ACCORDING TO FAMILY SIZE**

Name of the Sectors		Total number of families	Family size					
			Single/1	Double/2	3-4	5-6	7-8	9 & 9+
Category: 1	Dhumci gaon	33 100.00	-	03 09.09	12 36.36	13 39.39	05 15.15	-
	Mitran gaon	29 100.00	01 03.45	-	09 31.03	12 41.38	05 17.24	02 06.90
	Puja gaon	22 100.00	01 04.55	-	06 27.27	06 27.27	05 22.73	04 18.18
	<b>Total</b>	84 100.00	02 02.38	03 03.57	27 32.14	31 36.90	15 17.85	06 07.14
Category: 2	Mondal gaon	24 100.00	-	03 12.50	10 41.67	11 45.83	-	-
	Panchayat gaon	62 100.00	02 03.23	03 04.84	20 32.25	31 50.00	04 06.45	02 03.23
	Subba gaon	68 100.00	-	06 08.82	25 36.77	28 41.18	07 10.29	02 02.94
	<b>Total</b>	154 100.00	02 01.29	12 07.79	55 35.71	70 45.45	11 07.14	04 02.59
<b>Grand Total</b>		238 100.00	04 01.68	15 06.30	82 34.45	101 42.44	26 10.92	10 04.20

**TABLE: 2.3 DISTRIBUTION OF HOUSEHOLD ACCORDING TO FAMILY TYPE**

Name of the Sectors		Total number of families	Family type					
			Single unit	Nuclear	Joint	Extended	Broken	Others
Category: 1	Dhumci gaon	33 100.00	-	19 57.57	04 12.12	03 09.09	07 21.21	-
	Mitran gaon	29 100.00	01 03.45	20 68.96	07 24.14	01 03.45	-	-
	Puja gaon	22 100.00	01 04.55	17 77.25	01 04.55	01 04.55	01 04.55	01 04.55
	<b>Total</b>	84 100.00	02 02.38	56 66.66	12 14.28	05 05.95	08 09.52	01 01.19
Category: 2	Mondal gaon	24 100.00	-	18 75.00	02 08.33	-	03 12.50	01 04.17
	Panchayat gaon	62 100.00	02 03.23	03 04.84	20 32.25	31 50.00	04 06.45	02 03.23
	Subba gaon	68 100.00	-	06 08.82	25 36.77	28 41.18	07 10.29	02 02.94
	<b>Total</b>	154 100.00	02 01.29	27 17.53	47 30.52	59 38.31	14 09.09	05 03.25
<b>Grand Total</b>		238 100.00	04 01.68	83 34.87	59 24.78	64 26.89	22 09.24	06 02.52

**TABLE: 2.4 DISTRIBUTION OF POPULATION ACCORDING TO MARITAL STATUS IN TOTOPARA**

Name of the Sectors		Unmarried		Married		Widow	Widower	Separated Females only	Total	
		M	F	M	F				M	F
Category: 1	<b>Dhumci gaon</b>	53 63.09	43 58.10	27 32.14	27 36.48	04 5.40	04 4.76	-	84 100.00	74 100.00
	<b>Mitran gaon</b>	46 58.23	42 57.53	29 36.71	29 39.73	02 02.74	04 05.06	-	79 100.00	73 100.00
	<b>Puja gaon</b>	52 71.23	37 62.72	20 27.40	21 35.59	01 01.69	01 01.37	-	73 100.00	59 100.00
	<b>Total</b>	151 63.98	122 59.22	76 32.20	77 37.37	07 03.39	09 03.81		236 100.00	206 100.00
Category: 2	<b>Mondal gaon</b>	29 56.862	29 53.70	21 41.18	22 40.74	03 05.55	01 01.96	-	51 100.00	54 100.00
	<b>Panchayat gaon</b>	102 62.20	67 50.76	60 36.59	61 46.21	03 02.27	02 01.22	01 00.76	164 100.00	132 100.00
	<b>Subba gaon</b>	119 64.67	73 51.05	63 34.24	66 46.15	04 02.80	02 01.09	-	184 100.00	143 100.00
	<b>Total</b>	250 62.65	169 51.36	144 36.09	149 45.29	10 03.04	05 01.25	01 00.30	399 100.00	329 100.00
<b>Grand Total</b>		401 63.15	291 54.39	220 34.65	226 42.24	17 03.18	14 02.20	01 00.19	635 100.00	535 100.00

TABLE: 2.4.1 POPULATION ACCORDING TO MARITAL STATUS IN DHUMCI GAON

Age - groups	Unmarried		Married		Widow	Widower	Separated Females Only	Total	
	M	F	M	F				M	F
0-4	14 100.00	08 100.00	-	-	-	-	-	14 100.00	08 100.00
5-9	05 100.00	10 100.00	-	-	-	-	-	05 100.00	10 100.00
10-14	18 100.00	08 100.00	-	-	-	-	-	18 100.00	08 100.00
15-19	12 100.00	09 90.00	-	01 10.00	-	-	-	12 100.00	10 100.00
20-24	02 33.33	06 50.00	04 66.66	06 50.00	-	-	-	06 100.00	12 100.00
25-29	02 18.18	01 12.50	09 81.81	07 87.50	-	-	-	11 100.00	08 100.00
30-34	-	-	04 100.00	03 100.00	-	-	-	04 100.00	03 100.00
35-39	-	01 20.00	01 100.00	03 60.00	01 20.00	-	-	01 100.00	05 100.00
40-44	-	-	03 100.00	02 100.00	-	-	-	03 100.00	02 100.00
45-49	-	-	01 50.00	01 100.00	-	01 50.00	-	02 100.00	01 100.00
50-54	-	-	02 100.00	02 100.00	-	-	-	02 100.00	02 100.00
55-59	-	-	01 100.00	01 100.00	-	-	-	01 100.00	01 100.00
60-64	-	-	01 33.33	01 33.33	02 66.66	02 66.66	-	03 100.00	03 100.00
65-69	-	-	01 50.00	-	01 100.00	01 50.00	-	02 100.00	01 100.00
70 & 70+	-	-	-	-	-	-	-	-	-
Total	53 63.09	43 58.11	27 32.14	27 36.48	04 05.40	04 04.76	-	84 100.00	74 100.00

**TABLE: 2.4.2 DISTRIBUTION OF POPULATION ACCORDING TO MARITAL STATUS IN MITRAN GAON**

Age - groups	Unmarried		Married		Widow	Widower	Separated Females Only	Total	
	M	F	M	F				M	F
0-4	12 100.00	10 100.00	-	-	-	-	-	12 100.00	10 100.00
5-9	09 100.00	14 100.00	-	-	-	-	-	09 100.00	14 100.00
10-14	13 100.00	11 100.0	-	-	-	-	-	13 100.00	11 100.00
15-19	09 100.00	07 100.00	-	-	-	-	-	09 100.00	07 100.00
20-24	02 50.00	-	02 50.00	06 100.00	-	-	-	04 100.00	06 100.00
25-29	-	-	07 100.00	09 100.00	-	-	-	07 100.00	09 100.00
30-34	-	-	05 100.00	05 100.00	-	-	-	05 100.00	05 100.00
35-39	-	-	05 100.00	05 100.00	-	-	-	05 100.00	05 100.00
40-44	01 14.29	-	05 71.42	-	-	01 14.29	-	07 100.00	-
45-49	-	-	02 100.00	02 66.67	01 33.33	-	-	02 100.00	03 100.00
50-54	-	-	01 100.00	-	-	-	-	01 100.00	-
55-59	-	-	01 50.00	-	01 100.00	01 50.00	-	02 100.00	01 100.00
60-64	-	-	01 50.00	02 100.00	-	01 50.00	-	02 100.00	02 100.00
65-69	-	-	-	-	-	01 100.00	-	01 100.00	-
70 & 70+	-	-	-	-	-	-	-	-	-
<b>Total</b>	46 58.23	42 57.53	29 36.71	29 39.73	02 02.74	04 05.06	-	79 100.00	73 100.00

TABLE: 2.4.3 DISTRIBUTION OF POPULATION ACCORDING TO MARITAL STATUS IN PUJA  
GAON

Age - groups	Unmarried		Married		Widow	Widower	Separated Females Only	Total	
	M	F	M	F				M	F
0-4	13 100.00	06 100.00	-	-	-	-	-	13 100.00	06 100.00
5-9	14 100.00	13 100.00	-	-	-	-	-	14 100.00	13 100.00
10-14	12 100.00	13 100.00	-	-	-	-	-	12 100.00	13 100.00
15-19	11 100.00	04 100.00	-	-	-	-	-	11 100.00	04 100.00
20-24	01 50.00	01 16.67	01 50.00	05 83.33	-	-	-	02 100.00	06 100.00
25-29	-	-	06 100.00	03 100.00	-	-	-	06 100.00	06 100.00
30-34	-	-	03 100.00	02 100.00	-	-	-	03 100.00	02 100.00
35-39	-	-	-	02 100.00	-	-	-	-	02 100.00
40-44	01 25.00	-	03 75.00	03 100.00	-	-	-	04 100.00	03 100.00
45-49	-	-	04 100.00	05 83.33	01 16.67	-	-	04 100.00	06 100.00
50-54	-	-	02 100.00	-	-	-	-	02 100.00	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	-	-	01 100.00	-	01 100.00	-	01 100.00	01 100.00
65-69	-	-	01 100.00	-	-	-	-	01 100.00	-
70 & 70+	-	-	-	-	-	-	-	-	-
<b>Total</b>	52 71.23	37 62.72	20 27.40	21 35.59	01 01.69	01 01.37	-	73 100.00	59 100.00

**TABLE: 2.4.4 DISTRIBUTION OF POPULATION ACCORDING TO MARITAL STATUS IN  
MONDAL GAON**

Age - groups	Unmarried		Married		Widow	Widower	Separated Females Only	Total	
	M	F	M	F				M	F
0-4	01 100.00	01 100.00	-	-	-	-	-	01 100.00	01 100.00
5-9	10 100.00	07 100.00	-	-	-	-	-	10 100.00	07 100.00
10-14	03 100.00	10 100.00	-	-	-	-	-	03 100.00	10 100.00
15-19	06 100.00	07 100.00	-	-	-	-	-	06 100.00	07 100.00
20-24	08 80.000	03 60.000	02 20.000	02 40.000	-	-	-	10 100.00	05 100.00
25-29	01 33.333	01 16.666	02 66.666	05 83.333	-	-	-	03 100.00	06 100.00
30-34	-	-	03 100.00	06 100.00	-	-	-	03 100.00	06 100.00
35-39	-	-	05 100.00	02 100.00	-	-	-	05 100.00	02 100.00
40-44	-	-	03 100.00	02 100.00	-	-	-	03 100.00	02 100.00
45-49	-	-	01 100.00	02 66.666	01 33.333	-	-	01 100.00	03 100.00
50-54	-	-	02 100.00	02 66.666	01 33.333	-	-	02 100.00	03 100.00
55-59	-	-	01 50.000	-	-	01 50.000	-	02 100.00	-
60-64	-	-	02 100.00	01 50.000	01 50.000	-	-	02 100.00	02 100.00
65-69	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-
<b>Total</b>	29 56.862	29 53.703	21 41.176	22 40.740	03 05.555	01 01.960	-	51 100.00	54 100.00

TABLE: 2.4.5 DISTRIBUTION OF POPULATION ACCORDING TO MARITAL STATUS IN PANCHAYAT GAON

Age - groups	Unmarried		Married		Widow	Widower	Separated Females Only	Total	
	M	F	M	F				M	F
0-4	18 100.00	13 100.00	-	-	-	-	-	18 100.00	13 100.00
5-9	20 100.00	12 100.00	-	-	-	-	-	20 100.00	12 100.00
10-14	21 100.00	19 100.00	-	-	-	-	-	21 100.00	19 100.00
15-19	23 100.00	16 84.21	-	03 15.79	-	-	-	23 100.0	19 100.00
20-24	14 70.00	06 46.15	06 30.00	07 53.85	-	-	-	20 100.00	13 100.00
25-29	05 33.33	-	10 66.67	08 100.00	-	-	-	15 100.00	08 100.00
30-34	-	-	07 100.0	13 100.00	-	-	-	07 100.0	13 100.00
35-39	-	-	07 100.00	11 100.00	-	-	-	07 100.00	11 100.00
40-44	01 10.00	01 08.33	09 90.00	10 83.33	01 08.33	-	-	10 100.00	12 100.00
45-49	-	-	14 100.00	06 75.00	01 12.50	-	01 12.50	14 100.00	08 100.00
50-54	-	-	02 66.67	-	-	01 33.33	-	03 100.00	-
55-59	-	-	02 100.00	02 100.00	-	-	-	02 100.00	02 100.00
60-64	-	-	03 100.00	01 100.00	-	-	-	03 100.00	01 100.00
65-69	-	-	-	-	01 100.00	-	-	-	01 100.00
70 & 70+	-	-	-	-	-	01 100.00	-	01 100.00	-
<b>Total</b>	102 62.20	67 50.76	60 36.59	61 46.21	03 02.27	02 01.22	01 00.76	164 100.00	132 100.00

**TABLE: 2.4.6 DISTRIBUTION OF POPULATION ACCORDING TO MARITAL STATUS IN  
SUBBA GAON**

Age - groups	Unmarried		Married		Widow	Widower	Separated Females Only	Total	
	M	F	M	F				M	F
0-4	12 100.00	12 100.00	-	-	-	-	-	12 100.00	12 100.00
5-9	35 100.00	26 100.00	-	-	-	-	-	35 100.00	26 100.00
10-14	29 100.00	17 100.00	-	-	-	-	-	29 100.00	17 100.00
15-19	25 100.00	13 92.86	-	01 07.14	-	-	-	25 100.00	14 100.00
20-24	12 80.00	04 36.36	03 20.00	07 63.64	-	-	-	15 100.00	11 100.00
25-29	03 18.75	01 06.67	13 81.25	14 93.33	-	-	-	16 100.00	15 100.00
30-34	-	-	11 100.00	12 92.31	01 07.69	-	-	11 100.00	13 100.00
35-39	01 06.67	-	14 93.33	13 100.00	-	-	-	15 100.00	13 100.00
40-44	01 14.29	-	06 85.71	07 87.50	01 12.50	-	-	07 100.00	08 100.00
45-49	01 12.50	-	07 87.50	06 100.00	-	-	-	08 100.00	06 100.00
50-54	-	-	05 100.00	03 100.00	-	-	-	05 100.00	03 100.00
55-59	-	-	01 50.00	01 100.00	-	01 50.00	-	02 100.00	01 100.00
60-64	-	-	02 66.67	01 33.33	02 66.67	01 33.33	-	03 100.00	03 100.00
65-69	-	-	01 100.00	01 100.00	-	-	-	01 100.00	01 100.00
70 & 70+	-	-	-	-	-	-	-	-	-
Total	119 64.67	73 51.05	63 34.24	66 46.15	04 02.80	02 01.09	-	184 100.00	143 100.00

TABLE: 2.5 DISTRIBUTION OF THE POPULATION ON THE BASIS OF EDUCATIONAL STATUS

Name of the Sectors		Cannot sign		Different categories																Total		
				Can sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Other				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Category: 1	Dhumci gaon	17 20.24	22 29.73	23 27.38	27 36.49	-	02 02.70	31 36.90	21 28.38	08 09.52	01 01.35	04 04.76	-	01 01.19	-	-	-	-	-	-	84 100.00	74 100.00
	Mitran gaon	37 46.83	51 69.86	04 05.06	01 01.37	01 01.27	02 02.75	15 18.99	14 19.18	17 21.52	05 06.85	05 06.33	-	-	-	-	-	-	-	-	79 100.00	73 100.00
	Puja gaon	36 49.31	38 64.41	01 01.37	-	03 04.11	04 06.78	23 31.51	16 27.12	08 10.96	01 01.69	02 02.74	-	-	-	-	-	-	-	-	73 100.00	59 100.00
	Total	90 38.14	111 53.88	28 11.86	28 13.59	04 01.69	08 03.88	69 29.24	51 24.76	33 13.98	07 03.39	11 04.66	-	01 00.42	-	-	-	-	-	-	236 100.00	206 100.00
Category: 2	Mondal gaon	14 27.45	22 40.74	08 15.69	05 09.26	07 13.73	08 14.81	10 19.61	19 35.19	10 19.61	-	02 03.92	-	-	02 03.70	-	-	-	-	-	51 100.00	54 100.00
	Panchayat gaon	43 26.22	65 49.24	11 06.71	05 03.79	05 03.05	08 06.06	33 20.12	33 25.00	41 25.00	10 7.58	21 12.80	09 06.82	05 03.05	01 00.76	04 02.44	01 00.76	01 00.61	-	-	164 100.00	132 100.00
	Subba gaon	59 32.06	87 60.84	06 03.26	03 02.10	02 01.09	02 01.40	68 36.96	38 26.57	28 15.22	09 06.09	16 08.69	04 02.80	05 02.72	-	-	-	-	-	-	184 100.00	143 100.00
	Total	116 29.07	174 52.89	25 06.27	13 03.95	14 03.50	18 05.47	111 27.82	90 27.36	76 19.05	19 05.78	39 09.77	13 03.95	10 02.51	03 00.91	04 01.00	01 00.30	01 00.25	-	-	399 100.00	329 100.00
Grand Total		206 32.44	285 53.27	53 8.35	41 07.66	18 02.83	26 04.86	180 28.35	141 26.35	109 17.17	26 04.86	50 07.87	13 02.43	11 01.73	03 00.56	04 00.63	01 00.19	01 00.16	-	-	635 100.00	535 100.00

TABLE: 2.5.1 DISTRIBUTION OF THE POPULATION ON THE BASIS OF EDUCATIONAL STATUS (DHUMCI GAON)

Age groups	Cannot sign		Different categories																Total	
			Can sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Other			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	14 100.00	08 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14 100.00	08 100.00
5-9	-	01 10.00	-	01 10.00	-	02 20.00	05 100.00	06 40.00	-	-	-	-	-	-	-	-	-	-	05 100.00	10 100.00
10-14	-	-	01 05.55	01 12.50	-	-	17 94.44	06 75.00	-	01 12.50	-	-	-	-	-	-	-	-	18 100.00	08 100.00
15-19	-	01 10.00	01 08.33	04 40.00	-	-	04 33.33	05 50.00	04 33.33	-	03 25.00	-	-	-	-	-	-	-	12 100.00	10 100.00
20-24	-	02 16.66	02 33.33	07 58.33	-	01 08.33	02 33.33	02 16.66	01 16.66	-	-	-	01 16.66	-	-	-	-	-	06 100.00	12 100.00
25-29	-	01 12.50	06 54.54	05 62.50	-	-	02 18.18	02 25.00	02 18.18	-	01 09.09	-	-	-	-	-	-	-	11 100.00	08 100.00
30-34	-	-	04 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	04 100.00	03 100.00
35-39	-	02 40.00	01 100.00	03 60.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	05 100.00
40-44	-	01 50.00	01 33.33	01 50.00	-	-	01 33.33	-	01 33.33	-	-	-	-	-	-	-	-	-	03 100.00	02 100.00
45-49	-	-	02 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	01 100.00
50-54	-	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	02 100.00
55-59	-	-	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	01 100.00
60-64	02 66.66	03 100.00	01 33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03 100.00	03 100.00
65-69	01 50.00	01 100.00	01 50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	01 100.00
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	17 20.24	22 29.73	23 27.38	27 36.49	-	02 02.70	31 36.90	21 28.38	08 09.52	01 01.35	04 04.76	-	01 01.19	-	-	-	-	-	84 100.00	74 100.00

TABLE: 2.5.2 DISTRIBUTION OF THE POPULATION ON THE BASIS OF EDUCATIONAL STATUS (MITRAN GAON)

Age groups	Cannot sign		Different categories																Total	
			Can sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Other			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	11 91.67	10 100.00	-	-	01 08.33	-	-	-	-	-	-	-	-	-	-	-	-	-	12 100.00	10 100.00
5-9	03 33.33	02 14.29	-	-	-	02 14.29	06 66.67	10 71.42	-	-	-	-	-	-	-	-	-	-	09 100.00	14 100.00
10-14	-	03 27.27	-	-	-	-	05 38.46	03 27.27	08 61.54	05 45.46	-	-	-	-	-	-	-	-	13 100.00	11 100.00
15-19	03 33.33	05 71.42	-	01 14.29	-	-	01 11.11	01 14.29	02 22.23	-	03 33.33	-	-	-	-	-	-	-	09 100.00	07 100.00
20-24	02 50.00	06 100.00	-	-	-	-	-	-	01 25.00	-	01 25.00	-	-	-	-	-	-	-	04 100.00	06 100.00
25-29	01 14.29	09 100.00	-	-	-	-	02 28.57	-	03 42.85	-	01 14.29	-	-	-	-	-	-	-	07 100.00	09 100.00
30-34	04 80.00	05 100.00	01 20.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	05 100.00	05 100.00
35-39	03 60.00	05 100.00	01 20.00	-	-	-	01 20.00	-	-	-	-	-	-	-	-	-	-	-	05 100.00	05 100.00
40-44	04 57.14	-	-	-	-	-	-	-	03 42.86	-	-	-	-	-	-	-	-	-	07 100.00	-
45-49	01 50.00	03 100.00	01 50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	03 100.00
50-54	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	-
55-59	02 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	01 100.00
60-64	01 50.00	02 100.00	01 50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	02 100.00
65-69	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	37 46.83	51 69.86	04 05.06	01 01.37	01 01.27	02 02.75	15 18.99	14 19.18	17 21.52	05 06.85	05 06.33	-	-	-	-	-	-	-	79 100.00	73 100.00

**TABLE: 2.5.3 DISTRIBUTION OF THE POPULATION ON THE BASIS OF EDUCATIONAL STATUS (PUJA GAON)**

Age groups	Cannot sign		Different categories																Total			
			Can sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Other					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
0-4	13 100.00	05 83.33	-	-	-	01 16.67	-	-	-	-	-	-	-	-	-	-	-	-	13	06	100.00	100.00
5-9	02 14.28	03 23.08	-	-	03 21.43	03 23.08	09 64.29	07 53.84	-	-	-	-	-	-	-	-	-	-	14	13	100.00	100.00
10-14	02 16.67	05 38.46	-	-	-	-	07 58.33	08 61.54	03 25.00	-	-	-	-	-	-	-	-	-	12	13	100.00	100.00
15-19	02 18.18	03 75.00	-	-	-	-	06 54.55	01 25.00	02 18.18	-	01 09.09	-	-	-	-	-	-	-	11	04	100.00	100.00
20-24	01 50.00	05 83.33	-	-	-	-	-	-	01 50.00	01 16.67	-	-	-	-	-	-	-	-	02	06	100.00	100.00
25-29	02 33.33	03 100.00	-	-	-	-	01 16.67	-	02 33.33	-	01 16.67	-	-	-	-	-	-	-	06	03	100.00	100.00
30-34	02 66.67	02 100.00	01 33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03	02	100.00	100.00
35-39	-	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02	100.00	-
40-44	04 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	04	03	100.00	100.00
45-49	04 100.00	06 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	04	06	100.00	100.00
50-54	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02	-	100.00	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01	01	100.00	100.00
65-69	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01	-	100.00	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	36 49.31	38 64.41	01 01.37	-	03 04.11	04 06.78	23 31.51	16 27.12	08 10.96	01 01.69	02 02.74	-	-	-	-	-	-	-	73	59	100.00	100.00

TABLE: 2.5.4 DISTRIBUTION OF THE POPULATION ON THE BASIS OF EDUCATIONAL STATUS (MONDAL GAON)

Age groups	Cannot sign		Different categories																Total	
			Can sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Other			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	01 100.00
5-9	04 40.00	02 28.57	01 10.00	-	05 50.00	03 42.86	-	02 28.57	-	-	-	-	-	-	-	-	-	-	10 100.00	07 100.00
10-14	-	-	-	01 10.00	-	03 30.00	03 100.00	06 60.00	-	-	-	-	-	-	-	-	-	-	03 100.00	10 100.00
15-19	-	-	-	01 14.29	-	-	-	04 57.14	06 100.00	-	-	-	-	01 14.28	-	01 14.28	-	-	06 100.00	07 100.00
20-24	-	-	01 100.00	-	-	02 40.00	04 40.00	03 60.00	04 40.00	-	01 10.00	-	-	-	-	-	-	-	10 100.00	05 100.00
25-29	-	02 33.33	-	02 33.33	-	-	02 66.67	02 33.33	-	-	01 33.33	-	-	-	-	-	-	-	03 100.00	06 100.00
30-34	-	05 83.33	02 66.67	01 16.67	01 33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	03 100.00	06 100.00
35-39	-	02 100.00	03 60.00	-	01 20.00	-	01 20.00	-	-	-	-	-	-	-	-	-	-	-	05 100.00	02 100.00
40-44	02 66.67	02 100.00	01 33.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03 100.00	02 100.00
45-49	01 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	03 100.00
50-54	02 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	03 100.00
55-59	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	-
60-64	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	02 100.00
65-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	14 27.45	22 40.74	08 15.69	05 09.26	07 13.72	08 14.81	10 19.61	19 35.19	10 19.61	-	02 03.92	-	-	-	-	-	-	-	51 100.00	54 100.00

**Table: 2.5.5 DISTRIBUTION OF POPULATION ON THE BASIS OF EDUCATIONAL STATUS (PANCHAYAT GAON)**

Age groups	Total		Different Categories																	
	M	F	Can Sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Others	Can't Sign		
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	M	F	
0-4	18 100.00	13 100.00	-	-	03 16.67	05 38.46	02 11.11	-	-	-	-	-	-	-	-	-	-	-	13 72.22	08 61.54
5-9	20 100.00	12 100.00	02 10.00	-	02 10.00	03 25.00	11 55.00	06 50.00	-	01 08.33	01 05.00	-	-	-	-	-	-	-	04 20.00	02 16.67
10-14	21 100.00	19 100.00	-	-	-	-	09 42.86	14 73.68	08 38.09	03 15.79	01 04.76	01 05.26	01 04.76	-	-	-	-	-	02 09.52	01 05.26
15-19	23 100.00	19 100.00	-	-	-	-	01 04.35	06 31.58	13 56.52	03 15.79	08 34.78	04 21.05	-	01 05.26	-	-	-	-	01 04.35	05 26.32
20-24	20 100.00	13 100.00	01 05.00	01 07.69	-	-	01 05.00	3 23.08	08 40.00	01 07.69	03 15.00	02 15.38	02 10.00	-	03 15.00	01 07.69	-	-	02 10.00	05 38.46
25-29	15 100.00	08 100.00	01 06.67	-	-	-	01 06.67	-	04 26.67	02 25.00	03 20.00	-	-	-	01 06.67	-	01 06.67	-	04 26.67	06 75.00
30-34	07 100.00	13 100.00	-	03 23.08	-	-	03 42.86	-	01 14.29	-	-	01 07.69	01 14.29	-	-	-	-	-	02 28.57	09 69.23
35-39	07 100.00	11 100.00	04 57.14	-	-	-	-	03 27.27	01 14.29	-	-	01 09.09	-	-	-	-	-	-	02 28.57	07 63.64
40-44	10 100.00	12 100.00	01 10.00	-	-	-	02 20.00	01 08.33	02 20.00	-	02 20.00	-	01 10.00	-	-	-	-	-	02 20.00	11 91.67
45-49	14 100.00	08 100.00	01 07.14	01 12.50	-	-	02 14.29	-	02 14.29	-	03 21.43	-	-	-	-	-	-	-	06 42.86	07 87.50
50-54	03 100.00	-	-	-	-	-	01 33.33	-	02 66.67	-	-	-	-	-	-	-	-	-	-	-
55-59	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	02 100.00
60-64	03 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03 100.00	01 100.00
65-69	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00
70&70+	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	164 100.00	132 100.00	11 06.71	05 03.79	05 03.05	08 06.06	33 20.12	33 25.00	41 25.00	10 07.58	21 12.80	09 06.82	05 03.05	01 0.76	04 02.44	01 0.76	01 0.61	-	43 26.22	65 49.24

**TABLE: 2.5.6 DISTRIBUTION OF THE POPULATION ON THE BASIS OF EDUCATIONAL STATUS ( SUBBA GAON)**

Age groups	Cannot sign		Different categories																Total	
			Can sign		Without any standard		I-IV		V-VIII		IX-X		XI-XII		Graduate		Other			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	10 83.34	12 100.00	-	-	01 08.33	-	01 08.33	-	-	-	-	-	-	-	-	-	-	-	12 100.00	12 100.00
5-9	10 28.57	05 19.23	-	-	01 02.87	02 07.69	24 64.86	19 73.08	-	-	-	-	-	-	-	-	-	-	35 100.00	26 100.00
10-14	03 10.34	03 17.65	-	-	-	-	18 62.07	10 58.82	07 24.14	04 23.53	01 03.45	-	-	-	-	-	-	-	29 100.00	17 100.00
15-19	04 16.00	06 42.86	01 04.00	-	-	-	04 16.00	04 28.57	10 40.00	03 21.43	06 24.00	01 07.14	-	-	-	-	-	-	25 100.00	14 100.00
20-24	-	06 72.73	-	-	-	-	05 33.33	02 18.18	04 26.67	01 09.09	03 20.00	-	03 20.00	-	-	-	-	-	15 100.00	11 100.00
25-29	03 18.75	09 60.00	-	02 13.33	-	-	05 31.25	03 20.00	05 31.25	-	02 12.50	01 06.67	01 06.25	-	-	-	-	-	16 100.00	15 100.00
30-34	03 27.27	12 92.31	01 09.09	-	-	-	07 63.64	-	-	-	-	01 07.69	-	-	-	-	-	-	11 100.00	13 100.00
35-39	08 53.34	12 92.31	03 20.00	-	-	-	-	-	02 13.33	01 07.69	02 13.33	-	-	-	-	-	-	-	15 100.00	13 100.00
40-44	03 42.88	06 75.00	01 14.28	01 12.50	-	-	01 14.28	-	-	-	01 14.28	01 12.50	01 14.28	-	-	-	-	-	07 100.00	08 100.00
45-49	06 75.00	06 100.00	-	-	-	-	02 25.00	-	-	-	-	-	-	-	-	-	-	-	08 100.00	06 100.00
50-54	03 60.00	03 100.00	-	-	-	-	01 20.00	-	-	-	01 20.00	-	-	-	-	-	-	-	05 100.00	03 100.00
55-59	02 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02 100.00	01 100.00
60-64	03 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03 100.00	03 100.00
65-69	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	01 100.00
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	59 32.06	87 60.84	06 03.26	03 02.10	02 01.09	02 01.40	68 36.96	38 26.57	28 15.22	09 06.29	16 08.69	04 02.80	05 02.72	-	-	-	-	-	184 100.00	143 100.00

TABLE: 2.6 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION

Name of the Sectors		Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Category: 1	Dhumci gaon	84 100.00	74 100.00	45 53.57	-	-	-	-	02 03.38	49 66.12	22 26.19	15 20.27	-	-	-	-	01 01.19	01 01.35	14 16.67	09 12.16	
	Mitran gaon	79 100.00	73 100.00	41 51.90	19 26.03	-	-	-	01 01.37	04 05.06	22 30.13	20 27.40	-	-	03 03.80	-	-	01 01.37	09 11.39	10 13.70	
	Puja gaon	73 100.00	59 100.00	31 42.46	21 35.60	-	-	-	-	04 05.48	17 28.81	22 30.14	15 25.42	-	-	03 04.11	-	02 02.74	01 01.69	11 15.07	05 08.48
	Total	236 100.00	206 100.00	117 49.58	40 19.42	-	-	-	01 00.49	10 04.24	88 42.72	66 27.97	50 24.27	-	-	06 02.54	-	03 01.27	03 01.46	34 14.41	24 11.65
Category: 2	Mondal gaon	51 100.00	54 100.00	25 49.09	-	-	-	02 3.92	-	03 05.88	29 53.70	16 31.37	19 35.19	03 05.88	-	-	-	-	03 05.88	02 3.92	03 05.55
	Panchayet gaon	164 100.00	132 100.00	41 25.00	03 2.27	03 1.83	-	05 3.05	-	02 1.21	72 54.55	50 30.49	36 27.28	16 09.76	02 01.51	12 07.32	-	08 04.88	01 0.76	27 16.46	18 13.67
	Subba gaon	184 100.00	143 100.00	69 37.50	38 26.56	02 1.09	-	02 1.09	05 3.50	12 6.52	47 32.87	66 35.87	33 23.08	07 03.80	03 02.10	08 04.35	02 1.40	10 05.43	04 2.80	08 4.35	11 07.69
	Total	399 100.00	329 100.00	135 33.83	41 12.46	05 01.25	-	09 02.26	05 01.52	17 04.26	148 44.98	132 33.08	88 26.74	26 06.52	05 01.52	20 05.01	02 00.61	18 04.51	08 02.43	37 09.27	32 09.73
Grand Total		635 100.00	535 100.00	252 39.69	81 15.14	05 00.79	-	09 01.42	06 01.12	27 04.25	236 44.11	198 31.18	138 25.79	26 04.09	05 0.93	26 04.09	02 0.38	21 03.31	11 02.06	71 11.18	56 10.47

TABLE: 2.6.1 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION (DHUMCI GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	14 100.00	08 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14 100.00	08 100.00
5-9	05 100.00	10 100.00	-	-	-	-	-	-	-	-	05 100.00	09 90.00	-	-	-	-	-	-	-	01 10.00
10-14	18 100.00	08 100.00	02 11.11	-	-	-	-	-	-	02 25.00	16 88.89	06 75.00	-	-	-	-	-	-	-	-
15-19	12 100.00	10 100.00	11 91.67	-	-	-	-	-	-	10 100.00	01 08.33	-	-	-	-	-	-	-	-	-
20-24	06 100.00	12 100.00	06 100.00	-	-	-	-	-	-	12 100.00	-	-	-	-	-	-	-	-	-	-
25-29	11 100.00	08 100.00	10 90.91	-	-	-	-	-	-	08 100.00	-	-	-	-	-	-	01 10.00	-	-	-
30-34	04 100.00	03 100.00	04 100.00	-	-	-	-	-	-	03 100.00	-	-	-	-	-	-	-	-	-	-
35-39	01 100.00	05 100.00	01 100.00	-	-	-	-	-	-	04 80.00	-	-	-	-	-	-	-	01 20.00	-	-
40-44	03 100.00	02 100.00	03 100.00	-	-	-	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-
45-49	02 100.00	01 100.00	02 100.00	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-
50-54	02 100.00	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-
55-59	01 100.00	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-
60-64	03 100.00	03 100.00	02 66.666	-	-	-	-	-	01 33.33	03 100.00	-	-	-	-	-	-	-	-	-	-
65-69	02 100.00	01 100.00	01 50.000	-	-	-	-	-	01 50.00	01 100.00	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	84 100.00	74 100.00	45 53.57	-	-	-	-	-	02 02.38	49 66.22	22 26.19	15 20.27	-	-	-	-	01 01.19	01 01.35	14 16.67	09 12.16

TABLE: 2.6.2 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION (MITRAN GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	12 100.00	10 100.00	-	-	-	-	-	-	02 16.67	01 10.00	01 08.33	-	-	-	-	-	-	-	09 75.00	09 90.00
5-9	09 100.0	14 100.00	01 11.11	-	-	-	-	-	02 22.22	02 14.29	06 66.67	12 85.71	-	-	-	-	-	-	-	-
10-14	13 100.00	11 100.00	01 07.69	01 09.09	-	-	-	-	-	01 09.09	12 92.31	08 72.73	-	-	-	-	-	-	-	01 09.09
15-19	09 100.0	07 100.00	04 44.45	03 42.86	-	-	-	01 14.29	-	02 28.57	03 33.33	-	-	-	02 22.22	-	-	01 14.29	-	-
20-24	04 100.00	06 100.00	04 100.00	01 16.67	-	-	-	-	-	05 83.33	-	-	-	-	-	-	-	-	-	-
25-29	07 100.00	09 100.00	06 85.71	06 66.67	-	-	-	-	-	03 33.33	-	-	-	-	01 14.29	-	-	-	-	-
30-34	05 100.00	05 100.00	05 100.00	01 20.00	-	-	-	-	-	04 80.00	-	-	-	-	-	-	-	-	-	-
35-39	05 100.00	05 100.00	05 100.00	03 60.00	-	-	-	-	-	02 40.00	-	-	-	-	-	-	-	-	-	-
40-44	07 100.00	-	07 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	02 100.00	03 100.00	02 100.00	02 66.67	-	-	-	-	-	01 33.33	-	-	-	-	-	-	-	-	-	-
50-54	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	02 100.00	01 100.00	02 100.00	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-
60-64	02 100.00	02 100.00	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
65-69	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	79 100.00	73 100.00	41 51.90	19 26.03	-	-	-	01 01.37	04 05.06	22 30.13	22 27.85	20 27.40	-	-	03 03.80	-	-	01 01.37	09 11.39	10 13.70

TABLE: 2.6.3 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION (PUJA GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	13 100.00	06 100.00	-	-	-	-	-	-	02 15.38	-	-	01 16.67	-	-	-	-	-	-	11 84.62	05 83.33
5-9	14 100.00	13 100.00	-	01 07.69	-	-	-	-	02 14.29	03 23.08	12 85.71	09 69.23	-	-	-	-	-	-	-	-
10-14	12 100.00	13 100.00	02 16.67	04 30.77	-	-	-	-	-	03 23.08	09 75.00	05 38.46	-	-	-	-	01 08.33	01 07.69	-	-
15-19	11 100.00	04 100.00	08 72.73	03 75.00	-	-	-	-	-	01 25.00	01 09.09	-	-	-	02 18.18	-	-	-	-	
20-24	02 100.00	06 100.00	01 50.00	05 83.33	-	-	-	-	-	01 16.67	-	-	-	-	01 50.00	-	-	-	-	
25-29	06 100.00	03 100.00	05 83.33	-	-	-	-	-	-	03 100.00	-	-	-	-	-	-	01 16.67	-	-	
30-34	03 100.00	02 100.00	03 100.00	01 50.00	-	-	-	-	-	01 50.00	-	-	-	-	-	-	-	-	-	
35-39	-	02 100.00	-	01 50.00	-	-	-	-	-	01 50.00	-	-	-	-	-	-	-	-	-	
40-44	04 100.00	03 100.00	04 100.00	01 33.33	-	-	-	-	-	02 66.67	-	-	-	-	-	-	-	-	-	
45-49	04 100.00	06 100.00	04 100.00	05 83.33	-	-	-	-	-	01 16.67	-	-	-	-	-	-	-	-	-	
50-54	02 100.00	-	02 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
60-64	01 100.00	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	
65-69	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	73 100.00	59 100.00	31 42.46	21 35.60	-	-	-	-	04 05.48	17 28.81	22 30.14	15 25.42	-	-	03 04.11	-	02 02.74	01 01.69	11 15.07	05 08.48

TABLE: 2.6.4 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION (MONDAL GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	01 100.00
5-9	10 100.00	07 100.00	-	-	-	-	-	-	-	-	09 100.00	06 89.71	-	-	-	-	-	-	01 100.00	01 14.29
10-14	03 100.00	10 100.00	-	-	-	-	-	-	-	-	03 100.00	09 90.00	-	-	-	-	-	-	-	01 10.00
15-19	06 100.00	07 100.00	02 33.33	-	-	-	-	-	-	-	04 66.67	04 57.14	-	-	-	-	-	03 42.86	-	-
20-24	10 100.00	05 100.00	08 80.00	-	-	-	02 20.00	-	-	05 100.00	-	-	-	-	-	-	-	-	-	-
25-29	03 100.00	06 100.00	03 100.00	-	-	-	-	-	-	06 100.00	-	-	-	-	-	-	-	-	-	-
30-34	03 100.00	06 100.00	03 100.00	-	-	-	-	-	-	06 100.00	-	-	-	-	-	-	-	-	-	-
35-39	05 100.00	02 100.00	04 80.00	-	-	-	-	-	-	02 100.00	-	-	01 20.00	-	-	-	-	-	-	-
40-44	03 100.00	02 100.00	01 33.33	-	-	-	-	-	-	02 100.00	-	-	02 66.67	-	-	-	-	-	-	-
45-49	01 100.00	03 100.00	01 100.00	-	-	-	-	-	-	03 100.00	-	-	-	-	-	-	-	-	-	-
50-54	02 100.00	03 100.00	02 100.00	-	-	-	-	-	-	03 100.00	-	-	-	-	-	-	-	-	-	-
55-59	02 100.00	-	01 50.00	-	-	-	-	-	01 50.00	-	-	-	-	-	-	-	-	-	-	-
60-64	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	51 100.00	54 100.00	25 49.09	-	-	-	02 03.92	-	03 05.88	29 53.70	16 31.37	19 35.19	03 05.88	-	-	-	-	03 05.88	02 03.92	03 05.56

TABLE: 2.6.5 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION (PANCHAYAT GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	18 100.00	13 100.00	-	-	-	-	-	-	-	-	01 05.56	-	-	-	-	-	-	-	17 94.44	13 100.00
5-9	20 100.00	12 100.00	-	-	-	-	-	-	01 05.00	-	11 55.00	09 75.00	-	-	-	-	-	-	08 04.00	03 25.00
10-14	21 100.0	19 100.00	02 09.52	-	-	-	01 04.76	-	-	04 21.05	17 80.95	14 73.68	-	-	01 04.76	-	-	-	-	01 05.26
15-19	23 100.00	19 100.00	01 04.35	-	02 08.69	-	02 08.69	-	-	10 52.63	15 65.22	09 47.37	01 04.35	-	01 04.35	-	-	-	01 04.35	-
20-24	20 100.00	13 100.00	03 15.00	-	-	-	01 05.00	-	01 05.00	09 69.23	05 25.00	04 30.77	02 10.00	-	05 25.00	-	02 10.00	-	01 05.00	-
25-29	15 100.00	08 100.00	05 33.33	01 12.50	01 06.66	-	-	-	-	06 75.00	01 06.67	-	04 26.67	01 12.50	02 13.33	-	02 13.33	-	-	-
30-34	07 100.00	13 100.00	05 71.43	-	-	-	-	-	-	12 92.31	-	-	-	-	-	-	02 28.57	01 07.69	-	-
35-39	07 100.00	11 100.00	06 85.71	-	-	-	-	-	-	10 90.91	-	-	-	01 09.09	01 14.29	-	-	-	-	-
40-44	10 100.00	12 100.00	04 40.00	01 08.33	-	-	01 10.00	-	-	11 91.67	-	-	04 40.00	-	-	-	01 10.00	-	-	-
45-49	14 100.00	08 100.00	08 57.14	01 12.50	-	-	-	-	-	07 87.50	-	-	04 28.57	-	02 14.25	-	-	-	-	-
50-54	03 100.00	-	02 66.67	-	-	-	-	-	-	-	-	-	01 33.33	-	-	-	-	-	-	-
55-59	02 100.00	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-
60-64	03 100.00	01 100.00	02 66.67	-	-	-	-	-	-	-	-	-	-	-	-	-	01 33.33	-	-	01 100.00
65-69	-	01 100.00	-	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-
70 & 70+	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	164 100.00	132 100.00	41 25.00	03 02.27	03 01.83	-	05 03.05	-	02 01.21	72 54.55	50 30.49	36 27.28	16 09.76	02 01.51	12 07.32	-	08 04.88	01 00.76	27 16.46	18 13.67

TABLE: 2.6.6 DISTRIBUTION OF POPULATION ON THE BASIS OF PRIMARY OCCUPATION (SUBBA GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	12 100.00	12 100.00	-	-	-	-	-	-	02 16.67	01 08.33	02 16.67	-	-	-	-	-	-	-	08 66.66	11 91.67
5-9	35 100.00	26 100.00	01 02.86	01 03.85	-	-	-	-	10 28.57	04 15.38	24 68.57	21 80.77	-	-	-	-	-	-	-	-
10-14	29 100.00	17 100.00	03 10.34	03 17.65	-	-	-	-	-	01 05.88	22 75.86	10 58.82	-	-	01 03.45	-	03 10.34	03 17.65	-	-
15-19	25 100.00	14 100.00	08 32.00	07 50.00	-	-	01 04.00	-	-	03 21.42	12 48.00	02 14.29	-	-	04 16.00	02 14.29	-	-	-	-
20-24	15 100.00	11 100.00	07 46.66	04 36.36	-	-	-	01 09.09	-	05 45.46	05 33.33	-	01 06.67	-	01 06.67	-	01 06.67	01 09.09	-	-
25-29	16 100.00	15 100.00	13 81.25	05 33.33	-	-	-	01 06.67	-	08 53.33	01 06.25	-	-	01 06.67	01 06.25	-	01 06.25	-	-	-
30-34	11 100.00	13 100.00	08 72.73	03 23.08	01 09.09	-	-	01 07.69	-	08 61.54	-	-	-	01 07.69	01 09.09	-	01 09.09	-	-	-
35-39	15 100.00	13 100.00	10 66.67	06 46.15	-	-	-	01 07.70	-	06 46.15	-	-	03 20.00	-	-	-	02 13.33	-	-	-
40-44	07 100.00	08 100.00	03 42.85	04 50.00	01 14.29	-	01 14.29	-	-	03 37.50	-	-	02 28.57	01 12.50	-	-	-	-	-	-
45-49	08 100.00	06 100.00	08 100.00	02 33.33	-	-	-	01 16.67	-	03 50.00	-	-	-	-	-	-	-	-	-	-
50-54	05 100.00	03 100.00	03 60.00	01 33.33	-	-	-	-	-	02 66.67	-	-	01 20.00	-	-	-	01 20.00	-	-	-
55-59	02 100.00	01 100.00	01 50.00	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	01 50.00	-	-	-
60-64	03 100.00	03 100.00	03 100.00	01 33.33	-	-	-	-	-	02 66.67	-	-	-	-	-	-	-	-	-	-
65-69	01 100.00	01 100.00	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	184 100.00	143 100.00	69 37.50	38 26.56	02 01.09	-	02 01.09	05 03.50	12 06.52	47 32.87	66 35.87	33 23.08	07 03.80	03 02.10	08 04.35	02 01.40	10 05.43	04 02.80	08 04.35	11 07.69

TABLE: 2.7 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION

Name of the Sectors		Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Category: 1	Dhumci gaon	84 100.00	74 100.00	02 02.38	28 37.84	01 01.19	01 01.35	02 02.38	09 12.16	27 32.14	25 33.78	-	-	-	-	32 38.09	01 01.35	06 07.14	01 01.35	14 16.67	09 12.16
	Mitran gaon	79 100.00	73 100.00	05 06.33	18 24.66	-	-	01 01.26	01 01.37	39 49.37	39 53.42	-	-	01 01.26	-	11 13.93	-	08 10.13	-	14 17.72	15 20.55
	Puja gaon	73 100.00	59 100.00	09 12.33	16 27.12	-	-	01 01.37	01 01.69	36 49.31	35 59.32	-	-	-	-	10 13.70	-	02 02.74	-	15 20.55	07 11.87
	<b>Total</b>	236 100.00	206 100.00	16 06.78	62 30.09	01 00.42	01 00.49	04 01.69	11 05.34	102 43.22	99 48.06	-	-	01 00.42	-	53 22.46	01 00.49	16 06.78	01 00.46	43 18.22	31 15.05
Category: 2	Mondal gaon	51 100.00	54 100.00	03 05.88	30 55.55	-	03 05.55	-	-	19 37.25	20 37.04	-	-	-	-	19 37.25	-	09 17.65	-	01 01.96	01 1.85
	Panchayat gaon	164 100.00	132 100.00	18 10.98	30 22.73	03 01.83	-	07 04.27	-	06 03.66	12 09.09	01 0.61	-	-	-	-	-	09 05.49	02 01.52	119 72.56	88 66.67
	Subba gaon	184 100.00	143 100.00	26 14.13	44 30.77	-	-	01 00.54	-	121 65.76	79 55.24	-	-	-	-	07 03.80	-	09 04.89	02 01.40	20 10.88	18 12.59
	<b>Total</b>	399 100.00	329 100.00	47 11.78	104 31.61	03 00.75	03 00.91	08 02.01	-	146 36.59	111 33.74	01 .250	-	-	-	26 06.52	-	27 06.77	04 01.22	140 35.09	107 32.52
<b>Grand Total</b>		635 100.00	535 100.00	63 09.92	166 31.03	04 00.63	04 00.75	12 01.89	11 02.06	248 39.06	210 39.25	01 .157	-	01 00.16	-	79 12.44	01 00.19	43 06.77	05 00.93	183 28.82	138 25.79

TABLE: 2.7.1 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION (DHUMCI GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	14 100.00	08 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08 100.00
5-9	05 100.00	10 100.00	-	-	-	-	-	-	05 100.00	09 90.00	-	-	-	-	-	-	-	-	-	01 10.00
10-14	18 100.00	08 100.00	01 05.56	01 12.50	-	-	-	-	13 72.22	07 87.50	-	-	-	-	03 16.67	-	01 05.56	-	-	-
15-19	12 100.00	10 100.00	-	03 30.00	-	-	-	03 30.00	02 16.67	03 30.00	-	-	-	-	09 75.00	01 10.00	01 08.33	-	-	-
20-24	06 100.00	12 100.00	-	07 58.33	-	-	-	05 41.67	01 16.67	-	-	-	-	05 83.33	-	-	-	-	-	-
25-29	11 100.00	08 100.00	01 09.09	07 87.50	01 09.09	-	02 18.18	01 12.50	-	-	-	-	-	05 45.45	-	02 18.18	-	-	-	-
30-34	04 100.00	03 100.00	-	02 66.67	-	01 33.33	-	-	-	-	-	-	-	04 100.00	-	-	-	-	-	-
35-39	01 100.00	05 100.00	-	03 60.00	-	-	-	-	-	02 40.00	-	-	-	-	01 100.00	-	-	-	-	-
40-44	03 100.00	02 100.00	-	02 100.00	-	-	-	-	01 33.33	-	-	-	-	-	02 66.67	-	-	-	-	-
45-49	02 100.00	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	01 50.00	-	01 50.00	-	-	-	-
50-54	02 100.00	02 100.00	-	01 50.00	-	-	-	-	-	01 50.00	-	-	-	-	01 50.00	-	01 50.00	-	-	-
55-59	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	01 100.00	-	-
60-64	03 100.00	03 100.00	-	01 33.33	-	-	-	-	03 100.00	02 66.67	-	-	-	-	-	-	-	-	-	-
65-69	02 100.00	01 100.00	-	-	-	-	-	-	01 50.00	01 100.00	-	-	-	-	01 50.00	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	84 100.00	74 100.00	02 02.38	28 37.84	01 01.19	01 01.35	02 02.38	09 12.16	27 32.14	25 33.78	-	-	-	-	32 38.09	01 01.35	06 07.14	01 01.35	14 16.67	09 12.16

TABLE: 2.7.2 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION (MITRAN GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	12 100.00	10 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12 100.00	10 100.00
5-9	09 100.00	14 100.00	-	-	-	-	-	-	07 77.78	12 85.71	-	-	-	-	-	-	-	-	02 22.22	02 14.29
10-14	13 100.00	11 100.00	03 23.08	01 09.09	-	-	-	-	10 76.92	09 81.82	-	-	-	-	-	-	-	-	-	01 09.09
15-19	09 100.00	07 100.00	02 22.22	03 42.86	-	-	-	-	04 44.45	04 57.14	-	-	-	-	03 33.33	-	-	-	-	-
20-24	04 100.00	06 100.00	-	05 83.33	-	-	-	-	01 25.00	01 16.67	-	-	-	-	03 75.00	-	-	-	-	-
25-29	07 100.00	09 100.00	-	02 22.22	-	-	-	01 11.11	03 42.86	05 55.56	-	-	01 14.29	-	01 14.29	-	02 28.56	-	-	01 11.11
30-34	05 100.00	05 100.00	-	04 80.00	-	-	01 20.00	-	01 20.00	01 20.00	-	-	-	-	03 60.00	-	-	-	-	-
35-39	05 100.00	05 100.00	-	02 40.00	-	-	-	-	03 60.00	03 60.00	-	-	-	-	-	-	02 40.00	-	-	-
40-44	07 100.00	-	-	-	-	-	-	-	05 71.43	-	-	-	-	-	-	-	02 28.57	-	-	-
45-49	02 100.00	03 100.00	-	01 33.33	-	-	-	-	02 100.00	02 66.67	-	-	-	-	-	-	-	-	-	-
50-54	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	-	-	-
55-59	02 100.00	01 100.00	-	-	-	-	-	-	01 50.00	-	-	-	-	-	01 50.00	-	-	-	-	01 100.00
60-64	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-
65-69	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	79 100.00	73 100.00	05 06.33	18 24.66	-	-	01 01.26	01 01.37	39 49.37	39 53.42	-	-	01 01.26	-	11 13.93	-	08 10.13	-	14 17.72	15 20.55

TABLE: 2.7.3 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION (PUJA GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	13 100.00	06 100.00	-	-	-	-	-	-	-	01 16.67	-	-	-	-	-	-	-	-	13 100.00	05 83.33
5-9	14 100.00	13 100.00	-	-	-	-	-	-	12 85.71	11 84.62	-	-	-	-	-	-	-	-	02 14.29	02 15.38
10-14	12 100.00	13 100.00	05 41.67	05 38.46	-	-	-	-	07 58.33	08 61.54	-	-	-	-	-	-	-	-	-	-
15-19	11 100.0	04 100.00	03 27.27	01 25.00	-	-	-	-	06 54.55	03 75.00	-	-	-	-	01 09.09	-	01 09.09	-	-	-
20-24	02 100.00	06 100.00	-	01 16.67	-	-	-	-	01 50.00	05 83.33	-	-	-	-	01 50.00	-	-	-	-	-
25-29	06 100.00	03 100.00	01 16.67	03 100.0	-	-	01 16.67	-	01 16.67	-	-	-	-	03 50.00	-	-	-	-	-	-
30-34	03 100.0	02 100.00	-	01 50.00	-	-	-	-	01 33.33	01 50.00	-	-	-	-	02 66.67	-	-	-	-	-
35-39	-	02 100.00	-	01 50.00	-	-	-	-	-	01 50.00	-	-	-	-	-	-	-	-	-	-
40-44	04 100.00	03 100.00	-	02 66.67	-	-	-	-	02 50.00	01 33.33	-	-	-	-	01 25.00	-	01 25.00	-	-	-
45-49	04 100.00	06 100.00	-	01 16.67	-	-	-	01 16.67	03 75.00	04 66.66	-	-	-	-	01 25.00	-	-	-	-	-
50-54	02 100.00	-	-	-	-	-	-	-	01 50.00	-	-	-	-	01 50.00	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	01 100.00	01 100.00	-	01 100.00	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
65-69	01 100.00	-	-	-	-	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	73 100.00	59 100.00	09 12.33	16 27.12	-	-	01 01.37	01 01.69	36 49.31	35 59.32	-	-	-	-	10 13.70	-	02 02.74	-	15 20.55	07 11.87

TABLE: 2.7.4 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION (MONDAL GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	01 100.00
5-9	10 100.00	07 100.00	-	-	-	-	-	-	10 100.00	07 100.00	-	-	-	-	-	-	-	-	-	-
10-14	03 100.00	10 100.00	-	01 10.00	-	-	-	-	03 100.00	09 90.00	-	-	-	-	-	-	-	-	-	-
15-19	06 100.00	07 100.00	-	03 42.85	-	-	-	-	-	04 57.14	-	-	-	-	04 66.67	-	02 33.33	-	-	-
20-24	10 100.00	05 100.00	-	05 100.00	-	-	-	-	-	-	-	-	-	-	08 80.00	-	02 20.00	-	-	-
25-29	03 100.00	06 100.00	-	06 100.00	-	-	-	-	-	-	-	-	-	-	03 100.00	-	-	-	-	-
30-34	03 100.00	06 100.00	-	06 100.00	-	-	-	-	-	-	-	-	-	-	02 66.67	-	01 33.33	-	-	-
35-39	05 100.00	02 100.00	01 20.00	02 100.00	-	-	-	-	-	-	-	-	-	-	02 40.00	-	02 40.00	-	-	-
40-44	03 100.00	02 100.00	02 66.67	01 50.00	-	01 50.00	-	-	-	-	-	-	-	-	-	-	01 33.33	-	-	-
45-49	01 100.00	03 100.00	-	02 66.67	-	01 33.33	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
50-54	02 100.00	03 100.00	-	03 100.00	-	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-	-
55-59	02 100.00	-	-	-	-	-	-	-	01 50.00	-	-	-	-	-	-	-	01 50.00	-	-	-
60-64	02 100.00	02 100.00	-	01 50.00	-	01 50.00	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	51 100.00	54 100.00	03 05.88	30 55.56	-	03 05.56	-	-	19 37.25	20 37.04	-	-	-	-	19 37.25	-	09 17.65	-	01 01.96	01 01.85

TABLE: 2.7.5 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION (PANCHAYAT GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	18 100.00	13 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 100.00	13 100.00
5-9	20 100.00	12 100.00	-	-	-	-	-	-	-	01 08.33	-	-	-	-	-	-	01 05.00	-	19 95.00	11 91.67
10-14	21 100.0	19 100.00	02 09.52	02 10.53	-	-	-	-	03 14.29	06 31.58	-	-	-	-	-	-	01 05.26	16 76.19	10 52.63	
15-19	23 100.00	19 100.00	04 17.39	03 15.79	-	-	-	-	02 08.70	03 15.79	-	-	-	-	-	-	-	-	17 73.91	13 68.42
20-24	20 100.00	13 100.00	02 10.00	03 23.08	-	-	01 05.00	-	-	01 07.70	01 05.00	-	-	-	-	-	03 15.00	-	12 60.00	09 69.23
25-29	15 100.00	08 100.00	02 13.33	03 37.50	01 06.67	-	01 06.67	-	01 06.67	-	-	-	-	-	-	-	01 06.67	01 12.50	09 60.00	04 50.00
30-34	07 100.00	13 100.00	01 14.29	04 30.77	-	-	01 14.29	-	-	-	-	-	-	-	-	-	01 14.29	-	04 57.14	09 69.23
35-39	07 100.00	11 100.00	-	06 54.55	01 14.29	-	02 28.57	-	-	01 09.09	-	-	-	-	-	-	01 14.29	-	03 42.86	04 36.36
40-44	10 100.00	12 100.00	03 30.00	03 25.00	-	-	01 10.00	-	-	-	-	-	-	-	-	-	-	-	06 60.00	09 75.00
45-49	14 100.00	08 100.00	03 21.43	04 50.00	01 07.14	-	01 07.14	-	-	-	-	-	-	-	-	-	01 07.14	-	08 57.14	04 50.00
50-54	03 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03 33.33	-	02 66.67	-
55-59	02 100.00	02 100.00	01 50.00	01 50.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 50.00	01 50.00
60-64	03 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	03 100.00	01 100.00
65-69	-	01 100.00	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01 100.00	-
Total	164 100.00	132 100.00	18 10.98	30 22.73	03 01.83	-	07 04.27	-	06 03.66	12 09.09	01 00.61	-	-	-	-	-	09 05.49	02 01.52	119 72.56	88 66.67

TABLE: 2.7.6 DISTRIBUTION OF POPULATION ON THE BASIS OF SECONDARY OCCUPATION (SUBBA GAON)

Age groups	Total population		Agriculture		Agricultural labour		100 days Worker		H. H. W.		School going		Service		Worker in Bhutan		Other		Occupation less	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	12 100.00	12 100.00	-	-	-	-	-	-	01 08.33	-	-	-	-	-	-	-	-	-	11 91.67	12 100.00
5-9	35 100.00	26 100.00	01 02.86	-	-	-	-	-	25 71.43	23 88.46	-	-	-	-	-	-	-	-	09 25.71	03 11.54
10-14	29 100.00	17 100.00	07 24.14	02 11.76	-	-	-	-	22 75.86	15 88.24	-	-	-	-	-	-	-	-	-	-
15-19	25 100.00	14 100.00	07 28.00	05 35.71	-	-	-	-	17 68.00	08 57.14	-	-	-	-	01 04.00	-	-	01 07.15	-	-
20-24	15 100.00	11 100.0	04 26.67	07 63.64	-	-	-	-	10 66.67	03 27.27	-	-	-	-	-	-	01 06.66	01 09.09	-	-
25-29	16 100.00	15 100.00	02 12.50	08 53.33	-	-	01 06.25	-	10 62.50	07 46.47	-	-	-	-	02 12.50	-	01 06.25	-	-	-
30-34	11 100.00	13 100.00	02 18.18	09 69.23	-	-	-	-	07 63.64	04 30.77	-	-	-	-	02 18.18	-	-	-	-	-
35-39	15 100.0	13 100.00	01 06.67	05 38.46	-	-	-	-	10 66.67	07 53.85	-	-	-	-	02 13.33	-	02 13.33	-	-	01 07.69
40-44	07 100.00	08 100.00	01 14.29	01 12.50	-	-	-	-	05 71.42	06 75.00	-	-	-	-	-	-	01 14.29	-	-	01 12.50
45-49	08 100.00	06 100.00	-	03 50.00	-	-	-	-	06 75.00	03 50.00	-	-	-	-	-	-	02 25.00	-	-	-
50-54	05 100.00	03 100.00	-	02 66.67	-	-	-	-	03 60.00	01 33.33	-	-	-	-	-	-	02 40.00	-	-	-
55-59	02 100.00	01 100.00	01 50.00	01 100.00	-	-	-	-	01 50.00	-	-	-	-	-	-	-	-	-	-	-
60-64	03 100.00	03 100.00	-	01 33.33	-	-	-	-	03 100.0	01 33.33	-	-	-	-	-	-	-	-	-	01 33.33
65-69	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	184 100.00	143 100.00	26 14.13	44 30.77	-	-	01 00.54	-	121 65.76	79 55.24	-	-	-	-	07 03.80	-	09 04.89	02 01.40	20 10.88	18 12.59

TABLE: 2.8 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK

Name of the Sectors		Place of work						Occupation less		Total	
		Totopara		Totopara & Bhutan		Others					
		M	F	M	F	M	F	M	F	M	F
Category: 1	Dhumci gaon	30 35.71	63 85.13	37 44.05	-	04 04.76	02 02.70	13 15.48	09 12.16	84 100.00	74 100.00
	Mitran gaon	50 63.29	62 84.93	20 25.32	-	-	01 01.37	09 11.39	10 13.70	79 100.00	73 100.00
	Puja gaon	48 65.75	54 91.53	14 19.18	-	-	-	11 15.07	05 08.47	73 100.00	59 100.00
	Total	128 54.24	179 86.89	71 30.08	-	04 01.69	03 01.46	33 13.98	24 11.65	236 100.00	206 100.00
Category: 2	Mondal gaon	32 62.745	54 100.00	19 37.25	-	-	-	-	-	51 100.00	54 100.00
	Panchayat gaon	124 75.61	118 89.39	12 07.32	-	06 03.66	-	22 13.41	14 10.61	164 100.00	132 100.00
	Subba gaon	150 81.52	130 90.91	20 10.87	02 01.40	06 03.26	-	08 04.35	11 07.69	184 100.00	143 100.00
	Total	306 76.69	302 91.79	51 12.78	02 00.61	12 03.01	-	30 07.52	25 07.59	399 100.00	329 100.00
Grand Total		434 68.35	481 89.91	122 19.21	02 00.37	16 02.52	03 00.56	63 09.92	49 09.16	635 100.00	535 100.00

TABLE: 2.8.1 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK (DHUMCI GAON)

Age groups	Place of work						Occupation less		Total	
	Totopara		Totopara & Bhutan		Others		M	F	M	F
	M	F	M	F	M	F	M	F	M	F
0-4	02 14.28	02 25.00	-	-	-	-	12 85.71	06 75.00	14 100.00	08 100.00
5-9	04 80.00	07 70.00	-	-	-	-	01 20.00	03 30.00	05 100.00	10 100.00
10-14	18 100.00	08 100.00	-	-	-	-	-	-	18 100.00	08 100.00
15-19	-	10 100.00	10 83.33	-	02 16.67	-	-	-	12 100.00	10 100.00
20-24	-	10 83.33	06 100.00	-	-	02 16.67	-	-	06 100.00	12 100.00
25-29	-	08 100.00	09 81.81	-	02 18.18	-	-	-	11 100.00	08 100.00
30-34	-	03 100.00	04 100.00	-	-	-	-	-	04 100.00	03 100.00
35-39	-	05 100.00	01 100.00	-	-	-	-	-	01 100.00	05 100.00
40-44	-	02 100.00	03 100.00	-	-	-	-	-	03 100.00	02 100.00
45-49	-	01 100.00	02 100.00	-	-	-	-	-	02 100.00	01 100.00
50-54	-	02 100.00	02 100.00	-	-	-	-	-	02 100.00	02 100.00
55-59	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	01 100.00
60-64	03 100.00	03 100.00	-	-	-	-	-	-	03 100.00	03 100.00
65-69	02 100.00	01 100.00	-	-	-	-	-	-	02 100.00	01 100.00
70 and 70+	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	30 35.71	63 85.13	37 44.05	-	04 04.76	02 02.70	13 15.48	09 12.16	84 100.00	74 100.00

**TABLE: 2.8.2 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK (MITRAN GAON)**

Age groups	Place of work						Occupation less		Total	
	Totopara		Totopara & Bhutan		Others		M	F	M	F
	M	F	M	F	M	F				
0-4	03 25.00	01 10.00	-	-	-	-	09 75.00	09 90.00	12 100.00	10 100.00
5-9	09 100.00	14 100.00	-	-	-	-	-	-	09 100.00	14 100.00
10-14	13 100.00	09 81.82	-	-	-	01 09.09	-	01 09.09	13 100.00	11 100.00
15-19	04 44.44	07 100.00	05 55.56	-	-	-	-	-	09 100.00	07 100.00
20-24	01 25.00	06 100.00	03 75.00	-	-	-	-	-	04 100.00	06 100.00
25-29	03 42.86	09 100.00	04 57.14	-	-	-	-	-	07 100.00	09 100.00
30-34	01 20.00	05 100.00	04 80.00	-	-	-	-	-	05 100.00	05 100.00
35-39	03 60.00	05 100.00	02 40.00	-	-	-	-	-	05 100.00	05 100.00
40-44	06 85.71	-	01 14.29	-	-	-	-	-	07 100.00	-
45-49	02 100.00	03 100.00	-	-	-	-	-	-	02 100.00	03 100.00
50-54	01 100.00	-	-	-	-	-	-	-	01 100.00	-
55-59	01 50.00	01 100.00	01 50.00	-	-	-	-	-	02 100.00	01 100.00
60-64	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	02 100.00
65-69	01 100.00	-	-	-	-	-	-	-	01 100.00	-
70 and 70+	-	-	-	-	-	-	-	-	-	-
Total	50 63.29	62 84.93	20 25.32	-	-	01 01.37	09 11.39	10 13.70	79 100.00	73 100.00

**TABLE: 2.8.3 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK (PUJA GAON)**

Age groups	Place of work						Occupation less		Total	
	Totopara		Totopara & Bhutan		Others		M	F	M	F
	M	F	M	F	M	F	M	F	M	F
0-4	02 15.38	01 16.67	-	-	-	-	11 84.62	05 83.33	13 100.00	06 100.00
5-9	14 100.00	13 100.00	-	-	-	-	-	-	14 100.00	13 100.00
10-14	12 100.00	13 100.00	-	-	-	-	-	-	12 100.00	13 100.00
15-19	08 72.73	04 100.00	03 27.27	-	-	-	-	-	11 100.00	04 100.00
20-24	-	06 100.00	02 100.00	-	-	-	-	-	02 100.00	06 100.00
25-29	02 33.33	03 100.00	04 66.67	-	-	-	-	-	06 100.00	03 100.00
30-34	01 33.33	02 100.00	02 66.67	-	-	-	-	-	03 100.00	02 100.00
35-39	-	02 100.00	-	-	-	-	-	-	-	02 100.00
40-44	03 75.00	03 100.00	01 25.00	-	-	-	-	-	04 100.00	03 100.00
45-49	03 75.00	06 100.00	01 25.00	-	-	-	-	-	04 100.00	06 100.00
50-54	01 50.00	-	01 50.00	-	-	-	-	-	02 100.00	-
55-59	-	-	-	-	-	-	-	-	-	-
60-64	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	01 100.00
65-69	01 100.00	-	-	-	-	-	-	-	01 100.00	-
70 and 70+	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	48 65.75	54 91.53	14 19.18	-	-	-	11 15.07	05 08.47	73 100.00	59 100.00

**TABLE: 2.8.4 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK (MONDAL GAON)**

Age groups	Place of work						Occupation less		Total	
	Totopara		Totopara & Bhutan		Others		M	F	M	F
	M	F	M	F	M	F				
0-4	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	01 100.00
5-9	10 100.00	07 100.00	-	-	-	-	-	-	10 100.00	07 100.00
10-14	03 100.00	10 100.00	-	-	-	-	-	-	03 100.00	10 100.00
15-19	02 33.33	07 100.00	04 66.66	-	-	-	-	-	06 100.00	07 100.00
20-24	02 20.00	05 100.00	08 80.00	-	-	-	-	-	10 100.00	05 100.00
25-29	-	06 100.00	03 100.00	-	-	-	-	-	03 100.00	06 100.00
30-34	01 33.33	06 100.00	02 66.66	-	-	-	-	-	03 100.00	06 100.00
35-39	03 60.00	02 100.00	02 40.00	-	-	-	-	-	05 100.00	02 100.00
40-44	03 100.00	02 100.00	-	-	-	-	-	-	03 100.00	02 100.00
45-49	01 100.00	03 100.00	-	-	-	-	-	-	01 100.00	03 100.00
50-54	02 100.00	03 100.00	-	-	-	-	-	-	02 100.00	03 100.00
55-59	02 100.00	-	-	-	-	-	-	-	02 100.00	-
60-64	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	02 100.00
65-69	-	-	-	-	-	-	-	-	-	-
70 and 70+	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	32 62.74	54 100.00	19 37.25	-	-	-	-	-	51 100.00	54 100.00

**TABLE: 2.8.5 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK  
(PANCHAYAT GAON)**

Age groups	Place of work						Occupation less		Total	
	Totopara		Totopara & Bhutan		Others		M	F	M	F
	M	F	M	F	M	F	M	F	M	F
0-4	-	-	-	-	-	-	18 100.00	13 100.00	18 100.00	13 100.00
5-9	16 80.00	11 91.67	-	-	-	-	04 20.00	01 08.33	20 100.00	12 100.00
10-14	20 95.24	19 100.00	01 04.76	-	-	-	-	-	21 100.00	19 100.00
15-19	20 86.95	19 100.00	01 04.35	-	02 08.70	-	-	-	23 100.00	19 100.00
20-24	13 65.00	13 100.00	05 25.00	-	02 10.00	-	-	-	20 100.00	13 100.00
25-29	11 73.33	08 100.00	02 13.33	-	02 13.33	-	-	-	15 100.00	08 100.00
30-34	07 100.00	13 100.00	-	-	-	-	-	-	07 100.00	13 100.00
35-39	06 85.71	11 100.00	01 14.29	-	-	-	-	-	07 100.00	11 100.00
40-44	10 100.00	12 100.00	-	-	-	-	-	-	10 100.00	12 100.00
45-49	12 85.71	08 100.00	02 14.29	-	-	-	-	-	14 100.00	08 100.00
50-54	03 100.00	-	-	-	-	-	-	-	03 100.00	-
55-59	02 100.00	02 100.00	-	-	-	-	-	-	02 100.00	02 100.00
60-64	03 100.00	01 100.00	-	-	-	-	-	-	03 100.00	01 100.00
65-69	-	01 100.00	-	-	-	-	-	-	-	01 100.00
70 and 70+	01 100.00	-	-	-	-	-	-	-	01 100.00	-
<b>Total</b>	124 75.61	118 89.39	12 07.32	-	06 03.66	-	22 13.41	14 10.61	164 100.00	132 100.00

**TABLE: 2.8.6 DISTRIBUTION OF POPULATION ON THE BASIS OF PLACE OF WORK (SUBBA GAON)**

Age groups	Place of work						Occupation less		Total	
	Totopara		Totopara & Bhutan		Others		M	F	M	F
	M	F	M	F	M	F				
0-4	04 33.33	01 08.33	-	-	-	-	08 66.67	11 91.67	12 100.00	12 100.00
5-9	35 100.00	26 100.00	-	-	-	-	-	-	35 100.00	26 100.00
10-14	27 93.10	17 100.00	01 03.45	-	01 03.45	-	-	-	29 100.00	17 100.00
15-19	18 72.00	12 85.71	04 16.00	02 14.29	03 12.00	-	-	-	25 100.00	14 100.00
20-24	12 80.00	11 100.00	02 13.33	-	01 06.67	-	-	-	15 100.00	11 100.00
25-29	13 81.25	15 100.00	02 12.50	-	01 06.25	-	-	-	16 100.00	15 100.00
30-34	08 72.73	13 100.00	03 27.27	-	-	-	-	-	11 100.00	13 100.00
35-39	10 66.67	13 10.00	05 33.33	-	-	-	-	-	15 100.00	13 10.00
40-44	07 100.00	08 100.00	-	-	-	-	-	-	07 100.00	08 100.00
45-49	07 87.50	06 100.00	01 12.50	-	-	-	-	-	08 100.00	06 100.00
50-54	04 80.00	03 100.00	01 20.00	-	-	-	-	-	05 100.00	03 100.00
55-59	01 50.00	01 100.00	01 50.00	-	-	-	-	-	02 100.00	01 100.00
60-64	03 100.00	03 100.00	-	-	-	-	-	-	03 100.00	03 100.00
65-69	01 100.00	01 100.00	-	-	-	-	-	-	01 100.00	01 100.00
70 and 70+	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	150 81.52	130 90.91	20 10.87	02 01.40	06 03.26	-	08 04.35	11 07.69	184 100.00	143 100.00

**TABLE: 2.9 DISTRIBUTIONS OF FAMILIES ACCORDING TO MONTHLY INCOME**

Name of the Sectors		Number of families	Categories of monthly income (in Rs.)										
			Upto 1,000	1,001-2,000	2,001-3,000	3,001-4,000	4,001-5,000	5,001-6,000	6,001-7,000	7,001-8,000	8,001-9,000	9,001-10,000	Above 10,000
Category:1	Dhumci gaon	33 100.00		02 06.06	17 51.51	10 30.30	03 09.09	01 03.03	-	-	-	-	-
	Mitran Gaon	29 100.00	01 03.45	10 34.48	10 34.48	05 17.24	03 10.35	-	-	-	-	-	-
	Puja gaon	22 100.00	01 04.54	12 54.55	08 36.37	01 04.54	-	-	-	-	-	-	-
	<b>Total</b>	84 100.00	02 2.38	24 28.57	35 41.67	16 19.05	06 07.14	01 01.19	-	-	-	-	-
Category:2	Mondal gaon	24 100.00	-	-	02 08.33	01 04.16	01 04.16	05 20.83	02 08.33	05 20.83	03 12.50	02 08.33	03 12.50
	Panchayat gaon	62 100.00	07 11.29	12 19.35	13 20.97	06 09.68	05 08.06	04 06.45	03 04.84	02 03.23	05 06.45	03 04.84	02 03.23
	Subba Gaon	68 100.00	07 10.29	34 50.00	13 19.13	06 08.82	01 01.47	01 01.47	01 01.47	02 02.94	-	01 01.47	02 02.94
	<b>Total</b>	154 100.00	14 09.09	46 29.87	28 18.18	13 08.44	07 04.45	10 06.49	06 03.89	09 05.84	08 05.19	06 03.89	07 04.45
<b>Grand Total</b>		238 100.00	16 06.72	70 29.41	63 26.47	29 12.18	13 05.46	11 04.62	06 02.52	09 03.79	08 03.36	06 02.52	07 02.94

TABLE: 2.10 DISTRIBUTION OF FAMILIES ACCORDING TO MONTHLY EXPENDITURE

Name of the Sectors		Number of families	Categories of monthly Expenditure (in Rs.)					
			Upto 1000	1001-2000	2001-3000	3001-4000	4001-5000	Above 5000
Category:1	Dhumci gaon	33 100.00	04 12.12	09 27.27	19 57.57	01 03.03	—	—
	Mitran gaon	29 100.00	05 17.24	18 62.07	05 17.24	01 03.45	—	—
	Puja gaon	22 100.00	06 27.27	14 63.64	02 09.09	—	—	—
	<b>Total</b>	84 100.00	15 17.85	41 48.80	26 30.95	02 02.38	—	—
Category:2	Mondal gaon	24 100.00	02 08.33	02 08.33	05 20.83	02 08.33	08 33.33	05 20.83
	Panchayat gaon	62 100.00	14 22.58	20 32.26	08 12.90	06 09.68	03 04.84	11 17.74
	Subba gaon	68 100.00	31 45.59	23 33.83	07 10.29	05 07.35	01 01.47	01 01.47
	<b>Total</b>	154 100.00	47 30.51	46 29.87	20 12.98	13 08.44	12 07.79	17 11.03
<b>Grand Total</b>		238 100.00	62 26.05	87 36.55	46 19.32	15 06.20	12 05.04	17 07.14

**Table: 2.11 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN**

Name of the Sectors		Total population		Language known (speak)													
				Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Category 1	Dhumei gaon	84 100.00	74 100.00	03 03.57	05 06.75	33 39.28	55 74.32	36 42.85	08 10.81	-	-	-	-	-	-	12 14.28	06 08.10
	Mitran gaon	79 100.00	73 100.00	06 07.59	06 08.22	17 21.53	38 52.04	31 39.24	19 29.03	14 17.72	03 04.11	-	03 04.11	06 07.59	-	05 06.33	04 05.49
	Puja gaon	73 100.00	59 100.00	11 15.07	05 08.48	18 24.66	32 54.24	31 42.46	19 32.20	07 05.59	-	-	-	03 04.11	01 01.69	03 04.11	02 03.39
	Total	236 100.00	206 100.00	20 08.47	16 07.77	68 28.81	125 60.68	98 41.53	46 22.33	21 08.89	03 01.46	-	03 01.46	09 03.81	01 0.485	20 08.47	12 05.83
Category 2	Mondal gaon	51 100.00	54 100.00	01 01.96	02 03.37	26 50.98	43 79.63	19 37.254	09 16.67	05 09.80	-	-	-	-	-	-	-
	Panchayet gaon	164 100.00	132 100.00	07 04.27	05 03.79	13 7.93	29 21.97	63 38.41	58 43.94	39 23.78	17 12.88	04 2.44	-	26 15.85	15 11.36	12 07.32	08 06.06
	Subba gaon	184 100.00	143 100.00	11 05.98	13 09.09	31 16.85	67 46.85	73 39.67	44 30.77	43 23.37	09 06.29	10 05.43	05 03.50	13 07.07	01 00.70	03 01.63	04 02.80
	Total	399 100.00	329 100.00	19 04.76	20 6.08	70 17.54	139 42.25	155 38.85	111 33.74	87 21.80	26 07.90	14 03.51	05 01.52	39 09.77	16 04.86	15 03.76	12 03.65
Grand Total		635 100.00	535 100.00	39 06.14	36 06.73	138 21.73	264 49.35	253 39.84	157 29.35	108 17.01	29 05.42	14 02.20	08 01.49	48 07.56	17 03.18	35 05.51	24 04.49

TABLE: 2.11.1 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN (DHUMCI GAON)

Age groups	Total population		Language known (speak)													
			Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	14 100.00	08 100.00	02 14.28	02 25.00	-	-	-	-	-	-	-	-	-	-	12 85.71	06 75.00
5-9	05 100.00	10 100.00	01 20.00	03 30.00	03 60.00	05 50.00	01 20.00	02 20.00	-	-	-	-	-	-	-	-
10-14	18 100.00	08 100.00	-	-	09 50.00	07 87.50	09 50.00	01 12.50	-	-	-	-	-	-	-	-
15-19	12 100.00	10 100.00	-	-	04 33.33	07 70.00	08 66.66	03 30.00	-	-	-	-	-	-	-	-
20-24	06 100.00	12 100.00	-	-	01 16.67	10 83.33	05 83.33	02 16.66	-	-	-	-	-	-	-	-
25-29	11 100.00	08 100.00	-	-	01 09.09	08 100.00	10 90.91	-	-	-	-	-	-	-	-	-
30-34	04 100.00	03 100.00	-	-	03 75.00	03 100.00	01 25.00	-	-	-	-	-	-	-	-	-
35-39	01 100.00	05 100.00	-	-	01 100.00	05 100.00	-	-	-	-	-	-	-	-	-	-
40-44	03 100.00	02 100.00	-	-	02 66.67	02 100.00	01 33.33	-	-	-	-	-	-	-	-	-
45-49	02 100.00	01 100.00	-	-	01 50.00	01 100.00	01 50.00	-	-	-	-	-	-	-	-	-
50-54	02 100.00	02 100.00	-	-	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-
55-59	01 100.00	01 100.00	-	-	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-
60-64	03 100.00	03 100.00	-	-	03 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-
65-69	02 100.00	01 100.00	-	-	02 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	84 100.00	74 100.00	03 03.57	05 06.78	33 39.29	55 74.32	36 42.86	08 10.81	-	-	-	-	-	-	12 14.29	06 08.11

T=Toto, N= Nepali, B= Bengali, H= Hindi, E= English

TABLE: 2.11.2 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN (MITRAN GAON)

Age groups	Total population		Language known (speak)													
			Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	12 100.00	10 100.00	05 41.67	05 50.00	02 16.66	01 10.00	-	-	-	-	-	-	-	-	05 41.67	04 40.00
5-9	09 100.00	14 100.00	01 11.11	-	02 22.22	04 28.57	05 55.55	09 64.29	01 11.11	-	-	01 07.14	-	-	-	-
10-14	13 100.0	11 100.00	-	-	01 07.69	03 27.27	10 76.93	05 45.46	01 07.69	01 09.09	-	02 18.18	01 07.69	-	-	-
15-19	09 100.00	07 100.00	-	-	01 11.11	05 71.43	04 44.45	02 28.57	03 33.33	-	-	-	01 11.11	-	-	-
20-24	04 100.00	06 100.00	-	-	02 50.00	04 66.67	-	01 16.67	01 25.00	01 16.67	-	-	01 25.00	-	-	-
25-29	07 100.00	09 100.00	-	-	01 14.28	06 66.67	03 42.86	02 22.22	03 42.86	01 11.11	-	-	-	-	-	-
30-34	05 100.00	05 100.00	-	01 20.00	01 20.00	04 80.00	02 40.00	-	01 20.00	-	-	-	01 20.00	-	-	-
35-39	05 100.00	05 100.00	-	-	01 20.00	05 100.00	04 80.00	-	-	-	-	-	-	-	-	-
40-44	07 100.00	-	-	-	04 57.14	-	01 14.28	-	02 28.58	-	-	-	-	-	-	-
45-49	02 100.00	03 100.00	-	-	-	03 100.00	01 50.00	-	-	-	-	-	01 50.00	-	-	-
50-54	01 100.00	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
55-59	02 100.00	01 100.00	-	-	-	01 100.00	-	-	02 100.00	-	-	-	-	-	-	-
60-64	02 100.00	02 100.00	-	-	-	02 100.00	01 50.00	-	-	-	-	-	01 50.00	-	-	-
65-69	01 100.00	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	79 100.00	73 100.00	06 07.59	06 08.22	17 21.53	38 52.04	31 39.24	19 26.03	14 17.72	03 04.11	-	03 04.11	06 07.59	-	05 06.33	04 05.49

T=Toto, N= Nepali, B= Bengali, H= Hindi, E= English

TABLE: 2.11.3 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN (PUJA GAON)

Age groups	Total population		Language known (speak)													
			Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	13 100.00	06 100.00	08 61.54	03 50.00	02 15.38	01 16.67	-	-	-	-	-	-	-	-	03 23.08	02 33.33
5-9	14 100.00	13 100.00	02 14.30	01 07.69	06 42.86	06 46.16	06 42.86	05 38.46	-	-	-	-	-	01 07.69	-	-
10-14	12 100.00	13 100.00	-	01 07.69	02 16.67	04 30.77	09 75.00	08 61.54	01 08.33	-	-	-	-	-	-	-
15-19	11 100.00	04 100.00	01 09.09	-	01 09.09	01 25.00	08 72.73	03 75.00	01 09.09	-	-	-	-	-	-	-
20-24	02 100.00	06 100.00	-	-	01 50.00	05 83.33	-	01 16.67	01 50.00	-	-	-	-	-	-	-
25-29	06 100.00	03 100.00	-	-	-	03 100.00	04 66.66	-	01 16.67	-	-	-	01 16.67	-	-	-
30-34	03 100.00	02 100.00	-	-	-	02 100.00	02 66.67	-	-	-	-	-	01 33.33	-	-	-
35-39	-	02 100.00	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-
40-44	04 100.00	03 100.00	-	-	01 25.00	03 100.00	-	-	02 50.00	-	-	-	01 25.00	-	-	-
45-49	04 100.00	06 100.00	-	-	01 25.00	05 83.33	02 50.00	01 16.67	01 25.00	-	-	-	-	-	-	-
50-54	02 100.00	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	01 100.00	01 100.00	-	-	01 100.00	-	-	01 100.00	-	-	-	-	-	-	-	-
65-69	01 100.00	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	73 100.00	59 100.00	11 15.07	05 08.48	18 24.66	32 54.24	31 42.46	19 32.20	07 09.59	-	-	-	03 04.11	01 01.69	03 04.11	02 03.39

T=Toto, N= Nepali, B= Bengali, H= Hindi, E= English

TABLE: 2.11.4 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN (MONDAL GAON)

Age groups	Total population		Language known (speak)													
			Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	01 100.00	01 100.00	01 100.00	01 100.00	-	-	-	-	-	-	-	-	-	-	-	-
5-9	10 100.00	07 100.00	-	-	10 100.00	06 85.71	-	01 14.29	-	-	-	-	-	-	-	-
10-14	03 100.00	10 100.00	-	-	01 33.33	09 90.00	02 66.66	01 10.00	-	-	-	-	-	-	-	-
15-19	06 100.00	07 100.00	-	-	-	03 42.86	05 83.33	04 57.14	01 16.67	-	-	-	-	-	-	-
20-24	10 100.00	05 100.00	-	01 20.00	03 30.00	02 40.00	04 40.00	02 40.00	03 30.00	-	-	-	-	-	-	-
25-29	03 100.00	06 100.00	-	-	-	06 100.00	03 100.00	-	-	-	-	-	-	-	-	-
30-34	03 100.00	06 100.00	-	-	01 33.33	05 83.33	03 33.33	01 16.67	01 33.33	-	-	-	-	-	-	-
35-39	05 100.00	02 100.00	-	-	03 60.00	02 100.00	02 40.00	-	-	-	-	-	-	-	-	-
40-44	03 100.00	02 100.00	-	-	02 66.66	02 100.00	01 33.33	-	-	-	-	-	-	-	-	-
45-49	01 100.00	03 100.00	-	-	01 100.00	03 100.00	-	-	-	-	-	-	-	-	-	-
50-54	02 100.00	03 100.00	-	-	01 50.00	03 100.00	01 50.00	-	-	-	-	-	-	-	-	-
55-59	02 100.00	-	-	-	02 100.00	-	-	-	-	-	-	-	-	-	-	-
60-64	02 100.00	02 100.00	-	-	02 100.00	02 100.00	-	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 & Above	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	51 100.00	54 100.00	01 01.96	02 03.73	26 50.98	43 79.63	19 37.26	09 16.67	05 09.80	-	-	-	-	-	-	-

T=Toto, N= Nepali, B= Bengali, H= Hindi, E= English

**TABLE: 2.11.5 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN (PANCHAYAT GAON)**

Age groups	Total population		Language known (speak)													
			Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	18 100.00	13 100.00	03 16.67	03 23.08	03 16.67	02 15.38	01 05.55	-	-	-	-	-	-	-	11 61.11	08 61.54
5-9	20 100.00	12 100.00	03 15.00	02 16.67	03 15.00	-	09 45.00	08 66.67	01 05.00	-	-	-	03 15.00	02 16.67	01 05.00	-
10-14	21 100.00	19 100.00	-	-	-	02 10.53	14 66.67	12 63.15	05 23.81	03 15.79	-	-	02 09.52	02 10.53	-	-
15-19	23 100.00	19 100.00	-	-	-	01 05.26	12 52.17	07 36.84	08 34.78	08 42.11	02 08.70	-	01 04.35	03 15.79	-	-
20-24	20 100.00	13 100.00	-	-	03 15.00	04 30.77	06 30.00	04 30.77	08 40.00	04 30.77	01 05.00	-	02 10.00	01 07.69	-	-
25-29	15 100.00	08 100.00	01 06.67	-	01 06.67	03 37.50	01 06.67	01 12.50	07 46.67	01 12.50	01 06.67	-	04 26.67	03 37.50	-	-
30-34	07 100.00	13 100.00	-	-	-	03 23.08	04 57.04	09 69.23	-	-	-	-	03 42.86	01 07.69	-	-
35-39	07 100.00	11 100.00	-	-	01 04.29	04 36.36	03 42.86	06 54.54	02 28.57	-	-	-	01 04.29	01 09.09	-	-
40-44	10 100.00	12 100.00	-	-	-	05 41.66	03 30.00	04 33.33	05 50.00	01 08.33	-	-	02 20.00	02 16.67	-	-
45-49	14 100.00	08 100.00	-	-	01 07.14	02 25.00	07 50.00	06 75.00	01 07.14	-	-	-	05 35.71	-	-	-
50-54	03 100.00	-	-	-	-	-	-	-	01 33.33	-	-	-	02 66.67	-	-	-
55-59	02 100.00	02 100.00	-	-	-	01 50.00	01 50.00	01 50.00	-	-	-	-	01 50.00	-	-	-
60-64	03 100.00	01 100.00	-	-	-	01 100.00	02 66.67	-	01 33.33	-	-	-	-	-	-	-
65-69	-	01 100.00	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-
70 & 70+	01 100.00	-	-	-	01 100.00	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	164 100.00	132 100.00	07 04.27	05 03.79	13 07.93	29 21.97	63 38.41	58 43.94	39 23.78	17 12.88	04 02.44	-	26 15.85	15 11.36	12 07.32	08 06.06

T=Toto, N= Nepali, B= Bengali, H= Hindi, E= English.

**TABLE: 2.11.6 DISTRIBUTION OF POPULATION ON THE BASIS OF LANGUAGE KNOWN (SUBBA GAON)**

Age groups	Total population		Language known (speak)														
			Mother tongue (T)		T, N		T, N, B		T, N, B, H		T, E, others		Others		Not applicable		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
0-4	12 100.00	12 100.00	06 50.00	08 66.67	03 25.00	-	-	-	-	-	-	-	-	-	-	03 25.00	24 33.33
5-9	35 100.00	26 100.00	05 14.29	03 11.54	07 20.00	09 34.62	19 54.29	10 38.45	02 05.71	01 03.85	02 05.71	03 11.54	-	-	-	-	
10-14	29 100.00	17 100.00	-	01 05.88	03 10.34	01 05.88	15 51.73	13 76.48	05 17.25	-	05 17.24	01 05.88	01 03.45	01 05.88	-	-	
15-19	25 100.00	14 100.00	-	-	03 12.00	06 42.86	09 36.00	07 50.00	08 32.00	-	01 04.00	01 07.14	04 16.00	-	-	-	
20-24	15 100.00	11 100.00	-	-	-	07 63.64	05 33.33	03 27.28	10 66.67	01 09.09	-	-	-	-	-	-	
25-29	16 100.00	15 100.00	-	-	-	07 46.67	08 50.00	05 33.33	05 31.25	03 20.00	01 06.25	-	02 12.50	-	-	-	
30-34	11 100.00	13 100.00	-	-	-	12 92.31	06 54.55	01 07.69	04 36.36	-	-	-	01 09.09	-	-	-	
35-39	15 100.00	13 100.00	-	-	03 20.00	10 76.92	06 40.00	01 07.69	03 20.00	02 15.39	01 06.67	-	02 13.33	-	-	-	
40-44	07 100.00	08 100.00	-	-	03 42.86	05 62.50	02 28.57	03 37.50	02 28.57	-	-	-	-	-	-	-	
45-49	08 100.00	06 100.00	-	-	04 50.00	04 66.66	02 25.00	01 16.67	01 12.50	01 16.67	-	-	01 12.50	-	-	-	
50-54	05 100.00	03 100.00	-	-	01 20.00	02 66.67	01 20.00	-	02 40.00	01 33.33	-	-	01 20.00	-	-	-	
55-59	02 100.00	01 100.00	-	-	01 50.00	01 100.00	-	-	-	-	-	-	01 50.00	-	-	-	
60-64	03 100.00	03 100.00	-	01 33.33	03 100.00	02 66.67	-	-	-	-	-	-	-	-	-	-	
65-69	01 100.00	01 100.00	-	-	-	01 100.00	-	-	01 100.00	-	-	-	-	-	-	-	
70 & 70+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total</b>	184 100.00	143 100.00	11 05.98	13 09.09	31 16.85	67 46.85	73 39.67	44 30.77	43 23.37	09 06.29	10 05.43	05 03.50	13 07.07	01 00.70	03 01.63	04 02.80	

T=Toto, N= Nepali, B= Bengali, H= Hindi, E= English.

**TABLE: 2.12 AVAILABILITY OF ELECTRICITY IN HOUSES**

Name of the sectors		Total number of Families	Electricity available	Electricity not available
Category: 1	Dhumci gaon	33 100.00	-	33 100.00
	Mitran gaon	29 100.00	16 55.17	13 44.83
	Puja gaon	22 100.00	16 72.72	06 27.27
	Total	84 100.00	32 38.09	52 61.90
Category: 2	Mondal gaon	24 100.00	24 100.00	-
	Panchayat gaon	62 100.00	59 95.16	03 04.84
	Subba gaon	68 100.00	58 85.29	10 14.71
	Total	154 100.00	141 91.56	13 08.44
<b>Grand Total</b>		238 100.00	173 72.68	65 27.31

## CHAPTER – III

HEALTH AND DISEASE:

TRADITIONAL WAY OF TREATMENT

### 3.1 Introduction:

From time immemorial man has been interested in trying to control disease and to gain knowledge by which life span may be prolonged. All cultures, irrespective of its simplicity and complexity have a set of ideas for defining and treating disease, ways of prescribing cures or easing pain and for making statements about the probable outcome of disease. Disease and illness are individual biological responses directed and shaped for the most part by the cultural ideas learned in the course of being socialized. Human society has created an adaptive strategy and own pharmacopoeia- be it magico- religious or scientific to counteract with disease.

Tribes are relatively isolated and autonomous groups. It has been noted all over the world that the tribal people devote a lot of their time, energy and material resources to the honoring, worshipping and appeasing spirits, ghosts, deities, god and goddess. In tribal societies health is not an isolated phenomenon, but part of magico- religious fabric of existence and of the social, ethical and cosmic equilibrium. Among the tribes, health, disease and medicine are inextricably linked to the area of social relationships and to the magico-religious world. Physical diseases, psychic disorders and even death are mostly thought of as the result of personal hatred and has having been affected through the intervention of spirits, ghosts, gods or other forces belonging to collective belief. But the system of cure is not only based on magico- religious means but also on plant and animal products. Tribal people have a developed pharmacopoeia and some rudimentary knowledge of medical techniques, i.e. magico religious and herbal medicines are used to cure sick either together or separately. Along with all these belief pattern socio-cultural practices of tribals put some sort of implications towards the concept of health and hygiene. Sometimes it also acts as preventive medicines.

Thus, medicine in tribal societies addresses both supernatural and empirical theories of disease. It includes various systems of medicines- herbal, supernatural, home remedies and even surgical methods. In this chapter attempt has been made to focus upon the role and function of supernaturalism to acquire knowledge about specific healing technique. It also discusses the role and function of different deities, spirits in the social life of the village people. Special emphasis is given to the ethno-medical practices which include herbalism and uses of animal products in curing diseases. In this section analysis has also been done

regarding the role and function of traditional medicine men, herbalist and magico religious practitioners. Life cycle related rituals are also given in detail to disclose the relation between health, hygiene and those rituals. Case studies are also given for better understanding of the above said issues.

Sectors are arranged in the followed way- 1. Dhumci gaon 2. Mitran gaon 3. Puja gaon 4. Mondal gaon 5. Panchayat gaon 6. Subba gaon.

### **3.2 Treatment by Traditional Medicine (Selected Case Studies):**

Following the method given in the chapter 1 the case studies were taken considering the availability of patients. The relevant case studies are discussed for better interpretation of coming sections.

Abbreviations of categories are as follows:

M: Male

F: Female.

H: Higher family income.

L: Lower family income.

T: Traditional treatment.

B: Both (traditional and modern treatment).

t: Traditional procedure at the first step of treatment.

#### **3.2.1 Name of the Sector: Dhumci gaon**

(Distant from the main market place and Primary Health Centre; and no modern health facilities in close proximity)

Case: 1

Category: *MLT*

45 years old Bhupen Toto had suffered from jaundice just one year back. He was not sure about the specific reason behind the disease but realized that the disease may attack anyone due to natural cause. He went to the Paranding gram for remedy. He reported the traditional healer about his yellow urination, along with yellow body and eyes. Then the traditional healer confirmed about the disease. The medicine man prescribed him some herbal medicine

(root like substance) and he (patient) had to prepare the medicine by himself. The patient had to take the root extract twice a week (Tuesday and Saturday) in empty stomach. Four doses were prescribed for complete cure. He had to follow some food restrictions up to two months. Taking of beef and pulses were prohibited. There was no compulsion regarding the remuneration of the traditional healer. He gave Rs 100/- to the healer. He was cured within one month.

Case: 2

Category: FLT

Sumati Toto a 35 year old lady was suffering from stomach ache during last two years. She was not sure about the specific reason behind the problem. But she had a thought that she probably got some bad wind attack from the forest at the time of collection of fuel in the forest. Because the pain was occasional she did not take the matter seriously. As a first step of remedy she visited traditional medicine men (*jhakri*) residing in Puja gaon. Some worship and sacrifices were suggested by the *jhakri*. Specific worship was performed along with the sacrifice of a red hen. Some amount of rice, ginger, *eu* were also given in the name of god in a banana leaf. She spent Rs 300 for the purpose. Food restriction was also imposed and she was advised not to take beef. After performing all the rituals she was not totally cured. But she also reported that frequency of attack was decreased considerably.

### 3.2.2 Name of the Sector: Mitran gaon

(Distant from the main market place and Primary Health Centre and no modern health facilities in close proximity)

Case: 1

Category: MLT

Kalicharan Toto, a 35 years old man broke his back bone, leg and hand after falling down from a tree. After giving traditional first aid, he was taken to the *kabiraj* in Puja gaon, and then he was shifted to another *kabiraj* in Ballalguri. He was not cured although he took all the traditional treatment from the *kabiraj* of Ballalguri. Then he went to Nisigunj\*. One point should be mentioned in this context that before taking him to Nisigunj the patient was taken into Birpara but the doctor denied treating him because of his too critical condition. Further, they referred the patient to Jalpaiguri District Hospital. Instead of going to the Jalpaiguri District Hospital he went to Nisigunj where he had to stay 3 months for his treatment. He had

to spend above Rs 5000 for the treatment procedure. Finally he got cured and came back to Totopara.

(Nisigunj was a place under Cooch Behar district famous for orthopedic treatment specifically through herbal procedure)

Case: 2

Category: FLT

Olgi Toto, a 12 years old girl had suffered from jaundice one year back. Her family members took her to traditional healer (*jhakri*) at Mondal gaon. *Jhakri* performed some magico-religious performances but she was not cured. Then her family members took her to another traditional healer at Hollapara. That traditional healer put a black colored *tika* (auspicious mark on forehead) on her forehead and also gave her one bottle liquid medicine. Colour of that medicine was blue like kerosene oil. Patient had to take the medicine twice a day after taking meal. Medication continued up to one month. Gradually black colour of the *tika* was changed in to yellow colour. With the colour change the patient realized that was getting cure. Finally the *tika* was washed off with warm water but the medicine continued upto another 7 days. Price of each bottle was Rs 100/- and the remuneration of the kabiraj was Rs100/- for each visit. The patient family had to spend total Rs 500/- and finally she was cured.

### 3.2.3 Name of the Sector: Puja gaon

(Distant from the main market place and Primary Health Centre and no modern health facilities in close proximity)

Case: 1

Category: MLT

Mongol Toto, a 18 years old boy suffered from jaundice. He was confirmed about the disease because of yellow urination, yellow body and eyes. His family members took him to traditional medicine men (*kabiraj*) at Ballalguri. The traditional medicine men prescribed him some liquid medicine and put a *tika* (black coloured) on his forehead. He had to take the liquid medicine twice a day. That black coloured *tika* was discolored after one and half month, although the treatment continued up to three months. He required three bottles of liquid medicine (red colour liquid) for complete cure. Cost of each bottle was Rs 200/- and

the remuneration of *kabiraj* was Rs100/- for each visit. He had to visit *kabiraj's* house twice while he was suffering from jaundice.

Case: 2

Category: FLT

35 years old women Robina Toto suffered from female disease during last eight years. She had been facing severe stomach ache during her menstruation cycle. Taking it as a natural phenomenon initially she did not consult with any doctor or herbal medicine men. But when she faced severe pain then her husband took her into traditional medicine men. Some herbal medicine and a small root (to use like a *maduli*) were prescribed by the healer. Some puja was performed by sacrificing one red hen; rice, *eu*, and ginger were also offered in the name of god.

She had also suffered from jaundice one year back. She visited an herbal medicine woman for her treatment at Ballalguri. She prescribed some black coloured liquid medicine and advised her to take twice a day after meal. Along with the medicine that lady put a sandal coloured *tika* (mark) on her forehead. After 2 days that *tika* was put up spontaneously with some of her flesh. She had to take 3 bottle of liquid medicine for complete cure. She had to bare total Rs 700/- for whole treatment procedure. But she was not cured totally. Still she reported drowsiness and also felt weakness. She also reported that intake of oily food increased her problem.

### **3.2.4 Name of the Sector: Mondal gaon**

(Adjacent to market place and modern medical facilities in close proximity)

Case: 1

Category: MHT

Khagen Toto, a 45 years old man reported about his severe leg pain. He also reported that he found his leg was swollen. The patient reared some idea that the type of illness he suffered could not be cured by mere allopathic medicine. He consulted with the paw (magico-religious practitioner) resided in Dhumci gaon. The traditional healer diagnosed the disease by counting rice on a plate. He suggested the patient to perform worship by sacrificing one pair of hen. The healer also performed some charms and incantation to cure the pain. After

performing worship and all sorts of incantation regarding the particular disease the patient was cured. The patient had to spend Rs 300/- for the purpose.

### 3.2.5 Name of the Sector: Panchayat gaon

(Nearer to market place and Primary Health Centre is situated in this village sector)

Case: 1

Category: MLT

55 years old Sudas Toto was found to suffer from severe stomach ache. Along with stomach ache, his digestive system was also found upset. According to the patient his illness was not so acute to consult with the modern medical practitioner or to visit Primary Health Centre (PHC). Regarding the cause of his illness he opined that ghost attack or evil eye caused his illness. During the wood collection process from the nearer forest, he was attacked by some *jangli bhoot*. To get rid from the ailment and ghost attack he consulted with the traditional healer (*paw*) resided in Dhumci gaon. Healer prescribed him to organize some *Moisingpa* worship. By sacrificing pig and all other ingredients all the rituals were performed in the presence of *paw* (religious specialist). Sum of Rs 1000/- was spent for the above said purpose. In Toto society generally *paw* does not demand for any remuneration. In that case there was no exception. But the patient gave him Rs 100/- and *eu* (country liquor) and a portion of sacrificed chicken. Sudas Toto reported that after performing all the rituals and incantation he got relief although temporarily. After few days the disease came back but the intensity was not same as previous. He complained that he was not totally cured.

Case: 2

Category: FLT

Gokima Toto, a 65 years old Toto women had to go through a painful experience three years back. She was suffering from throat tumour. Although she visited Totopara Primary Health Centre (PHC) and Birpara State General Hospital, she did not take any modern medicine. Finally she decided to visit traditional healer resided in Mitran gaon, Totopara. That traditional healer applied one kind of sticky paste on her tumour consecutive 3-4 days. The medicine was applied externally. All the lumps got burst. After that one black colour oil was applied on the wound regularly once in a day. As the oil was applied by the *kabiraj* himself so she had to visit his house regularly. The treatment continued up to one month. Finally she was cured. As a remuneration she gave the *kabiraj* Rs 300/- and worked in his field for one

month. *Kabiraj* suggested some food restrictions and she was advised not to take beef, pork, pulses, and pumpkin. During the field work days she was found to obey all the restrictions and found fully cure.

### 3.2.6 Name of the Sector: Subba gaon

(Nearer to market place and Primary Health Centre is situated in close proximity)

Case: 1

Category: MHT

As reported by Sugrib Toto, a 48 years old man suffered from some eye infection. According to him while he was returning back from Hollapara one insect bitted on his eye lid and his both eyes got infected. He thought that some mistake had made by him; as a result of which he was suffering from eye infection. Then he decided to consult with paw (religious practitioner). Paw suggested him to perform *Sanika* worship. In that worship one red hen was sacrificed. *Eu* (country liquor), atop rice, ginger were also given in the name of deity *Sanika*. After performing the *puja* infection was totally cured. He had to bare Rs 500/- as a whole for conducting whole ritual. There was no fixed remuneration of the paw but Rs 100/- was given to him. According to the patient he was completely cured after performing all incantations.

Case: 2

Category: FLT

During last two years Sundori Toto, 46 years old lady was suffering from high pressure and hypertension. After suffering from general symptoms of high pressure and hypertension, she decided to consult with a traditional medicine man (*jhakri*) resided in Pakha gaon\*. He prescribed a *tabij* (auspicious thing) and some sacrifices. After performing all the rituals she was not cured. Then she again decided to go to another traditional healer resided in Mangar gaon. He also suggested some rituals and sacrifices. Even after performing such procedure she was not cured. Although she did not know about the reason behind the problem but somehow realized that taking of salt increased her problem. Now she is planning to go for modern medical treatment.

Note: 1. (Pakha gaon was situated at the extreme north east end of Totopara village and majority of the inhabitants of Pakha gaon belongs to Nepali community)

2. (Mangar gaon was also Nepali dominated section within Totopara village)

### **3.3 Treatment through Both Categories:**

#### **(Traditional and Modern)**

#### **3.3.1 Name of the Sector: Dhumci gaon**

(Distant from the main market place and Primary Health Centre; and no modern health facilities in close proximity)

Case: 1

Category: MLB (t)

29 years old Giriraj Toto was suffering from chest pain and cough and cold during last three months. Initially he consulted with a traditional medicine man who gave him four bottles of medicine but did not demand any remuneration. After completion of the treatment he did not get cure. Then he decided to visit Totopara Primary Health Centre (PHC). Pulmonary tuberculosis was detected. Doctor prescribed six months course. At the time of field work he was under medication and he claimed that his condition was improving.

Case: 2

Category: FLB (t)

25 years old Sundori Toto was found to suffer from breathing problem. According to her, initially her problem was not so severe and she did not take proper care of herself. Gradually her problem had increased. So, she decided to visit a traditional healer (*kabiraj*). He prescribed some medicines (tablets). She took all the medicines but was not cured. Then she decided to visit Totopara Primary Health Centre (PHC) and asthma was detected. Doctor prescribed some medicines for one month. She reported that she took all the medicines but did not get relief. She had to spend Rs 2000/- for the above said purpose.

#### **3.3.2 Name of the Sector: Mitran gaon**

(Distant from the main market place and Primary Health Centre and no modern health facilities in close proximity)

Case: 1

Category: MLB (t)

Tirman Toto, 65 years old Toto man was suffering from high pressure and hypertension. He faced the problem of over sweating and palpitation. Initially he consulted with a traditional

healer (*jhakri*). *Jhakri* detected *chapani* disease and prescribed some worship. *Jhakri* belonged to Nepali community and resided in Pakha gaon. After performing all the rituals he was not cured. Then he consulted with another Nepali *jhakri* of Mangar gaon. Again he was advised to perform some worship and sacrifice. Again he did not get cure. Finally he decided to visit Primary Health Centre (PHC) Totopara. In PHC high pressure and hypertension were diagnosed. Doctors prescribed all the required medicines. After taking all the medicines regularly he was relieved from the problem. At the time of field work he was under medication. He spent more than Rs 2000/- to get rid off from the problem.

Case: 2

Category: FLB (t)

Sunia Toto, an 11 years old girl suffered from physical disability since her birth. She was found unable to walk. Initially she was taken to different *jhakris*, herbal medicine men by her parents. But they did not get any positive result. Her parents even did not know anything regarding the cause or type of illness. She did not feel any pain. According to her parents one medical camp (2005) was organized by Christian missionaries in Dhonopati Memorial High School in Totopara and they took the girl into the camp to know the detail of her illness. One ointment and some medicines were prescribed for 20 days. She took all the medicines and followed all the instructions, but was not cured. Now they gave up all the hope to cure her daughter.

Case: 3

Category: MLB (t)

Goram Toto, a 34 years old man had been suffering from chest pain and cough. He thought that some supernatural entity was responsible for such happenings. So he decided to visit a traditional healer resided in Dhumci gaon. *Jhakri* treated him according to traditional healing technique and performed all the incantation. But any positive result did not come. Then he decided to visit Totopara Primary Health Centre (PHC). Extra pulmonary tuberculosis was detected. He had to complete six month medication course. Treatment was provided by PHC totally free of cost. At the time of field survey he was fully cured.

### 3.3.3 Name of the Sector: Puja gaon

(Distant from the main market place and Primary Health Centre and no modern health facilities in close proximity)

Case: 1

Category: MLB(t)

Jhumsha Toto, 48 years old man was suffering from severe stomach ache for last 2 years. As he was himself a traditional healer he applied some medicine by himself. But he did not get expected result. Then he decided to visit Totopara Primary Health Centre (PHC) and doctor advised him to go for ultra-sonography. Finally tumor was detected. After detection he again tried some traditional medicine to get rid from the ailment. But there was no result. He was referred to Birpara State General Hospital. Due to economic crisis he was unable to carry the expenditure of the treatment. Finally the community members helped him out and bared all the expenditure regarding the treatment. The tumour was operated in PHC with very minimum infrastructural facilities and he ultimately overcome from the situation.

Again he suffered from tuberculosis. Symptoms of the disease were so prominent he himself realized that he might be affected from tuberculosis. In spite of taking any traditional medicine, he visited Totopara Primary Health Centre (PHC), collected all the prescribed medicines and completed six months course. Finally he was fully cured.

Case: 2

Category: FLB(t)

Rojina Toto, 1.5 years old girl was found to suffer from some serious eye problem. According to her mother, she was born with a white patch on her right eye. One day the same eye got injured by a bamboo strip. Gradually a tumor was developed on the same eye and she was suffering from serious pain. As her father was traditional healer, he applied some medicine and performed all the incantations known to him. Instead of achieving remedy the problem was becoming more acute. Then the patient family decided to consult with modern medical practitioner. Initially they visited Totopara Primary Health Centre (PHC), from where patient was referred to Jalpaiguri District Hospital. But the family member took her to Siliguri Lions Club. For exact diagnosis concerned eye specialist prescribed scan and ultrasound. Ultrasound was done in same organization by spending Rs 500/-. Due to

economic crisis they were unable to manage enough money to carry out further treatment. As a result they came back to Totopara. Few months' later condition of the patient was again deteriorated so much that they had to take her to North Bengal Medical College. Cancer was detected. As reported she was under treatment. But doctor were very anxious about her treatment.

### **3.3.4 Name of the Sector: Mondal gaon**

(Adjacent to market place and modern medical facilities in close proximity)

Case: 1

Category: FHB (t)

Wife of Surajit Toto, 38 years old Yogmaya Toto had been suffering from stomach ache. She did not know anything about the cause of illness. Belief upon supernaturalism compelled her to consult with *jhakri* (traditional medicine men). *Jhakri* prescribed her to go for some propitiation and sacrifice one red hen along with atop rice, *eu*, ginger etc. she did all the religious performances according to the suggestion of the *Jhakri*. But she did not get cure. She had to spend Rs 1000/- for the said purpose. Then she decided to visit the Primary Health Centre (PHC), Totopara. Gastro- entities were diagnosed and the practitioner prescribed all the required medicines. Treatment continued up to seven days. Finally she got relief. All the medicines were given free of cost from the health centre. So she did not have to bare any expenditure regarding the treatment.

### **3.3.5 Name of the Sector: Panchayat gaon**

(Nearer to market place and Primary Health Centre is situated in this village sector)

Case: 1

Category: MHB (t)

45 years old Bhupen Toto had been a patient of Epilepsy since 15 years. He reported that initially epilepsy attacks were not so frequent and he was able to manage the problem. To cure the disease he decided to visit the *Jhakri*. The traditional healer prescribed some herbal medicine (a piece of root) and performed worship along with the sacrifice of red hen. But he was not cured. With the time he realized that the frequency of attack was increasing which compelled him to think otherwise. Then he decided to consult with modern medical practitioner at Birpara in private. In each visit he had to spend Rs 1000/- (including

medicine). After taking modern medicine he got some relief and his condition was improving. At the time of field work he was under medication. In this context one point should be mentioned here that he was also in touch with the traditional healer while taking modern medicine.

Case: 2

Category: FLB (t)

Dulali Toto, 60 years old Toto women was found to suffer from some kind of skin infection. According to her, three months ago she saw a bulb on her right leg. She felt severe itching sensation; as a result blood and puss were coming out. To get rid off from the problem she initially consulted with a traditional healer. He did not prescribe any herbal medicine but went for incantation and worship. Although she belonged to Below Poverty Line (BPL) category she arranged all the ingredients for worship and sacrifices. After performing all the rituals she did not get cure. Instead of getting cure, infection spreaded and her left leg also got affected. Then all the neighbourer suggested her to visit Totopara Primary Health Centre (PHC). She visited PHC and scabies was diagnosed. All the medicines for scabies were prescribed. At the time of field survey she was under medication. In spite of taking all the medicines she was suffering from acute pain and was unable to move freely. There were some food restrictions. She was advised not to take potatoes, pulses, pork, beef, *eu* (country liquor) and sour items. She had to spend Rs 1000/- for the above said purpose and had to face enough difficulties to manage the said expenses.

### 3.3.6 Name of the Sector: Subba gaon

(Nearer to market place and Primary Health Centre is situated in close proximity)

Case: 1

Category: FLB (t)

Rita Toto, 30 years old Toto women was suffering from chest pain since last two years. Belief upon supernaturalism influenced her to consult with the *jhakri* (magico-religious practitioner). She visited *jhakri* in Dhumci gaon. All the magico-religious performances were performed along with the sacrifice of a red hen. But she did not get cure. Then her family member mainly her husband took her into the Primary Health Centre (PHC) Totopara. Posted doctor of PHC referred her to Birpara State General Hospital from where she was referred to Jalpaiguri. According to her she took all the medicines prescribed for one month. After taking

all the medicines and following all the measures prescribed by the doctors she did not get cure. She spend total Rs 1500/- for the purpose.

### 3.4 Life Cycle: (Rituals and Occasions)

Relatively isolated and autonomous tribe Totos has their own cultural system owing to the specific outlook towards social, cultural and religious life. Like the other Toto society also recognizes three crucial stages of life cycle viz. birth, marriage and death that are more important as these are seemed as universal in nature. Numbers of rituals and occasions are celebrated as part of their social and cultural life centering the said crucial phases of life. Birth and marriage ceremonies are always connected with joy which give the community members some festive mood. On the other hand incidence of death often challenges social solidarity and integrity of the community. During the field survey it was possible to observe three phases of life cycle among the studied tribe. There were no inter-sectarian differences observed by the researcher. Particularly three distinct phases of life cycle were studied in detail to know how far the associated rituals are related with health issues and health hygiene concept of the concerned population.

Toto rituals regarding the life cycle are as follows.

#### 3.4.1 Birth:

There is no pre birth ceremony among the studied Toto population. After birth there is no pollution period observed among the Totos. Mother and baby are kept little bit isolated but on the same house. *Madipapo* is the name giving ceremony and it is observed at the uneven number of day like 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup> or 13<sup>th</sup> day of birth. It has to be mentioned here that any type of animal sacrifice is strictly prohibited on the day of *Madipapo*. As per custom, the children are named after their grandparents though new name is adopted at the time of marriage. But now a day's relaxation is entertained regarding this rule. On the auspicious day of *Madipapo*, *paw* (i.e. priest) is invited by the family members in early morning breakfast. There is a strict reason behind giving the early morning invitation. The *paw* has to take fast on the day of *Madipapo*. So, the inviting family has to send invitation at early morning. At about 7a.m. *paw* comes and rituals are started. With the help of coating (wooden piece) and wooden stick a *tul* like structure is prepared which is called *changpi*. One full pot of *eu*

(country liquor), 7 piece of *durba* grass, *tanke* (one kind of herb), one piece of fresh turmeric, 7 piece of thread (made from *kapash*) are kept over *changpi*. The *paw* spins out all the seven threads together up to 7 times. The length of the thread must reach one and half feet. The threads are spines out like hair plating to make a wreath or garland like structure which is tied on the neck. The wreath is called *madi*. The *paw* performs some propitiation and prayer. The meaning of the prayer is that, from the day onwards the baby will be recognized by the name of 'X' (X= name of the baby). Sun, moon, plants, earth are the spectators of this truth. With this prayer, rituals get conclusion. The priest sits the house and drinks a bowlful of liquor and then all the community members drink together. The child gets all the blessings from his community members. One point should be mentioned here that there was no distinction found between the male and female child regarding the rituals of *Madipapo*.

### 3.4.2 Rice Giving Ceremony:

Another important occasion among the Totos is *Badilongwa* i.e. the rice giving ceremony which must be celebrated before marriage irrespective of male and female. Without celebrating *Badilongwa* none can proceed for marriage. There is no fixed date for this celebration but generally celebrated between the age of 1 to 14. One red cock or one pig (weighted 5-6kg) is sacrificed according to the clan. On that auspicious day *paw* comes and sacrifice is done. Sacrifice is not made by him but his associates only. In case of pig the left portion is devoted to god at *changpitawa*. In case of hen/ cock feather and wings are removed before killing and butter is smeared over head and chest. Then the hen is sacrificed. One *eu* pot is placed over *choiting* at *jiri* (i.e. *puja ghar* or propitiation room). *Paw* spells the sacred text and prays to god that the boy or the girl should not face any difficulty in rest of his life. Then community feast is given by the family with that sacrificed animal. Special gift is given to *paw* and *Dhaima* (concerned mid wife) and both of them must take part on that feast.

### 3.4.3 Marriage:

The Totos are endogamous tribe and strictly follow clan exogamy. Marriage within the same clan is strictly prohibited. There are 13 numbers of clans and each clan is permitted to marry different clans. This equation is fixed. For example, *Dantrobei* can marry with *Bangobei*, *Dankobei*, *Nurinchankobei*, *Buddhubei* and *Boudhubei*. Some pairs of clans are considered fraternal; hence arrange between *Nubeibeibe* and *Manchingbei* or marriage between *Bangobei*

and *lenkaijibei* cannot be executed. In this context one point should be mentioned here that marriage between two fraternal clans is possible only after seven generation. Cross cousin marriage of both type are preferred though parallel cousin marriage is strictly prohibited.

Engagement or betrothal ceremony is the only premarital occasion. In the old days Toto boys and girls used to get married at very early age. At the preliminary stage, the parents talked to each other and the agreement was finalized with small feast in the bride's house. The girl was given new dress and meat by her in-law family every year in *Ongchu* festival (celebrated in rainy season) until she attained puberty. If she marries any other boy she has to give compensation to the previous boy. But now-a-days marriage rituals have gone through some changes. There are two type of marriages one is called *Tabo behao* and other one is *Tai paowa*. *Tabo behao* is also recognized as *Deba Behao* and *Tai paowa* is also known as *Jipeco Behao*. *Tabo behao* or *Deba Behao* is the form of marriage among the Totos which is celebrated in one step; on the other hand *Tai paowa* or *Jipeco Behao* is the form of marriage which is celebrated in two steps. Now a day *Tabo behao* or *Deba Behao* is almost disappeared from Toto society and *Tai paowa* or *Jipeco Behao* is widely accepted from of marriage ritual.

In first type of marriage, two of the close male relatives of groom (other than father) go to the brides house with 2 two pitcher of *eu* but the groom does not come. After reaching bride's house *Bankoteowa* is celebrated over there. In *Bankoteowa*, two pitcher of *eu* is placed over *choiting* at *jiri* and the paw performs some incantation. The essential ingredients were turmeric, ginger, betel nut, *dhungchu* leaf, mustard oil and red colored thread. After completion of *Bankoteowa* the girl moves toward her in- law house. Two female relative of the bride must accompany her. All the rituals should be completed in the morning and the girl starts her journey. During this period relatives of the bride gather in bride's house and wait for invitation. Some male and female relatives of the groom's side come to the bride's house to give invitation. Then all the relatives of both side come to the groom's house. Rituals are performed by the paw and the newly married couple worships the deity by sacrificing a cock. Community feast is given. After that *Barapiwa* is celebrated in which father in law and son in law get introduced with each other. Son in law gives one pot of crop and father in law gives him a pot of *eu*. After 3 days the new couple again visits to wife's house where small feast is given to close relatives. All the invitees bless the new couple in form of gifts or any other

things. On the same day the couple comes back to their own house. Then the marriage is declared socially sanctioned.

In case of *Tai paowa* or *Jipeco Behao* marriage is celebrated in two steps. In first step, two close relatives of groom go to the bride's house with two pot of *eu* and a red fowl. If the bride's father accepts the proposal then *bankoteowa* is celebrated in the evening. Then the bride moves over to her husband's house. Then the newly married couple worships the family deity and the new name is given to the couple. Actual marriage ceremony is held at the second step after the wife is conceived. On the day as fixed by the bride's father, all members assemble in the house. Husband and wife come in the wife's house. They sit together amongst the gathering of village people. After propitiation priest offers a portion of beef to their highest deity *Senja*. Community feast is given which continues up to three days. Finally the marriage is socially, spiritually sanctioned and declared properly celebrated.

**Chart- 3A**

**Consideration of Clans for Marriages**

<b>Name of the clans</b>	<b>Name of the clan with which marriage can be executed</b>	<b>Name of the clan with which marriage cannot be executed</b>
<i>Bangobei</i>	<i>Dantrobei, Dankobei, Budhubei, Baudhubei, Lenkaijibei, Nubeibei, Mantrobei, Mankobei, Manchingbei, Pisichancobei.</i>	<i>Nurinchancobei, Diringchancobei, and Bangobei.</i>
<i>Budhubei</i>	<i>Dankobei, Bangobei, Lenkaijibei, Nubeibei, Mankobei, Mantrobei, Manchingbei, Pisichancobei, Nurinchancobei, Diringchancobei,</i>	<i>Dantrobei, Budhubei, Baudhubei,</i>
<i>Dantrobei</i>	<i>Bangobei, Dantrobei, Nurinchancobei, Budhubei, Baudhubei.</i>	<i>Lenkaijibei, Nubeibei, Mantrobei, Mankobei, Manchingbei, Pisichancobei, Diringchancobe, Dantrobei.</i>
<i>Dankobei</i>	<i>Bangobei, Dantrobei, Budhubei, Baudhubei, Lenkaijibei, Nubeibei,</i>	<i>Nuringchancobei, Diringchancobei, and Dankobei.</i>

Contd..

	<i>Mantrobei, Mankobei, Mangchingbei, Pisichancobei.</i>	
<i>Nuringchancobei</i>	<i>Dantrobei, Dankobei, Budhubei, Baudhubei, Lenkaijibe, Nubeibe, Mantrobei, Mankobei, Mangchingbei, Pisichancobei.</i>	<i>Bangobei, Nuringchancobei and Diringchancobei.</i>
<i>Baudhubei</i>	<i>Dantrobei, Dankobei, Lenkaijibe, Nubeibe, Mantrobei, Mankobei, Mangchingbei, Pisichancobei, Dirinchangkobei, Bangobei, Nuringchancobei.</i>	<i>Budhubei and Baudhubei.</i>
<i>Lenkaijibe</i>	<i>Dantrobei, Dankobei, Budhubei, Baudhubei, Nubeibe, Mantrobei, Mankobei, Pisichancobei, Dirinchangcobei, Bangobei, Nurinchangcobei.</i>	<i>Mangchingbei and Lenkaijibe.</i>
<i>Nubeibe</i>	<i>Dankobei, Budhubei, Baudhubei, Mantrobei, Mankobei, Pisichancobei, Dirinchangcobei, Bangobei, Nurinchangcobei, Mangchingbei, Lenkaijibe.</i>	<i>Sub clans of Dantrobei only and Nubeibe.</i>
<i>Mantrobei</i>	<i>Dantrobei, Dankobei, Budhubei, Baudhubei, Mankobei, Pisichancobei, Diringchankobei, Bangobei, Nuringchancobei, Mangchingbei, Lenkaijibe, Nubeibe</i>	<i>Mantrobei</i>
<i>Mankobei</i>	<i>Bangobei, Dankobei, Dantrobei, Budhubei, Baudhubei, Lenkaijibe, Nubeibe, Mantrobei, Mangchingbei, Pisichancobei, Nuringchancobei, Diringchancobei.</i>	<i>Mankobei</i>

Contd..

<i>Mangchingbei</i>	<i>Bangobei, Dankobei, Dantrobei, Budhubei, Baudhubei, Nubeibei, Mantrobei, Pisichankobei, Nuringchankobei, Diringchankobei, Mankobei.</i>	<i>Lenkaijibei, Mangchingbei.</i>
<i>Pisichankobei</i>	<i>Bangobei, Dantrobei, Baudhubei, Budhubei, Nubeibei, Mantrobei, Nuringchancobei, Diringchancobei, Lenkaijibei, Mangchingbei, Mankobei.</i>	<i>Dantrobei, Pisichankobei.</i>
<i>Diringchankobei</i>	<i>Dantrobei, Dankobei, Budhubei, Baudhubei, Nubeibei, Mantrobei, Mankobei, Linkaijibei, Mangchingbei, Pisichancobei.</i>	<i>Bangobei, Nuringchankobei and Diringchankobei.</i>

**3.4.4 Death:**

Death is the last phase of life cycle. The studied Toto villagers observe different types of rituals for the peaceful journey of a departed soul and for the purification of themselves. After death they do not change the cloth but wash with water and oil the body. In case of death of a couple, opposite sex put the oil on the body. A few clan members go to the nearby forest to procure wood and bamboo in order to construct a dug out on which the body is laid wrapped in plantain of *Odla* leaves. Body is made purified by *Dhungchu* leaf. One clan member takes a straw from the roof of the deceased's hut and lit it. He waves it seven times for both male and female and throws away. Another party of the community members digs the grave in the clan ossuary according to the size of the wooden bed. Clan member will carry the dead body and no woman is allowed to accompany this funeral procession. At the burial ground the dead body should be placed with its head facing east direction. They put all the necessary items like gold, utensils, cloths etc used by the deceased person at the feet of the corp. the first soil is given by the eldest son. Two banana leaves, betel nuts are also offered in the grave. One point should be mentioned here that one who digs the grave must carry *eu* and fire on his

hand. At the time of burring the body one elderly person comes in front of the body carrying a banana leaf on his hand and prays for the happy journey of the departed soul. A piece of bamboo of the size of dead is given to the wife of the deceased's husband or to the husband of the deceased's wife. The bamboo stick must be kept for a year. Those who accompany the funeral process they must purify themselves by hot water, *Dhungcu* leaves, ginger and fire. If the deceased person is male then the pollution period continues up to 6 days, on the other hand in case of female the pollution period continues up to 5 days. In case of a couple, the opposite sex has to perform the obsequies rites into two steps; first step is performed after 5 or 6 days. After one year, the bamboo stick which has been carried by the deceased's husband or wife is thrown away. The husband or wife has to take bath for purification. During this one year period they have to maintain certain rules and regulations. If the husband dies then the wife cannot wear any kind of ornament, cannot cut or oil her hair. On the other hand also the husband has to follow the same rule regarding the hair cutting. They cannot attain any propitious ceremony during this one year. Now a day, this taboo has been relaxed from one year to 12 days. In earlier days one calf was given in charity. But now this rule is generally not followed by most of the Toto villagers.

So, it is found that there are various rituals as well as occasions centering round the major phases of life cycles among the studied population. According to them and through the in-depth study and analysis of the researcher it is found that the use of different types of ingredients in various occasions reflects the necessity of those things in daily life for better health and better preventive precaution of the studied people.

Apart from that, they follow various special rite and rituals centering round the three major phases of life cycle which intern strengthen the social solidarity of the community.

The various articles used in all occasion and rituals can be categorized into two categories-

- Herbal Ingredients
- Auspicious Articles

The reason behind the uses of the above said articles or special things can be analyzed in the following way.

**Chart-3B**

**Herbal Ingredients used during Life Cycle Rituals**

<b>SI No.</b>	<b>Name</b>	<b>Occasion</b>	<b>Main Reason</b>
1.	Turmeric	Birth, Marriage, Death	<ol style="list-style-type: none"><li>1. Antiseptic, can check microbial infection</li><li>2. For brightness and to glorify skin</li><li>3. Can absorb pain (with lime i.e. calcium carbonate)</li></ol>
2.	Mustard oil	Birth and Death	<ol style="list-style-type: none"><li>1. By balancing moisture level, it can prevent skin roughness</li><li>2. Gives better result when mixed with turmeric</li></ol>
3.	Betel Nut	Marriage	<ol style="list-style-type: none"><li>1. To increase taste of mouth</li><li>2. Helpful to give successful child birth</li></ol>
4.	Betel leaf	Death	<ol style="list-style-type: none"><li>1. Good mouth freshener</li><li>2. Extract of young leaf is useful in stomach pain</li></ol>
5.	Banana leaf	Marriage and Death	<ol style="list-style-type: none"><li>1. Gives protection from skin disease</li><li>2. Remedy from insect bite</li><li>3. Remedy from skin injury (particularly for burn cases)</li></ol>
6.	<i>Dhungchu</i> leaf	Birth, Marriage, Death	<ol style="list-style-type: none"><li>1. Good antiseptic, can give protection from skin disease</li><li>2. Can prevent contamination</li><li>3. Good mosquito repellent</li></ol>
7.	<i>Tanke/ Tenke</i>	Birth and Death	<ol style="list-style-type: none"><li>1. Good antiseptic</li><li>2. Very useful in curing pierce</li></ol>
8.	Neem	Death	<ol style="list-style-type: none"><li>1. Antiseptic, can cure skin infection</li><li>2. Prevents contamination</li></ol>

Contd..

9.	<i>Durba/ Duba</i>	Birth	<ol style="list-style-type: none"> <li>1. Twig part can check bleeding</li> <li>2. Good appetite increaser</li> </ol>
10.	Ginger	Marriage and Death	<ol style="list-style-type: none"> <li>1. Useful in curing cough and cold</li> <li>2. Can be used as mouth freshener</li> </ol>

### Chart-3C

#### Auspicious Article used during Life Cycle Rituals

Sl No.	Name	Occasion	Main Reason
1.	Bamboo pot and bamboo stick	Birth and Death	<ol style="list-style-type: none"> <li>1. Anti-infectious and hygienic for consuming any kind of food and liquor</li> <li>2. Protection from evil spirit</li> <li>3. Easily available</li> </ol>
2.	Sacred thread (made from <i>kapash</i> )	Birth	<ol style="list-style-type: none"> <li>1. Hygienic, cannot cause harm to new born</li> </ol>
3.	Use of fire	Death	<ol style="list-style-type: none"> <li>1. To destroy surrounding germ</li> <li>2. Use of fire with <i>Dhungchu</i> leaf is good antiseptic</li> <li>3. Give protection from evil spirit</li> </ol>
4.	Hen, pig, cock, fowl	Birth, Marriage, Death,	<ol style="list-style-type: none"> <li>1. Source of high animal protein</li> <li>2. Easily available</li> </ol>
5.	<i>Eu</i> (country liquor, made from <i>marua</i> )	Birth, Marriage, Death	<ol style="list-style-type: none"> <li>1. Keep the body cool in summer</li> <li>2. Used as an energy supplement</li> </ol>

It has already been reported that use of auspicious items like turmeric, *neem*, mustard oil etc are widespread among the studied tribe. It is not always true that all the studied villagers use these auspicious items after knowing the beneficiaries of those items. In one hand, many villagers use these auspicious ingredients as part of the practice of their traditional culture, on the other hand number of villagers are there who actually more or less aware about the basic beneficiaries of using turmeric, *neem*, *dhungchu*, mustard oil etc.

For example, turmeric is used in all the three major phases of life cycle viz. birth, marriage and death among the studied tribe. It is very useful for new born baby and new mother as it is a very good antiseptic. The same turmeric is used in marriage ceremony as it has very powerful skin glorifying property. The protective and antimicrobial property of turmeric makes it as an essential ingredient at the time of funeral procession. The studied people have strong belief that the use of turmeric can avoid the attack of evil spirit. Daily cooking requirement mustard oil also has some herbal remedial feature; so there is a custom to use mustard oil in various occasions.

The widespread application of *dhungchu* and *neem* are also reported by the studied tribe. According to the villagers *dhungchu* is considered auspicious item but *neem* is not, although both of them carry similar type of beneficiary properties. The age old concept of close relation between *neem* and evil spirit may be the probable reason for not using it during auspicious occasions like birth, marriage. But in case of birth and marriage the basic beneficiary quality of *neem* is attained by using auspicious as well as antiseptic *dhungchu* leaf.

Apart from the thinking pattern of general people, some herbal medicine men added more conspicuous features to the above said auspicious items or special items. According to them, turmeric is very much reliable for curing liver disease, earthworm problem. The bitter taste of *neem* as well as *dhungchu* is protective and germ killer.

Apart from the use of special herbal and auspicious articles the studied tribe strictly follows some observances or rites which intern helps them to achieve good health. For example, bathing before special rituals is an age old tradition among the studied population for the purification of body, mind and soul. Keeping isolation of mother and new born baby is another important taboo associated with them. This particular taboo is useful for protection from various possible neonatal infections, at the same time new mother can get rest for at least some period of time which helps in early recovery.

It is noticed that related rituals of different phases of life cycle is linked with health issues and health status of studied population. It is recorded that the use of different types of herbal ingredients in different rituals reflected the necessity of those items in daily life for better

health and hygiene. The above study about the occasion centering the life cycle of the people unfolded the idea about the basic health concept of them and how they include the herbal remedies in their occasions also which can establish the better way of living.

### **3.5 Ethnomedicine:**

The evidence of disease in general and also in particular varies in different societies. According to Foster and Anderson (1978) all societies have disease theory systems to identify, classify and explain illness (cited in A.K.Sinha and B.G. Banerjee's paper, 2004). Particularly in the tribal societies disease and treatment cannot be properly understood in isolation. Although medicine in tribal societies addresses supernatural means but also possesses strong empirical theories of disease. Tribal people have a developed pharmacopoeia and some rudimentary knowledge of medical techniques at individual level. Various techniques of herbalism, home remedies and even surgical methods are used to cure sick either together or separately. People have strong knowledge about their surrounding forest ecology which helps them to develop strong traditional/ indigenous medical system of their own. Their deep observation and understanding of nature derived through their deep observation of other animals to do so.

It is a matter of concern that though majority of tribal people need health care of one kind or the other on account of object property, lack of safe drinking water, poor communication system, they still appear to live close to nature and in and around healthy surrounding of natural environment. The various roots and tubers available in the surrounding forest or small animals they can hunt supply a balanced nutrition of them. Again in many cases it has been noted that certain diseases may be common in certain areas but they are controlled because of certain food habits based on vegetation available locally, or certain practices which have been generated through traditions. Thus deforestation and commercial afforestation of mono plant forest which causes ecological disturbance may seriously affect the availability of medicinal plants and also the balanced diet of the indigenous population. As a result some diseases which are now at controlled endemic state may spread very quickly. So, it could be said that utilization of available natural resources can determine the health behavior of the concerned population.

In the forth coming section, kinds of indigenous treatments along with curable diseases and symptoms are given in detail. The studied tribal and the healers used all those plants which were available to them.

### 3.5.1 Herbal Medicines:

Sl No.	Local Name	Scientific Name	Parts to be used	Disease
1.	Ambarsingh (in Toto) Or Bhate (in Nepali)	<i>Clerodendrum viscosum</i> (family:Verbenaceae)	Young leaf and flower	Malaria and high fever.
2.	<i>Arjun</i> (in Toto)	<i>Terminalia arjuna</i> (family:Combritaceae)	Bark of the plant	Heart problem.
3.	<i>Ahmiche</i> (in Toto)	<i>Amaranthus viridis</i> (family: Amaranthaceae)	Stem	Scorpion bite.
4.	<i>Avijal</i> (in Nepali)	<i>Blainvela acmella</i> (family:Compositae)	Root and leaf.	Tooth cavity and wriggled skin.
5.	<i>Amename</i> (in Toto)	<i>Ageratum conizoides</i> (family:Compositae)	Leaf.	Curing wound.
6.	<i>Aaing</i> (in Toto)	Not confirmed	Root	Jaundice and gastric problem.
7.	<i>Bojo</i> (in Nepali).	<i>Acorus calamus</i> (family:Acaceae).	Leaf	Fracture
8.	<i>Buta singh</i> (in Toto)	<i>Malotus philipensis</i> (family:Euphorbiaceae)	Bark of mature tree, stem of plant.	Dysentery

Contd..

9.	<i>Banmara</i> (in Nepali) Or <i>Badera</i> (in Toto)	<i>Eupatorium odoratum</i> (family:Compositae)	Young leaf.	Wound/ injury.
10.	<i>Buddhi</i> (in Toto)	<i>Acasia pinata</i> (family:Leguminosae)	Stem and bark of mature tree.	Dandruff.
11.	<i>Bhuichampa</i> (in Toto)	Not confirmed	Stem and leaf	Fracture
12.	<i>Cinijar</i> (in Toto)	<i>Scoparia dulcis</i> (family: Scrophulariaceae)	Seed, fruit and leaf.	Pneumonia cough and cold.
13.	<i>Cirota</i> (both Bengali and Toto)	Not confirmed	Leaf and stem.	Jaundice.
14.	<i>Chaprase</i> (in Toto)	Not confirmed	Leaf	Wound.
15.	<i>Dhungchu</i> (in Toto) Or <i>Titepate</i> or <i>vhaironpate</i> (in Nepali)	<i>Artemisia vulgaris</i> (family:Compositae)	Leaf	Skin disease and is also good mosquito repellent.
16.	<i>Duba</i> (in Toto)	<i>Cynodon dactylon</i> (family: Poacea)	Young twig.	Check bleeding.
17.	<i>Daising</i> (in Toto)	Not confirmed	Bark.	Swine flu and is also good digestive

Contd..

18.	<i>Denishi</i> (in Toto)	Not confirmed	Bark.	Swine flu
19.	<i>Dudushe</i> (in Toto)	Not confirmed	Tuber	High pressure
20.	<i>Eoying</i> (in Toto)	<i>Diospyros montana</i> (family:Ebenaceae)	Leaf, fruit and seed.	Gastro-entities and stomach ache.
21.	<i>Eyanasim</i> (in Toto)	<i>Xanthophyllum flavescens</i> (family:Polygalaceae)	Bark and leaf.	Urinary problem, dysentery and fracture.
22.	<i>Fauching</i> (in Toto)	<i>Zingiber officinalea</i> (family:Zingiberaceae)	Rhizome	Paralysis.
23.	<i>Gamari</i> (both Toto and Bengali)	Not confirmed	Bark of mature tree.	Pneumonia
24.	<i>Gurja</i> (in Toto)	Not confirmed	Stem	Diabetes.
25.	<i>Gua tree</i> (in Toto)	<i>Areca catcchu</i>	Young bud	Pneumonia and Stomach ache
26.	<i>Harchur</i> (in Toto)	Not confirmed	Stem, leaf.	Burn wound
27.	<i>Hartal/ Kapate</i> (in Toto)	Not confirmed	Root	Stomach ache
28.	<i>Kasai</i> (in Toto) Or <i>Chua</i> (in Nepali)	<i>Phlogacanthus thyrsoflorus</i> (family:Acanthaceae)	Twig part and flower.	Malaria and high fever

Contd..

29.	<i>Koremba</i> (in Toto) Or <i>Total</i> (in Nepali)	<i>Toona ciliate</i> (family:Meliaceae)	Bark of mature plant.	Skin disease and Wound
30.	<i>Kawla</i> (in Toto)	Not confirmed	Bark of mature plant.	Fracture
31.	<i>Karkudi</i> (in Toto)	Not confirmed	Leaf	Fracture
32.	<i>Kulin</i> (in Toto)	Not confirmed	Root	Malaria
33.	<i>Loyasingh</i> (in Toto)	Not confirmed	Root	Jaundice
34.	<i>Lahari</i> (in Toto)	<i>Cajanus cajan</i> (family:Leguminosae)	Leaf	Jaundice
35.	<i>Langaya</i> (in Toto)	<i>Polyalthea simiarum</i>	Bark	Scorpion bite.
36.	<i>Lutodabai</i> (in Toto)	<i>Cassia alata</i> (family:Fabaceae)	Leaf and fruits	Skin disease.
37.	<i>Losing</i> (in Toto)	<i>Bombax cieba</i> (family:Bambacaceae)	Leaf	Fracture and jaundice
38.	<i>Mairungsai</i> (in Toto)	Not confirmed	Leaf	Increase the frequency of breast feeding
39.	<i>Maushe</i> (in Toto)	Not confirmed	Leaf	High pressure

Contd..

40.	<i>Nagbili</i> (in Toto)	<i>Bauhinia scandens</i> (family:Leguminosae)	Root	Psychological disorder
41.	<i>Neem</i> (both in Toto and Bengali)	<i>Azadirachta indica</i>	Leaf	Fever and malaria
42.	<i>Nayaparaya</i> (in Toto)	Not confirmed	Stem, leaf	Fracture
43.	<i>Oatang</i> (in Toto)	<i>Ficus glomerate</i> (family:Moraceae)	Leaf, stem	Mumps
44.	<i>Pendrasingh</i> (in Toto)	Not confirmed	Leaf	Chest pain
45.	<i>Pipla</i> (in Toto)	<i>Piper sylvestium</i> (family:Piperaceae)	Leaf, root (young plant)	Cough and cold
46.	<i>Pangcha/ Ultekhara</i> (in Toto)	Not confirmed	Root	Pneumonia
47.	<i>Sadhimodi</i> (in Toto)	<i>Emilia sonchifolia</i> (family:Compositae)	Root	Diarrhea
48.	<i>Taiting</i> (in Toto)	<i>Mangifera indica</i> (family:Anacardiaceae)	Leaf	Sty
49.	<i>Tenke/ Jharu</i> (in Toto)	<i>Sida rhomboidea</i> (family:Malvaceae)	Leaf	Pierce
50.	<i>Vat</i> (both in Bengali and Toto)	Not confirmed	Young leaf	Malaria

### 3.5.2 Preparation Process:

Traditional medicine men were found to use the above medicinal plants in various ways to cure ailment and relief the patient from suffering. The treatments of different diseases are discussed in the following table.

Sl No	Name of the disease related symptoms and misfortunes	Ingredients used	Way of Administration
1.	Malaria	<p>Young leaf and flower of <i>Ambersing</i>.</p> <p>Twig part, leaf and flower of <i>Kasai</i>.</p> <p><i>Basak</i> leaf, <i>Vat</i> flower, leaf and root.</p>	<p>Leaf is grinded. The patient has to take the extract or the juice twice a day. The same dose continues up to 3 to 5 days depending on the condition of the patient.</p> <p>The plant parts of <i>Kasai</i> are very useful in treating malaria and high fever. The flower of <i>Kasai</i> plant is preserved. The flower is boiled in water, after cooling the water is preserved in glass container. According to the condition of the patient the liquid is prescribed for 7-10 days.</p> <p>Any patient suffering from high fever initially he or she is given extract of <i>Basak</i> leaf up to 3-4 days. If the patient does not get cure then extract of <i>Kasai</i> leaf is prescribed. The treatment continues up to 7 days. If the patient still does not get cure finally root and flower extract</p>

		<p><i>Neem</i> leaf</p> <p>Root of <i>Kulin</i></p> <p>Bile of cow (liver is also collected)</p> <p>Bile of bear</p>	<p>of Vat is applied. The patient has to take half glass of the prescribed juice for 4-7 days.</p> <p><i>Neem</i> leaves are boiled and the water is given to the patient twice or thrice a day.</p> <p>Root extract of <i>Kulin</i> tree is prescribed. The patient has to take medicine until fever is completely cured.</p> <p>In earlier days bile of cow is collected and burned. Then the bile was grinded to make a dust and the dust was prescribed to the malaria patient. The treatment continued until the patient got complete cure.</p> <p>Bile of bear was also used in traditional medicine to cure malaria. The fresh collected bile was dried off and crushed to prepare dust. The patient had to take the dust with little amount of water until he got complete cure.</p>
2.	Heart problem	Bark of <i>Arjuna</i>	<p>The bark is crushed for extracting the juice which is given to the patient daily morning in empty stomach. The patient has to carry out the treatment for a long time.</p>

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		<i>Pendrasing</i> leaf	Extract of <i>Pendrasing</i> leaf is given to the cardiology patient daily once. The leaf is also used in daily cooking which reduces chances of heart attack.
3.	Mumps	Stem and leaf of <i>Oatang</i>	<i>Oatang</i> is very useful in curing mumps. First of all a whole is made on the tree trunk. Through the pore plant juice comes out which is applied on the affected area.
4.	Cough and cold	Leaf and root of <i>Pipla</i>	<i>Pipla</i> leaf, black pepper and honey are mixed together. The patient has to take the mixture in every 3-4 hr. Root extract of <i>Pipla</i> is also prescribed for curing tonsil.
5.	Diarrhea	Root of <i>Sadhimodi</i>	Root extract of <i>Sadhimodi</i> is prescribed twice or thrice daily up to complete remedy.
6.	Pneumonia	Root of <i>Pancha</i> or <i>Ultekhara</i>	Root extract of <i>Pancha</i> is prescribed. The patient has to take the medicine in empty stomach in the early morning. 2-3 doses, maximum 4 doses are required for complete cure.
		Bark of mature <i>Gamari</i> tree.	Bark is crushed and mixed with little amount of water. This mixture is prescribed daily twice; one another dose in evening. The patient has to take the medicine in

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		<p><i>Gua</i> tree (young leaf)</p>	<p>empty stomach. Complete recovery needs 5 to 6 doses.</p> <p>Twig or young leaf of <i>Gua</i> tree is grinded and the patient is advised to take the extract daily twice or thrice as per requirement.</p>
7.	Scorpion bite	<p>Stem of <i>Ahmiche</i></p> <p>Bark of <i>Langaya</i>.</p>	<p>The plant is used as a remedy of scorpion bite. The stem is grinded to make a paste which is applied on the affected area.</p> <p>Bark and leaf of the <i>Langaya</i> plant have medicinal properties. The plant parts are used as medicine in scorpion bite. The bark is grinded and the paste is applied on the affected area. In an alternative way, juice prepared from <i>Langaya</i> leaf is given to the patient. Sometimes both the techniques are applied simultaneously.</p>
8.	Dysentery	<p>Bark of the mature <i>Butasingh</i> tree, stem of the same plant can also be used</p>	<p>Extract of the <i>Butasingh</i> stem is prepared. The extract must be taken without any impurities twice daily.</p>
9.	Jaundice	<p>Rhizome or root of <i>Aing</i></p>	<p>Root is grinded first. Then the grinded root is mixed with little amount of water. The patient has to take the mixture thrice daily up to 3-4 days.</p>

		<p><i>Lahari</i> leaf</p>	<p>The leaf extract is found useful in treating jaundice. The patient is advised to take one glass of leaf extract daily once in empty stomach. The patient should take the medicine at least up to 15 days.</p>
		<p><i>Cirota</i> leaf</p>	<p><i>Cirota</i> leaf is boiled in one glass of water. The patient has to take the water daily once. The treatment continues up to 7 days to one month depending on the condition of the patient.</p>
		<p><i>Eyubda</i> (one kind of turmeric)</p>	<p>The root portion of <i>Eyubda</i> is grinded to make a paste. Little amount of water is added to the paste. After taking meal patient has to take the mixture daily once up to 7 days.</p>
		<p><i>Fauching</i> (root/ rhizome)</p>	<p>Root extract of <i>Fauching</i> is useful of treating jaundice. 3-4 doses are required for complete cure. Patient has to take the medicine in empty stomach. The extract can be preserved in glass container for 3-4 days.</p>
10.	Dandruff	<p><i>Buddhi</i> (stem and bark of mature tree)</p>	<p><i>Buddhi</i> is very much useful in treating dandruff. First of all stem of the plant is bruised with stone, water is mixed with it which will</p>

			produce foam. The foamy solution is used like soap to wash dandruff.
11.	Psychological disorder	Root of <i>Nagbili</i> plant	Extract of <i>Nagbili</i> root is used for psychological disorder. People having psychic problem are prescribed to take the extract of <i>Nagbili</i> root. The patient would get relaxed and sleep.
12.	Gastroentites	<i>Eoying</i> leaf	The leaf and fruits of <i>Eoying</i> plant are used as medicine for curing gastro-entities. Fruits and leaf are paste together and cooked. According to the traditional belief, ingestion of the prepared food strengthens the digestive power of the body.
13.	Sty	<i>Taiting</i> leaf	Sty which sometimes comes out on eyelids, one drop of <i>Taiting</i> leaf extract is applied. The sty would disappear within 5-10min.
14.	Skin disease	<i>Dhungchu</i> leaf	<i>Dhungchu</i> leaf is used in curing skin disease. The dust of <i>Dhungchu</i> leaf is applied on the affected area of the skin. In an alternative way the boiled water of <i>Dhungchu</i> leaf is applied on the disease affected area. According to the traditional healers both the techniques are equally effective in curing the skin problems.

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		<i>Lutodabai</i> leaves and fruits	The plant parts of <i>Lutodabai</i> are useful in curing skin disease. The collected leaves and fruits are crushed to make a paste which is applied on the disease affected area.
		Bark of <i>Koremba</i> or <i>Toila</i>	The bark of the plant or leaf is used as remedy in skin disease especially on sore or bruise. Firstly the bark and leaf of the plant are dried off and burned to make ash which is applied on the affected area to make the infection completely cure.
15.	Tooth cavity.	<i>Avijal</i> (root and leaf)	Root extract of the plant is prescribed in curing cavity.
16.	Pierce	<i>Jharu</i> leaf	The Toto people make the dust of <i>Jharu</i> leaf which is applied on the mouth of pierce, pierce is dried off. The medicine also removes pain.
17.	Diabetes	<i>Gurja</i> (stem)	Stem of <i>Gurja</i> is soaked overnight in a glass of water. On the next day morning the patient has to take the formed precipitate. The patient has to take the medicine once in a week and the treatment continues 6 months to any long period depending on the condition of the patient.

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18.	Stomach ache	<p><i>Kartal/</i> <i>Kapate</i> (root portion)</p> <p><i>Eoying</i> (leaf, fruits and seed)</p> <p><i>Gua tree</i></p> <p><i>Bikoma</i> (<i>bikoma</i> is one kind of fruit)</p>	<p><i>Hartal</i> root is prescribed in stomach ache. Patient has to take root extract of <i>Hartal</i> once or twice a day (depending on the severity of the pain).</p> <p>The leaf and fruits of <i>Eoying</i> plant are used as medicine for gastro-entities and stomach ache.</p> <p>Twig or young leaf of <i>Gua</i> tree is grinded and the patient has to take the extract twice a day until he is completely cured.</p> <p><i>Bikoma</i> is prescribed in severe stomach ache. The paste of <i>Bikoma</i> is mixed with little amount of water and the patient has to take the solution once a day in empty stomach. This medicine is prescribed generally for 3-4 days.</p>
19.	Gland TB	Lemon and ' <i>Silaji</i> ' (one kind of plant)	According to the traditional healer who prescribes this treatment, firstly 1 lit lemon juice is boiled until it reaches $\frac{1}{4}$ of the initial volume. Grad-ually a sticky appearance is achieved which is applied on the affected gland up to 3-4 days regularly. Finally the tumors burst and the wound is cured by regular application of ' <i>Silaji</i> '. According to the healer

			<p>'<i>Silaji</i>' is collected from some specific rocks of Bhutan.</p> <p>All the patients are advised not to take pork, '<i>kalai dal</i>' and '<i>kachu</i>'.</p>
		<p><i>Cini</i> (<i>Cini</i> is an animal part. <i>Cini</i> is actually liver and bile of <i>Naya</i> i.e. bear, especially the Bhutanese bear).</p>	<p>Toto traditional healers buy the medicine '<i>Cini</i>' from Bhutan especially from Bhutanese tribe.</p> <p>The patient has to take a small portion of '<i>Cini</i>' once a day in anytime preferably after meal until he achieves complete cure.</p>
20.	Asthma	<p><i>Khudkal</i> <i>Toima</i>(bee like insect), <i>Puti, Tulsi pata</i></p>	<p><i>Puti</i> which is produced by <i>Khudka</i> or <i>Toima</i> is collected from the nearer forest. Extract of <i>Tulsi</i> leaf is mixed with the collected <i>Puti</i>. This solution can be preserved for one to two months. The asthma patient has to take the solution while he/she gets asthma attack. Treatment continues until the patient gets relief from acute problem.</p>
21.	Snake bite.	<p>Earth worm, salt Chili, row.</p>	<p>In case of snake bite, the traditional medicine men firstly ties up just 2 inches up the wounded area. Then diagnosis is done whether the snake bite is poisonous or not. To make correct diagnosis the patient is asked to taste chili. If the patient could taste hot then he is declared out of danger and he does not require any further treatment. In</p>

			<p>another case if the snake bite diagnosed poisonous then further treatment is applied. In that case earth worm is searched and salt is given to the mouth of earth worm. Gradually the earthworm secretes some foamy white solution which is collected and prescribed to the patient. In an alternative way, hot chili is crushed and applied to the affected area.</p>
22.	Urinary problem	<i>Eyanasim</i> (leaf and bark)	<p>In urinary problem <i>Eyanasim</i> leaf is used. A mixture solution is prepared from <i>Eyanasim</i> leaf and bark mixing with water. This solution is useful in treating urinary problem.</p>
23.	Hydrophobia	Seed of ' <i>Dhutra</i> '	<p>Concept of Hydrophobia is closely related with the dog bite. If the traditional healer suspects hydrophobia he advises the patient to watch the particular dog. Three seeds of <i>Dhutra</i> are crushed to make dust and the dust is given to the dog. This process is repeated up to 7 days from the day of bite. According to the healer the patient will be cured.</p>
24.	Paralysis	<i>Fauching</i> (Rhizome), <i>Bojo</i> leaf, Kerosene oil,	<p>To treat the paralysis patient a mixture is prepared first. Rhizome and leaves of <i>Fauching</i>, <i>Bojo</i> leaves</p>

		Mustard oil.	are grinded together to make a paste. Then 1:1 ratio of kerosene and mustard oil are mixed with the prepared pasts. Regular massage with this paste proves effective in paralysis.
25.	High pressure	<i>Mawshe</i>	Leaf of <i>Mawshe</i> is collected and boiled in water upto 15-20 minutes. The water is prescribed to the patient twice or thrice in a week depending on the condition of the patient. But low pressure patients are strictly advised nit to take <i>Mawshe</i> , because <i>Mawshe</i> can cause arthritis to them.
26.	Fracture	<i>Dubo, Harjor, Kawla, Akti, Pakan bet, Gurja, Karkudi, Simbole, Totla, Karemba, Losing leaf, Amra, Eyanasim, Bhuichampa, Egg, Bamboo.</i>	Traditional medicine can cure the fracture. If the fracture is old, egg is applied on the fractured area to make soften the fractured bone. A paste is prepared by mixing <i>Dubo</i> leaf, two kind of <i>Harjor</i> , bark of <i>Kawla</i> , bark of <i>Akti</i> , bark of <i>Pakan bet</i> , <i>Gurja</i> (stem), leaf of <i>Karkudi</i> , bark of <i>Simbole</i> , bark of <i>Totla</i> , bark of <i>Karemba</i> , <i>Losing</i> leaf, root extract of <i>Losing</i> , young leaf of <i>Amra</i> , root of <i>Bhui-champa</i> . The fractured bone is settled properly and the prepared sticky paste is applied on the fractured area. With the help of bamboo frame plaster is

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			<p>done. Regular dressing is required for quick and proper recovery. The patient has to carry the plaster up to 22 days. During this period patient is strictly advised to take only vegetarian food.</p> <p>After removing the plaster sometimes patient experiences little bit of pain. In that case another solution is applied on the affected area. The solution is prepared from the bird hornbill. The flesh and bone of hornbill are boiled together until the flesh and bone are totally dissolved. After cooling the solution is kept in a glass container. The solution is applied on the affected area regularly until the patient gets relief from the pain.</p>
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### 3.6 Religious Belief:

Religious belief is the most common and important aspect of the social system of any community. Every religion has a common characteristic i.e. they represent a complex of emotional feelings and attributes towards mysteries and perplexities of life. Thus religion comprises of various aspects viz. belief, superstition, feelings, fear, worship, attitudes.

The tribal people are mainly animistic as their day to day life is surrounded by supernatural events. As the studied tribe lives in the forest, hilly, isolated region, so their environment also permits them to trust in the super natural world. Like the other tribes, Totos are also animistic in nature. The Totos are animistic as they worship those things which are naturally born. They also have strong belief in nature. The flora, fauna, natural objects and natural phenomena make them more attached with their natural habitat. According to the Toto people they find their nature born deities mainly in their dreams. On the very next day morning they

search for those things and establish those objects as deities. Various times their animistic believes have been challenged by other religions mainly by the Christians. But still traditional values, belief and practices are prevalent within the community.

As a primitive tribal community the Totos are still highly dependent on various folk beliefs. Again being animists, they are being controlled by a psychology of imposing animistic ideas in each of the natural beings like the hills, sky, river, rocks and so on. They belief that even a river and streamlet has soul or spirit of its own, which reacts whenever the hill, rock or river god is neglected by anybody and the offender is punished in various way (such as by giving serious diseases) by the spirit of that particular object according to its own whims and caprices (Majumdar, 1998).

The Toto religion is very simple. No special religious philosophy in greater sense has so far been influenced in the Toto religious thought. The deities of the Totos are both benevolent and malevolent in nature. They also have deities who are protective in nature. They all belong to the supernatural world. The role of these Gods and confined within the surrounding world of the Totos. Most of the Toto deities are denoted by a piece of rock, tree trunk, crest of a particular hill, a water spot and sometimes the river and rivulets surrounding their habitat. As the animists the Totos not only offer worship or penance to the presiding deities of water and streamlets of Totopara but also some major rivers of the district.

The religious life of the Totos of the six sectors of Totopara is a wonderful admixture of their traditional ways of life as well as Christianity and Buddhism. Irrespective of the sectors majority of the Totos were animistic.

In category-1 village sectors, among 33 families of Dhumci gaon 96.97 percent follows animism, in Mitran gaon 96.55 percent families were animistic and remaining 3.45 percent families were Christian while in Puja gaon all the families were animistic in nature.

In category-2 village sectors among 24 families of Mondal gaon 87.50 percent were animistic and 12.50 percent were Christian. In Panchayat gaon 92.65 percent families were animistic and 9.68 percent families were Buddhist. In case of Subba gaon 92.65 percent families were animistic, 4.41 percent families were Buddhist and 2.94 percent families were Christians (table 3.1).

### 3.7 Supernatural Belief:

It has been observed from various studies that beliefs in supernatural agencies are particularly strong in the context of health and disease. Different gods and goddesses, spirits as well as various rituals are connected with different diseases. The role of supernatural agencies particularly in the tribal life in the causation and treatment of diseases is so important that the local tribal people have to seek the help of traditional diviners for appeasing, controlling or driving away the disease causing agents. Thus all the rituals connected with different diseases are observed by the tribal villagers. In general Totos of Totopara village had their own supernatural belief regarding rites of passage, health, disease and treatment although remarkable differences were found between the educated and uneducated villagers. Birth, marriage, death are surrounded by various rituals and many of them are observed due to the faith upon supernaturalism. To protect themselves from various health hazards they believe on supernatural power. In any auspicious occasion, before preceding any ritual they devote one portion of sacrificed meat and *eu* to their supreme powerful deity *Senja*.

The Totos may have impressed by the animistic type of ideology, which is reflected in their belief that the souls of the dead ancestors continues to remain in contact with their kith and kins and do not convert into a potential spiritual force. Hence ancestors worship is present among them since long time as a cultural practice. They also believe in God of house or God of the family which is locally known as *Chima*. According to the studied villagers their house hold deity protects them from all sorts of misfortune. They also informed about both the benevolent and malevolent ghosts and spirits. According to them their ancestor spirit do not harm them at all rather they help the villagers, guide them and make the things easier. People have strong belief that their ancestor's spirit and their house hold deities give them moral support at the time of distress and dispersion.

They also mentioned about the village non-member spirit and ghosts. According to the villagers, village non-membered spirit actually came from outside the village only to cause harm to the villagers. Because of the strong malevolent nature villagers mainly scared about the forest ghosts. The forest ghosts were very harmful and could cause various ailments and misfortunes among the villagers. The fear of supernatural power forced them to worship their ancestor deities who could protect them from various misfortunes.

Villagers from Puja gaon and Mitran gaon mentioned about a strange incident that they often hear a peculiar sound of bird which comes from the nearer forest. This sound always followed by various misfortunes like diseases among the villagers or natural calamities. Then they generally offered one black hen and seven eggs of that particular hen to the forest ghost. According to the villagers, after offering worship, from the very next day they did not found any sound which was coming out from the forest. In that way the forest ghost demanded penance or worship from the villagers.

During the field work, it was observed that they had strong belief in *Jatri* and *Shikari bhut*. Both of them were forest ghosts. According to the belief, *Jatri bhut* could kill any person if she was not worshipped properly. This ghost could attack both male and female particularly when they collected fire wood from the forest. Forest ghost *Jatri* is appeased by sacrificing one black hen with rice, salt, turmeric and ginger. This worship can be done at anytime in the year but must be performed in the morning. All the items should be given in cooked form.

They also had strong belief in the existence of *Shikari bhut*. It was a male spirit. It was formed when anybody dies at the time of fuel collection. Whenever somebody was attacked by *Shikari bhut*, the affected person suddenly fell in high fever and suffered from acute pain in legs. According to the villagers, *Shikari bhut* specifically attacked male members of the society but did not attack females. Villagers opined that opposite sex attraction might be probable cause behind such type of happenings. One pair of hen and one pair of egg of that particular hen have to offer along with some amount of *eu*.

The Totos also believe that three types of ghosts live in Ishpa hill. Among these three, two are male and one is female. The male ghosts are *Bindi-kepa* and *Yuasudang-choishu*. Both of them are worshiped by blood and flesh of pig and the female ghost *Choiri* is worshiped by sacrificing a cow. When these ghosts attack any individual, he will suffer from high fever, swelling of hand and legs. These ghosts generally appear in the river basin of *Goati* in the evening or night. They also believe that whenever the ghosts come in their dream, the person will walk in front of his house and can hear various kinds of sounds. This incident is generally followed by some kind of misfortune. Most commonly, some of the family member of the house may suffer from diseases. To get rid of from the problem, the villagers mainly consult with the *paw* and according to his suggestion various rituals are performed by sacrificing pig or hen or pigeons.

Although majority of the spirits are malevolent in nature, there is also a spirit who is benevolent in nature. The only benevolent spirit of the forest is *Bansakpa* and is called the queen of the forest. The villagers have deep faith on *Bansakpa* and believe that *Bansakpa* helps to recognize various medicinal plants.

According to table 3.2 among the total families 44.96 percent have strong belief in supernatural power while 55.04 percent families do not believe in supernatural agencies. In category-1 village sectors, among the total 84 families 75.00 percent have deep faith on supernatural power and rest 25.00 percent do not have any faith. In category-2 village sectors, 28.57 percent family believe in supernatural agencies and 71.43 percent do not believe in supernatural agencies. According to the study, it could be said that the people living in category-1 village sectors have much believe in supernatural power than that of category-2 village sectors.

### 3.8 Worship of Deities:

The Totos are very much traditional in their religious observances. Various kinds of worship and penance take place throughout the year. The Totos are basically animist, although some of them claim themselves as the Hindus. But their basic religious practices viz. sacrifices of cow, pigs etc do not comply with the essence of Hinduism. They do not propitiate any image of God. They worship totemic objects like hill, river, forest etc. The worships can be categorized depending on the level of participation at the family, clan or community. *Tsa-gDang-pa* is the deity of the house or the family, the *Chimadora* is the ancestral deity of the lineage, *Chaisung* is the ancestral deity of the clan and *Ishpa* is the Supreme God of the community. But presently *Chima* is said to be the family or household deity.

Each clan has a separate *Chaisung* which are worshiped by the clan members unitedly under the guidance of an elderly clan member with the help of a priest by offering particular ingredients and sacrifice of animals according to their tradition. Each of the Toto house has a separate chamber of worship which is called *jiri* and the family or house hold deity *Chima* is worshiped over there. According to their belief *Chima* saves the family members from evil spirit. Non- Totos are not allowed to enter into the *jiri*.

### 3.8.1 Worship of *Ishpa*:

*Ishpa* is regarded as the supreme deity of the Toto community. *Ishpa* is mainly worshiped to save the community people from the evil spirit and the misfortune. The worship of *Ishpa* takes place in their traditional temple at Puja gaon which is locally called *Demsha*. It was found during the field study that the goddess *Ishpa* is represented by two sacred drums (*Bakung*). The two drums are preserved within the *Demsha* which is used only during the religious occasion or in case of emergency. One of these two drums is considered as male and other female by the Totos. The male one is named as *Cigamo* and the female drum is known as *Mogaimo*. The pair is treated as husband and wife. The drums are made from the wood of Gamari tree. These drums kept hanging from a wooden beam of *Demsha*. The female drum is placed in the east direction and male is placed in the west direction. Non Toto population is not allowed to touch the sacred drums. Otherwise the person has to go through *Sangailami* i.e. the compensation by sacrificing a cow.

Previously these drums were kept in the clan house of *Baudhbei* and *Budhubei* clans who were entrusted to take care of the *Bakungs*. The preservation of the drums gave the *Baudhubei* and *Budhubei* clans a superior status over others. But since the abolition of the separate houses the drums are being kept in *Demsha* itself where the aforesaid clan members take care of them.

*Ishpa* is the most powerful deity and is not worshiped with flower. The essential ingredients for this worship were blood and flesh of cow, sun dried rice, butter, ginger, plaintain leaves and the country liquor eu. A powder from the leaves of a tree named Tito is burnt as incense. To appease *Ishpa* pig, hen, birds are also sacrificed. At the time of propitiation both *Gapu* and *Kaiji* (religious headman) must be present over there. Generally animal sacrifices are done near the *Goati khola* where the women and children are not allowed to take part. Cow and pig are killed by piercing the heart with a pointed weapon called *patang* and flesh and blood is sprinkled over the place. After completion all the rituals at *Goatikhola* they come back to the *Demsha* and the meat and rice is cooked with the territory of *Demsha*. Each of the family has to contribute two pots of eu. They pray their supreme deity *Senja* in all the occasions (both religious and secular) including marriage. The prayer of the Totos is “*kung Senja neo*” i.e. we have our supreme power *Senja* and “*ayu Senja Ishpa mae*” that means you are my parents and you are my truth.

After completion of the worship the head priest, other paws and elderly persons of the Toto community start dancing with the celestial music. Females are not allowed to take part in dance and singing. The dance is performed by imitating a bird which reside near the river and picked up stones from the river. The Totos have a strong belief that this dance will help them to understand the safe existence of our earth. The worship of *Ishpa* at the community level takes place twice in a year during their community festival *Ongchu* and *Mayu*.

During the marriage ceremony no religious function is observed by the Totos except worship of *Ishpa* which is done by sacrificing a cow and offering its heart along with some other portion of the body for seeking his permission. During this function a member from *Badhubei* clan must hold the front legs of the cow that are being offered to the god.

### **3.8.2 Worship of *Choir*:**

The lineage has an active role in respect of the control over the religious and ritualistic activities of the studied tribe. Every lineage has got a lineage deity of its own and the head of the family (male) must worship the deity till his sons replace him after their marriage. The deity is called *Chima* or *Chimadora* and the worship is called *Choir*. Each of the lineages of the Totos has a separate *Chimadora* or ancestral deity named after one of the most powerful ancestors in the male line.

The essential ingredients oh this ritual is blood and flesh of cow. The close relatives particularly the same lineage member come to the house of the organizer and each contribute a pot of *eu*. There is no need of invitation. During this worship the particular cow which has to be sacrificed is tied with a *soudi* (rope). Just sitting over the 'dui' (an open projected space of bamboo platform in front of their room) the female members and the children of the family pull the rope. At that time the paw throws some sun dried rice and water over the cow. Other important items for this worship are *lasu* leaves, *dhungchu* leaves and *eu*. The collected *lasu* leaves are particularly used for making bowls in which *nangsha* (i.e. Prasad) is served. *Dhungchu* leaves are used for purification of the place as well as the whole environment. The cow is sacrificed by the male members of the same lineage. Firstly the boiled flesh of the sacrificed cow is devoted in the name of *Chimadora* and the remaining portion is cooked and served among the invitees. The leg portion of the cow is allotted for the *paw* who performed

all the rituals. This worship is performed in the courtyard but necessarily within the territory of the house or homestead land. Active participation of other clan members is not allowed in this worship. This worship is performed in the day light. There is a story (folktale) regarding this worship. In earlier days deer was sacrificed in this ritual. But once a Toto man hunted a deer and consumed the meat of the deer as a delicious food but kept the head of that deer. The next day morning, with great surprise the man found that the head which he had preserved is not that of deer but of a cow instead. After that incident the Totos sacrifice cow in this *Choir* worship.

### 3.8.3 Worship of *Chaisung*:

*Chaisung* is the ancestral deity of the clan. As mentioned earlier the Totos have thirteen different clans and each of the clan has its separate *Chaisung* which has to be propitiated by the clan members. In case of multiple lineages within a clan the *Chaisung* of the most dominant lineage would be treated as the *Chaisung* of the whole clan. *Chaisung* is generally propitiated by the clan members of particular clan unitedly inside the house at the *jiri* of any of the same clan member.

*Chaisung* of different clans are propitiated by sacrificing various animals but sun dried rice, *dhungchu* leaf, *eu*, ginger, plaintain leaf are the other essential ingredients which are common for all the clans. Also incense of Titepate is burnt and enough of *eu* is offered on the occasion by all the clans.

**Chart-3D**

**Identifications of Clan, Clan Deity and Totem**

Sl No.	Name of the Clan	Clan Deity ( <i>Chaisung</i> )	Birds/animals used to Offer in Worship	Totemic Symbol
1.	<i>Baudhubei</i>	<i>Lutsada (Gepaija)</i>	One black hen	White cow/ elephant
2.	<i>Budhubei</i>	<i>Ngedoopa</i>	One pig	Tiger
3.	<i>Bongobei</i>	<i>Ganja-wang-pa</i>	One cow	Red cow

Contd..

4.	<i>Dankobei</i>	<i>Chen (Lama Lapang Basarang)</i>	One red hen	Red hourse
5.	<i>Dantrobei</i>	<i>Basrong</i>	One pig	Elephant
6.	<i>Diringchankobei</i>	<i>Basudang</i>	One hen and one cock	Elephant
7.	<i>Linkaijibei</i>	<i>Aajibei</i>	One pig	Snake
8.	<i>Mankobei</i>	<i>Lei-choung</i>	One pig	Red dog/ red buffalo
9.	<i>Mantrobei</i>	<i>Darong (i.e Sun)</i>	One pig	White goat
10.	<i>Manchingbei</i>	<i>Lanteng-jee (Bingdinepa)</i>	One pig	Monkey
11.	<i>Nubeibei</i>	<i>Leicho</i>	One red hen	Elephant
12.	<i>Nurinchankobei</i>	<i>Dutsang-tui (Basudang)</i>	One pig	Elephant
13.	<i>Pisichankobei</i>	<i>Sarka</i>	One hen	Red horse

#### 3.8.4 Jerongkobe:

Sometimes the worship of *Chaisung* is performed by sacrificing one pig that worship is called *jerongkobe*. But this worship must be performed after sun set. The flesh of the sacrificed pig is devoted in the name of *Chaisung* either burnt or boiled but must be cooked. The left side of the sacrificed pig is given to the *paw* compulsorily. This ritual or worship is performed if any family member suffers from severe fever and weakness.

#### 3.8.5 Goram worship:

Goram puja is the worship in which the village itself is worshiped by considering it as a deity. This is performed for the welfare of the village. Women are not allowed to participate

directly in this worship. This worship is performed particularly to ward off diseases from the village. Besides sun dried rice, *eu*, ginger, *dhungchu* leaf five types of animal are required which have to be sacrificed. These are pigeon, pig, duck, goat, cock and hens as many as possible. Among the goats one goat must be white in color.

### **3.8.6 Goriya or Gorea worship:**

This is also a compulsory religious festival and performed at community level. Family, lineage or clan level worship in case of *Goriya* is not possible. At the top of the village organization there is a general council called *Latchi- Jangoa*. This *Latchi- Jangoa* or community council is the supreme decision making authority of the Toto community headed by *Kaiji* and *Gapu*. The *Latchi- Jangoa* may assume two different characters – religious and secular depending on the agenda under their deliberation. In *Latchi- Jangoa* the dates for various festivals including *Goriya* is fixed and also the subscription to be paid by every family. The main and essential ingredient of this worship is hen. Each of the Toto family must contribute one pair of hen and cock. The worship of *Goriya* generally takes place in the month of August- September. During the worship the Totos prepare seven types of plates by plaintain leaves and give ginger, *jaiti*, *pan-supari*, sun dried rice are distributed in each of the plate. In presence of paw hen is sacrificed. But the *pow* never sacrifices the hen by himself. After that blood of the sacrificed hen is sprinkled over the plate. Then the unmarried Toto girls keep the plaintain leaves at a secret place in such a way that the ghosts should not reach to the sacred plates. It should be also noted that *eu* is not allowed in this ritual. This worship is mainly performed to save the community people from ghost attack. According to the present *Kaiji* hundred years ago single *Goriya* worship was performed at *Goatikhola* and was conducted by *Kaiji*. Now a day's *Goriya* worship is performed sector wise but *kaiji* must go to the *Goati khola* at the time of sacrificing the hen.

### **3.8.7 Worship of Manka:**

Worship of *Manka* also takes place at the community level. Just after three days of *Goriya* worship of *Manka* must be taken place. Four to five pairs of hen and cock are sacrificed and the cock must be red in color.

### **3.8.8 Worship of *Sanika*:**

Totos have strong belief that birth and death of any individual is closely related with Sun. the Totos regularly worship the Sun which is commonly known as *Sanika puja*. This worship is performed at the family level or clan level. Generally red hen is sacrificed at the presence of paw in the name of *Sanika*. This ritual is performed for the well- being and good health of the family members.

### **3.8.9 Worship of *Sodingpa*:**

This worship takes place at the time of building of new houses. Pig is required along with *sal dhup*, sun dried rice. The blood of sacrificed pig is sprinkled over the newly built pillar and the potato, *sal dhup* and rice are placed in the cavity of the pillar. After filling up the cavity with the soil they start building the house. The worship is done by the *pow* incase of making the traditional houses but the *pow* does not take part in the worship in case of making modern houses i.e. concrete houses. The elderly persons of the Toto society still believe that *Sodingpa* i.e. the god of houses does not stay in the modern houses and can harm the dwellers of those houses.

### **3.9 Health and worship of Deities:**

Magico-religious belief and occult or esoteric practices with systematic procedures as indigenous health practices are closely associated with the tribal health or therapeutics. This can be viewed (a) as a cultural complex i.e. ideas and values and (b) a part of social structure and organization i.e. network of relatives between groups, classes, categories of persons. So the magico religious beliefs of the disease and cure can be seen as a system of values, beliefs, knowledge, objects, tools encompassing the organization of some assigned persons and the relationship with them in daily social intercourses.

Rivers (1924) found that the beliefs of mankind in general concerning the causation of disease may be divided into three groups – (i) natural causes (ii) the acting of supernatural agencies (iii) human agency. George Foster (1978) has modified this into two medical systems viz. (a) Personalistic and (b) Naturalistic. The first one covers the last two of the above in which disease is explained as due to the active, purposeful intervention of an agent,

who may be human (a witch or sorcerer), non-human (a ghost, an ancestor spirit or an evil spirit) or supernatural (a deity or other very powerful beings). All illness and death are believed to stem from the acts of the agent. In contrast to personalistic systems the second covers naturalistic systems which explain illness in personal systematic terms. Disease is thought to stem not from the machinations of agency being but rather from such natural forces or conditions as cold, heat, winds, dampness and above all by an upset in the balance of the basic body elements.

Totos, the only primitive tribal community of North Bengal are intimately related to their surrounding natural environment. They were solely dependent on the mercy of nature in the past with their primitive technology. On the other hand, the rivers and the streamlets have a vital role in development of culture and economy of the studied tribe. The hills of Totopara often change their courses causing heavy damage in the form of land slide and land erosion. Owing to the frequent change of courses it sometimes causes damage to huge quantities of agricultural lands including the standing crop and plantation.

### **3.9.1 Worship of River Gods:**

In old days, during portorage they had to come across a number of turbulent hill rivers and streamlets which created immense difficulties on their movement especially during the monsoon. As a result, they were aware of only with the destructive or evil activities of the streamlets. The living memories of their troublesome journey through the river beds have created the idea only about the malevolent nature of the rivers. In this way the curses of the river gods had been converted into different diseases and disasters. They were also deprived of getting any modern medical facilities till recently and majority of them had no rational ideas about the causes of diseases and treatment. They had alternative than to offer worship of penance to the river gods, as the preventive and curative measures to overcome various diseases. It has been reported by the Toto elders that in the early days most of the major rivers of the district were worshiped by the Totos. Previously they used to go to the spots for worship of the rivers in Bhutan, but at present they seldom go to the spot except the river Torsha. Now they offer the same within their own village. Besides worship of some large rivers like Teesta and Torsha the Totos offer regular worship or penance to at least fifteen streamlets which are located within the territory of Totopara. In most of the cases the Totos offer penance or worship to the presiding deities of these streamlets to save themselves from

various disease and calamities, because the river Gods of the Totos in most cases are malevolent and revengeful in nature. Again they offer *Sangailami* (penance) to the enraged river Gods as a curative measure by appeasing the deities.

### 3.9.1.1 Worship of *Goa-tee* and *Goa-tee-khola* or *Goatikhola*:

The river Goatee and the spot *Goatikhola* deserve some special mention because it is considered as the most sacred river of Totopara. It is compulsory to worship the river *Goa-tee* for each of the family head every year. In case of defiance, the offender will fall unconscious in front of village council *Lachi-jangoa*. Pig is the essential ingredient and each of the family have to give one red hen. All the priests under the leadership of religious head '*Kaiji*' take part in this ritual. This is obviously a community level worship.

### 3.9.1.2 Various River and Rivulet and their Worship:

Sl No.	Name of the river and its presiding deity	Ingredients used	Effect of enragement	Nature of worship
1.	<i>Dating-tee</i>	Black or red hen, sun dried rice, <i>eu</i> , butter, ginger, plaintain leaf.	High fever and stomach ache even may cause death.	Family level (annual but can be performed twice in a year)
2.	<i>Deep- tee</i>	Red or black hen, sun dried rice, <i>eu</i> , butter, ginger, plaintain leaf.	High fever, dysentery, distension.	Personal worship.
3.	<i>Niting-tee</i>	Two pigeons, <i>eu</i> , sun dried rice, <i>titepate</i> .	High fever.	Personal worship.
4.	<i>Choa-tee</i>	One red or black hen, sun dried rice, <i>eu</i> , <i>titepate</i> .	Diarrhea and similar diseases.	Personal worship.

Contd..

5.	<i>Pane-tee</i>	Two black pigeons, one pair of chicken, sun dried rice, <i>eu</i> , butter, ginger, <i>titepate</i> , plaintain leaf.	Madness	Personal and family level.
6.	<i>Uding-tee</i>	One pair black and one pair red chicken, sun dried rice, plaintain leaf and <i>eu</i> .	Madness	Family level.
7.	<i>Merem-tee</i>	One pig, one pair pigeon, one pair chicken, rice, plaintain leaf, <i>eu</i> .	Scabies, madness	Family and personal level.
8.	<i>Lepa-tee</i>	One red hen is essential, along with sun dried rice, <i>eu</i> , plaintain leaf	Miscarriage	Personal level worship.
9.	<i>Tunka-tee</i>	One red hen, rice, <i>eu</i> , plaintain leaf.	Vertig.	Personal level worship.
10.	<i>Tei- ting tee.</i>	One red hen, sundried rice, <i>eu</i> , plaintain leaf, <i>titepate</i> , <i>dhup</i> .	Appears in dreams and frightens.	Family level worship.
11.	<i>Moo-tee (Torsha)</i>	Three pigeon, sun dried rice, <i>eu</i> , <i>titepate</i> , ginger, butter, vermillion, <i>dhup</i>	General illness (fever, dysentery etc)	Family level and also community level.
12.	<i>Boirgori</i>	Pigeon, sun dried, <i>eu</i> , <i>titepate</i> .	Irregular menstruation cycle.	Personal level as well as family level.

### **3.9.2 Worship of Hills and Mountains:**

Totos worship number of mountain and piece of stone as the malevolent deities. Totos still have such a belief that when someone dies in an accident his or her soul turns to become ghost and takes shelter in *Taden* Mountain. For the peace of the departed soul Totos worship *Teden* Mountain. This worship is actually a family level worship. Hen or pair of pigeons is sacrificed at the presence of *paw*. There is no specific time for this worship.

#### **3.9.2.1 Worship of *Pidua*:**

*Pidua* is another well-known malevolent deity of Totopara. It is said that *Pidua* or *Pudua* lives in the nearer *Titi* forest about five miles away from Totopara. In relation *Pidua* is the maternal uncle of *Ishpa*. According to the folk tale, they did not have good relation at all and had a strong competition for their height. Since long back, Totopara had been facing scarcity of water and *Ishpa* tried to solve out the problem. *Ishpa* gave a proposal to *Pidua* for digging a deep pond at *Dhumci* gaon, so that the Totopara could overcome the water scarcity. Both *Ishpa* and *Pidua* engaged themselves in digging but at the mid way *Pidua* betrayed. Due to that wrong behavior *Ishpa* was so angry that he slashed away the head of *Pidua* and fixed his eyes on his back. The Totos have strong belief that if *Pidua* attacks somebody the person will suffer from severe head ache. Totos try to appease *Pidua* by sacrificing cock. The color of cock must be white and black mixed. The other essential ingredients are sun dried rice, eu, ginger and a piece of white cloth. After offering such things in the name of *Pidua* they return back to the village. While returning home they are not supposed to look back.

#### **3.9.2.2 Worship of *Dukulaka*:**

*Dukulaka* is the name of a stone which is propitiated as a deity. If somebody is found to suffer from severe stomach ache, then the traditional healer suggests appeasing the deity *Dukulaka*. One red hen has to be sacrificed. The person who is suffering from the disease, he has to organize the worship. One point should be mentioned here that during the worship the propitiator must look at the upward direction.

### **3.9.2.3 Worship of *Napu*:**

*Napu* is also a stone deity. This deity is found at *Purbokhola* which is situated within the territory of Bhutan. This is actually a big lime stone. According to the studied villagers, during the long trade journey in Bhutan they have to pass through *Purbokhola*. At that time, one of the most powerful malevolent deities *Napu* generally attacks them. As a result they particularly suffer from leg pain. To get rid off from the illness one red hen has to be sacrificed. This is also a personal worship. The villagers claim that they get the result within 48 hours.

### **3.9.3 Worship of Forest and Plant Species:**

The traditional healing system of the studied primitive tribe is largely dependent on their surrounding forest ecology. They collect all the medicinal plants from their surrounding forest. Apart from the healing mechanism, the economic pursuit of the Toto people is closely linked with the surrounding forest. As a result they worship various plant species considering them as deities.

#### **3.9.3.1 Worship of *Paikingsua*:**

*Paikingsua* was the name of tree *Nating* which was located at the Panchayet gaon. But there is no tree found in that place but the tree spot is still worshipped by the Toto people. They also have a belief that if someone suffers from swelling of leg and severe body ache, he may be attacked by *Paikingsua*. To get rid off from the disease, one pig must be sacrificed in the name of *Paikingsua*. This is a personal level worship and the sufferer himself has to perform this worship.

#### **3.9.3.2 Worship of *Luu*:**

*Luu* is also a tree spot. According to the studied tribe, enragement of *Luu* results in swelling of leg and formation of sore or bruise. If the said problem is reported by any villager, he has to go through penance and worship of stone deity *Luu*. One red hen or black hen has to be sacrificed. Along with hen, sun dried rice, *eu*, butter, ginger are the other common elements. This is also a personal level worship.

### 3.9.3.3 Worship of *Changshing*:

*Changshing* is the name of a tree. This tree is also worshipped when somebody is found to suffer from sore, wound or bruise. This forest deity is worshipped by sacrificing one cock. According to the villagers, the patient will recover very soon after performing this ritual.

### 3.9.3.4 Worship of *Moisingpa*:

*Moisingpa* is the worship of a big tree. Nearly before 50-60 years ago there was a big tree at Puja gaon which was propitiated by the villagers as *Moisingpa*. During the field work the researcher did not find the tree but the trunk of the tree was still there. Now a day that particular tree trunk is worshipped as *Moisingpa*. This is a community level worship which generally takes place in the month of August- September. One pig is sacrificed along with other ingredients. *Moisingpa* is also a malevolent deity and the effect of enragement may cause various skin diseases.

## 3.10 Concept of Taboo and Totem:

Totemism is a complex of ideas to involve a relationship between social groups, such as a clan and some class of natural objects, usually an animal or plant, Totem totem has been described in different ways by different authors. Durkheim associates it with religion, Radcliff Brown describes totem as a valued element in the lives of the people but Levi Strauss emphasizes that totemism is separate from the religion. Thus, precisely, totemism is a whole set of ideology with which several do's and don'ts and beliefs are attached. These do's and don'ts are associated with the ritualistic behavior principle of avoidance or taboo. Taboo is derived from a Polynesian word 'Tabu', meaning to forbid and forbidden, involving the prescription of contact with valued persons, objects or places etc i.e. totemic objects which should not be touched, few comestibles which may not be eaten, places which should not be entered, words which may not be spoken and few things which not be seen. These are the unwritten laws of the simple societies, having three fold purposes viz. productive, protective and prohibitive. The non-observance of these Taboos is polluting, dangerous, and can bring calamity on the entire social group.

In the socio-religious life of the Totos, taboos and totems occupy a very significant place. Besides *Chaisung* (ancestral deity of the clan) the Totos have separate totems for each of their clans. They assume a certain correspondence between the two. The *Chaisungs* are represented by different plants and other natural objects located in a particular spot within the territories of the clans and are demarcated as the clan-emblems or shrines. The clans are also totem based. Sometimes the totems are represented by a particular species of animal. So, each clan has separate *Chaisung* as well as totemic symbol. Like any other primitive tribes, the totem of the Totos has two aspects- social and religious. The social aspect plays a more dominant role than the religious one. The totemic symbols are related to their livelihood and to the day to day functioning of the Toto tribe. There is no restriction against eating or killing the totemic symbols among the Totos. Although the *Chaisung* is represented by one object or other within the clan territory, but the Totos do not have any shrine or any particular spot for their totems as the existence of the totems is more at psychological level than that of physical level. It is also reported during the field survey each clan deity (i.e. *Chaisung*) is worshipped twice in a year by the clan members but the clan totem is never worshipped.

Taboos and totems both are very much inter-related and is strictly observed among the Totos. For instance *Budhubei*, *Boudhubei*, *Nubeibei*, *Dhirinchankobei*, *Nurinchankobei*, *Linkaijibei* are designated as the priestly clans and the concern clan members are tabooed not to touch the squirrel and monkey. Five families are selected from above said six clans and from each of the family one male member is chosen for helping the pow at the time of worship of their supreme deity *Senja*. These six male members are not allowed to take cooked food from any women from any other clan. *Bongobei*, *Dantrobei*, *Pisichankobei* clan members are also not allowed to touch squirrel and monkey but do not have any restriction regarding food. Besides these, the rest four clans i.e. *Dankobei*, *Mankobei*, *Manchingbei* and *Mantrobei* clan members do not allow any kind of restriction.

There are various other taboos in their socio-cultural life. For example, regarding marriage they do not marry within their same clan. A Toto boy cannot marry any Toto girl within his own clan and vice versa. The other clan members are tabooed to enter into the '*jiri*' i.e. the place of the household deity. The women folk are not allowed to go to *Goatikhola* during the worship of *Ishpa*. Violation of this rule may lead to barrenness or miscarriage. The Toto women are also tabooed to touch the *chu* (plough) and are prohibited to perform any dance in their religious occasions. It is also found that, during pregnancy the women folk are not

allowed to go to the forest for fire fuel collection because that may cause harm both the mother and the child. During pregnancy a woman cannot take plaintain flower because that may cause miscarriage. After completion of the festival *Sordey* the Totos are tabooed to take orange until the festival of *Mayu*. During one month before *Goriya* and *Manka* worship, both *Kaiji* and *Gapu* must take food which is cooked in their own house. They are not allowed to take food from outside. During the worship days the *paw* is supposed to cook their own food and they take food once in a day.

### **3.11 Magico-Religious Practices related to Health:**

According to Foster and Anderson (1978) all societies have disease theory systems to identify, classify and explain illness (cited in Sinha and Banerjee's paper, 2004). A perusal of disease theory systems of traditional societies worldwide, anthropologists have concluded that in the explanation of illness, there are a number of casual perspectives or themes that appear with greater frequency. These themes cross-cuts time periods, geographic space and ethnic boundaries. According to Foster and Anderson (1978) there are three basic theories about the cause of illness: personalistic, naturalistic and emotionalistic (cited in Sinha and Banerjee's paper, 2004).

A personalistic medical system is believed to be caused by the active, purposeful intervention of a 'sensate' agent who may be a supernatural being (a deity or a god), a non-human being (such a ghost, ancestor or evil spirit) or a human being (a witch or sorcerer). The sick person literally is a victim, the object of aggression or punishment directed specially against him, for reasons that concerns him alone

In majority category of cause as characterized by the purposeful intervention of "sensate" agents who, whatever their reasons, seek out a victim who falls ill. We can call this category personalistic in that aggression or punishment is directed against a single person as a consequence of the will and power of a human a supernatural agent a being.

Personalistic explanations appear to predominate in the traditional societies. In all the traditional medical system we find efficient and proximate causes. In personalistic systems deities, ghosts, witches and sorcerers are efficient cause.

Magic has been understood as a system of manipulation by which an effect is sought through the action of unseen power. The concept of health and illness among the Totos is partially guided by the belief in super natural power. There are certain semi- divided beings or guardian spirits or supernatural powers which are not good at all but always respected. Through several types of magical practices magicians attempt to control these powers which are not validated by the existing scientific knowledge. Magic could be performed either for the welfare purpose i.e. white magic or for the destructive purpose i.e. black magic. The magical rites and practices could be associated with the superstitions and beliefs of that particular group and are also associated with one or the other deity on natural and super natural forces.

There is not always a hard and fast distinction between good and bad (black and white) magic, though there usually is a distinction between socially approved and anti social magic. Sorcery and witch craft are ritual means of working harm against an enemy. Though usually anti social they are not necessarily so; sorcery in some societies is used to detect and punish a criminal. It may be permissible to seek revenge on an evil doer by injuring a killing him or a member of his group by witch craft. A sorcerer is a person who willingly directs injurious magic on others. He may be able to transform himself into animal shape, he may be able to injure by the power of thought, or may have the "evil eye". Such person may keep their power secret. They may be regarded as public enemies or may be tolerated and employed to wreak evil on personal enemies.

Many of them believe that the evil spirits are mainly liable for their diseases and only by performing magical functions one can get rid of the diseases. The *Baidangis* or exorcists play an important role among the Totos. The exorcists use to put Marua or Mim-be in flat basket called *chering* to ascertain the nature of the disease, the name of the spirit or deity responsible for it and also the particular *Sangai lawmei* (penance) to be performed to appease the enraged deity or spirit. They also prescribe the ingredients require for offering the *Sangailawmei* including the sex and color of the particular animal or bird to be given in sacrifice.

In earlier days only the Toto *Baidangis* performed the magical performances, but now-a- day the same is also performed by the *paw*. Both white and black magic is practiced among them. The white magic practice known as *Gai puja* is performed before going to the forest to protect them from evil spirit. This magic is mainly performed in the month of March –April

at every early morning in the presence of *paw*. The essential ingredients are sun-dried rice (which is divided into nine parts) one red hen, plaintain leaves and ginger. The hen is sacrificed and the blood and flesh is offered to the forest spirit. The magic is performed whenever the people enter into the forest for hunting as well as collecting various medicinal plants. The main objective of the good magic or white magic is the welfare of the individual and the society as this is chiefly associated with collection of medicinal plant.

### 3.12 Sorcery and Witch Craft:

Sorcery and witch craft are ritual means of working harm against an enemy. The word 'witch' is derived from the old English 'wicce' meaning 'a female magician or sorceress,' but although the term 'wizard' and 'warlock' are available for male magicians, 'witch' and 'witch craft' are generally applied to both sexes and their magical activities (Sinha and Banerjee, 2004).

Although the terms witchcraft and sorcery are sometimes used synonymously, anthropologist generally distinguish between them. As practiced in a wide variety of societies throughout the world, witchcraft is an in born, involuntary and often unconscious capacity to cause harm to other people. On the other hand, sorcery, which often involves the use of materials, potions and medicines, is the deliberate use of supernatural power to bring about them. Some societies have specialist practitioners of sorcery but in other societies sorcery can be practiced by any one.

Different types of black magic are also practiced by the Totos. These magical practices are mainly performed by the *jhakris* who mainly belongs to the surroundings Nepali community. Black magic were not the integral part of the traditional Toto society but were borrowed from the Nepali community. Now a day's some religious healer and 'paws' of Toto community itself are practicing this malevolent art by imitating Nepali *jhakris*.

The most widely practice black magic is called *Banmara* by the Totos. The paw or the *jhakries* perform some rituals with the help of *mantras* to destroy someone. This practice must be performed outside home often sun set. There is no specific day or month for performing this particular magic but must be performed secretly. The essential ingredients are one pair of eggs, chicken, betel nut and vermilion. According to the villagers this magic can

cause death of the target. In another way, the *paw* placed three pigeons returned back to the *paw* and an imprisoned by him. Later on, three pigeons are released in deep forest. The fate of the target is also same.

Another type of black magic is *Toijung* where the target will suffer from high fever. The essential ingredients of this magic are one red cock, ginger, *eu* and sun dried rice. This magic must be performed often sunset within deep forest.

*Noijung* is another type of black magic which can cause psychological disorder of the target. This magic can only be performed during the month of August – September. The main ingredients are one pair of pig, salt, chilly, and sun dried rice.

In case of *Agre ban* *paw* makes an idol/image of the target piercing it with arrow. This can be performed at any day of any month but must be in an isolated place. The essential ingredients are one chicken, one pigeon and sun dried ice. After sacrificing the chicken, the *paw* buries the sacrificed chicken by himself. The magic is performed in the name of the target person. The target will suffer from some chronic disease. The mantra of this magic is '*Agre ban, Bojro ban, mairung, bairung, gurung.*'

Another type of black magic is common in Toto society where one *paw* can cause harm to another *paw*. The main weapon used in this magic is arrow and the other ingredients are sun dried rice, black pulses and fire.

(Witch craft is also observed among them and sometimes they consider non Toto women as a witch.)

### **3.13 Rituals of Medical Exorcism:**

Totos under study have strong belief that diseases are caused due to the wrath of god and evil spirits; hence their healing system is followed by prayers, religious rituals, propitiations and sacrifices. Their traditional medicine is closely linked with food habits based on the staple food and associated food taboos.

These meaningful and highly stylistic rituals can also be grouped into two broad categories, viz. healing worship and protective worship. The healing rituals are one where the evil effects

have already been noticed. The ritual is therefore an attempt to remove, suppress or ward off the misfortune. In protective ritual, the mal effect may or may not be known. The ritual is an attempt to avoid any future suffering. Rituals and rites associated with medical exorcism can be studied in two ways viz. the preventive procedure and the curative procedure.

### **3.13.1 The Preventive Procedure:**

The preventive procedure mainly includes use of charms, amulets, animal sacrifices, and propitiation of disease causing gods and goddesses or spirits, worship of the controlling deity of various diseases. Animal sacrifices and offering of various ingredients are performed to ward off the effect or cause of evil spirit. Supreme deities *Ishpa*, house hold deity *Chima* are regularly worshipped at the community level as well as family level for the protection of community member or family members from various disease and evil attack.

### **3.13.2 The Curative Measures:**

The curative measures are the methods of treatment they follow to cure the various disease. The treatment process consists of the domestic methods, magical spells, the shamanistic treatment etc.

#### **3.13.2.1 Local Medicine:**

At very initial stage of any disease, they apply their own knowledge without consulting any medicine man. For example, to cure suffering from cough and cold, the patient is given juices of *Tulsi* or *basak* leaves, with a pinch of common salt and ginger extract. The patient is given the *neem* leaves with boil water while the patient is suffering from high fever. They also take *pendrashing* (*kari* leaves) as a vegetable to cure high pressure.

#### **3.13.2.2 Shamanistic Treatment:**

The studied tribe consults with the traditional medicine men for various reasons.

#### **Headache:**

Only 'mantra' and some propitiation are applied to the patient with the help of fire and sun dried rice.

### **High Fever:**

When any one is found to suffer from high fever before going to local PHC (Primary Health Centre), he consults with the traditional medicine men or *paw*. The *paw* or the religious practitioner use to put *marua* or rice in a flat basket or plate to ascertain the name and nature of fever, and also the deity or spirit responsible for it. He also prescribes the necessary ingredients and particular animal which has to be sacrificed. Mainly one of the fifteen rivulets is worshipped. The main ingredients are eight pigeon or hen, or pig along with some sun dried rice, ginger, *eu* and *marua*. After sacrificing the animal, cooked rice and meat is served to all the invitees.

### **Stomach Ache:**

The nature of disease and associated deity or spirit is detected by the *paw*. Sometime forest deity or spirits associated with various rivulet found to be responsible for the disease. According to the nature of spirit red hen, a black hen is generally sacrificed. Sun-dried rice, ginger, *eu*, *dhup* are the other common ingredients.

### **Bleeding from Nose and Mouth:**

In case of bleeding from nose and mouth the *paw* utter some mantras with the help of red color flower called *Sang*. This flower is commonly found in winter season. Other than winter, this worship is performed by using young leaves of the *Sang* tree.

### **Sore and Swelling of Leg:**

The Totos have deep faith on evil spirits. They have a belief that if somebody is attacked by *Sikari bhut*, he will suffer from sore and swelling of leg. The spirit is worshipped by sacrificing their hens along with sun dried rice, water and *eu*. At first fire is made in an earthen pot with some amount of rice and water. Then some amount of rice is taken on a plate and distributed in four directions east, west, north, south. Sitting in front of *paw* the sick person has to put his middle finger in the plate. At that time, the *paw* performs some magical spell or incantation (*mantras*). According to their belief, magical spell can relief the pain.

### **3.14 Concept of Soul and Ghost:**

#### **3.14.1 Spirit Possession:**

Concept of soul and spirit is intermingled with the human life. Starting from the Hindu scripture Gita to the tribal religion there is a prominent existence of soul in the dark sphere of life. Tylor in his book *Primitive Culture* (1871) define soul “as the unsubstantial human image and made of a sort of vapor like substance, which is impalpable, invisible, but it has power.” The soul is indestructible i.e. it exists even after death. It may also be defined as sort of elixir of life. From the primitive point of view there are two kinds of soul in man; the body soul or the fixed soul and the free soul or the shadow. The body soul animates the body and pervades the whole of it. But the soul matter concentrates in certain parts of the body viz. hair, nail, blood sputum, heart, lung and head. Personal name is also a part of the body soul. The shadow or the free soul is defined with breath and shadow of the human beings. It is harmless and independent of the body, when a man sleeps; the free soul comes out of his body and wanders different places. The image of the out world experience of the free soul, one sees in his dream. Dream is a form of hallucination. In dreams, man transcends reality. It is through dreams man relives the past and anticipates the future. When the free soul comes back to abode or the living body, the person awakes. If the free soul gets injury at the time of its outside wandering cause illness it its processor. The primitive conception of disease and illness due to soul loss is derived from this notion. This is the common belief regarding the relation between soul, health and disease.

All the rural Bengal has a firm conception about the existence of ghost, spirit and soul. The Totos of Totopara villages were not different from them. Ghost only is a malevolent character as the villagers reported. But spirits are of two types viz. malevolent and benevolent. But majority of spirits are malevolent in nature and are responsible for various disease. Spirits do not have any specific target. It can capture both male female. Even children are also some times captured by evil spirits. Victimized person feels illness and can die if not treated properly.

According to the villagers they recognize soul in the form of spirit. They also reported that spirit can capture a attack different parts of body viz. eye, leg, hand, ear, brain etc., As a result the victim may suffer from various disease such as head ache, stomach ache etc.

Villagers from distant sectors of primary health centre had opined about the direct relation between the soul or spirit attack and female disease particularly in case of irregular menstruation cycle and miscarriage. They also told the sterility of a woman can emerge due to the bad impact of evil spirit. This is the reason that the women folk is not allowed to go *Goatikhola* at the time of sacrificing any animal. The existence of witch was not reported within the community level. But they have the conception regarding the witch. They reported that there were witches within the village but they did not belong to Toto community.

However, number of people from primary hospital adjacent village sectors not agreed with any of the above statements. They reported that there are some strange things in the name of spirit or ghost or soul but there is no such direct relation with disease or misfortune. According to them major ailments cannot emerge through the capture of soul or ghost.

So, there were some differences among the villagers intra- village level regarding the concept of soul and ghost with impact upon the diseases. Majority of the villagers confirmed about the relation between diseases and spirit but some villagers did not agree with that. But in general there was a concept about soul in relation to disease.

### **3.15 Traditional Health Practitioners:**

#### **3.15.1 Role and Position**

In most traditional culture, there is a specialist who treats illness, injury, disease and related misfortune. These persons are generally corresponds to the leader of religious practices. The medico religious practitioner is also considered to be practitioner of magic, mantric or witch craft or exorcism traditionally and that person was a man of critical mind endowed with many abilities and that is dedicated to the vocation. Generally it is assumed that these specialists and the people have a common faith upon the technique used for the remedy as quit often both share the same culture milieu. The Totos identify illness as caused by natural and supernatural forces. In both the cases the illness is termed as *bimari* whether it is caused by natural or supernatural agencies.

The traditional healers of Toto society is mainly categorized in the following way-

- i) *Paw*- Priest, Magical as well and Herbal therapist (Most belong to Toto community)
- ii) *Baidangis*- Exorcists (Most belong to Toto community)
- iii) *Kabiraj*- Herbal therapist (Most belong to Toto community)
- iv) *Naongpoin*- Second class priest, Magical as well as Herbal therapist (belong to Toto community)
- v) *Jhakri*- Magical as well as Herbal therapist (belong to Nepali community.)

All the traditional medical practitioners are ordinary house holders who do healing work beside their routine house hold duties. An important factor, which not only singles out Toto traditional healers from the doctors but also from many other reported forms elsewhere, is there a inexpensive treatment terms. Mostly their services are gratis and sometimes inexpensive and as much their treatment is always within the reach of the people. In nut shell, the healer role is a 'non- profit social services' which adds to the prestige of an individual as a helpful guy. There are however very few exceptions in the forms of super specialist traditional healers. The super specialists charge exorbitant sum for their services.

The role set of a 'paw' is a complex one as it includes the role of a priest, diagnostician, healer and sometimes astrologer. Paw's role is typically a male's job. It is also some extent clan specific. Paw must belong to either of three class viz. *Dantrobei*, *Boudhubei* and *Nubeibei*. The status of 'paw' is not ascribed by birth and also not inherited vertically from father to son. Paw's healing art is not a literary tradition. The role of a 'paw' is not a full time job nor can it yield sufficient for a practitioner in economic terms. A paw is like any other land owning person and works as a healer during spare time. For calculation of any kind of illness a misfortune he generally receives ten to fifty rupees considering the type of illness. Paws generally do not demand for the fee and he has been seen to ever reluctantly accept the taken amount. For performing rituals, the paw receives the ingredients used besides rupees. Only on some special rituals which involve trance inclusion and have lot of strain on the paw the payment could raise up to hundred rupees. One point should be mentioned that, although they prescribe sacrifices but paw himself does not sacrifice any animal.

*Baidangis* are the exorcists of the Toto community. They generally practice various types of (sorcery and) exorcism related to health and disease. The exorcist use to put marua or mimba in a plate to ascertain the nature of the disease and the name of the deity or spirit responsible for it. They also prescribe the ingredients required for offering the penance including the color and sex of the particular animal or bird to be given in sacrifice. Some times the *Baidangis* also prepare folk medicine (or herbal medicine) from locally available herbs. Exorcists are always male member of the Toto community, but not clan specific. This is also not a full time job. The art of exorcism is not learnt and transmitted vertically from father to son. The curative measures performed by the Toto *Baidangis* are less costly than that of the Nepali *jhakris*. The Toto *Baidangis* were reputed to treat cause of snake bites.

*Kabiraj* are the herbal therapist of the Toto community. The role of *kabiraj* includes diagnosis of disease and prescribing relevant medicine for curing the disease. The status of *kabiraj* is not ascribe by birth and also not inherited vertically from father to son. *Kabiraji* is a learnt method.

### 3.15.2 Traditional Healer- Case: 1

There was a famous herbal therapist Sri Kalicharan Toto lived in the village sector Mitran gaon (farthest from the Primary Health Center and market place.) when the field survey was conducted he was at the age of 40 years. He was married and has got four kids. He was mainly associated with agriculture as his primary occupation. His house was situated at the extreme end of Mitran gaon where he lived with his family members. Considering the educational background Sri Kalicharan Toto was dropped out at the primary school level. His livelihood was mainly dependent on agriculture and herbal therapy was his secondary occupation.

As he resided in Mitran gaon he would easily be accessible to the inhabitants of Mitran gaon. Due to the positional proximity he was also easily available to the villagers of Panchayet gaon and Mondal gaon. Irrespective of age, sex education and economic background all kinds of patients were attended by him. He also attended the patients belongs to Nepali, Bengali, Bihari community. He got remuneration considering etiology, serenity of the disease and on the basis of the treatment he provided. According to Sri Kalicharan Toto he acquired the

art of healing by herbal therapy from the place Nisiganj. Sri Kalicharan Toto reported that he had got multiple fractures in an accident and was taken to Jalpaiguri District Hospital. But he was not cured properly. Then he went to Nisiganj where he was treated for one year and finally got cured. During that one year he learnt application of various herbal medicines. He also enriched his knowledge regarding medicinal plants by deep observation to nearer ecology. He claimed that he could prescribe medicine successfully for treating gastroenteritis, malaria, urinary problems, mumps, jaundice etc. according to Sri Kalicharan Toto, the cases of malaria were found quite frequently among the Totos. Apart from that, skin problems and tooth cavity were also wide spread in Toto society. During onset of the disease the Toto people used to prefer traditional medicine. He claimed that he is very successful in treating fracture. For treating fracture he made a paste with *Loisung*, *Amra*, *Bosea*, *Gurja*, *Eyanasing*, *Durba* and *Bhuichampa* were used. First of all, a plate was made with bamboo stick and the bone is set properly with that bamboo frame. The prepared paste is applied on the fractured bone. He claimed that all his prescribed medicines are very effective for curing various diseases. Due to this reason, he acquired a respectable position in and around the village and obeyed by most of the villagers.

### 3.15.3 Traditional Healer- Case: 2

The villagers of all the studied six sectors were noticed to visit a person residing at Ballalguri (the gram panchayet of Totopara) whenever they suffered from jaundice. According to the villagers her medicine is unfailing for remedy.

Sixty five years old a Muslim women Hamida Begum was that person inhabiting at Ballalguri with her husband, son, daughter in law and grand children. Her son was agriculturist based on some five bighas of land. He was had a small business of areca nut as his secondary occupation. Her family was not economically very sound.

A backward class Muslim lady Hamida Begum acquired the medicine and its preparation procedure from her distant relative uncle who was a fakir. She did not want to disclose the formula to the outsider. But she is giving training to her daughter in law. The root of a specific tree is collected from the forest and the extract of the root is mixed with various other ingredients. The whole process is carried out by the lady herself and partially assisted by her daughter in law. This is a liquid syrup kind of medicine which could be stored up to one

month. This medicine can be prepared at any time as per requirement of the patient. Patients have to pay Rs.50/- to Rs 100/- including the remuneration of her. Along with the medicine she also gives a 'tika' at the forehead of the patient and a 'male' (i.e. garland). The changes in color of that 'tika' indicate whether the disease is curing or progressing. Many of the cured patients presented some gifts to the lady. Even sometimes the hospital admitted patient party visited her for the medicine. According to her clinical diagnosis is necessary prior to consume of the medicine. Because there may be a bad effect to the patients those have not suffer by the said disease. But in some cases she prescribes the medicine by observing the symptoms of the patients. The quantity of the medicine differs in case of adult or children. The dose is also determined according to the severity of the disease. Whenever any jaundice patient come to her, she initially prescribes one dose for 15 days and places a *tika* on his forehead. After 15 days, she reexamines the patient and prescribes second dose of medicine. According to her, two dosages are sufficient for curing the disease. She also told that jaundice is very prominent in Totopara and she treated number of Toto patients. All the studied Toto population of the said six sectors of Totopara village reported about the efficiency of the medicine given by Hamida Begum. But they also complained that Hamida Begum charges very high for her medicine, even sometimes it exceeds Rs.500/- .

#### **3.15.4 Traditional Healer- Case: 3**

This section is dealing with the role and activities of the traditional healer of the Toto society, so the role and action of the mid wives of the Toto society should be discussed under the traditional healing practices. As far as the accumulated statistical data there was 86.88 percent home delivery took place in the category-1 village sectors (farthest from the local Primary Health Centre and the market place). The percentage of home birth in the category- 2 village sectors was also very high (91.35 percent) although there was modern health facility in close proximity. From the statistical data it is also observed that before 40-50 years ago hundred percent deliveries took place at home with the help of mid wives and elderly ladies. During field work it was observed that present generation prefers local primary health centre for delivery. Birth by mid wives is a traditional process but it is known to large number of elderly women.

There was an elderly lady who was well-known as a mid wife among the Totos. Sabita Toto, sixty years old Toto widow women resided in Mondal gaon (category-2 village sector).

Sabita Toto had four son and three daughters. Daughters were married and among four sons three sons were married and separated. Sabita had to live alone but within the same campus along with her sons. They had two bighas of land.

The procedure of child birth was learnt by her from her mother in law. According to her bamboo thread and hot water are the main requirements for the whole process. The concern house supplies all the material at the time of delivery. Bamboo thread is necessary for cutting the umbilical cord and one bamboo strip is used once for the delivery purpose. According to her bamboo strip is fully hygienic and also claimed that she was never reported with neonatal infection. Umbilical cord is buried immediately after the delivery. The baby is washed by the hot water. She also told that always she needs some assistance by the experienced female family members of that pregnant lady. She also added that in majority of the cases she does not get prior information and has to move with the patient party without any preparation. She never claims any remuneration for her job. She also reported that she refers critical cases to the hospital but less critical cases could easily be handled by her. She also informed that before establishment of local primary health centre (PHC) she performed such a critical delivery which is technically known as forceps delivery. She claimed that during her lifetime she performed more than fifteen deliveries and assisted at least thirty deliveries. She handled on Toto patients. Other community people such as Nepali, Bihari or Bengali families do not call her because they prefer hospital or local PHC for the delivery. According to the traditional norm she is invited in the name giving ceremony of the new baby.

#### **3.15.5 Traditional Healer- Case: 4**

The magico-religious performances which were previously very much practiced among the Totos are gradually decreasing day by day after the death of many traditional healers. One of the famous magico- religious practitioners in the Toto society was Chepte Toto. He was seventy five years old when the study was conducted. The house of Chepte Toto was situated at the extreme end of Puja gaon. He was living at the slop of the *Tading* hill of Puja gaon at a very isolated location. He was unmarried and devoted his life in the vocation of traditional healing practices.

Chepte Toto belongs to the *Maisi* clan. According to him all magico religious practitioners of Toto society either belong to the *Maisi* clan or *Deisi* clan. Other clans are not allowed to

practice any magico-religious performances. The Toto people still perceive the idea that large number of the diseases could be cured only by practicing the ritualistic performances. The traditional healer acquired the art of healing from their preceptor during his life time. After the death of their spiritual guides they came on the dream of their disciples to teach their own scripture. All the religious practitioners tried to spend their life in a very isolated location with a hope that the preceptor will come on their dream. They never expose those mystical formulas to any of the outsider.

According to Chepte Toto, he was quite capable of curing lots of diseases only by offering worship and sacrifices without any medicine or plant extract. Sometime he used prayer beads to diagnose the origin or cause of illness. He claimed that he easily could identify whether a person attacked by the witch or evil spirit could either be cured or not. Rice, ginger and country liquor *eu* are considered to be the three essential elements of every offering. According to him different incantation are practiced for different types of witch killing. Apart from rice, ginger and *eu*, fowl which is called *fasur* is another important ingredient for apprising the witch or evil spirit. He told about the name of different ghost or evil spirit such as *Dip-tee*, *Datin-tee*, *Choa-tee*, *Tasu*, *Lengpa-tee*, *Panajora*, *Goa-tee* etc. all these spirits were named after the name of some small rivulets.

Chepte Toto described about some magico-religious performances which he practiced for curing diseases. For example *Datin-tee puja* was performed for getting rid off from stomach pain. For healing skin problem *Lumbai puja* was practiced which ensures early recovery. The deity associated with this puja was made up of small piece of stone sized 1-1.5 inches. This worship should be organized by the family members of the affected person. One cock has to be sacrificed. Prevalence of another important disease found in Totopara was malaria. In case of malaria two white pigeons and one black cock are sacrificed in the name of *Moo-tee* which is actually a river.

The most crucial case he had to face in his life time when a child came with severe body ache with a strange characteristic that the body size was gradually diminishing. He diagnosed that the child was attacked by *Maan*. The *Maan* was the combined attack of *Niting-tee*, *Moo-tee* and *Doying chomii*. To get rid off from the disease he prescribed to sacrifice one red fowl along with rice, ginger, and the country liquor *eu*. He claimed that the child was completely cured after performing all the rites and rituals.

As Chepte Toto lived in Puja gaon (distant from local PHC and market place), he was easily accessible to the people of Puja gaon. He attended all the patients irrespective of male, female and children. He got some remuneration depending on the economic condition of the patient's family and he got a portion from the offering. Chepte Toto said that the magico-religious practices are gradually decreasing after the death of their traditional healers and nobody is interested to acquire the prescribed techniques. He had of opinion that the importance of magico-religious activities are decreasing among the villagers as they think that nothing could be achieved through that sort of practices. It was also found that when people suspect that supernatural power are at play behind their ailments they prefer to avail the traditional way of treatment prescribed by the traditional healers. Apart from that, magico-religious activities are also performed not only to ward of diseases and ghost attack but also for snake bite and related misfortunes. From the words of Chepte Toto, it could be assumed easily that by blending the action of magic and religion, a combination of magical practices and religious observances was obtained to ward off misfortune of the society.

#### **Chapter Summary:**

Traditional concept of health and disease as well as the indigenous way of treatment among the studied tribe was discussed in this chapter. In this chapter reader could go through the supernatural beliefs regarding health and well-being of the community member along with the procedure of appeasement of different deities for protection from various diseases. Role and activities of the traditional healers are also written in detail. Knowledge about the indigenous medicine occupied a crucial part in this chapter. Case studies of patients who availed the traditional medical system are also stated in detail. The chapter discussed about treatment by traditional medicines (selected case studies), life cycle related rituals and occasions, ethnomedicines and their administration process, health related religious belief as well as supernatural belief, health and worship of various deities, concept of taboo and totem, magico-religious practices related with health and role and position of traditional healthcare practitioners.

**TABLE: 3.1 DISTRIBUTIONS OF FAMILIES ON THE BASIS OF RELIGION**

Name of the Sectors		Total number of families	Animistic	Buddhist	Christian
Category: 1	Dhumci gaon	33 100.00	32 96.97	-	01 03.03
	Mitran gaon	29 100.00	28 96.55	-	01 03.45
	Puja gaon	22 100.00	22 100.00	-	-
	<b>Total</b>	84 100.00	82 97.62	-	02 02.38
Category: 2	Mondal gaon	24 100.00	21 87.50	-	03 12.50
	Panchayat gaon	62 100.00	56 90.32	06 09.68	-
	Subba gaon	68 100.00	63 92.65	03 04.41	02 02.94
	<b>Total</b>	154 100.00	140 90.91	09 05.84	05 03.25
<b>Grand Total</b>		238 100.00	222 93.28	09 03.78	07 02.94

**TABLE: 3.2 DISTRIBUTIONS OF FAMILIES ON THE BASIS OF SUPERNATURAL BELIEF**

Name of the Sectors		Total number of Families	Belief in supernatural power		
			Yes		No
			Ghost/ Witchcraft/ Soul/ Shaman/ Spirit		
Category:1	Dhumci gaon	33 100.00	32 96.97	01 03.03	
	Mitran gaon	29 100.00	15 51.72	14 48.28	
	Puja gaon	22 100.00	16 72.73	06 27.27	
	<b>Total</b>	84 100.00	63 75.00	21 25.00	
Category: 2	Mondal gaon	24 100.00	05 20.83	19 79.17	
	Panchayat gaon	68 100.00	23 33.82	45 66.18	
	Subba gaon	62 100.00	16 25.81	46 74.19	
	<b>Total</b>	154 100.00	44 28.57	110 71.43	
<b>Grand Total</b>		238 100.00	107 44.96	131 55.04	

**TABLE: 3.3 DISEASE AFFECTED FAMILIES (in last five years)**

Name of the Sectors		Total number of Families	Affected	Not affected
Category:1	Dhumci gaon	33 100.00	27 81.81	06 18.18
	Mitran gaon	29 100.00	23 79.31	06 20.69
	Puja gaon	22 100.00	19 86.36	03 13.64
	<b>Total</b>	84 100.00	69 82.14	15 17.86
Category: 2	Mondal gaon	24 100.00	21 87.50	03 12.50
	Panchayat gaon	62 100.00	54 87.09	08 12.90
	Subba gaon	68 100.00	58 85.29	10 14.71
	<b>Total</b>	154 100.00	133 86.36	21 13.64
<b>Grand Total</b>		238 100.00	202 84.87	36 15.13

**TABLE: 3.4 VILLAGERS AFFECTED BY DISEASES [last 5 yrs.]**

Name of the Sectors		Total number of Families	Total population		Disease affected	
			Male	Female	Male	Female
Category:1	Dhumci gaon	33 100.00	84 100.00	74 100.00	50 59.52	43 58.11
	Mitran gaon	29 100.00	73 100.00	59 100.00	18 24.66	21 35.59
	Puja gaon	22 100.00	79 100.00	73 100.00	22 27.85	16 21.92
	<b>Total</b>	84 100.00	236 100.00	206 100.00	90 38.14	80 38.83
Category: 2	Mondal gaon	24 100.00	51 100.00	54 100.00	45 88.23	36 66.67
	Panchayat gaon	62 100.00	164 100.00	132 100.00	104 63.41	89 67.42
	Subba gaon	68 100.00	184 100.00	143 100.00	55 29.89	47 32.87
	<b>Total</b>	154 100.00	399 100.00	329 100.00	204 51.13	172 52.28
<b>Grand Total</b>		238 100.00	635 100.00	535 100.00	294 46.29	252 47.10

**TABLE: 3.4.1 DISEASE AFFECTED PERSONS IN DHUMCI GAON [last 5 yrs.]**

Age groups	Total affected		Total	
	Male	Female	Male	Female
<b>0-4</b>	04 28.57	05 62.50	14 100.00	08 100.00
<b>5-9</b>	02 40.00	03 30.00	05 100.00	10 100.00
<b>10-14</b>	09 50.00	05 62.50	18 100.00	08 100.00
<b>15-19</b>	06 50.00	06 60.00	12 100.00	10 100.00
<b>20-24</b>	03 50.00	04 33.33	06 100.00	12 100.00
<b>25-29</b>	11 100.00	05 62.50	11 100.00	08 100.00
<b>30-34</b>	04 100.00	03 100.00	04 100.00	03 100.00
<b>35-39</b>	01 100.00	03 60.00	01 100.00	05 100.00
<b>40-44</b>	03 100.00	02 100.00	03 100.00	02 100.00
<b>45-49</b>	01 50.00	01 100.00	02 100.00	01 100.00
<b>50-54</b>	02 100.00	02 100.00	02 100.00	02 100.00
<b>55-59</b>	01 100.00	01 100.00	01 100.00	01 100.00
<b>60-64</b>	01 33.33	02 66.67	03 100.00	03 100.00
<b>65-69</b>	02 100.00	01 100.00	02 100.00	01 100.00
<b>70 and 70+</b>	-	-	-	-
<b>Total</b>	50 59.52	43 58.11	84 100.00	74 100.00

**TABLE: 3.4.2 DISEASE AFFECTED PERSONS IN MITRAN GAON [last 5 yrs.]**

Age groups	Total affected		Total	
	Male	Female	Male	Female
<b>0-4</b>	01 08.33	01 10.00	12 100.00	10 100.00
<b>5-9</b>	01 11.11	03 21.43	09 100.00	14 100.00
<b>10-14</b>	03 23.08	03 27.27	13 100.00	11 100.00
<b>15-19</b>	01 11.11	-	09 100.00	07 100.00
<b>20-24</b>	-	02 33.33	04 100.00	06 100.00
<b>25-29</b>	02 28.57	06 66.67	07 100.00	09 100.00
<b>30-34</b>	01 20.00	02 40.00	05 100.00	05 100.00
<b>35-39</b>	02 40.00	-	05 100.00	05 100.00
<b>40-44</b>	03 42.86	-	07 100.00	-
<b>45-49</b>	01 50.00	02 66.67	02 100.00	03 100.00
<b>50-54</b>	-	-	01 100.00	-
<b>55-59</b>	-	01 100.00	02 100.00	01 100.00
<b>60-64</b>	02 100.00	01 50.00	02 100.00	02 100.00
<b>65-69</b>	01 100.00	-	01 100.00	-
<b>70 and 70+</b>	-	-	-	-
<b>Total</b>	18 22.78	21 28.77	79 100.00	73 100.00

**TABLE: 3.4.3 DISEASE AFFECTED PERSONS IN PUJA GAON [last 5 yrs.]**

Age groups	Total affected		Total	
	Male	Female	Male	Female
0-4	02 15.38	02 33.33	13 100.00	06 100.00
5-9	02 14.29	01 07.69	14 100.00	13 100.00
10-14	02 16.67	03 23.08	12 100.00	13 100.00
15-19	03 27.27	01 25.00	11 100.00	04 100.00
20-24	01 50.00	01 16.67	02 100.00	06 100.00
25-29	02 33.33	02 66.67	06 100.00	03 100.00
30-34	02 66.67	-	03 100.00	02 100.00
35-39	-	01 50.00	-	02 100.00
40-44	03 75.00	01 25.00	04 100.00	03 100.00
45-49	04 100.00	04 66.67	04 100.00	06 100.00
50-54	-	-	02 100.00	-
55-59	-	-	-	-
60-64	-	-	01 100.00	01 100.00
65-69	01 100.00	-	01 100.00	-
70 & 70+	-	-	-	-
<b>Total</b>	22 30.14	16 27.12	73 100.00	59 100.00

**TABLE: 3.4.4 DISEASE AFFECTED PERSONS IN MONDAL GAON [last 5 yrs.]**

Age groups	Total affected		Total	
	Male	Female	Male	Female
0-4	01 100.00	01 100.00	01 100.00	01 100.00
5-9	10 100.00	06 85.71	10 100.00	07 100.00
10-14	03 100.00	05 50.00	03 100.00	10 100.00
15-19	04 66.67	06 85.71	06 100.00	07 100.00
20-24	07 70.00	03 60.00	10 100.00	05 100.00
25-29	03 100.00	02 33.33	03 100.00	06 100.00
30-34	03 100.00	03 50.00	03 100.00	06 100.00
35-39	04 80.00	01 50.00	05 100.00	02 100.00
40-44	03 100.00	02 100.00	03 100.00	02 100.00
45-49	01 100.00	02 66.67	01 100.00	03 100.00
50-54	02 100.00	03 100.00	02 100.00	03 100.00
55-59	02 100.00	-	02 100.00	-
60-64	02 100.00	02 100.00	02 100.00	02 100.00
65-69	-	-	-	-
70 and 70+	-	-	-	-
<b>Total</b>	45 88.23	36 66.67	51 100.00	54 100.00

**TABLE: 3.4.5 DISEASE AFFECTED PERSONS IN PANCHAYAT GAON [last 5 yrs.]**

Age groups	Total affected		Total	
	Male	Female	Male	Female
0-4	11 61.11	09 69.23	18 100.00	13 100.00
5-9	14 70.00	06 50.00	20 100.00	12 100.00
10-14	14 66.67	13 68.42	21 100.00	19 100.00
15-19	12 52.17	11 57.89	23 100.00	19 100.00
20-24	10 50.00	09 69.23	20 100.00	13 100.00
25-29	07 46.67	07 87.50	15 100.00	08 100.00
30-34	06 85.71	07 53.85	07 100.00	13 100.00
35-39	06 85.71	10 90.91	07 100.00	11 100.00
40-44	07 70.00	06 50.00	10 100.00	12 100.00
45-49	10 71.42	08 100.00	14 100.00	08 100.00
50-54	03 100.00	-	03 100.00	-
55-59	01 50.00	01 50.00	02 100.00	02 100.00
60-64	02 66.67	01 100.00	03 100.00	01 100.00
65-69	-	01 100.00	-	01 100.00
70 and 70+	01 100.00	-	01 100.00	-
<b>Total</b>	104 63.41	89 67.42	164 100.00	132 100.00

**TABLE: 3.4.6 DISEASE AFFECTED PERSONS IN SUBBA GAON [last 5 yrs.]**

Age groups	Total affected		Total	
	Male	Female	Male	Female
0-4	02 16.67	01 08.33	12 100.00	12 100.00
5-9	03 08.57	06 23.08	35 100.00	26 100.00
10-14	06 20.69	03 17.65	29 100.00	17 100.00
15-19	10 40.00	02 14.29	25 100.00	14 100.00
20-24	05 33.33	05 45.45	15 100.00	11 100.00
25-29	07 43.75	08 53.33	16 100.00	15 100.00
30-34	07 63.64	08 61.54	11 100.00	13 100.00
35-39	06 40.00	05 38.46	15 100.00	13 10.00
40-44	01 14.29	02 25.00	07 100.00	08 100.00
45-49	01 12.50	03 50.00	08 100.00	06 100.00
50-54	04 80.00	02 66.67	05 100.00	03 100.00
55-59	-	01 100.00	02 100.00	01 100.00
60-64	03 100.00	-	03 100.00	03 100.00
65-69	-	01 100.00	01 100.00	01 100.00
70 and 70+	-	-	-	-
<b>Total</b>	55 29.89	47 32.87	184 100.00	143 100.00

**TABLE: 3.5 CONCEPT OF DISEASE**

Name of the Sectors		Male				Female			
		Natural	Super natural	Can't say	Total	Natural	Super natural	Can't say	Total
Category: 1	<b>Dhumci gaon</b>	47 94.00	03 06.00	-	50 100.00	37 86.05	04 09.30	02 04.65	43 100.00
	<b>Mitran gaon</b>	18 100.00	-	-	18 100.00	19 90.48	01 04.76	01 04.76	21 100.00
	<b>Puja gaon</b>	16 72.73	05 22.73	01 04.55	22 100.00	11 68.75	04 25.00	01 06.25	16 100.00
	<b>Total</b>	81 90.00	08 08.89	01 01.11	90 100.00	67 83.75	09 11.25	04 05.00	80 100.00
Category: 2	<b>Mondal gaon</b>	36 80.00	07 15.56	02 04.44	45 100.00	25 69.44	10 27.78	01 02.78	36 100.00
	<b>Panchayat gaon</b>	94 90.38	05 04.81	05 04.81	104 100.00	87 97.75	01 01.12	01 01.12	89 100.00
	<b>Subba gaon</b>	52 94.55	03 05.45	-	55 100.00	41 87.23	02 04.26	04 08.51	47 100.00
	<b>Total</b>	182 89.22	15 07.35	07 03.43	204 100.00	153 88.95	13 07.56	06 03.49	172 100.00
<b>Grand Total</b>		263 89.46	23 07.82	08 02.72	294 100.00	220 87.30	22 08.73	10 03.97	252 100.00

**TABLE: 3.5.1 CONCEPT OF DISEASE IN DHUMCI GAON**

Age groups	Natural		Supernatural		Cannot say		Total affected	
	M	F	M	F	M	F	M	F
0-4	03 75.00	04 80.00	01 25.00	01 20.00	-	-	04 100.00	05 100.00
5-9	02 100.00	03 100.00	-	-	-	-	02 100.00	03 100.00
10-14	09 100.00	02 40.00	-	02 40.00	-	01 20.00	09 100.00	05 100.00
15-19	06 100.00	05 83.33	-	01 16.67	-	-	06 100.00	06 100.00
20-24	02 66.67	04 100.00	01 33.33	-	-	-	03 100.00	04 100.00
25-29	11 100.00	05 100.00	-	-	-	-	11 100.00	05 100.00
30-34	04 100.00	03 100.00	-	-	-	-	04 100.00	03 100.00
35-39	01 100.00	02 66.67	-	-	-	01 33.33	01 100.00	03 100.00
40-44	03 100.00	02 100.00	-	-	-	-	03 100.00	02 100.00
45-49	-	01 100.00	01 100.00	-	-	-	01 100.00	01 100.00
50-55	02 100.00	02 100.00	-	-	-	-	02 100.00	02 100.00
55-59	01 100.00	01 100.00	-	-	-	-	01 100.00	01 100.00
60-64	01 100.00	02 100.00	-	-	-	-	01 100.00	02 100.00
65-69	02 100.00	01 100.00	-	-	-	-	02 100.00	01 100.00
70 and 70+	-	-	-	-	-	-	-	-
<b>Total</b>	47 94.00	37 86.05	03 06.00	04 09.30	-	02 04.65	50 100.00	43 100.00

**TABLE: 3.5.2 CONCEPT OF DISEASE IN MITRAN GAON**

Age groups	Natural		Supernatural		Cannot say		Total affected	
	M	F	M	F	M	F	M	F
0-4	01 100.00	01 100.00	-	-	-	-	01 100.00	01 100.00
5-9	01 100.00	03 100.00	-	-	-	-	01 100.00	03 100.00
10-14	03 100.00	03 100.00	-	-	-	-	03 100.00	03 100.00
15-19	01 100.00	-	-	-	-	-	01 100.00	-
20-24	-	02 100.00	-	-	-	-	-	02 100.00
25-29	02 100.00	06 100.00	-	-	-	-	02 100.00	06 100.00
30-34	01 100.00	02 100.00	-	-	-	-	01 100.00	02 100.00
35-39	02 100.00	-	-	-	-	-	02 100.00	-
40-44	03 100.00	-	-	-	-	-	03 100.00	-
45-49	01 100.00	02 100.00	-	-	-	-	01 100.00	02 100.00
50-54	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	01 100.00	-	01 100.00
60-64	02 100.00	-	-	01 100.00	-	-	02 100.00	01 100.00
65-69	01 100.00	-	-	-	-	-	01 100.00	-
70 and 70+	-	-	-	-	-	-	-	-
<b>Total</b>	18 100.00	19 90.48	-	01 04.76	-	01 04.76	18 100.00	21 100.00

**TABLE: 3.5.3 CONCEPT OF DISEASE IN PUJA GAON**

Age groups	Natural		Supernatural		Cannot say		Total affected	
	M	F	M	F	M	F	M	F
0-4	02 100.0 0	01 50.00	-	01 50.00	-	-	02 100.00	02 100.00
5-9	01 50.00	-	-	01 100.00	01 50.00	-	02 100.00	01 100.00
10-14	01 50.00	03 100.00	01 50.00	-	-	-	02 100.00	03 100.00
15-19	02 66.67	01 100.00	01 33.33	-	-	-	03 100.00	01 100.00
20-24	01 100.0	01 100.00	-	-	-	-	01 100.00	01 100.00
25-29	02 100.0 0	01 50.00	-	01 50.00	-	-	02 100.00	02 100.00
30-34	01 50.00	-	01 50.00	-	-	-	02 100.00	-
35-39	-	-	-	01 100.00	-	-	-	01 100.00
40-44	03 100.0 0	01 100.00	-	-	-	-	03 100.00	01 100.00
45-49	03 75.00	03 75.00	01 25.00	-	-	01 25.00	04 100.0	04 100.00
50-54	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-
65-69	-	-	01 100.00	-	-	-	01 100.00	-
70 and 70+	-	-	-	-	-	-	-	-
<b>Total</b>	16 72.73	11 68.75	05 22.73	04 25.00	01 04.55	01 06.25	22 100.00	16 100.00

**TABLE: 3.5.4 CONCEPT OF DISEASE IN MONDAL GAON**

Age groups	Natural		Supernatural		Cannot say		Total affected	
	M	F	M	F	M	F	M	F
0-4	01 100.00	-	-	01 100.00	-	-	01 100.00	01 100.00
5-9	06 60.00	03 50.00	04 40.00	03 50.00	-	-	10 100.00	06 100.00
10-14	02 66.67	02 40.00	01 33.33	03 60.00	-	-	03 100.00	05 100.00
15-19	03 75.00	03 50.00	01 25.00	03 50.00	-	-	04 100.00	06 100.00
20-24	04 57.14	03 100.00	01 14.29	-	02 28.57	-	07 100.00	03 100.00
25-29	03 100.00	02 100.00			-	-	03 100.00	02 100.00
30-34	03 100.00	03 100.00		-	-	-	03 100.00	03 100.00
35-39	04 100.00	01 100.00	-	-	-	-	04 100.00	01 100.00
40-44	03 100.00	02 100.00	-	-	-	-	03 100.00	02 100.00
45-49	01 100.00	01 50.00	-	-	-	01 50.00	01 100.00	02 100.00
50-55	02 100.00	03 100.00	-	-	-	-	02 100.00	03 100.00
55-59	02 100.00	-	-	-	-	-	02 100.00	-
60-64	02 100.00	02 100.00	-	-	-	-	02 100.00	02 100.00
65-69	-	-	-	-	-	-	-	-
70 and 70+	-	-	-	-	-	-	-	-
<b>Total</b>	36 80.00	25 69.44	07 15.56	10 27.78	02 04.44	01 02.78	45 100.00	36 100.00

**TABLE: 3.5.5 CONCEPT OF DISEASE IN PANCHAYAT GAON**

Age groups	Natural		Supernatural		Cannot say		Total affected	
	M	F	M	F	M	F	M	F
0-4	10 90.91	09 100.00	-	-	01 09.09	-	11 100.00	09 100.00
5-9	14 100.00	06 100.00	-	-	-	-	14 100.00	06 100.00
10-14	13 92.86	12 92.31	01 07.14	01 07.69	-	-	14 100.00	13 100.00
15-19	10 83.33	11 100.00	01 08.33	-	01 08.33	-	12 100.00	11 100.00
20-24	06 60.00	09 100.00	02 20.00	-	02 20.00	-	10 100.00	09 100.00
25-29	07 100.00	07 100.00	-	-	-	-	07 100.00	07 100.00
30-34	06 100.00	07 100.00	-	-	-	-	06 100.00	07 100.00
35-39	06 100.00	10 100.00	-	-	-	-	06 100.00	10 100.00
40-44	07 100.00	16 100.00	-	-	-	-	07 100.00	06 100.00
45-49	09 90.00	07 87.50	-	-	01 10.00	01 12.50	10 100.00	08 100.00
50-54	03 100.00	-	-	-	-	-	03 100.00	-
55-59	01 100.00	01 100.00	-	-	-	-	01 100.00	01 100.00
60-64	02 100.00	01 100.00	-	-	-	-	02 100.00	01 100.00
65-69	-	01 100.00	-	-	-	-	-	01 100.00
70 and 70+	-	-	01 100.00	-	-	-	01 100.00	-
<b>Total</b>	94 90.38	87 97.75	05 04.81	01 01.12	05 04.81	01 01.12	104 100.00	89 100.00

**TABLE: 3.5.6 CONCEPT OF DISEASE IN SUBBA GAON**

Age groups	Natural		Supernatural		Cannot say		Total affected	
	M	F	M	F	M	F	M	F
0-4	02 100.00	01 100.00	-	-	-	-	02 100.00	01 100.00
5-9	03 100.00	06 100.00	-	-	-	-	03 100.00	06 100.00
10-14	06 100.00	03 100.00	-	-	-	-	06 100.00	03 100.00
15-19	09 90.00	02 100.00	01 10.00	-	-	-	10 100.00	02 100.00
20-24	04 80.00	05 100.00	01 20.00	-	-	-	05 100.00	05 100.00
25-29	07 100.00	08 100.00	-	-	-	-	07 100.00	08 100.00
30-34	07 100.00	06 75.00	-	-	-	02 25.00	07 100.00	08 100.0
35-39	06 100.00	03 60.00	-	01 20.00	-	01 20.00	06 100.00	05 100.00
40-44	-	02 100.00	01 100.00	-	-	-	01 100.00	02 100.00
45-49	01 100.00	02 66.67	-	-	-	01 33.33	01 100.00	03 100.00
50-54	04 100.00	02 100.00	-	-	-	-	04 100.00	02 100.00
55-59	-	-	-	01 100.00	-	-	-	01 100.00
60-64	03 100.00	-	-	-	-	-	03 100.00	-
65-69	-	01 100.00	-	-	-	-	-	01 100.00
70 & 70+	-	-	-	-	-	-	-	-
<b>Total</b>	52 94.55	41 87.23	03 05.45	02 04.26	-	04 08.51	55 100.00	47 100.00

**TABLE: 3.6 NATURE OF TREATMENT**

Name of the Sectors		Male					Female				
		T	M	Both	No	Total	T	M	Both	No	Total
Category: 1	Dhumci gaon	09 18.00	21 42.00	19 38.00	01 02.00	50 100.00	11 25.58	17 39.53	15 34.88	-	43 100.00
	Mitran gaon	03 16.67	08 44.44	07 38.89	-	18 100.00	04 19.05	14 66.67	03 14.29	-	21 100.00
	Puja gaon	07 31.82	12 54.55	03 13.64	-	22 100.00	05 31.25	09 56.25	02 12.50	-	16 100.00
	<b>Total</b>	19 21.11	41 45.56	29 32.22	01 01.11	90 100.00	20 25.00	40 50.00	20 25.00	-	80 100.00
Category: 2	Mondal gaon	07 15.56	29 64.44	09 20.00	-	45 100.00	03 08.33	25 69.44	08 22.22	-	36 100.00
	Panchayat gaon	22 21.15	69 66.35	13 12.50	-	104 100.00	09 10.11	64 71.91	15 16.85	01 01.12	89 100.00
	Subba gaon	06 10.91	37 67.27	12 21.82	-	55 100.00	09 19.15	28 59.57	10 21.28	-	47 100.00
	<b>Total</b>	35 17.16	135 66.18	34 16.67	-	204 100.00	21 12.21	117 68.02	33 19.19	01 00.58	172 100.00
<b>Grand Total</b>		54 18.37	176 59.86	63 21.43	01 00.34	294 100.00	41 16.27	157 62.30	53 21.03	01 00.39	252 100.00

T: TRADITIONAL WAY OF TREATMENT

M: MODERN WAY OF TREATMENT

**TABLE: 3.7 RESULT OF TREATMENT (TRADITIONAL)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	05 55.56	04 44.44	09 100.00	06 54.55	05 45.45	11 100.00
	Mitran gaon	01 33.33	02 66.67	03 100.00	02 50.00	02 50.00	04 100.00
	Puja gaon	03 42.86	04 57.14	07 100.00	04 80.00	01 20.00	05 100.00
	<b>Total</b>	09 47.37	10 52.63	19 100.00	12 60.00	08 40.00	20 100.00
Category : 2	Mondal gaon	02 28.57	05 71.43	07 100.00	03 100.00	-	03 100.00
	Panchayat gaon	08 36.36	14 63.64	22 100.00	03 33.33	06 66.67	09 100.00
	Subba gaon	06 100.00	-	06 100.00	06 66.67	03 33.33	09 100.00
	<b>Total</b>	16 45.71	19 54.29	35 100.00	12 57.14	09 42.86	21 100.00
<b>Grand Total</b>		25 46.29	29 53.70	54 100.00	24 58.53	17 41.46	41 100.00

## CHAPTER – IV

# MODERN HEALTH CARE FACILITIES AND PROGRAMMES

#### **4.1 Introduction:**

To understand the health behavior of the concerned population, it is essential to study the modern health care facilities and programme provided to them. In this chapter emphasis is given to reveal the functioning the modern medical system in the village of Totopara.

The present chapter is divided into two sections. In the first section a detail discussion is made regarding the health care services of the country (India), for better understanding of the basic health facilities, different health planning executed by Government of India. Special attention is given on the rural and tribal health in the concerned chapter.

The second section will reveal the scenario of modern health care facilities, institutions, services, programmes and their implementation in the studied village of Totopara. It is already stated in the previous chapter that the studied village Totopara is divided into six sectors. Discussion regarding the functioning of modern medical system in each sector is based on modern health facilities in close proximity/ vicinity (i.e. Primary Health Centre). In this chapter detailed descriptions are given about the Primary Health Centre (PHC), Sub-centers, Block Hospital, Sub-divisional hospital and District hospital along with the medical infrastructure and staff strength. Interviews of the modern medical personnel are given in detail for better understanding of the problems. Neonatal and post neonatal child health care and pregnant mother health care are also discussed. A separate sub section is made for detailed discussion and analysis for the vaccination, pulse polio and immunization programmes. As the Totos are the Primitive Tribal Group (PTG), there is a Government restriction for family planning. A sub section is also made for detail discussion, regarding the population control measures. Safe drinking water and sanitation facilities along with health hygiene concept are analyzed in detail to unfold the issues regarding the water borne, vector borne and other communicable diseases. Discussion is also made on the communication infrastructure which is important for achieving good medical help.

## Section - A

### A.4.1 Health Service Scenario of the Country:

India was one of the first countries to recognize the merits of Primary Health Care Approach (PHC) as the backbone of health service delivery. This approach was first conceptualized in 1946, when Sir Joseph Bhore made recommendations that formed the basis for organizing basic health services in India. Although the National Health Policy (NHP) in India was not framed until 1983, India has build up a vast health infrastructure and initiated several national health programmes over last five decades in Government, voluntary and private sectors under the guidance and direction of various committees (Bhore Committee 1946, Mudaliar Committee 1956-61, Junganwala Committee 1967, Katar Singh Committee 1973, Shrivastava Committee 1975), the Constitution, the Planning Commission, the Central Council of Health and Family Welfare and Consultative Committees attached to the Ministry of Health and Family Welfare.

Since independence improvement in health status of the population has been one of the major thrust areas for the social development programmes of the country. To achieve the goal the country has been formulating various welfare programmes during Five Year Plan Period for better utilization of health, Family Welfare and Nutrition services, giving special emphasis on underserved and under privileged segments of population (viz. Scheduled Caste and tribal population).

The first formulated National Health Policy 1983 (NHP-1983) aimed to achieve the goal of 'Health for all' by 2000 AD, through the provision of comprehensive primary health care services. It stressed the creation of an infrastructure for primary health care; close co ordination of health related services and activities (like nutrition, drinking water supply and sanitation), the active involvement and participation of voluntary organizations, the provision of essential drugs and vaccines; quality improvement of health and family planning services, the provision of adequate training and medical research aimed at the common health problems of the people. After the formulation of first National Health Policy 1983 (NHP-1983), the period after 1983 witnessed several major developments in the policies impacting the health sectors-73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments in 1992, National Nutrition Policy 1993, National Health Policy 2002 (NHP-2002), National Policy on Indian System of

Medicine and Homeopathy in 2002, Drug Policy 2002, introduction of Universal Health Insurance schemes for the poor in 2003 and inclusion of health in Common Minimum Programme of the Government of India in 2004.

Nearly twenty years after the first health policy, the 2<sup>nd</sup> National Health Policy 2002 (NHP-2002) was presented. Recognizing the noteworthy successes of previous health policy the NHP 2002 sets out a new policy framework to achieve public health goals within the socio-economic circumstances currently prevailing the country. The approach aims at increasing access to the decentralized public health system by establishing new infrastructure in deficient areas and upgrading the infrastructure of existing institutions. It sets out an increased sectarian share of allocation out of total health spending to primary health care.

More recently (2005), the Government of India has launched the National Rural Health Mission (NRHM) with the goal of improving the availability of and access to quality health care by people, particularly in rural areas. As a result bulk of tribal population gets benefited out of this project. All over the country the food supplementation programmes for mother and child are implemented by the state through ICDS infrastructure funded by the Central Government to serve particularly mal-nutrition. To supply safe drinking water Central Government had launched Rajiv Gandhi Water Mission Project. Both environmental sanitation and safe drinking water projects are guided and funded by Department of Urban and Rural Development, Ministry of Health and Family Welfare, Central Government either directly or through State Government To decentralize the urban and clinical based infrastructure of the country Government has formulated three-tier health care system in different Five Year Plan period by building up primary, secondary and tertiary care institutions and link them through appropriate referral system.

#### **A.4.2 Health Care System in India:**

The health care services are divided under State list and Concurrent list in India. While some items such as public health and hospitals fall in the State list, others such as population control and family welfare, medical education, and quality control of drugs are included in the Concurrent list. The Union Ministry of Health and Family Welfare (UMHFW) is the central authority responsible for implementation of various programmes and schemes in areas of family welfare, prevention and control of major diseases.

The health care system in India has been developed as a three- tier structure based on predetermined population norms. The health care system consists of:

- (b) Primary, secondary and tertiary care institutions, manned by medical and paramedical personnel
- (c) Medical college and paraprofessional training institutions to train the needed manpower and give the required academic input
- (d) Programme manager managing ongoing programmes at Central, State and District level
- (e) Health management information system consisting of a two way system of data collection, analysis and response

**Table: A.4.2 (a) Primary Health Structure and their Population Norm**

Centre	Population Norm	
	Plain area	Hilly area/Tribal/Difficult area
Sub-centres(SCs)	5000	3000
Primary Health Centre (PHCs)	30,000	20,000
Community Health Centre (CHCs)	1,20,000	80,000

Source: Rural Health Statistics, MOHFW, GOI, 2007

#### **A.4.2.1 Sub- Centre (SC):**

The Sub-Centre is the most peripheral health units and first contact point between the primary health care system and the community. Each sub-centre has one female health worker/ ANM (Auxiliary Nurse Midwife) and male health worker. One female Health Assistant (Lady Health Visitor; LHV) and one male health assistant supervise six sub-centres. Sub-centres are assigned to perform tasks related to components of primary health care. They are provided with basic drugs (both allopathic and AYUSH) for minor ailments needed for taking care of essential health needs of population. There is 1, 45,272 sub-centres functioning in the country as on March, 2007 (Source: Rural Health Statistics, MOHFW, GOI, 2007).

#### **A.4.2.2 Primary Health Centre (PHC):**

Primary Health Centre (PHC) comprises the second tier in rural health care structure. PHC remains the first contact between village community and Medical Officer. They are manned

by a Medical Officer supported by 14 paramedical and other staff. It acts as a referral unit for 6 sub-centres. It has 4-6 beds for patients. There are 22,370 PHCs functioning as on March 2007 in the country (Source: Rural Health Statistics, MOHFW, GOI, 2007).

#### **A.4.2.3 Community Health Centre (CHC):**

Community Health Centre (CHC) forming the uppermost tier are established and maintained by the State Government under the minimum need programme/ basic minimum service programme. Four medical specialists including surgeon, physician, gynecologist and pediatrician supported by twenty one paramedical and other staff are supposed to staff each CHC. Norms require a typical CHC to have thirty in door beds with OT, X- ray, labor room and laboratory facilities. A CHC is a referral centre for four PHCs within its jurisdiction, providing facilities for obstetric care and specialist expertise. As on March 2007, there are 4,045 CHCs functioning in the country (Source: Rural Health Statistics, MOHFW, GOI, 2007).

#### **A.4.3 Indian System of Medicine and Homeopathy (ISM&H):**

The umbrella term, Indian System of Medicine and Homeopathy (ISM&H) includes Ayurveda, Siddha, Unani, Homeopathy and therapies such as Yoga and Naturopathy. Practitioners of ISM&H catered to all the health care needs of the people before modern medicine came to India in the twentieth century. Currently there are over 680,000 registered (ISM&H) practitioners in the country; most of them work in the private sector.

**Table: A.4.3(a) Registered Medical Practitioners in Indian System of Medicine and Homeopathy**

1.	Ayurveda	4,27,504	4,53,661
2.	Unani	42,445	46,558
3.	Siddha	16,599	6,381
4.	Naturopathy	429	888
5.	Homeopathy	1,94,147	2,17,850
	Total	6,81,124	7,25,383

Source: Department of ISM&H, 2001 and Department of AYUSH, Status on 1<sup>st</sup> January 2007

India has a vast network of governmental ISM&H healthcare institutions. There are 3000 hospitals with over 60 beds and over 23,000 dispensaries providing primary health care. Over 16,000 ISM&H practitioners qualify every year from 405 ISM&H colleges. A major strength of ISM&H system is that it is accessible, acceptable and affordable i.e. cost effective.

#### **A.4.3.1 National Policy on Indian System of Medicine and Homeopathy:**

As these systems (i.e. Ayurveda, Unani, Siddha, Homeopathy, Yoga and Naturopathy) are indigenous, the first National Health Policy (NHP 1983) visualized an important role for the ISM&H practitioners in the delivery of health services. In order to give focused attention to the development and optimal utilization of this branch of medicine, a separate Department of ISM&H was set up in 1995. The Indian System of Medicine and Homeopathy were given an independent identity by Ministry of Health and Family Welfare by creating a separate Department of Ayurveda, Yoga, and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) in November, 2003. The department is making efforts to ensure that ISM&H practitioners are brought into the mainstream so that they provide a complementary system of care along with practitioners of modern systems of medicine.

#### **Approach during the Tenth Plan:**

The approach during the Tenth Plan will be to ensure that the ISM&H system achieves its full potential in providing health care by

Improving the quality of primary, secondary and tertiary care

Mainstreaming ISM&H institutions and practitioners with modern system of medicine so that people have access to complementary systems of care

Strengthening ISM&H educational institutions so that students get adequate training, giving them confidence to practice their system and participate in national programmes

- Investing in continuing medical education

- Ensuring the conservation, preservation, promotion, cultivation, collection and processing of medical plants and herbs required to meet growing domestic demand for ISM&H drugs and the export potential
- Completing pharmacopoeia of all the systems of ISM&H and drawing up a list of essential drugs and ensuring their availability
- Ensuring quality control of drugs and improving their availability at an affordable cost
- Investing in research and development (R and D) for the development of new drugs and formulations and patenting them
- Undertaking clinical trials of promising drugs by appropriately strengthening the Central Research Councils and co-coordinating their research with other research agencies such as *Indian Council of Medical Research (ICMR), Delhi*

#### **A.4.3.2 Role of ISM&H in Primary, Secondary and Tertiary Health Care:**

India possesses an unmatched heritage represented by its ancient systems of medicine which are a treasure house of knowledge for both preventive and curative health care. A broad acceptance by the general public, requirement of low technological input, along with cost effectiveness of the Indian System of Medicine compels to take measures to popularize and develop ISM&H in primary, secondary and tertiary health care.

##### **Primary Health Care:**

ISM&H practitioners provide primary health care to vulnerable sections of population especially those living in urban slums and remote areas. In the state like West Bengal ISM&H practitioners alone are posted in Primary Health Centre in some rural and tribal areas. The Central Council for Health and Family Welfare in 1999 recommended that at least one physician from Indian System of Medicine and Homeopathy (ISM&H) should be available in every Primary Health Centre and that vacancies caused by non availability of allopathic personnel should be filled by ISM&H physicians. Majority of ISM&H

practitioners in urban and rural areas are private practitioners and provide primary health care with minimum cost.

### **Secondary Health Care:**

A majority of existing ISM&H secondary hospitals functions as separate institutions and do not have linkages with either primary ISM&H health care institutions or with secondary health care institutions in the modern system of medicine. Very often these institutions lack adequate diagnostic facilities, infrastructure and man power. The Central Council for Health and Family Welfare also resolved that specialist ISM&H treatment centres should be introduced in rural hospitals and a wing should be created in existing state and district level Government hospitals.

### **Tertiary Health Care:**

All ISM&H colleges, private as well as public have attached tertiary care hospitals. In addition, there are tertiary care and/ or specialty centres attached to national institutes. Private or voluntary sector institutes also provide tertiary care in ISM&H.

The Tenth Five Year Plan not only emphasizes to improve all the tertiary care institutions but also establish effective referral linkage between primary, secondary and tertiary care institutions so that there is improvement in teaching, training and R&D and patient care, all at the same time.

### **Approach during the Eleventh Five Year Plan (2007-2012)**

The key intervention and strategies in the Eleventh Five Year Plan are enumerated as

- Documenting measurable outputs for annual plan as well as for five year plans that will facilitate designing and implementing systematic ME system
- Training in public health for AYUSH personnel is envisaged an essential part of education and CME.
- Mainstreaming the system of AYUSH in National Health Care Delivery System by co-locating AYUSH facilities in primary health network

- Restructuring public health management to integrate AYUSH practitioners into the national health care system
- Formulating a two-tiered research framework for AYUSH to interface with modern science while giving due cognizance and importance to development and application of theoretical foundations of the traditional knowledge systems and practices
- Promoting scientific validation of AYUSH principles, remedies and therapies
- Revitalizing, documenting and validating local health traditions of AYUSH
- Improving the status of pharmacopoeial standards by setting up pharmacopoeia commission
- Improving the status of quality of clinical services by creating specialty AYUSH secondary and tertiary care centers
- Upgrading AYUSH undergraduate and post graduate educational institutions by better regulation and establishing a system for NET type testing of AYUSH teachers and NAAC type assessment and accreditation of AYUSH undergraduate and post graduate colleges
- Ensuring conservation of medicinal plants gene pools as well as promoting cultivation of species in high trade and establishment of medicinal plants processing zones
- Strengthening regulatory mechanism for ensuring quality control, research and development and processing technology involving accredited laboratories in the Government and non-Government sectors
- Establishing centre of excellence
- Promoting international co-operation in research, education, health services and trade and market development
- Digitizing India's vast corpus of medical manuscripts in collaboration with the National Manuscript Mission
- Promoting public awareness about the strengths and contemporary relevance of AYUSH through IEC

#### **A.4.4 Role of National Rural Health Mission (NRHM) in Health Care System in India:**

After formulation of National Health Policy 2002, more recently (in April 2005), the Government of India has launched the National Rural Health Mission (NRHM) for a period of seven years (2005-2012) with the goal of improving the availability of and access to

quality health care by people, particularly in rural areas. The main aim of NRHM is to provide accessible, affordable, accountable, effective and reliable primary health care, especially to the poor and vulnerable section of population.

#### **A.4.4.1 National Rural Health Mission (NRHM) and Sub-Centre:**

NRHM has proposed strengthening of sub-centers in the form of provision of untied fund of Rs.10, 000 per annum. This fund has to be utilized for local needs and maintenance of sub-centers. The units will also be provided with essential drugs, both allopathic and AYUSH. The programme will also promote access to improved health care at household level through the village level worker (Accredited Social Health Activist- ASHA). It also makes provision for strengthening sub-centers through better human resource development, clear quality standards, better community standards, better community support.

#### **A.4.4.2 National Rural Health Mission (NRHM) and Primary Health Centre (PHC):**

National Rural Health Mission (NRHM) aims at strengthening of PHCs for quality preventive, promotive, curative, supervisory and outreach services through:

1. Adequate and regular supply of essential quality drugs and equipment to PHCs
2. Provision of 24 hrs service in at least 50% PHCs by addressing shortage of doctors (especially in high focus areas) through mainstreaming AYUSH manpower
3. Observance of standard treatment guidelines and protocols
4. Intensification of ongoing communicable disease control programmes, new programmes for control of non-communicable diseases, up gradation of 100% PHCs for 24 hour referral service and provision of second doctor at PHC level (1 male, 1 female) to be undertaken on the basis of felt need.

#### **A.4.4.3 National Rural Health Mission (NRHM) and Community Health Centre (CHC):**

National Rural Health Mission aims to strengthen services at CHCs by operationalising 100% CHCs as 24 hours First Referral Units (FRUs), including posting of anesthetists. The other

key strategies of mission are codification of new Indian Public Health Standards setting norms for infrastructure, staff, equipment, management etc for CHCs; promotion of Stakeholder Committees (*Rogi Kalyan Samitee*) for hospital management; developing standards of services and costs in hospital care; in case of additional outlays creation of new Community Health Centers (30-50 beds) to meet the population norms as per Census 2001, and bearing their recurring costs for the Mission period could be considered.

#### **A.4.5 Role of Accredited Social Health Activists (ASHA) in Primary Health Care:**

Under the National Rural Health Mission (NRHM) Plan of Action for infrastructure strengthening every village or large habitat will have a female Accredited Social Health Activist (ASHA) chosen by and accountable to the panchayat to act as the interface between the community and the public health system. ASHA would act as a bridge between the ANM and the village and be accountable to the panchayat. She will be an honorary volunteer, receiving performance based compensation for promoting universal immunization, referral and escort services for RCH, construction of household toilets and other health care delivery programmes. She will be trained on pedagogy of public health developed and mentored through a Standing Mentoring Group at National level incorporating best practices and implemented through active involvement of community health resource organizations. Introduction training of ASHA is to be of 23 days in all, spread over 12 months. On the job training would continue throughout the year. ASHA will facilitate preparation and implementation of the village health plan along with Anganwadi worker, ANM, functionaries of other departments and Self-Help Group members under the leadership of the village health committee of the panchayat. She will be given a Drug kit containing generic AYUSH and allopathic formulations for common ailments. The drug kit would be replenished from time to time.

#### **A.4.6 Role of Multipurpose Health Worker in Primary Health Care:**

Serious efforts have been made since the inception of health care service delivery in the country, to create appropriate health infrastructure and raised skilled man power at various levels to develop a vibrant health care delivery system. Toward this effort, the year 1974 proved to be a turning point in the history of health care in India, when the Kartar Singh Committee 1974 submitted its report on the Multipurpose Health Workers Scheme. The

committee's recommendations suggesting a new model by creating a cadre of multipurpose workers was a major step towards integration of health and family welfare services. The committee recommended the conversion of uni-purpose workers including ANM into multipurpose male and female workers. It recommended that each pair of such worker should serve a population of 10,000 to 12,000. Hence the multipurpose worker (MPW) scheme was launched with the objective of retaining the existing cadres of vertical programmes were to be fully integrated into the primary health care package for rural areas.

Under this scheme, the health workers who were engaged in delivering basic health services like malaria control, polio eradication programme, family planning and health education etc were inducted into a new cadre of multipurpose workers with the hope that they would provide all types of health services at one go, rather than different categories of workers providing specific services. Both male and female workers were supposed to stay at the sub-centre village and cater to different health and family welfare service needs of a population of 10,000. While the female multipurpose worker was made responsible for antenatal, intra-natal and post natal care services only, the team was assigned to look into programmes like family planning, malaria eradication, immunization, environmental sanitation, nutrition, health education, training of traditional dais, health care, information of notified diseases, collection of vital statistics in their assigned area. The male multipurpose workers were responsible for delivering all the services except the maternal care (refer such cases to female counterpart). The scheme become operational by 1978 and 1983, almost all the states had converted their staff at the sub-centre level into multipurpose worker.

#### **A.4.7 Rural Health Infrastructure:**

The entire family welfare programme is being implemented through Primary Health Care System. The primary health care infrastructure has been developed as a three tier system with Sub-centers, Primary Health Centre (PHC), and Community Health Centre (CHC) being the three pillars of primary health care system in rural India. Progress of Sub-centers, which is the most peripheral contact point between the primary health care system and the community, is a prerequisite for the overall progress of the entire system.

**Table: A.4.7(a) Health Infrastructure Scenario**

Five Year Plan Period	Sub-centres	Primary Health Centre (PHC)	Community Health Centre (CHC)
Sixth Plan (1981-85)	84,376	9,115	761
Seventh Plan (1985-90)	1,30,165	18,671	1,910
Eight Plan (1992-97)	1,36,258	22,149	2,633
Ninth Plan (1997-2002)	1,37,311	22,875	3,054
Tenth Plan (upto March 2007)	1,45,272	22,370	4,045

Source: Ministry of Health and Family Welfare, GOI, 2011

Keeping the view that health is an integral part of the socio-economic development of any country, Government of India has provided the most holistic understanding to health and also is trying to frame work an appropriate primary health care system for common mass in its post independent period. This primary health care is trying to include at least education concerning prevailing health problems and methods of identifying, preventing and controlling them; promotion of food supply and proper nutrition, adequate supply of safe water and basic sanitation; mal nutrition and child health care including family planning; immunization against major infectious diseases; prevention and control of local endemic diseases; appropriate treatment of common diseases and injuries; promotion of maternal health and provision of essential drugs. Although the Government is trying to put effort in building up the basic health care facilities, India's health care infrastructure has not kept pace with the economy's growth. The physical infrastructure is woefully inadequate to meet today's health care demand, much less tomorrows. While India has several centers of excellence in health care delivery, these facilities are limited in their ability to drive health care standards because of the poor condition of the infrastructure in the vast majority of the country. The number of public health facilities is inadequate. For instance, India needs 74,150 community health centers per million populations but has less than half that number. In addition, at least eleven Indian states do not have laboratories for testing drugs, and more than half of existing laboratories are not properly equipped or staffed. The principal responsibility for public health funding lies with the state Governments, which provide about 80% of public funding. The federal Government contributes another 15%, mostly through national health programmes.

The existing manpower is an important prerequisite for the efficient functioning of the rural health infrastructure. Despite significant progress made in terms of creating manpower over the years, there remains a huge gap in terms of human resource at primary care level which is realized by the Government of India and the process is underway to bridge the gap. As a result, the allocation of funds for health and family welfare activities during Eleventh Five Year Plan (2007-2012) is on steep rise (227%) as against financial outlays and expenditure for health and family welfare for the 2002 -2007 Tenth Five Year Plan (Annual Report, MOHFW, GOI, 2007-2008).

Availability of appropriate and adequate trained human resources is an essential concomitant of rural health infrastructure. Across rural health areas, there are considerable short falls plus a large number of vacant positions of doctors, nurses and paramedical personnel. There is also wide variation in number of persons served by a specialist in rural areas. Despite the existing shortages, whatever few formally trained and qualified doctors are available, are mainly through the public health care system. A large proportion of population visits private providers for their health care needs. The challenge is to resolve these problems and provide the poor access to subsidized or free public health services.

During the last few years there has been a great change in the availability of secondary and tertiary health care facilities in the country. Number of Government hospitals increased from 4571 in 2000 to 7663 in 2006, i.e. an increase of 14.4%. Apart from the public sectors, in 2002, the country had 11345 private/ NGO hospitals (allopathic) with a capacity of 2,62,256 beds. These are mostly in the private sector located in cities and towns.

**Table: A.4.7(b) Shortfall in Health Infrastructure – All India**

As per 2001 population	Required	Existing	Short fall	% of short fall
Sub-centres	158792	144998	20903	13.16
PHCs	26022	22669	4803	18.46
CHCs	6491	3910	2653	40.87

Source: Bulletin of Rural Health Statistics in India, Special Revised Edition, MOHFW, GOI (2006)

#### **A.4.8 Drawbacks of the Public Health System:**

The public health system in our country has various drawbacks. The conceptualization and planning of all programmes is centralized instead of decentralized using locally relevant strategies. The approach towards disease control and prevention is fragmented and disease specific rather than comprehensive. This leads to vertical programmes for each and every disease. This vertical programme is technology centric and work in isolation of each other. The provision of infra-structure is based on population norms rather than habitations leading to issues of accessibility, acceptability and utilization. Inadequate resources also lead to lack of client conveniences and non availability of essential consumables and consumables. The gap between requirement and availability of human resources at various levels of health care is wide and where they are available, the patient-provider interactions are beset with many problems, in addition to waiting time (opportunity cost) for consultation/ treatment. The system lacks a real and working process of monitoring, evaluation and feedback. There is no incentive for those who work well and check on those who do not. Quality assurance at all levels is not adhered due to lacunae in implementation. This results in semi used or dysfunctional infrastructure. Despite constrains of human resources, practitioners of Indian System of Medicine (ISM), Registered Medical Practitioners (RMP) and other locally available human resources have not been adequately mobilized and integrated in the system.

#### **Major Drawbacks of Public Health Care System:**

- Centralized planning instead of decentralized planning and using locally relevant strategies
- Institutions based on population norms rather than habitations
- Fragmented disease specific approach rather than comprehensive health care
- Inflexible financing and limited scope for innovations
- Semi- used or dysfunctional health infra-structure
- Inadequate provision of human resources
- No prescribed standard of quality
- Inability of system to mobilize action in areas of safe water, sanitation, hygiene and nutrition (key determinants of health in the context of our country)- lack of convergence
- Inability to mobilize AYUSH and RMPs and other locally available human resources

**Table: A.4.8(a) Shortfall in Health Personnel- All India**

For the existing infrastructure	Required (R)	Sanctioned (S)	In position (P)	Vacant (S-P)	Short fall (R-P)
Multipurpose workers(female)/ANM at Sub-centre and PHC	167657	162772	149695	13126 (8.06%)	18318 (10.93%)
Health workers (Male) /MPWs(M) at Sub- centers	144998	94924	65511	29437 (31.01%)	74721 (51.53%)
Health Assistant (female)/ LHV at PHC	22669	19874	17107	2781 (13.99%)	5941 (26.21%)
Health Assistant (male) at PHCs	22669	24207	18223	5984 (24.72%)	7169 (31.62%)
Doctors at PHCs	22669	27927	22273	5801 (20.77%)	1793 (7.91%)
Total Specialists at CHCs	15640	9071	3979	4681 (51.60%)	9413 (60.19%)
Radiographers at CHCs	3910	2400	1782	620 (25.83%)	1330 (34.02%)
Pharmacists at PHCs and CHCs	26579	22816	18419	4445 (19.48%)	4389 (16.51%)
Lab-technicians at PHCs and CHCs	26579	15143	12351	2792 (18.44%)	9509 (35.78%)

Source: Bulletin of Rural Health Statistics in India, Special Revised Edition, MOHFW, GOI (2006)

### Section- B

#### B.4.1 Treatment by Modern Medical Institutions and Practitioners:

##### Selected Case Studies:

It is needed to mention here that the studied villagers had to go to various medical institutions and medical practitioners for their treatment. But variations were reported considering the village sector, category, economy, educational status and sex of the villagers from the medical institutions. *Selected case studies and analysis of tables can give a better interpretation in the context of treatment of the disease affected villagers by the various institutions and personnel.*

## Case Studies:

According to the analysis of the Preliminary Schedule Form (PSF) the sample of the detailed case study of the patients in the six studied village sectors were chosen. Some important categories were made for sampling the disease affected people (in last five years). The categories are as follows-

- (i) Sex
- (ii) Procedure of treatment (traditional/ modern/ both)
- (iii) Family income (higher/lower)

The relevant cases are given here for better interpretation of different above discussed issues. Abbreviations of categories are as follows-

M: Male;

F: Female;

L: Lower income group;

H: Higher income group;

M: Modern treatment;

B: Both (modern and traditional treatment);

m: Modern procedure at the first step of treatment;

t: Traditional procedure at the first step of treatment

### **B.4.1.1 Village Sector: Dhumci gaon (Category-1 village sector)**

Distant from local Primary Health Centre and market place

No modern health facility in close proximity

Case: 1

Category: MLM

As reported by his wife, Satish Toto 50 years aged man was suffering from high fever and severe weakness. His family members were not sure about the actual cause behind the ailments. He was admitted to Totopara Primary Health Centre (PHC) for three days and blood test diagnosed *Phalciperum* malaria. Patient was given all the medicines for curing the disease at free of cost from the PHC. The patient party had to buy only one vitamin tonic

from outside which was prescribed by the PHC doctor. He was completely cured after completing the course of medicine.

Case: 2

Category: MLM

Bikol Toto an 11 years old boy suffered also from malaria and was taken to Totopara Primary Health Centre where his disease was detected. According to the parents of Bikol Toto, at that time there was scarcity of medicine at PHC. Due to this reason, they had to buy all the medicines from Madarihat and had to spend more than Rs 500/- for that purpose. Finally the boy was completely cured.

Case: 3

Category: MLM

Taking of unhygienic food might be the cause of diarrhea which affected Siba Toto, a six year old boy. Initially he was taken to Totopara Primary Health Centre (PHC) from where he was referred to Birpara State General Hospital. He was admitted in Birpara hospital for four days. Saline and other medicines were prescribed. The patient family had to buy all the medicines from outside. During this course they had to spend Rs. 2500/- which they were able to manage from monthly family income. Finally Siba was cured and returned back to his home after four days.

#### **B.4.1.2 Village Sector: Mitran gaon (Category-1 village sector)**

Distant from local Primary Health Centre and market place

No modern health facility in close proximity

Case: 1

Category: FLM

Kanchan Toto (29 years old), wife of Pratap Toto had always been a patient of anemia. But after getting her first issue, her problem took a serious form. Initially she consulted doctor of local PHC and completed all the prescribed medicines. But she did not get good result. Then she consulted a private doctor at Birpara and took all the medicines. Continuous checking and taking of medicines occurred for a period of two years. Patient's family had to spend more than Rs 2000/- for the whole purpose.

Case: 2

Category: MHM

Dhukrú Toto, a 60 years old man had to visit a nursing home at Siliguri with Tetanus. Initially he started treatment in Totopara Primary Health Centre (PHC) and he was referred to Birpara and then to Jalpaiguri District hospital. During this process he already spend more than Rs. 3000/-. But he did not get cure. Finally he went to Siliguri and stayed for 15 days. He had to take injection for 15 days (twice a day) each costing Rs 550/-. Total costing for the said purpose was Rs. 17,000/-. Finally he was cured and returned back to Totopara.

Case: 3

Category: MLM

Abin Toto, a fifteen years was detected with Thalassemia. According to his parents, the disease was detected in a medical camp in his own village which was organized by some external doctors. Neither Abin nor his family members did know anything about the disease. They also informed, at the time of detection the disease did not show any symptom. Finally blood transfusion was required. It was needed for two times and was taken place at Jalpaiguri. During the field survey he was under treatment of a doctor of Birpara State General Hospital.

Case: 4

Category: FLM

Five years old Ayesha Toto, daughter of Bhupen Toto had also gone through a serious skin infection just after one month of her birth. As reported by her father, she had suffered from infection in her palm and foot. She was taken to the homeopathy doctor at Primary Health Centre. She was given some oral medicine and ointment. Treatment continued up to three month. Finally the baby was completely cured and the infection did not come back. The entire treatment procedure was completely free of cost.

#### **B.4.1.3 Village Sector: Puja gaon (Category-1 village sector)**

Distant from Primary Health Centre and market place

No modern health facility in close proximity

Case: 1

Category: FLM

Dolki Toto, a 48 years old lady suffered from arthritis for 6-7 years. As reported by his son, initial treatment was started at local PHC, from where she was taken to a private doctor at Madarihat. During this process they had to spend more than Rs.3000/-, but she was not cured. In last winter her disease took a severe form and she was almost paralyzed. Then she was taken to Birpara State General Hospital and stayed there for 10 days. She got some relief after a long treatment. Family members protected her from cold as well as damp weather. Still, she was not able to participate in regular house hold work. A total expenditure of Rs 5000/- was reported and it was managed from the family savings. Although during the field study she was reported to take the medicines.

Case: 2

Category: FLM

Very poor economic condition, mal nutrition and so many children seems to be the prime cause of tuberculosis of Roma Toto (45 years old lady). A continuous cough was the only preliminary symptom. She was not at all attentive to her problem. After few days, she found that blood was coming out with the cough. Then she was taken to Totopara Primary Health Centre where tuberculosis was detected. Although doctor suggested taking admission, she did not take admission. Then she went to Birpara and took all the medicines as prescribed by the doctor of Birpara State General Hospital. Due to economic constrains her family was not able to provide advised food for remedial purpose. After six months, further detection test reported that the intensity of the disease was decreased but it was not completely cured. Then she carried out her treatment at Totopara PHC. Although during the field survey, she was not cured but was on the process of remedy.

Case: 3

Category: MLM

As reported by his father Bimal Toto, Prasanta Toto (sixteen years old), was attacked by both malaria and jaundice (although not simultaneously). He suffered from jaundice last four years

back. But he was suffered from malaria just few months back. In case of jaundice, although the other family members suggested taking medicine from a renowned *jhakri* but Bimal Toto took his son to local PHC. Doctor confirmed the disease as jaundice and advised some medicine. Doctor also gave him a diet chart which should be strictly followed. All the prescribed medicines were purchased from Madarihat. After taking all the medicines and following the diet chart the boy was cured. But the recovery of the patient took a long time as reported by his father.

Few months back the same boy suffered from malaria. The disease was detected in Totopara Primary Health Centre. But they got all the required medicines from PHC at free of cost. After completing the course the boy was completely cured. According to his father, for the treatment of jaundice he had to spent Rs. 1000/-.

#### **B.4.1.4 Village Sector: Mondal gaon (Category-2 village sector)**

Nearer to local Primary Health Centre and market place

Modern medical facility in close proximity

Case: 1

Category: MHM

Samir Toto, a 20 years old boy was attacked by tuberculosis and it existed for six months. He or his family was not known to the reasons behind the disease because it was first time in their family. After realizing some bad symptoms he was taken to local Primary Health Centre by his father Sachin Toto. He was given all the prescribed medicine from PHC. He collected the medicine thrice a week as per the rule of PHC and completed the six months course. As his father was a Government employee, his family was able to provide all the advised food for remedial purpose. After six months, further detection test revealed that he was completely cured and need not to carry out further treatment.

Case: 2

Category: MHM

Elder son of Sachin Toto, Sushanta (22 years old) was also attacked by tuberculosis. His initial symptom was cough and blood was also coming out with cough. Apart from that, he was rapidly losing his weight. As his brother was also a T.B patient, he was immediately taken to the Totopara Primary Health Centre by his parents. Along with sputum test, X-ray

was the main diagnostic test for detection of the disease. His family spent Rs. 2000/- for the purpose of detection tests. His parents started his treatment at Totopara PHC. He took all the medicines as recommended by the physician. But further detection test revealed that he was not completely cured and needed a further course of medicine. During the field survey, it was found that he had been collecting the medicine from local PHC and was under the treatment.

#### **B.4.1.5 Village Sector: Panchayat gaon (Category-2 village sector)**

Nearer to local Primary Health Centre and the market place

Modern health facility in close proximity

Case: 1

Category: FLM

Subhadra Toto, a 14 years old girl was admitted to Totopara Primary Health Centre for her severe breathing trouble. Her family members were not sure about the actual cause behind the ailment. But she did not respond properly in the treatment and finally referred to Birpara State General Hospital. According to them, she was given artificial oxygen for one day and stayed in the hospital for three days. Due to unavailability of the medicine in the hospital, the patient party had to purchase all the prescribed medicine from outside shops. But somehow they were able to manage the free beds for the patient. At Birpara State General Hospital asthma was detected for the acute breathing trouble. Since then, as suggested by the doctor they always keep an inhaler with them for the emergency purpose. Although Subhadra got some relief but she was not at all completely cured.

Case 2

Category: MLM

As his wife reported, a 27 years aged man Nirol Toto suffered from gastric problem. Poor digestion and occasional but severe stomach ache were the main symptoms of his disease. He visited initially Totopara PHC, then Madarihat Block Hospital and finally at Birpara in a private chamber giving fees of Rs. 100/- in each visit. Doctor prescribed ultrasound for detecting the actual cause of the ailment. Finally gastric ulcer was detected. Prescribed medicines were brought from local medicine shop and the treatment continued up to one year. Patient had to visit the doctor five times during the treatment process. Total cost of the entire treatment was Rs. 4000/-. Although he did not get complete remedy from his ailment

but got some relief. He also reported that irregular diet sometimes causes severe stomach pain.

#### **B. 4.1.6 Village Sector: Subba gaon (Category-2 village sector)**

Nearer to local Primary Health Centre and market place

Modern health facility in close proximity

Case: 1

Category: FLM

Rashmi Toto, a 14 years old girl suffered from some serious head ache. Her problem started one year back. The main symptoms were severe head ache along with vomiting and reluctance of taking normal diet. Her family did not take the problem so seriously and did not think about any interference of supernatural agency in this connection. She was initially taken to Totopara Primary Health Centre and then to Birpara. Instead of getting relief, her problem took a serious form. Finally she was taken to Siliguri Mitra Nursing Home. Further she had to go through many of the diagnostic and clinical tests for instance X-ray, blood test, MRI, scan etc. which cost very high considering the poor economic condition of the family. Finally she was detected with some critical brain problem and was admitted under Dr Chang. Treatment continued up to fifteen days and she was completely cured after completing the full course of treatment. Total costing of her treatment was Rs 50,000/-. Her family had to mortgage the agricultural land to arrange the said money as his family income was below Rs. 5000/- per month. They had been giving Rs 500/- installment back to the bank. But the patient party was satisfied because the girl was finally cured.

Case: 2

Category: MHM

Laxmikanta Toto, 50 years old man was found to affect by both tuberculosis and malaria. Four years ago he was affected by malaria. His symptoms were high fever and severe weakness. He went to Totopara Primary Health Centre and blood test detected malaria (PF). He immediately started treatment according to the prescription of local PHC doctor. After completing the course of medicine he was completely cured. He did not need to purchase any medicine from medicine shop but supplied with all the medicines by Totopara PHC.

Last one year back he was also affected by tuberculosis. He himself recognized the disease through counseling doctor of Totopara PHC. For detecting the said disease required test and X-ray occurred at Birpara in a private laboratory. Initially he started treatment at Totopara PHC and collected all the medicines from the same place at free of cost. But he was not fully cured. After reoccurrence of the previous symptoms he consulted with a private doctor (Dr. Biren Roy) at Birpara. He got a very good response after taking the medicines of Dr Biren Roy. He had to spend more than Rs. 3000/- for the total process. During the field survey it was found that, although the doctor was passed away but still he was taking the medicines prescribed by the said doctor.

Case: 3

Category: MLM

Gopal Toto, a forty-nine years old man suffered from external tumour in his neck. He went to a private chamber of a doctor at the first step of his treatment. According to him, he did not feel any pain or irritation in the affected area. But the said doctor advised him to consult a surgeon either at Jalpaiguri or Siliguri. According to the doctor's advice the patient decided to visit a specialist doctor at Siliguri. He had to go through the various tests to diagnose whether the tumour was benign or malignant. The tumour was detected as a benign growth. Finally tumour was operated in a private nursing home at Siliguri and the patient got early recovery. In due course, patient family took loan from Gramin Bank by showing the agricultural land. The patient was completely cured and very much satisfied with the treatment.

Case: 4

Category: MLM

Fifteen year old Suman Toto, son of Gopal Toto also suffered from the same problem as his father. But he suffered from multiple numbers of tumours in his whole body. As his father went through the similar kind of a problem, patient was immediately taken to the same nursing home at Siliguri. But he did not go through any surgery. Only medicines were prescribed. Patient responded very well and need not to carry out further treatment. But the concern doctor advised him regular check up.

## **B.4.2 Treatment through both Category (Modern and Traditional)**

### **B.4.2.1 Village Sector: Mondal gaon (Category-2 village sector)**

Nearer to Totopara Primary Health Centre and market place

Modern health facility in close proximity

Case: 1

Category: MHB (m)

Surit Toto, a five year old boy suffered from a sore in his head just after three months of his birth. According to his father, the infection had spreading nature. The boy was immediately taken to Madarihat, then to Birpara. After getting treatment there was no such improvement. Then he was taken to Coochbeher. But there was no result. Finally they came back to Totopara and consulted the head *paw*, although they were continuing the medicine. After some calculation the head *paw* advised the worship of *luu* by sacrificing a red fowl. As reported by his father, after that worship the boy was cured. For the whole process the patient family had to spend more than Rs. 5000/- (including both traditional and modern treatment).

### **B.4.2.2 Village Sector: Panchayat gaon (Category-2 village sector)**

Nearer to Totopara Primary Health Centre and market place

Modern health facility in close proximity

Case: 2

Category: MLB (m)

Five years old Bihot Toto was attacked by Pneumonia very poorly in last winter. As reported by his mother he was immediately taken to the Totopara Primary Health Centre. Proper diagnosis detected his disease and he treated by prescribed medicine. The patient family had to buy all the medicines from Madarihat and Birpara. According to his mother, since then the boy was very weak. His digestive system was also poorly affected. Then the boy was taken to a traditional medicine man (belongs to Nepali community). The traditional medicine man or *jhakri* detected that the cause of the disease is *najar laga* i.e. the intervention of super natural power. *Jhakri* suggested some penance worship and also gave a *tabij* (auspicious thing) which always should be carried by the boy. Although for the traditional treatment the patient family had to spent Rs 500/- but they were satisfied with the traditional treatment as the boy was cured after the treatment.

#### **B.4.2.3 Village Sector: Subba gaon (Category-2 village sector)**

Nearer to market place and local Primary Health Centre

Modern health facility in close proximity

Case 3

Category: MLB (m)

Ganesh Toto (forty seven years old) had always been a patient of hypertension and blood sugar. He started his treatment at Totopara PHC but carried out his treatment in Birpara under the supervision of a private doctor. In a sudden accident (probably stroke) he was partially paralyzed, even he was unable to leave his bed at any circumstances. His family members were so anxious because he was the only earning member of his family. After consultation with the doctor of Totopara PHC he was taken to Birpara State General Hospital where he was admitted for seven days. The patient's family somehow was able to manage free bed but had to purchase all the medicines. The total costing of the treatment was Rs 15000/- . Patient's family had to take dept for bearing the said cost because the family belongs to BPL category. After spending the said money and giving continuous treatment, there was no such remarkable response. So the patient family had stopped the prescribed allopathic medicines. Apart from that financial constrains were also important cause for discontinuing the treatment. Then they decided to go for traditional treatment as because somebody had informed that herbal medicines have the capacity to cure the paralysis patient. He was taken to a *kabiraj* at Ballalguri. A typical liquid medicine was given for daily massage in lieu of Rs 150/- per bottle. Traditional treatment was carried out at the time of field work. As informed by the patient, traditional treatment was much fruitful than that of modern treatment. It was seen by the researcher that the patient was able to walk after getting traditional treatment.

#### **B.4.3 Modern Medical Institutions:**

In this section a brief description of modern health care institutions in the studied areas are given for understanding their physical, administrative and instrumental infrastructure. It is needed to apprehend the situations of modern health facilities available in the studied areas.

#### **B.4.3.1 Sub- Centre:**

Sub-centres are also known as Sub Primary Health Centres. There was only one sub-centre for serving the whole Totopara village. The sub-centre was situated at Panchayet gaon. Actually the sub-centre did not have any separate building but operated in a single room inside the Totopara Primary Health Centre. The sub-centre was staffed as per the Government rule. There were one ANM i.e. nursing staff and a health assistant (male). The health workers attended the centre trice a week i.e. Monday, Wednesday and Friday from 9 a.m. to 2 p.m. officially. As there was only one sub-centre for serving the whole village, the centre had to attend visitors regularly irrespective of time or day of working. There was an almira for keeping the official records along with some tables and chairs for setting and demonstrating the medicines. The room was noticed cleaned and well decorated with some scientific poster (related to maternal and child care) and calendar. Regarding the equipments, there were two refrigerators for keeping the vaccines. Stock of dettol, savlon, bengine and cotton were noticed. Among the medical instruments, there were thermometer, weight machine (one for babies and one for the adults), pregnancy kit, ceazer, stove, filter and one bed for checkup was also there. Regarding the medicines vitamin oil, paracitamol, metrogil, iron tablets (AFEEL), iron syrup and some medicines for malaria (e.g. chloroquine phosphate tablets) were reported. According to the ANM they always store all those medicines which could cover fever, dysentery, cough and cold, minute eye problem of the babies, protection from septic and skin disease. Huge number of contraceptives i.e. condoms and oral pills were also noticed and that were demonstrated on the table. Copper tubes were also distributed among the women. Regarding the health service, pregnancy tests were regularly done. Immunization (both mother and child) was found to be the major area of concern. ASHA workers submitted their weekly report at sub-centre on Wednesday. Mainly they collected the blood samples and distribute the vaccines in door to door survey. As part of the contact survey process for the treatment of malaria, the ASHA workers were given the duty to distribute malaria medicine to all the inhabitants of 20 meter radius of the concern malaria patient.

Regarding the immunization, TT Buster was given within first three months of pregnancy; second dose was given in four to five month. Iron tablets were given after three months of pregnancy up to nine month. For the delivery of the child, would be mother is referred to Primary Health Centre. Regarding the immunization of the new born baby, first dose of BCG was given 7-15 days; DPT 1 was given in first one and half month; DPT 2 was given in 2.5

month (two and a half month); DPT 3 was given in 3.5 month (three and a half month). Hepatitis A and B vaccines were also given. Measles vaccines were also given in nine to tenth month. When the baby reached one and a half year (1.6 year) DPT Buster was administered and some vitamin oil was also given. The vitamin oil was distributed at a six month interval up to five years of age. Apart from that, in case of large scale polio vaccination, there was only one prefixed immunization date. The health worker along with the Anganwadi workers could distribute a message to the villagers about the day. Medicine supply was reported regular and it was twice in a month from Madarihat.

#### **B.4.3.2 Totopara Primary Health Centre (PHC):**

There was only one Primary Health Centre at Totopara for serving the whole village. The health centre was situated at Panchayat gaon. The Totopara Primary Health Centre was established in 1993. Considering the distance, Panchayat gaon, Mondal gaon and Subba gaon can easily access the health facilities provided by PHC in comparison to the rest three sectors i.e. Dhumci gaon, Mitran gaon and Puja gaon. There was a building comprising of two floors. It was a ten bedded PHC. It had eight rooms and two bathrooms. As it was said earlier one sub-centre was also working within the premises of the PHC. The said eight rooms were used for different purposes like (a) observation of patients (b) dressing, stitching and for distribution of medicines (c) store room for keeping the medicines and other necessary materials. There were specific residential place i.e. quarter for doctor and staff. There was one quarter allotted for doctor, one for nursing staff and one for pharmacist. There were total nine staff members in the PHC. A list of them is given below:-

SI No.	Category	Number of Person
1.	Doctor (MBBS)	01
2.	Nurse (GNM)	02
3.	Pharmacist	01
4.	General Duty Assistant	03
5.	Sweeper	01
6.	Driver	01

Source: field survey 2010

As noticed there was only one out door (OPD) for the treatment of the patients and the timing of it were from 9.00 a.m. to 2.00 p.m. for every day except Sunday. The PHC was completely closed on Sundays and National Holidays. Doctor attended the PHC all the six working days

of any week. During his absence the existing nurse and the pharmacist managed the treatment of the patients. Generally, the doctor treated the patient only through clinical observation, but whenever needed, the multipurpose health workers or ASHA collected the blood samples and were sent to Madarihat Block Primary Health Centre or Birpara State General Hospital as per the requirement. Regarding the medical equipments thermometer, weight machine, X-ray machine (but was not in a working condition), autoclave (1), microscope (1), socker machine, oxygen cylinder, nebulizer were noticed. There were instruments viz. needle, forceps, holders, seizers, thermometer, stethoscope and sphygmomanometer for giving the normal treatment to the patients although the presence of dressing tray, bandage, cotton thread for stitching and allied first –aid equipments were noticed during the first visit of the centre. Further it was used during the emergency cases like head injury, cutting of any bodily parts. All the medicines were supplied from District Reserve Store (DRS), District Jalpaiguri to PHC. It was supplied quarterly in a year or in some cases as per the requirement. Three refrigerators were there for preserving the medicines. Regarding clinical examination, diagnosis of malaria and tuberculosis was possible. Detecting malaria, rapid test was followed. Sufficient PF kits were there for detecting malaria. Slide test was also done both for PF and PV malaria. For detection of tuberculosis i.e. AFB test was also provided by PHC.

There was a separate labour room but caesarian facility was available. According to the Medical Officer, regularly 40-50 patient visited Totopara Primary Health Centre for their health need. Fever, cough and cold, dysentery, diarrhea, respiratory tract infection, malaria, tuberculosis and jaundice were treated in PHC. As reported by the medical personnel of PHC, DOT treatment was running very successfully and many T.B. patients were cured after getting treatment in Totopara Primary Health Centre. Paracetamol, Bruphen, Ciprofloxacin, Erythromycin, Ceptran, Vitamin B complex, Agythromycin, Amoxicillin, Artisunate drug etc were noticed in the PHC. As reported, the health personnel stored the medicines under the categories of antibiotic, antiamibic, painkiller, antiscabical, analgesic, paracetamol, paracytological drugs (de-warming drugs). But there was an acute scarcity of anti-venom. In case of snake bite, the patient was referred to Madarihat Block Primary Health Centre or Birpara State General Hospital. Irregular supply of electricity was also a serious problem faced by Totopara Primary Health Centre. Ambulance facility was also available in PHC and to avail that facility the patient party had to pay Rs 150/- to Rs. 350/- depending on the distance to be travelled. Birth controlling medicines and accessories were mainly kept in the adjacent sub-centre and it was distributed from there. In some cases the requisite iron tablets

for the pregnant mother was also distributed from the centre. Although the immunization or regular medical checkup could be done in the PHC but cesarian delivery was not possible there. The infrastructural set up of the Totopara PHC only could permit the normal delivery but there were some instances of forceps deliveries. The serious patients were referred to Madarihat or Birpara or Alipurduar sub-divisional hospital.

Regarding the permanent family planning programme (such as vasectomy or tubectomy operations), the concern PHC did not provide any such facility as per the Government rule. As the studied tribe is Primitive Tribal Group (now known as Particularly Vulnerable Tribal Group) of West Bengal as well as India, Government has restricted their permanent family planning programme. Over all Totopara Primary Health Centre was well equipped and well functioning health centre.

#### **B.4.3.3 Madarihat Block Primary Health Centre: (BPHC upgraded Rural Hospital)**

Madarihat Block Primary Health Centre was located at the heart of the block Madarihat, just beside the National Highway 31. Since 1972 to 1980 Madarihat Block Primary Health Centre had been working as Madarihat Primary Health Centre. In the year 1980 Madarihat Primary Health Centre got the status of Madarihat Block Primary Health Centre BPHC. In November 2009, an order was issued by the State Government in which Madarihat BPHC was upgraded to a Rural Hospital, although the order came into force in 2011. During the field survey, it was not found that Madarihat BPHC has been working as a full flagged rural hospital but it was under the process of up gradation. Madarihat BPHC had the bed strength of 30 patients and did not have paying bed facility. There was a male ward and a female ward. Beds were adjusted as per the requirement of the male and female ward. But flour admission was not allowed by the BMOH.

During the field study, five separate buildings were seen and some construction work was going on. One building was allotted for BMOH office, one was for OPD and medicine store, one was for indoor (male and female ward), one building was for 'Anneswa' used for pathological work and counseling section (both the mother and child care, adolescent female problems as well as HIV patients), one building was found to use for various official work. One point should be noted in this regard that, there was a sub-centre with in the premises of

Madarihat BPHC. But the sub-centre had its own separate building. There was no separate labor room as reported the doctors; one section of female ward was used as labour room. A veranda was used for the waiting lounge for the patients. There was no operation theatre (OT).

With the campus of Madarihat BPHC, there were the quarters allotted for doctors, nurses and other health works. As reported, six quarters were allotted for doctors, twelve quarters for nurses (GNMs), six quarters for Group D staff, one for pharmacist and one for PHN (Public Health Nurse).

During the field work, the working strength of the hospital was as follows:-

Sl No.	Category		Number of Persons
1.	Doctor (permanent)	Block Health Officer of Health (BMOH)	01
		Medical Officer (2 <sup>nd</sup> MO)	03
2.	Doctor	Medical Officer under National Rural Health Mission	01
3.	Homeopathy Doctor		01
4.	Nurse GNM		08
5.	Pharmacist		01
6.	Health Assistant		01
7.	Laboratory Technician (National Rural Health Mission)		02
8.	Health Inspector	Acting Malaria Inspector	01
		Acting Sanitary Inspector	01
9.	Upper Division Clerk		01
10.	Lower Division Clerk		01
11.	Group D Staff		10

Source: field survey 2011

Apart from that one homeopathy doctor was there who was attending the patients all the six working days of a week from 9.00 a.m. to 2.00 p.m. During the field survey one second medical officer was in detainment in Alipurduar Sub-divisional hospital and was not available at Madarihat BPHC. There was an emergency section and 24 hours emergency duty for the doctors and nurses in terms of shifting. OPD was completely free of cost. OPD timings were from 9.00 a.m. to 2.00 p.m. as per the Government rule in each day of week except Sunday. During the field study period two doctors were attending the patients during the OPD hours. As reported, doctors had to check minimum 80-90 patients during the OPD hours in each day.

Regarding the medical instruments, there were five microscopes (all were in working condition), two autoclaves (all were working). Artificial oxygen was readily available as reported by the BMOH. There was an urgent need of X-ray and ultrasound machine. Two categories of pathological diagnosis were possible inside the institution (a) blood test for detection of malaria (b) detection of tuberculosis. The detection of HIV was possible, but patients were referred to Jalpaiguri District Hospital for further treatment. According to BMOH, clinical diagnosis was possible and treatment of leprosy patient was provided under the NLEP programme. Malaria, tuberculosis and leprosy treatments were provided totally free of cost. Separate gynecology section was not available but there was a very urgent need of that section. One point should be important in this regard, there was no infrastructure for any kind of operation, even cesarian deliveries were not possible to perform. Ligation operations were possible. As reported by the doctors of BPHC, they organize medical camps once in a month or once in two month for permanent ligation operations. That prefixed date is announced before 7-10 days of that particular date. Apart from malaria, tuberculosis and leprosy, various other types of diseases were treated in the studied BPHC which includes fever, pneumonia, diarrhea, dysentery, food poisoning, minor respiratory tract infection, minor eye problem, snake bite, jaundice, skin infections etc. In majority of the cases, doctors prescribed the medicines on the basis of clinical diagnosis.

All the medicines, vaccines were supplied from District Reserve Store as per the requirement. There was a steady and a regular supply of medicines as reported by the pharmacist of the centre. But in some emergency cases (particularly at the time of monsoon) scarcity of medicine occurs due to maximum pressure of same kind of patients. Preservation of tetanus vaccine was reported. According to BMOH, supply of anti venom was regular. He also reported, maximum number of snake bite cases occurred during monsoon. Mother and child were referred to adjacent sub-centre for vaccination. Generally vaccines were given by the ANM of the sub-centre. As there was particular date and time (working hours) for the sub-centre for that reason emergency case were tackled by the doctors and nurses of the BPHC.

During the study days, various categories of patients were admitted, but majority of them were suffering from high fever. Some of them were detected with malaria. There were few patients with strong dysentery. Due to scarcity of bed, one patient with high fever was referred to Birpara hospital. Two pregnant women were admitted for the delivery. In general,

they were advised to visit the BPHC just before the delivery date. As the infrastructure could provide only the facility of normal delivery, one patient was referred to Birpara. Burn patients were referred to directly Jalpaiguri District Hospital. All the medicines were supplied from BPHC except few special cases whenever the required medicines were not available at the stock of the BPHC.

Considering the seriousness of the patients, they were referred to either to Birpara State General Hospital or Alipurduar sub-divisional hospital. But few critical cases (such as burn cases) were referred to either district hospital or directly to North Bengal Medical College. There was no Government provided ambulance facility. One private ambulance was present over there for shifting the critical patients in lieu of the payment of Rs 200-500/- depending on the distance to be travelled.

#### **B.4.3.4 Birpara State General Hospital:**

Birpara State General Hospital is neither a rural hospital nor Sub-divisional hospital. This hospital was located in Birpara, near about 40 km from Totopara. It was established in 1900 to serve near about two lakh people of Birpara and surrounding area. As the Jalpaiguri District hospital is far away from Birpara or Madarihat block, so there was an urgent need of establishing a multi-specialty hospital for those regions. Although Birpara State General Hospital was not a multi-specialty hospital but some extent fulfilled the demand of common mass. As stated earlier in various case studies, Birpara State General Hospital was always one of the choices from various modern medical institutions by the studied people. This hospital serves nearly two lakhs people of the surrounding area.

Birpara State General Hospital had a two storied building. During the field survey some construction work was going on. Apart from that there were some staff quarters. Bed strength of that hospital was hundred. The building was separated in two segments. All the OPD departments were situated inside one segment along with the medicine distribution chamber. Different indoor wards, operation theatre (OT), general wards, labour room, diagnostic and pathological unit, emergency unit, doctor and nurses rest rooms were located inside the another section. In between the two segments a veranda was there which was sometimes used as the waiting lounge for the patients. In some cases whenever beds were not available, patients were kept in veranda as per the demand of the situation.

During the field work the working strength of the hospital was as follows:-

Sl.No.	Category	Number of Persons
1.	Superintendent	01
2.	General Doctor Medical Officer (GDMO)	08
3.	Gynecologist	01
4.	Radiologist	01
5.	Physician	01
6.	Pediatrician	01
7.	Dentist	01
8.	Deputy Nursing Superintendent	01
9.	Sister	28
10.	Group D	40
11.	Sweeper	05

Source: field study 2010

Doctors were attending the hospital according to their duty chart. There was 24 hours emergency duty for the nurses and doctors in terms of shifting. Nurses handled less critical patients but they had to call the doctor for the treatment of critical patients.

Regarding the medical instruments Ultra-sound machine (2), X-ray machine (2), and other necessary operative instruments were available. Oxygen cylinders were also readily available. Various categories of diagnosis were possible inside the hospital viz.

- (a) Routine examination of blood
- (b) Routine examination of urine
- (c) Detection of malaria
- (d) Pregnancy profile investigation
- (e) Sputum test for detecting tuberculosis
- (f) Detection of AIDS i.e. HIV test

But in case of biopsy or FNAC test they had to refer all the suspected patients to Jalpaiguri District hospital. According to the Super, there was an urgent need of auto-analyzer for further blood investigation. Apart from that all the immunization facilities for mother and child were available. One point should be mentioned here that there was no such infrastructure for major operations as reported by the Super. Only cesarian deliveries and some minor operations were possible with that infrastructure. Regarding permanent family planning facilities, tubectomy and vasectomy operations were done.

Regarding the wards, there was one male general ward, one female ward (both paying and general), one labor ward (gyne ward), one labor room, two operation theaters, and one emergency ward. According to the doctors, there was a need of burning ward and children ward which was absent in the hospital. Burn cases were generally referred to Jalpaiguri District hospital. Apart from that specialist eye department was not available in the hospital. General eye problems were only treated by the doctors. Critical cases were either referred to Jalpaiguri or North Bengal Medical College.

OPD timings were from 9.00 a.m. to 2.00 p.m. in each day of the week except Sunday. As reported, doctor and nurses had to check minimum 150-200 patients during the OPD hours in each day. All the major medicines were supplied from the hospital but it was not possible to supply full courses of medicines due to scarcity of it and the patient had to purchase the rest from outside. Full courses of medicine were supplied in case of leprosy and tuberculosis. The diagnosis of malaria, tuberculosis and supplied medicines for those patients were totally free of cost. Each patient had to purchase an outdoor ticket at a cost of Rs. 5/-. All the medicines, vaccines were supplied from District Reserve Store. A continuous and steady preservation of tetanus vaccine was reported. But it was not noticed in case of anti-venom. Scarcity of anti-venom was a regular problem as reported by the health workers although there was no such infrastructural defect in terms of preservation of it. Medicines were supplied quarterly from the District Reserve Store. According to the Super, medicine strength was sufficient.

During the study days various categories of patients were admitted and majority of them were the pregnant women for their delivery purpose. Apart from that some diarrhea patients and two suspected malaria patients were admitted. As there was scarcity of beds, so the patients had to stay in the above said veranda. In case of pregnant mother, they were generally advised to visit the hospital one day before the delivery date. Caesarian deliveries were regularly done. Patients could stay one day to one week there as per the requirement of the patients. But the administrative authority tried to release the cured patients as early as possible because of the huge demand of the beds. There were three to six deliveries took place in each day. As reported, patient party had to purchase costly as well as valuable medicines from outside and sometimes the required medicine for injection and saline also included an added purchased medical aid from the outside shop. Hospital generally supplied one or two bottle of saline. If required the patient party had to purchase saline from outside. The serious patients were referred to Jalpaiguri District hospital or directly to the North

Bengal Medical College. There was an ambulance for shifting critical patients to the said hospitals in lieu of the payment of Rs.250/- to Rs 500/- for each journey.

#### **B.4.4 Quack:**

Existence of the quack can be noticed in many of the rural areas of India in general and West Bengal in particular. The present studied village was also not an exception. It was found from the detailed field study that, to recover from various general as well as casual diseases number of villagers preferred to visit a quack as his remuneration was very nominal and he was easily accessible to the villagers. As the quack offered the necessary medicines to the patients, so it was an additional facility for the villagers and there was no question to go to any outside medicine shops for medicines. In due course, researcher met the only quack of the village Totopara who treated the patients of all the studied six sectors of Totopara village. Narrative form of his interview can represent the thinking pattern of the person, emphasizing his educational as well as family background, intension of treatment and problems facing during treatment procedure.

Mr Hirendra Mankhin Sangma, an 85 years old man was the only quack of the Totopara village. He was well-known and found to be very much accepted among the studied tribe. He resided in the Panchayat gaon village sector with only his wife. They did not have any son or daughter. Along with his medical practices, he also managed a small church within the premises of his homestead land. He also claimed that, at the age of 85 he fulfilled all his requirements by himself and did not take any help from outside. His academic qualification was Matriculation and did not claim as registered medical practitioner. He also told about his experience in the village. He claimed that he came in the village Totopara nearly about 43 years ago as a member of Cooch Behar Swedish Mission (Luthar and World Service). At that time soreasis and other various types of skin infections including leprosy were prevalent among the Totos. Eight to ten people had been expiring due to only various types of skin infections. As part of their welfare work, one Bengali doctor had come from Cooch Behar once a week. He also told that, at that time the Totos did not have any conception regarding the modern medical treatment. If a medicine was given with an instruction that the medicine has to be taken thrice a week, the patient may took that total file just in one dose. According to Mr. Sangma, prescribing medicines and made them cure from any disease was very difficult at that time. He also narrated the fact that, Totopara had always been a malaria,

tuberculosis and jaundice prone zone and there was no facility for detecting the disease. As pathological examinations were not possible, medicines were prescribed on the basis of statement of the patient or the statement of the relatives of the patients. Mr Sangma reported that he continued his work with that organization at Totopara for five years. After that, he decided to settle at Totopara permanently. Since onward, he was residing at Totopara. One point should be mentioned here that he also not reported any case of polio among the Totos.

As reported by him, he was not specialized in any particular type of treatment but treated all types of common diseases. He diagnosed the disease on the basis of his observation and experience. Clinical diagnosis only helped him for prescribing the medicines. He carried out his medical practice in his own medicine shop which was situated at Bajar line in Subba gaon i.e. the only market place in the Totopara village. He stocked all the necessary medicines for minor ailments such as fever, cough and cold, dysentery, diarrhea, stomach ache, head ache, minor respiratory tract infection, eye infection etc. Apart from that bandage, cotton, seizer, injections were also seen in his dispensary. He claimed that he supplied all the medicines at a very reasonable price. He never performed any kind of surgical operation but was able to stitch small injuries or wounds. As reported he had to check average 5-7 patients in a day including all the categories of diseases. His practice time was 9.00 a.m. to 1.00 p.m. in the morning and 4.00 p.m. to 6.00 p.m. in the evening. His remuneration was Rs 15/- excluding the price of medicines. But in many cases villagers were not able to pay the said amount. So he had to take the offerings as people can afford. In some cases people paid his remuneration and cost of medicine in installments. He reported that in some circumstances free treatment along with the medicines was given to the poor patients. He also narrated the fact that before the establishment of Totopara Primary Health Centre (in the year 1993) he had to check large number of patients because there was no other option. At that time he referred all the critical patients to Cooch Behar. Now a day, he referred all the critical patients to local PHC, but in case of PHC returned patients, he advised them to consult the doctor in Cooch Behar or Siliguri. He purchased all his required medicines in a particular medicine shop at Madarihat but he did not himself visit the shop. One sales boy came to Totopara with all the medicines and collected the bill against those medicines.

#### **B.4.5 Modern Medical Personnel: Role and Activities**

While discussing about the modern medical facilities in an area, inevitably the role and activities of the modern medical personnel would arise. They are the specialist in western medical treatment process and have detail knowledge regarding the benefits of modern medical treatment.

During the field study researcher met doctors working in Totopara Primary Health Centre (PHC), Madarihat Block Primary Health Centre (BPHC) and Birpara State General Hospital. In due course with the help of an open structured schedule they were interviewed. Narrative form of interviews is given in this sub-section.

Dr. Abhishek Naha, 35 years aged man was the only doctor of Totopara Primary Health Centre. He was the original inhabitant of Kolkata and the second generation doctor of his family. He completed his MBBS degree from the Calcutta Medical Collage and got his first posting in B.C. ROY Hospital after joining West Bengal Health Service (WBHS). He was posted in Totopara Primary Health Centre just before three months ago. He was actually the residential doctor of Totopara PHC and had to attend the outdoor of the PHC from 09:00AM to 01:00PM on all the working days in a week. But unofficially he had to attend patients after 1:00 PM.

Whenever asked about the treatment procedure inside the PHC, he answered that basically clinical diagnosis was the main procedure of treatment. He also told that malaria, tuberculosis and jaundice were very much found among the studied population. If malaria was suspected, he suggested for blood test and the health worker collected the blood for the examination purpose. PHC had the infrastructure for the said examination and took just one day for the report. After confirmation he prescribed medicines. Apart from malaria, detection and treatment of tuberculosis was also possible in Totopara PHC. According to him, there was no infrastructure for any other pathological test and X-ray and that was the main constrain of his treatment procedure. He was also not very much satisfied with the supply of medicines because he had to give medicines 30-40 patients per day on an average which was not manageable by the medicines supplied through District Reserve Store. Shortage of Anti-venom was also reported by him. Apart from malaria, tuberculosis, he informed about the high frequency of skin infection, diarrhea, tooth cavity and anemia among the studied tribe.

He also added that malnutrition was another crucial health problem of the village people. Poor economy education and lack of awareness may be the probable cause behind the problem. According to him, the Toto people did not suffer from any particular kind of food deficiency. They did not found to suffer from protein or vitamin or mineral deficiency at all. But the main problem was that they did not get sufficient amount of balanced food which was necessary to overcome malnutrition.

As he was specialized in child studies, he also showed the researcher number of Toto child with ample signs of under feeding. He also reported that, many Toto patients himself tried to replace prescribed medicine with particular traditional medicine. Just after few days, again they started to take the previously prescribed modern medicine. He also reported that, improper and irregular taking of medicines was very much found among them. As a result, they did not get the expected recovery and blamed the doctor. According to him, lack of awareness was the main problem among the studied tribe.

Dr. Debojyoti Chakraborty, a 42 years old man was the Block Medical Officer of Health at Madarihat Block. He resided in the Government quarter within the campus of Madarihat Block Primary Health Centre. He was the original inhabitant of district Hoogly and became the first doctor of his family. After completing the MBBS degree he joined West Bengal Health Service and posted in Madarihat BPHC in 2010. He had to attend the outdoor of Madarihat BPHC almost regularly from 9.00 a.m. to 2.00 p.m. because of scarcity of doctors and maximum patient pressure. He also reported that he did not attach with any private dispensary or medical shop.

Whenever asked about his treatment procedure inside the BPHC when he replied that basically clinical diagnosis was the main procedure of treatment except some specific disease. During the study days, he had to treat maximum number of fever patients as reported by him. If malaria was suspected then he suggested for blood test and the laboratory technician collected the blood. Blood was examined in the BPHC lab itself and the patient party had to wait for only one day for collecting the report. According to him, he had to start treatment on the basis of clinical examination prior to the report. He reported that there were no infrastructure for any other pathological tests except malaria, T.B. and AIDS. Lack of X-ray and ultrasound machine were the main constrain of his treatment procedure. He also reported that during those days, majority of the patients were coming with high fever (60-65

days on an average) and he had to check all the patients. The required medicines which had to be distributed among the patients were not manageable by the medicines supplied through District Reserve Store. He opined that large number of tribal patients visited to him including the studied tribe and their health consciousness was increasing day by day. He informed about the high frequency of malaria and dysentery in that zone. Apart from that he also mentioned about the malnutrition particularly among the mother and child. According to him very poor economic condition and educational backwardness could be the possible cause of that problem.

Dr. Joydeb Barman, 48 years aged man was the Superintendent of Birpara State General Hospital. As he told, he was very much administrator than a doctor. Because, as a superintendent he had to look after every aspect of administrative machinery, he had to solve the problem of infrastructure, problems of doctors, patients, nursing staff, administrative staff even group D staff also. Even he had to interfere, when even tension arises between the doctor or administrative staffs and patients party. Naturally he did not get time to treat the patients except some emergency cases. He also told that sometimes he had to attend the OPD patients at the time of scarcity of doctors.

So, he did not involved directly to the clinical diagnosis or prescribing medicines. Although he had a permanent house at Cooch Behar but during the service days he was residing at the doctor quarter inside the hospital. His qualification as a doctor is MBBS. According to him he did not attached with the private dispensary.

Whenever he was asked about the disease frequency, treatment procedure, patient's socio-economic condition, he told that, there was no way to give special attention to the Toto patients although he always tried to do that. As the studied area and the Madaribat block itself was a tribal dominated zone not only the Totos, majority of the tribal patients came to Birpara hospital belong to poor socio-economic background. But he also reported that, there were many Toto patients treating themselves as our patients and in patient. Dr. Barman also reported that inspire having various infrastructural dispute and short fall of doctor and nurses, he tried to provide optimum service to the patients, particularly to the tribals. He also informed about the urgent requirement of burn unit and child intensive care unit in the Birpara Hospital, because many tribal as well as general patients came with serious burn injuries. Apart from that there was an urgent demand of ultra sound machine.

## **B.4.6 Analysis:**

### **B.4.6.1 Sub-Centre:**

As reported, there was not a single studied patient treated by the sub-centre during last five years. It is also supported by the quantitative data that not a single villager attends the centre for their ailment. This fact was supported by the villagers of all the studied six sectors of the village Totopara.

The Totopara sub-centre was situated on the same building of Totopara Health Centre (PHC). According to the studied villagers, the sub-centre was actually an additional medical centre because people could get their overall medical requirement from the Totopara Primary Health Centre (PHC). So, they did not depend upon the Sub-centre but directly went to the Totopara PHC for treating their general ailments. Villagers (both category-1 and category-2 village sectors) used to prefer Sub-centre for collecting contraceptives. Apart from that, at the time of immunization they had to go to the Sub-centre along with their babies. Vaccination of pregnant mother had also been carried out by the only Sub-centre of Totopara village. The multipurpose health workers and ASHA workers of Sub-centre were very particular regarding their work both inside the Sub-centre as well as in the field. They were mainly found to concentrate in various immunization programmes. As per the Government rule, they regularly visited distant as well as close village sectors for the awareness of the villagers.

### **B.4.6.2 Primary Health Centre:**

As stated earlier, there was only one Primary Health Centre for serving the people of whole Totopara village. In few exceptional cases, the concerned PHC also served some Bhutanese people belonging to Doya community who came to Totopara for their business purpose. According to the studied tribe, Totopara Primary Health Centre was their first choice whenever they required any kind of medical assistance. This fact was also supported by the accumulated field data (table 4.1- 4.1.1).

There were instances to regular visit of Totopara Primary Health Centre by the villagers of both category-1 and category-2 village sectors. In category-1 village sectors, nineteen (46.34%) males and twenty five (62.50%) females were reported to visit there for getting

relief from their ailments. Majority of them were suffered from malaria, dysentery and tuberculosis. Among those nineteen males, there were two critical cases which were referred from PHC as there was no such medicine and infrastructural set up for treating those two patients. One was referred to Jalpaiguri District Hospital and another was referred to North Bengal Medical College (NBMC). One patient was suffering from multiple tumour and another patient was suffering from tetanus. Four snake bite cases were also referred to Madarihat BPHC. Twenty-five number of female patients who took treatment from PHC for their ailments and twenty three were completely cured. As per the record of PHC, two critical female patients were referred from PHC. One was a child with retino carcinoma (later detected in North Bengal Medical College), another was a case of multiple tumour.

In category-2 village sectors, fifty five males (40.74%) and seventy one (60.68%) females were reported to visit the PHC for their medical assistance. Among the male patients forty nine (49) males were completely cured after taking treatment from PHC and six patients were referred to either Birpara State General Hospital or Jalpaiguri District Hospital. Among the female patients, sixty five (65) females were completely cured from their ailments.

As reported there were many reasons for the people choice about the Totopara Primary Health Centre (PHC)

- (a) The doctor attendance was very good and nurses were very much competent for the clinical diagnosis.
- (b) Required medicines were almost readily available.
- (c) All the medicines were given free of cost if the required medicines were available.
- (d) Primary Health Centre provided almost 24 hours service to the villagers of Totopara village. In the absence of doctor, pharmacist took the responsibility for providing primary treatment to the patients.
- (e) The timing of outdoor was widely accepted by the villagers. At the same time, timing was flexible and in some cases was adjusted as per the requirement of the patients.
- (f) As the Primary Health Centre (PHC) had the ambulance facility, emergency patients could easily be taken to Madarihat BPHC or Birpara State General Hospital if required.

- (g) The PHC provided diagnostic facilities and treatment of malaria as well as tuberculosis which was very much prevalent among the studied population. Quantitative data also supported the fact.
- (h) Immunization and vaccination facilities of mother and child were executed very properly by the PHC with the help of Sub-centre.
- (i) Finally, last 15 years of health service provided by Totopara Primary Health Centre gained the confidence of Toto people that the concerned PHC could be able to satisfy their primary health need.
- (j) Totopara Primary Health Centre (PHC) with the help of the Sub-centre almost provided door to door health service as per the requirement of the patient belonging to the Toto community (particularly in case of endemic disease).

Thus, it was found that nearly situated only PHC was able to meet the minimum requirements of the studied tribe as said by them. That's why maximum percentage of patients was reported to visit there irrespective of sex and economic status. It was clear from the above study that, whenever they seek for modern medical aid, Totopara PHC was found to be their first choice.

#### **B.4.6.3 Block Primary Health Centre (Madarihat): (Upgrade Rural Hospital)**

From the analysis of table 4.1.2 it can be noticed very few patient from the studied population visited the Madarihat Block Primary Health Centre for the modern way of treatment. Only one male from category-1 village sector Dhumci gaon was reported to visit there. On the other hand only one female from category-1 village sector visited the hospital. In case of category- 2 village sectors, altogether eight males and three females visited the said institution. Majority of the patients were snake bite cases. Only two males (one from Panchayat gaon and one male from Subba gaon) suffering from diarrhea took the admission in Block Primary Health Centre. As reported by the villagers, Madarihat Block Primary Health Centre provided almost the similar kind of facilities as provided by the Totopara Primary Health Centre. That was the only reason found not to visit the Madarihat BPHC. Only the snake bite cases were taken to Madarihat BPHC because anti-venom was generally available in the said institution. There was different positive and negative opinion by the studied villagers regarding Madarihat BPHC.

**Positive Opinion:**

- After Totopara PHC, the closest situated Government medical institution
- Institution can be accessed at any time (24 hrs)
- Availability of more than one doctor and also nurses round the clock
- Detection and treatment of malaria and tuberculosis is possible.
- Clinical testing of and treatment of leprosy is possible.
- Immunization and vaccination to the pregnant mother and new born babies can be possible.
- Counseling of adolescent problems and treatment of some sexually transmitted disease is done.
- Population control aids are distributed. Surgical ligation is also possible.

**Negative Opinion:**

- Proper attention is not always given to the tribal patients at OPD.
- Costly drugs are not always supplied. Poor villagers have to purchase them from outside.
- No major diagnosis is possible in the institution.
- There was no separate gynecology ward and cesarian deliveries were not possible with that limited infrastructure. Operation Theater was not available.
- Any kind of treatment of burn cases was not possible.
- No major or critical cases can be treated there; villagers have to go to Birpara State General Hospital.

Considering the above said issues villagers did not prefer to go to Madarihat BPHC (upgraded rural hospital). According to the said people, instead of visiting Madarihat BPHC, they preferred to visit Birpara State General Hospital directly.

#### **B.4.6.4 Birpara State General Hospital:**

From analyzing table 4.1 and 4.1.3, it can be realized that there were conspicuous percentage of villagers from each studied village sector who visited the Birpara State General Hospital for their treatment. The table also shows separate percentage of males and females in the said context. Along with the above said percentage there are valuable qualitative interpretations that can help to understand the overall situation in different circumstances. While studying table 4.1.3 one can see the percentage of villagers who got remedy after taking treatment in the hospital.

In category-1 village sectors (distant village sectors) eight males and four females visited Birpara State General Hospital for various purposes. Among them, seven males and three females were cured. On the other hand, in category-2 village sector, 34 males and 14 females took the modern way of treatment in the hospital. Among them, 30 males and 14 females were found totally cured. It was noticed that, when the villagers realized that the doctor of Totopara PHC could not be able to cure the disease, then only they visited the hospital. The distance between Totopara and Birpara was almost 40km and it took almost 2hr. Until emergency arises they do not prefer to go Birpara. As reported both from the category-1 and category-2 village sector the in patients were more than the out patients because all the cases were critical and needed extensive attention. Patient party also preferred admission of the patient because admitted cases only could get a total treatment from the hospital. In another situation villagers had to face problem regarding their diagnostic and pathological tests. As reported, they did not get chance to do many of the diagnostic as well as pathological tests in the hospital as they were very late to take entry inside there. Because, after travelling such a long distance from Totopara they could not reach within the scheduled time. Various times they were simply informed by the authority that the test could not be possible because the instruments were out of order. After travelling such a long distance they had to return back home without getting any faithful result. So, in various situations they had to go to the private clinic for those tests and had to spend extra money for the same purpose. Villagers also reported that, various times they did not get the required medicines from the hospital, instead of that, they had to purchase many costly medicines from outside the hospital. As reported, not all but number of doctor was found less attentive and did not spend much more time to listen the exact problem of the patient. Medium of communication sometimes caused problem particularly for the aged population.

The villagers visited to the hospital not only for the treatment of major diseases but they used to go there even for the cesarian delivery purpose; because separate gyne department was available in the hospital. Villagers were more or less satisfied with the facilities provided in gyne ward. But they also complained that, pregnant mother and her relatives had to face difficulties for managing free beds. Sometimes it was also very difficult for a new mother and child to return home within one or two days after delivery as directed by the hospital authority.

#### **B.4.7 Child Health Care:**

Children are a critical resource whose growth, nourishment and well being will determine to large extent the course of a country's socio- economic and demographic feature. Discussion about the health issues of any community without discussing aspect of child health care is incomplete. Because the health status of a human can only be improved as well as protected only if he is protected from his childhood. Further the childhood protection entirely depended upon the consciousness of the family members particularly the parents.

##### **B.4.7.1. Place of Birth:**

As it is mentioned that the protection should be taken from the conception of baby, so where the birth is taken place is one of the crucial factor for child protection. Among the rural India, there is a trend for home birth.

In this sub-section there will be a discussion about child-birth place in the studied villages. This sub-section will also discuss about the causes of choosing homebirth and also the hospital delivery. The changing scenario will also be discussed in the present context. The table 4.5 to 4.5.6 will represent the quantitative data touching all the studied village sectors and categories of places.

In case of category-1 village sectors (farthest from the market place and Totopara Primary Health Centre) 86.88 percent home birth was recorded. In case of category- 2 village sectors (nearest from the market place and modern health facility in close proximity) 91.35 percent homebirth was recorded. According to the elderly villagers of the studied village, home birth

was safe and most wanted procedure of birth. According to them, there was no problem and risk in such type of procedure. There was an important role of elderly mid-wives at the time of birth. Although, some educated and well to do families (particularly the Government service holder) did not prefer that type of procedure. They opined that, safe birth could not be possible inside home. That categories of families preferred continuous checking and delivery at hospital (either Totopara PHC or Madarihat BPHC and few exceptional cases Birpara State General Hospital). Because of regular checking one can get the exact delivery date and get sufficient time for taking admission. There was not a single case recorded who took admission in nursing home for the child birth purpose.

In case of emergency the patient was taken to hospital. During last 12 to 15 years there was a trend of hospital birth. This trend was particularly prevalent among the young parents who preferred hospital birth irrespective of economic status and sector. After the establishment of Totopara Primary Health Centre in 1993, the concept of safe child birth was gradually changing among the studied tribe. The villagers who reported that the facilities provided by Totopara PHC during the pregnancy period (such as immunization of would be mother, vitamin tonic, iron capsules) was quite satisfactory. Most of the villagers irrespective of sector were found to be influenced by the ASHA, multipurpose health workers and Anganwadi teachers for opting Totopara Health Centre for child birth. From the very beginning of pregnancy they were under the continuous checkup and treatment of Totopara PHC and were timely informed about the exact date of delivery. Apart from that, Janani Suraksha Jozona scheme of Central Government was another important factor for choosing hospital birth. In 'Janani Suraksha Jozona Scheme' each parent was paid Rs. 1200/- for their first child birth, provided the birth took place in the hospital. This scheme was launched in 2008, particularly for the people belong to the BPL category. The main reasons for choosing Totopara PHC for delivery purpose –

- (1) Doctor was always available for taking up the patients.
- (2) Pregnancy card gave all the facilities (like immunization, vitamin capsule, iron tablets)
- (3) Ambulance facility was available for shifting emergency cases (particularly in case of cesarean deliveries)
- (4) Separate gyne kind of ward was provided for pregnant women.

The only constrain faced by the village people that cesarean delivery was not possible in the Totopara Primary Health Centre. It was an urgent need of Totopara PHC. Particularly in rainy season Totopara village was simply cut off from the outside world. At that time if emergency arose, the patient party had to face maximum difficulties.

#### **B.4.7.2 Polio and Pulse Polio:**

Infant mortality rate is a good indicator of socio-economic and health status of a community. Immunization is one of the most cost-effective and surest means to give protection against vaccine preventable diseases. Poliomyelitis or Polio is the highly infectious viral disease which had been a threat to Indian children below 5 years of age. Polio mainly affects children under the age of 5 years. Older people with lower immunity levels are also vulnerable. There is no cure for polio. So it was said that polio have only prevention and prevention is to be only through vaccination. Polio vaccines are of two types – the Oral Polio Vaccine (OPV) and the Inactivated Polio Vaccine (IPV). OPV protects not only the person who has taken them but who others living around him. On the other hand IPV is highly effective, only protects the vaccinated person.

In India, vaccination against polio was initiated in 1978 under Expanded Programme on Immunization (EPI) with the aim that all infants should be given 3 doses of oral polio vaccine. In 1985, the Universal Immunization Programme (UIP) was launched and implemented in phased manner to cover all type of population of all district. Following the Global Polio Eradication Initiative of WHO in 1988, the Government of India launched the Pulse Polio Immunization (PPI) Programme in 1995 in addition to UIP. Under this programme all children under 5 years are to be administered 2 doses of OPV in each National Immunization Day (NID) in December and January every year during National and Sub-national immunization rounds (in high risk areas) until polio is eradicated.

#### **Schedule OPV**

It was also advised that, if a child is regularly being given OPV as per the scheduled date, then also the child should be administered with OPV at pulse polio camp.

During the period of the study and considering the situation it was needed to give emphasis upon the date about immunization particularly about the polio takers. Government of India

and specifically government of West Bengal gave priority on polio dose, particularly after the failure the drive of eradication of polio by 2000 A.D.

Table 4.7 represents number and percentage of polio taker from the studied village sectors and through Table 4.8 the result of pulse polio drive can be noticed. All the quantitative data on Table 4.7 and 4.8 were given on the basis of field survey among the studied villagers, only depending on their answers. The analysis of different circumstances along with the qualitative formulation is also given in this sub-section in the context of all the studied village sectors.

In case of polio takers quantification, age group of 0-18 years was considered, because there was no such remarkable regular polio taker who took polio according to scheduled date among the studied tribe. Only after the establishment of Totopara Primary Health Centre (year 1993), polio vaccines were regularly available to them. Before that, there was no such consciousness among the studied people about the disease of polio. They could not even be able to distinguish between a child born physically challenged (genetically deformed) or suffering from poliomyelitis. So there was no question of taking polio vaccines regularly before the establishment of Primary Health Centre (PHC) in the village.

It is shown that 46.48 percent male and 49.12 percent female polio taker were recorded from category-1 (farthest from the market place and Totopara Primary Health Centre). Among the three studied village segments from category-1 village sectors, smallest number of polio takers was recorded in Mitran gaon, 32.56 percent male and 42.86 percent female polio takers were recorded in Mitran gaon. Both the percentages were lower in comparison to the other two sectors of category-1 village sectors viz. Dhumci gaon and Puja gaon. Many of the villagers had simply no concept about the disease of poliomyelitis; so, they did not feel any urge of taking polio dose. Many of the villagers had a concept that side effects can be emerged after taking of polio and even death can be occurred as they saw in few exceptional cases polio taker baby were found to suffer from high fever. They were not able to realize the long term positive effect of taking polio dose (OPV). So, they avoided giving polio to their children. One point should be mentioned here that there was no record of taking Inactivated Polio Vaccine (IPV). In general all the villagers of category-1 village sectors had to go Totopara Primary Health Centre after travelling two to three Kilometers of hilly distance. It was particularly difficult during heavy rainy season. Only two female children of those village sectors were not given the last pulse polio dose. Among them one female child was

out of station along with their parents and another was ill. She was suffering from jaundice and was unable to attend the polio camp. During those study days, all the category-1 villagers had already grown the concept that pulse polio was an essential vaccine and their babies could not be able to survive properly if they had not taken the polio dose regularly. But many of them did not know that they could get a pulse polio dose whenever they were outside from their original habitat. Some of them also had the misconception that if they took polio dose outside their village, they have to pay money for that purpose. Apart from that two female child, all the children from category-1 village sectors were given pulse polio dose regularly.

Among the category-2 village sectors (Mondal gaon, Panchayat gaon, Subba gaon) 61.58 percent males and 62.42 percent females were recorded as polio taker. After introducing polio vaccine people of said village sectors (adjacent to market place and Totopara Primary Health Centre) could get their dose from adjacent Totopara PHC which was easily accessible to them. It was also found during the field study that the parents of Category-2 village sectors were much more conscious about regular polio vaccination, although villagers confessed that in past people had very scanty idea about polio vaccine. Not only that they were also very much confused about the consequences and safety of taking polio dose.

In Category-2 village sectors, 96.88 percent male and 98.15 percent female child were found to be the regular polio taker. Two male children from Subba gaon and one female child from Panchayat gaon did not attend the last pulse polio drive. All three of them were ill during that period and their parents were not able to take them into polio camp. The overall scenario of pulse polio drive in Totopara village was satisfactory. Among the studied tribe, 98.21 percent male and 96.81 percent female children were covered properly. Regular campaign helped the villagers to grow proper concept about the polio vaccination. In very few exceptional cases some villagers had grown wrong conception that if a baby took regular polio doses then there was no need to give pulse polio dose. One point should be mentioned here that pulse polio was given in the Anganwadi centres also. Many villagers also thanked the Anganwadi teacher, worker, ASHA workers for giving the exact idea and concepts about the pulse polio. Many villagers also told that mainly ASHA workers covered all the houses of the studied tribe for giving regular polio dose. They also maintained the record who was given the dose and who was not. The exact date of pulse polio drive was also informed by the ASHA workers, Anganwadi teachers and workers. One point should be mentioned here that there

was no sex biasness found among the studied tribe regarding the attendance of polio camp. No preference would be given for the male babies.

#### **B.4.7.3 Integrated Child Development Services:**

##### **(Anganwadi Centres)**

Majority of children in India have underprivileged childhoods starting from birth. The infant mortality rate of Indian children is 47 and the under five mortality rate is 93 and 25% of new born children are under weight among the nutritional, immunization and educational deficiencies of children in India. To fight against these daunting challenges, Integrated Child Development Scheme was launched in 1975 in accordance to the National Policy for children in India. Over the years it has grown into one of the largest integrated family and community welfare schemes in the world.

##### **Objectives:**

The predefined objectives of ICDS are-

- (a) To raise the health and nutritional level of poor Indian children below 6 years of age.
- (b) To create a base for proper mental, physical and social development of children in India.
- (c) To reduce instances of mortality, malnutrition and school drop outs among Indian children.
- (d) To co-ordinate activities of policy formulation and implementation among all departments of various ministries involved in the different Government programmes and schemes aimed at child development across India.
- (e) To provide health and nutritional information and education to mothers of young children to enhance child rearing capabilities of mothers in country of India.

##### **Scope of services:**

The following services are sponsored under ICDS to help to achieve its objectives-

- (a) Immunization
- (b) Supplementary nutrition
- (c) Health check up
- (d) Referral services

(e) Pre-school non formal education

(f) Nutrition and health education

Delivery of services under ICDS scheme is managed in an integrated manner through Anganwadi centres, its workers and helpers. The services of immunization, health check up and referral services delivered through public health infrastructure under the Ministry of Health and Family Welfare. UNICEF has provided essential supplies for the ICDS scheme since 1975. World Bank has also assisted with the financial and technical support for the programme.

The ICDS team comprises the Anganwadi workers, Anganwadi Helpers, Supervisors, Child Development Project Officers (CDPOs) and District Program Officers (DPOs). Anganwadi Workers, a lady selected from the local community is a community based frontline honorary worker of the of the ICDS program. She is also an agent of social change, mobilizing community support for better care of young children, girls and women. Besides the Medical Officers, Auxiliary Nurse Midwife (ANM) and Accredited Social Health Activist (ASHA) form a team with the ICDS functionaries to achieve convergence of different services.

Integrated Child Development Service (ICDS) scheme was available in all the studied sectors in Totopara village and the scheme was implemented through Anganwadi Centers (AWCs). There were 12 Anganwadi Centre in Totopara village for giving health protection for children up to 6 years and pregnant mothers. The purpose of the centers was to provide nutritional feeding for those persons along with basic education (Pre Primary) for the children of 3-6 age groups. Each centre comprises with two staff as recommended by the Government – One teacher and one helper. Teacher was responsible for giving education along with primary medical aids whenever necessary. An important point should mention in this context that a medicine kit along with nutrition book was given to the teachers which cover the preliminary treatment of minor ailments. Helper was appointed mainly for conducting the nutritional feeding programme. According to the instruction of the Government, cooked food must be supplied to the children and mothers. Cooking materials and medicine kit were supplied to each centre after a periodic interval. There was a post of Supervisor who is also an investigator of the said centers. Generally the Supervisor conducted a monthly field visit to each of the centre for evaluating the activities of the concerned centre. For detailed discussion about the problems and outcome, a monthly zonal meeting was held between the

Supervisor, Staff (Teacher) and Helper. The centre Workers were also responsible for providing information to the villagers about the dates of a vaccination and pulse polio for the children and pregnant mother. There is a Government rule that a child cannot get admission to the primary school without the certificate issued by the Anaganwadi centre. Anganwadi staff had to keep a continuous touch with the multipurpose worker of the Sub centre and Medical Officer and staff of Primary Health Centre (PHC). Joint program of Anganwadi and Sub centre was conducted for giving regular vaccines to the children. Growth monitoring of the children was another important task to be performed by the workers. In the three tier system of health, Anganwadi of first tier, Health Sub- centre at second and PHC was at third step. As reported, at the time critical diseases or emergency the teachers of Anganwadi centers were found to consult the doctor of PHC immediately. Only females were appointed as Supervisors, Teachers and Workers. The educational qualifications were Higher Secondary, Secondary and class VIII passed respectively. All of them were trained by special ICDS instructors.

It was found in field survey that all the ICDS centers worked together and organized health education programme especially for the children and women of Toto society 1<sup>st</sup> and 2<sup>nd</sup> Tuesday of every month. Meeting of mothers were also held under ICDS Anganwadi centre. Immunization process like pulse polio programme, Polio drops were given through ICDS centers with the help of Anganwari workers and helpers and ANM. It was found from the field survey that Anganwadi centers played a very important role for achieving good health of the concerned population.

**Table: B.4.7.3 (a) Studied Anganwari Centre**

SN	Centre Name	Workers Name	Centre No.
1.	Gai Gaon	Malati Tamang	312
2.	Hospital Line	Sanobala Roy	317
3.	Gaitring Line	Bani Toto	324
4.	Puja Gaon	Nita Toto	313
5.	Chandba Line	Sadhana Toto	562
6.	School Line (Panchayet)	Rupa Rana	49
7.	Post Office Gaon	Beauty Sarkar	50
8.	Rai Gaon	Pratima Indua	561
9.	Mangan Gaon	Pinky Deuri	163
10.	Bazaar Line	Rinu Monpal	314
11.	Mitran Gaon	Julia Khawas	315
12.	Pakha Gaon	Banti Toto	316

**Table: B.4.7.3 (b) List of Medicines and allied Materials in Anganwadi Kit**

Sl. No.	Materials	Power	Quantity / Pack
1	Paracetamol Tablet I.P	500 Mg.	500 Tab 1Jar
2	Paracetamol Syrup I.P	125 Mg/5ML.	50 MI Bottle.

Sl. No.	Medicines
1	Oral Rehydration Salt (ORS) Pkt. (Wt 27.9 Gm)
2	Vitamin A Solution (100,000 I.U/ML)
3	Iron and Folic Acid Tablets
4	Chloroquine Tablet

There are some instructions to Anganwadi Teacher for application of those medicines.

- Receive medicines after checking proper label. Don't take any medicine without label. Try to recognize them with label.
- Keep the medicine in dry and cool place and far from the children.
- After supplying new stock of medicine please check its power.
- Keep separate medicine in separate container.
- Don't use an expiry date over medicine.
- During distribution of medicine keep proper notes including the name, dose and quantity of medicine.

Anganwadi Centers were established not only to serve the Toto people but also covered the non Toto population. Among the above said ICDS centres, Hospital Line, Puja gaon, Chandba line, School line, Post Office line, Bazar line and Mitran gaon Anganwari Centres mainly covered the Toto population. According to the teachers (i.e Workers) of Anganwadi Centres, children belonging to BPL families mainly attended the centres. Parents belonging to Toto community were not very much reluctant regarding registering the name of their children in ICDS Centres. But their attendance was not regular. This was also supported by the accumulated qualitative data. The timing of the centres was from 8:00 AM to 11:00 AM. Parents also agreed that feeding is one of the main attractions of the centre, but the quality of food was not very good. Therefore they did not feel interest to send their children regularly. Many of the parents were also aware that their children could not get admission in the Primary School without the certificate issued by Anganwadi Centre. So they tried to send their children at least twice or trice in a week. Parents who did not bother about their

children's education were reluctant to send. Many of the villagers were not also aware about the medicine kit of Anganwadi Centre. This was the scenario of the whole Totopara village irrespective of the sectors.

According to the villagers, worker and helpers were sincere in their job and tried to attend centres regularly in each working day. Workers regularly organized the scheduled programme and informed the villagers about pulse polio date and routine data.

It is already stated that the activities of Anganwadi also extends benefits to the pregnant mothers. The workers noticed about the pregnancy cases and their dates along with the delivery dates with the help of ASHA Workers. Nutritional feeding programme also covers the pregnant mother up to 6 months after delivery. But among the studied tribe, in very rare cases they enjoyed the said facilities. In the context of immunization, pregnant mother took their required immunization vaccines in either Sub Centre or Totopara Primary Health Centre (PHC), but was not aware that immunization and nutritional feeding of Anganwadi also covered the pregnant mothers. According to the centre workers, they distributed the food to *the house of pregnant mothers but villagers opined that it was not supplied to all the needy houses among the Totos*. As many of the workers belong to Nepali Community, they preferred to distribute food items among the Nepali houses. Regarding immunization, vaccines were given mainly by the ASHA Workers.

#### **B.4.8 Health and Hygiene:**

Health, an important asset of any community is the foundation of strong nation. Health is an important determination of economic and social development because diseases creates vicious circle by depleting human energy, leading to low productivity and earning capacity, deteriorating quality and quantity of consumption and standard of living. The ability to add to the physical wealth depends on their physical and mental capabilities. Such capabilities also largely depend on the health status, including the personal hygiene concept. .

To know the overall health status of a population, it is very crucial to observe their regular health consciousness and knowledge about health and hygiene including the food and drinking habit. In the matter of hygiene the question of safe drinking water and proper sanitation are given the first priority. This section is particularly dealing with the whole

environment of the village along with the personal hygiene consciousness of the villagers, their smoking and liquor drinking habits etc.

Individual health and hygiene is largely dependent on adequate availability of drinking water and proper sanitation. There is a direct relationship between water, sanitation and health. Consumption of unsafe drinking water, improper disposal of human excreta, improper environmental sanitation and lack of personal and food hygiene have been major causes of many diseases in developing countries like India.

In the present study, it was found that the distant village sectors (category-1 village sectors) viz. Dhumci gaon, Mitran gaon and Puja gaon were far from car road and nearer to the Teeti forest. In that sense, those village sectors can be said smoke free. But dust was found to be the main problem. Mitran gaon which was situated at the sloping steps of Trading Hill was such more surrounded by trees. On the other hand Dhumci gaon and Puja gaon were surrounded by agriculture plain land. Majority of the houses were wood and bamboo made and roof was thatched with straw. Some Toto families got the concrete houses under the programme of 'Indira Abas Yojona'. According to the villagers regular cleaning of houses was not possible due to scarcity of water. The wooden floors were cleaned twice or thrice in a week by broom depending on the situation. But some well to do families used disinfectant and soap for the cleaning purpose. As noticed during the field study, very few families colored and decorated their houses. More or less all the people knew the use of shop and oil. But the use of oil was reported irregular. Scarcity of water sometimes also restricted the daily use of shop. Different categories of soda and detergent powder were used for washing the cloths. But due to economic contain many of them were unable to buy it regularly. This was commonly noticed in all the three sectors of category-1 villages. As noticed except few, villagers did not have any concept to wash hand before taking food. Accordingly to the villagers, they preferred regular bath but due to scarcity of water it was not always possible. Regular habit of nails and hair cutting was not noticed. Some of the villagers used *neem* branch for cleaning their teeth. Use of brush and toothpaste was observed in the context of economically well-to-do families. But it was also found younger generation preferred brash and tooth paste irrespective of economic class

But they had very little concept about food pollution. Many of them had no idea how the food polluted by the dust. Sometimes they cooked in verandah or courtyard. No such container

was used for keeping out of dust at the time of cooking or after. They were very much fond of dried animal protein such as dried fish and meat. Sometimes they were found to take dried meat after seven days. They also reported that, fish and meat were dried in sunlight for 2-3 days and could be preserved up to 15 days. They stocked *bhutta* or *marua* in big wooden box for next 6 months for consumption only.

It was also found that 91.67 percent families had their own domestic animal in the category-1 village sectors. Pig, hen and cow were the main domestic animal beneath the room. As noticed, particularly pigs were kept in that way. They did not have the concept that mosquito can spread through those animals. This could be one of the probable cause of wide spread malaria in Totopara (mentioned in Table No.4.14) Cows were kept simply in the courtyard. Few well-to-do families had separate animal house for keeping their domestic animal but the number was very small.

As recorded 52.94 percent of male (15-70 years) of those village sectors had regular habit of smoking *bidi*. Sometimes they also smoke cigarette, although most of them knew the harmful effect of smoking. But as reported the main reason of smoking was to minimize their daily tension, young boys smoke just for enjoyment.

Main concrete road of Totopara village went through the village sector Mondal gaon and Panchayat gaon (category-2 village sector). That was also the main bus and tracker route. So, a large segment of villagers of those two village sectors had to face a daily dust of the said road. But villagers of Subba gaon did not face such type of problem. Majority of houses in Mondal gaon and Panchayat gaon were concrete as majority of the well to do Toto families lived in Mondal gaon and Panchayat gaon. But wooden houses were also seen scatterly distributed. In case of Subba gaon, majority of the houses were wooden and bamboo made. More or less all the villagers were concerned about their personal hygiene. Habit of regular bathing and washing of cloths was noticed among them. Few villagers were devoid of regular use of soap and detergent due to their economic constrain. But their number was very small. Most of the villagers were well aware about the contamination of food and safe food taking process. It should be mentioned here that number of families of Panchayat gaon and Mandal gaon had separate concrete kitchen for cooking purpose. So regarding the food pollution concept the response of those villagers was very much better than that of the category-1 village sectors. The villagers of Mondal gaon also had the idea that domestic animal should

be kept in separate place. Nearly 70 percent families had separated animal house. But in case of Panchayat gaon and Subba gaon only the well-to-do families had separate animal house. Most of the villagers also reported that they preferred separate animal house but due to economic constrain they did not able to construct it.

In category-2 village sector 75.20 percent male were found as regular smoker, which was comparatively higher than the category-1 village sector. Consumption of *eu* (country liquor-traditional drink made from *marua*) was the daily habit of more or less all the studied villagers including females and children's above 15 years. This was considered as part of their culture. As stated earlier (Chapter 3) *eu* was essential in all the worships among the studied tribe. As noticed, they also welcomed guests by offering them *eu*. But the trend was changing during the study days. They also considered *eu* as best time passes beverages. The trend of taking *eu* was not preferred by the young generation. According to the villagers, *eu* energizes the people and also keep the body fit. Many people opined that, taking of *eu* cannot be harmful but taking of foreign liquor is harmful.

#### **4.8.1 Drinking Water:**

Drinking water supply in the rural areas in India has always been the prime concern of the Government since independence. Community managed open wells, private wells, ponds and small scale irrigation reservoirs have often been the main traditional sources of rural drinking water. The first Government installed rural water supply schemes were implemented in the 1950s as part of the Government policy to provide basic drinking water supply facilities to the rural population. The Government of India's role in the rural drinking water supply sector started in 1972-73 with the launch of Acceleration Rural Water Supply Programme (ARWRSP) to assist the State/ Union Territories for providing potable water to the rural population. The second generation programme started with the launching of Technology Mission (1986-87) later renamed as Rajiv Gandhi National Drinking Water Mission in 1991-92.

National Rural Drinking Water Programme (NRDWP) is being assigned to evolved suitable strategies for drinking water and designing appropriate cost and time effective technologies programmes and schemes which are not only necessary but have also become a strong basic of the success of the Health For All Programme.

### **Salient Features of the RGNDWM:**

- Priority should be given to problematic villages or habitation.
- To accelerate the assumed availability of portable drinking water on a sustainable basis in SC and ST dominated habitations, the states/UTS are required to earmark at least 25% of the NRDWP funds for drinking water supply to the SC dominated habitation and minimum of 10% for the ST dominated habitations.
- Close involvement of the Community and NGO's in implementation operation and maintenance of water facilities including health education campaigns.
- Activities are to be carried out in co-ordination with SSA, ICDS, NRHM and department of Social Welfare.
- Water quality testing laboratories should be formed at Sub-divisional level.

Totopara was situated on the slop of the Tading hill. Due to the adverse soil condition and hilly region tube wells, or hand pumps could not be possible in Totopara. So, water scarcity has always been a serious problem in the village although the region was in the rain shaded area where nature pours down during monsoon. Various streams and streamlets coming from Bhutan Hill were the main drinking water source of the studied population. In 1971 Swedish Missionaries (Luther and world service) established the first water reservoir at Pakha gaon to store the water of Tading Khola. After that, Government took their first initiative in the year 1982-83. There were two another tanks were made by ITDP through Department of PHE Government of West Bengal. The water came from Tading Khola of Bhutan was reserved in those tanks for future use particularly for domestic use. Those water reservoirs were the main source of drinking water of the studied population. In should be also mentioned that, as the water came from neighboring country Bhutan, the Gram Panchayat had to pay Rs. 3500/- to Rs. 4000/- yearly to the Bhutan Government. It was also observed that, small tanks (connecting each other) were made in different village sector for the distribution of water from the main reservoirs.

In the distant village sectors (category-1 village sector viz. Dhumci gaon, Mitran gaon and Puja gaon) the number of tank or water reservoir was insufficient as reported by the villagers. There were four reservoirs in Puja gaon (including the extended Puja gaon) and one each in Dhumci gaon and Mitran gaon. According to the villagers, during monsoon many springs sprout though the hills. They put spited bamboo strips in the opening of those springs for the easy supply of water. Purification of water and cleaning of water reservoirs were also done by

the initiative of Gram Panchayat but there was no specific time frame for that purpose. Purification of water was done once in a month or once in two month. But cleaning of reservoir was very much irregular. Purification of water was done only by using bleaching powder and halogen. Generally spring water was used for regular bath and washing purpose. If spring water was not available, they had to use stored water for all the domestic purposes. Filter or any other purification system was found in the houses of economically well-to-do families. There were 2(two) families in Dhumci goan, 1(one) family in Mitran gaon and 2(two) families in Puja gaon who had their own filter for drinking water purpose.

In hospital adjacent village sector (category-2 sector viz. Mondal gaon, Panchayat gaon and Subba gaon) the number of water reservoir was also insufficient considering the population strength. There were 4(four) reservoirs in Panchayat gaon, 3(three) reservoirs in Subba gaon and 1(one) reservoir found in Mondal gaon. Villagers of these three sectors were found much more conscious regarding the purification and quality of safe drinking water. Number of economically well-to-do families had their own filter or any other own water purification system. They collected water from the common reservoir and only after purification used that water for drinking purpose.

Bathing of domestic animal was done in the nearer river. That was also not a regular practice. According to the villagers scarcity of water had always been the problem of Totopara and they wanted an initiative should be taken from the Government level to solve their problem permanently.

#### **4.8.2 Sanitation:**

Being the second most populous country of the world, providing environmentally safe sanitation to millions of people has been the most significant challenge for the Government of India since independence. The task is undoubtedly difficult in a country where the introduction of new technologies sometimes can challenge people's traditions and beliefs.

The concept of sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes. Hazards can be physical, microbiological, biological or chemical agents of disease. Wastes that can cause health problems are human and animal feces, solid waste, domestic waste water (sewage, sullage, grey water), and also

agricultural waste. Hygienic means of prevention can be possible by using engineering solutions (e.g. sewage and waste water treatment), simple technologies (e.g. latrines, septic tanks) or even by personal hygiene practices (e.g. simple hand washing with soap).

The impacts of improper sanitation on human health are significant. Unsafe disposal of human excreta facilitates the transmission of oral fecal diseases, including diarrhea and a range of intestinal worm infections such as hookworm and round worm. Diarrhea accounts for almost one fifth of all deaths among Indian children under five years. Also rampant worm infestation and repeated diarrhea episodes results in widespread childhood malnutrition.

Government of India started the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people. With the broader concept of sanitation, CRSP adopted a demand driven approach with the name 'Total Sanitation Campaign' (TSC) or community led total sanitation with effect from 1999. It actually evolved from the limited achievements of the first structured programme for rural sanitation in India, the Central Rural Sanitation Programme, which had minimum community participation. The main goal of total sanitation campaign is to eradicate the practice of open defecation by 2017. The approach emphasized more on information, education and communication, human resource development, capacity development activities to increase awareness among the rural people including the tribals and generation of demand for sanitary facilities. Community led total sanitation is not focused on building infrastructure, but preventing open defecation through peer pressure and shame. Villages that achieve this status receive monetary rewards and high publicity under a programme called 'Nirmal Gram Puraskar'.

### **Emergence of Demand:**

It is the first and foremost ritual issue. Rural people in general and tribals in particular are habituated with their traditional nature's call procedure. So it will take time to mobilize them and to convert them in new procedure. So, prior to implementation people have to aware by health education and awareness programme by various means.

Only after emergence of demand then the sanitation materials can be distributed at a minimum cost.

Regarding the awareness, villagers from category-2 village sectors (viz. Mondal gaon, Panchayat gaon, Subba gaon) some extent showed interest for installing the sanitation system. Open defecation was not common in case of Mondal gaon and to some extent Panchayat gaon. But as noticed, people from extreme ends of Panchayat gaon and Subba gaon practiced open defecation. In various cases they did not even consider open defecation as unhygienic. There was another section of population who still practiced open defecation in spite knowing open defecation was unhygienic and infectious. But many well to do families installed sanitation system by their own initiative, particularly in Mondal gaon and Panchayat gaon. Although the number was very few.

The scenario was much poorer in distant village sectors (i.e. in category-1 village sectors viz. Dhunci gaon, Mitran gaon, Puja gaon). In spite Government installed sanitation, not a single sanitation found which was constructed through private initiative. It was noticed during the field study, open defecation was very common and regular habit among the villagers of category-1 village sectors. There were also some instances where villagers used Government installed sanitation for other purposes, such as store room for fuel collection. According to the villagers economic constrain was the basic problem for installation of sanitation.

Whenever asked to the Government high official about the consequences he answered, there is less awareness among the people. He reported that, there were eighty sanitation installed among the Totos through ITDP projects till date. He also added that economic crisis could not be the problem in this matter. Even the Below Poverty Line (BPL) families can afford this just by paying only Rs 250/- for the purpose. Government subsidizes the rest. So, it could be said that, despite all the initiatives by the Government, studied villagers were not found very much concerned about the sanitation system.

#### **B.4.9 Family Planning (Concept and Techniques):**

Realizing that high population growth is inevitable during the initial phases of demographic transition just after the independence, India, the second most populous country of the world became the first country to formulate a National Family Planning Programme in 1952. Since independence, there has been massive change in demographic structure and health status of the population. In last three decades, India witnessed an unprecedented increase in the

number of persons in 15-59 age groups. Every year around 16million people are added to the population, creating more demands for additional resources like clothing, housing, food, education. So, there is an obvious need to meet health and contraceptives needs of this population. The focus of India's health service right through family welfare programme from the early 1950's has been health care for women and children and provision of contraceptive service. The Objective of the policy was reducing birth rate to the extent necessary to stabilize the population at a level consistent with requirement of national economy.

The number of birth should remain unaltered but there is also an urgent need to reduce maternal and infant mortality, so that desired level of fertility could be reduced. Because the high fertility rate leading to the rapid growth of country's population is a major hindrance towards development of a nation like India.

Successive Five-Year plans have been providing the policy framework and funding for the planned development of nationwide health care infrastructure and manpower. The centrally sponsored and hundred percent centrally funded family welfare programme provides the states the additional infrastructure, manpower and consumables needed for improving the health status of women and children and to meet all the felt needs for fertility regulation.

#### **Approach during the Tenth Plan:**

The paradigm shift, which began in the Ninth Plan, will be fully operationalized. Reduction in fertility, mortality and population growth rate will be major objectives during the Tenth Plan.

- (a) To access the needs for reproductive and child health at PHC level.
- (b) Centrally defined targets to community need assessment and decentralized areas specific micro planning and implementation of programme for health care for women and children to reduce infant mortality and high desired fertility.

The Major area of concern to achieve the major objectives of the Tenth Five Year Plan-

- (1) Effective maternal and child health care (through CHC, PHC and Anganwadi Centre)
- (2) Ensuring uninterrupted supply of essential drugs, vaccines and contraceptives adequate in quality and appropriate in quality.
- (3) Universal access to information/counseling and service for fertility regulation and contraception with a wide basket of choices.
- (4) Safe management of pregnancy and nutritional service to vulnerable groups.

From time immemorial tribal's have the concept of family planning or population control. For that reason, small size families are prevalent among them.

In the distant village Dhumci gaon (category-1 village sector) 81.48 percent couple had the concept of family planning. Among them 13.64 percent went for operation. Only two (2) Toto couples of that village were reported to use traditional method for the said purpose. There was 31.82 percent couple found to use modern method like contraceptive, particularly condom. In the context of Mitran gaon (category-1 village sector) 72.41 percent couple had clear concept of family planning. Only one (1) couple was reported to use traditional method for the purpose. On the other hand 28.57 percent couple went for operation. In the context of Puja gaon (category-1 village sector) only 40.00 percent couple had the clear concept regarding family planning. Among them 20.00 percent couple went for operation.

Hospital adjacent village sector Mondal gaon (category-2 village sector) 73.91 percent couple had the concept of family planning, among them 29.41 percent operated. Only one (1) couple was found to use traditional method. In the context of Panchayat gaon (category-2 village sector) 61.67 percent couple reported that they had the concept of family planning. Among them 18.92 percent went for any operation. Hospital adjacent village sector Mondal gaon (category-2 village sector) 73.91 percent couple had the concept of family planning, among them 29.41 percent went for any kind of surgical procedure. Although these three sectors were health centre adjacent village sector, still concept of family planning was not up to the mark. Only 49.21 percent couple had the concept of family planning. Apart from that there were some couple found (both from category-1 and category-2 village sector) who had clear concept of family planning but they did not followed any specific modern method.

There were various qualitative implications for above quantitative formulation. One of the basic causes of not choosing traditional method for family planning was unavailability of specific traditional medicines. Apart from that, death of various traditional medicine men able to prescribe those medicines compelled them to think about alternative measures. Due to population control programme campaigning villagers were also losing their faith on traditional medicines.

Regarding the surgical procedure, maximum number of couple preferred tubectomy operation. There was a specific reason for opting tubectomy. They had the concept that vasectomy operation may cause weakness to the male counterpart and they would not be able to do hard work. In search for any alternatives, number of males opined that they did not feel comfort by using condom. But still they used it because they could get that free of cost from the Local Primary Health Centre. Number of females also reported that they were not able to lead their normal life after taking oral pills like Mala D or Saheli.

So, the above said couple had the clear concept of family planning but afraid of using any of the modern method. They also did not rely upon traditional one because they changed their mind after counseling with the doctor, nurses and health workers.

It should be mentioned here that the educated section of the studies population were found to be much more conscious about their family planning. Particularly, the young couples adopted various modern family planning methods. Now-a-days number of male members of Toto Society went not only in Bhutan but also Kalachini, Hamiltonganj and many other places for their economic purpose. Apart from that, in all the village sectors of Totopara village, the studied tribe was also surrounded by immigrated Nepali community people. Various Government population control campaigning programmes in Totopara and also interaction with the outside world make them aware about different types of modern family planning method. This could be the probable cause that the couples from distant village sectors also were using various modern family planning techniques.

On the other hand as the studied tribal population belongs to Particularly Vulnerable Tribal Group category, they were not allowed to go for any permanent family planning, as per the Government rule and policy. During the study days it was found that due to economic scarcity, they were not willing to take more than 2/3 children. As a result, they went to the

private hospitals and clinics for tubectomy or vasectomy operations. Particularly, they preferred Hamiltongunj or Kalcini for that purpose. They did not disclose their identity as Toto. Their Mongoloid feature helped them to hide their indigenous identity. As their physical feature was very similar to the Nepali people, they did not get much trouble to register any Nepali name at those private institutions. This trend was particularly found among the young educated generation. But elderly population did not found to follow any unfair measure for permanent family planning purpose.

As their population is very small, Government continuously encourages them to expand their family size, still they were not responding to the appeal. According to them the main reason was unsolved land problem. Most of the people were pursuing the same view. According to the studied tribe, 2000 acre of land was recorded in the name of Late. Dhonopati Toto up to 1968 and that amount of land were distributed among all the Toto families. But in 1978, after abolition of Jamindari Act, Government official enumerated the land of Totopara once again. At that time, the Toto people showed only 333 acre of land to the Government officials in a fear that if they showed higher amount of land they had to pay more tax which was beyond *their capacity. As a result only 333 acre of land was recorded in the individual name of some* Toto families. The rest amount of land was declared vested. Apart from that, vested land was gradually encroaching by the immigrated Nepali community people. So the studied tribe was found in constant stress that they could not be able to provide accommodation to their feature generation. Apart from poverty, this was one of the most important reasons which compelled them for choosing permanent family control measure.

### **Chapter Summary:**

Chapter: 4 was framed in two separate divisions. Section -A of the chapter discussed about health service scenario of the country, Indian system of medicine, rural health infrastructure, National drug policy etc. The health scenario of the country and the different Government policies formulated for the amelioration of socio- economic status of the Indian tribal population were discussed in detail. At a glance the health infrastructure of the country was given for understanding of the forth coming section of the entire study. A discussion was also made on the overall tribal health problem.

In the later half i.e. Section-B, detailed discussion about the health facilities and programmes of the studied areas was given. Treatment by modern medical institution and practitioners (selected case studies), the actual condition of modern medical institutions such as Primary Health Centre (PHC), Sub-centre, Block Primary Health Centre (upgraded rural hospital), and the nearest State General Hospital were given in detail. Within this chapter a small section was allotted to evaluate and discuss the role and activities of the modern medical practitioners, nurses, staff, and health workers. Case studies of those patients were also given who availed the modern medical facilities in different circumstances. Child health care practices, health hygiene, water supply and sanitation, family planning particularly among the studied people were evaluated in detail.

**TABLE: 4.1 CATEGORY OF TREATMENT (MODERN)**

Name of the Sectors		Male							Female						
		PHC	BPHC	Birpara SGH	District Hospital	Private Doctor	Quack	Total	PHC	BPHC	Birpara SGH	District Hospital	Private Doctor	Quack	Total
Category: 1	Dhumci gaon	10 47.62	01 04.76	04 19.05	01 04.76	01 04.76	04 19.05	21 100.00	07 41.18	01 05.88	01 05.88	01 05.88	-	07 41.18	17 100.00
	Mitran gaon	04 50.00	-	01 12.50	-	01 12.50	02 25.00	08 100.00	11 78.57	-	02 14.29	-	-	01 07.14	14 100.00
	Puja gaon	05 41.67	-	03 25.00	-	-	04 33.33	12 100.00	07 77.78	-	01 11.11	01 11.11	-	-	09 100.00
	<b>Total</b>	19 46.34	01 02.44	08 19.51	01 02.44	02 04.89	10 24.39	41 100.00	25 62.50	01 02.50	04 10.00	02 05.00	-	08 20.00	40 100.00
Category: 2	Mondal gaon	18 62.07	02 06.89	05 17.24	-	03 10.34	01 03.45	29 100.00	13 52.00	01 04.00	03 12.00	-	03 12.00	05 20.00	25 100.00
	Panchayat gaon	25 36.23	04 05.79	20 28.98	01 01.45	01 01.45	18 26.09	69 100.00	41 64.06	02 03.13	09 14.06	-	-	12 18.75	64 100.00
	Subba gaon	12 32.43	02 05.41	09 24.32	-	02 05.41	14 37.84	37 100.00	17 60.71	-	02 07.14	-	-	09 32.14	28 100.00
	<b>Total</b>	55 40.74	08 05.93	34 25.19	01 0.74	06 04.44	33 24.44	135 100.00	71 60.68	03 02.56	14 11.96	-	03 02.56	26 22.22	117 100.00
<b>Grand Total</b>		74 42.05	09 05.11	42 23.86	02 01.14	08 04.55	43 24.43	176 100.00	96 61.15	04 02.55	18 11.46	02 01.27	03 01.91	34 21.66	157 100.00

PHC=Primary Health Centre (Totopara), BPHC= Block Primary Health Centre (Madarihat), SGH= State General Hospital

**TABLE: 4.1.1 RESULT OF TREATMENT (MODERN; PHC)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	09 90.00	01 10.00	10 100.00	07 100.00	-	07 100.00
	Mitran gaon	03 90.00	01 10.00	04 100.00	11 100.00	-	11 100.00
	Puja gaon	05 100.00	-	05 100.00	05 71.43	02 28.57	07 100.00
	<b>Total</b>	17 89.47	02 10.53	19 100.00	23 92.00	02 08.00	25 100.00
Category : 2	Mondal gaon	16 88.89	02 11.11	18 100.00	13 100.00	-	13 100.00
	Panchayat gaon	21 84.00	04 16.00	25 100.00	37 90.24	04 9.76	41 100.00
	Subba gaon	12 100.00	-	12 100.00	15 88.24	02 11.76	17 100.00
	<b>Total</b>	49 89.09	06 10.91	55 100.00	65 91.55	06 08.45	71 100.00
<b>Grand Total</b>		66 89.19	08 10.81	74 100.00	88 91.67	08 08.33	96 100.00

**TABLE: 4.1.2 RESULT OF TREATMENT (MADARIHAT BPHC)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	01 100.00	-	01 100.00	01 100.00	-	01 100.00
	Mitran gaon	-	-	-	-	-	-
	Puja gaon	-	-	-	-	-	-
	<b>Total</b>	01 100.00	-	01 100.00	01 100.00	-	01 100.00
Category : 2	Mondal gaon	01 50.00	01 50.00	02 100.00	01 100.00	-	01 100.00
	Panchayat gaon	04 100.00	-	04 100.00	02 100.00	-	02 100.00
	Subba gaon	01 50.00	01 50.00	02 100.00	-	-	-
	<b>Total</b>	06 75.00	02 25.00	08 100.00	03 100.00	-	03 100.00
<b>Grand Total</b>		07 77.78	02 22.22	09 100.00	04 100.00	-	04 100.00

**TABLE: 4.1.3 RESULT OF TREATMENT (MODERN; BIRPARA STATE GENERAL HOSPITAL)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	03 75.00	25 25.00	04 100.00	01 100.00	-	01 100.00
	Mitran gaon	01 100.00	-	01 100.00	01 50.00	01 50.00	02 100.00
	Puja gaon	03 100.00	-	03 100.00	01 100.00	-	01 100.00
	<b>Total</b>	07 87.50	01 12.50	08 100.00	03 66.66	01 33.33	04 100.00
Category : 2	Mondal gaon	04 80.00	01 20.00	05 100.00	03 100.00	-	03 100.00
	Panchayat gaon	17 85.00	03 15.00	20 100.00	09 100.00	-	09 100.00
	Subba gaon	09 100.00	-	09 100.00	02 100.00	-	02 100.00
	<b>Total</b>	30 88.24	04 11.76	34 100.00	14 100.00	-	14 100.00
<b>Grand Total</b>		37 88.09	05 11.90	42 100.00	17 94.44	01 05.55	18 100.00

**TABLE: 4.1.4 RESULT OF TREATMENT (JALPAIGURI DISTRICT HOSPITAL)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	-	01 100.00	01 100.00	01 100.00	-	01 100.00
	Mitran gaon	-	-	-	-	-	-
	Puja gaon	-	-	-	-	01 100.00	01 100.00
	<b>Total</b>	-	01 100.00	01 100.00	01 50.00	01 50.00	02 100.00
Category : 2	Mondal gaon	-	-	-	-	-	-
	Panchayat gaon	01 100.00	-	01 100.00	-	-	-
	Subba gaon	-	-	-	-	-	-
	<b>Total</b>	01 100.00	-	01 100.00	-	-	-
<b>Grand Total</b>		01 50.00	01 50.00	02 100.00	01 50.00	01 50.00	02 100.00

**TABLE: 4.1.5 RESULT OF TREATMENT (MODERN; PRIVATE DOCTOR)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	01 100.00	-	01 100.00	-	-	-
	Mitran gaon	01 100.00	-	01 100.00	-	-	-
	Puja gaon	-	-	-	-	-	-
	<b>Total</b>	02 100.00	-	02 100.00	-	-	-
Category : 2	Mondal gaon	03 100.00	-	03 100.00	02 66.67	01 33.33	03 100.00
	Panchayat gaon	-	01 100.00	01 100.00	-	-	-
	Subba gaon	01 50.00	01 50.00	02 100.00	-	-	-
	<b>Total</b>	04 66.67	02 33.33	06 100.00	02 66.67	01 33.33	03 100.00
<b>Grand Total</b>		06 75.00	02 25.00	08 100.00	02 66.67	01 33.33	03 100.00

**TABLE: 4.1.6 RESULT OF TREATMENT (MODERN; QUACK)**

Name of the Sectors		Male			Female		
		Cured	Not cured	Total	Cured	Not cured	Total
Category : 1	Dhumci gaon	01 25.00	03 75.00	04 100.00	04 57.14	03 42.86	07 100.00
	Mitran gaon	02 100.00	-	02 100.00		01 100.00	01 100.00
	Puja gaon	04 100.00	-	04 100.00	-	-	-
	<b>Total</b>	07 70.00	03 30.00	10 100.00	04 50.00	04 50.00	08 100.00
Category : 2	Mondal gaon	01 100.00	-	01 100.00	05 100.00	-	05 100.00
	Panchayat gaon	13 72.22	05 27.78	18 100.00	09 75.00	03 25.00	12 100.00
	Subba gaon	12 85.71	02 14.29	14 100.00	07 77.78	02 22.22	09 100.00
	<b>Total</b>	26 78.79	07 21.21	33 100.00	21 80.77	05 19.23	26 100.00
<b>Grand Total</b>		33 76.74	10 23.26	43 100.00	25 73.53	09 26.47	34 100.00

**TABLE: 4.2 RESULT OF TREATMENT (BOTH)**

Name of the Sectors		Male				Female			
		Cured	Not cured	Treat-ment in progress	Total	Cured	Not cured	Treat-ment in progress	Total
Category : 1	Dhumci gaon	15 78.95	02 10.53	02 10.53	19 100.00	13 86.67	-	02 13.33	15 100.00
	Mitran gaon	04 57.14	-	03 42.86	07 100.00	02 66.67	-	01 33.33	03 100.00
	Puja gaon	03 100.00	-	-	03 100.00	-	-	02 100.00	02 100.00
	<b>Total</b>	22 75.86	02 6.89	05 17.24	29 100.00	15 75.00	-	05 25.00	20 100.00
Category : 2	Mondal gaon	06 66.67	01 11.11	02 22.22	09 100.00	-	01 12.50	07 87.50	08 100.00
	Panchayat gaon	07 53.85	-	06 46.15	13 100.00	09 60.00	-	06 40.00	15 100.00
	Subba gaon	07 58.33	-	05 41.67	12 100.00	05 50.00	01 10.00	04 40.00	10 100.00
	<b>Total</b>	20 58.82	01 2.94	13 38.24	34 100.00	14 42.42	02 6.06	17 51.52	33 100.00
<b>Grand Total</b>		42 66.67	03 4.76	18 28.57	63 100.00	29 54.72	02 3.77	22 41.51	53 100.00

**TABLE: 4.3.1 PREFERENCE OF TREATMENT IN DHUMCI GAON**

Disease related symptoms/ misfortunes	Total persons suffered		Types of treatment						No treatment	
			Traditional		Modern		Both			
	M	F	M	F	M	F	M	F	M	F
Anemia	-	02 100.00	-	01 50.00	-	01 50.00	-	-	-	-
Arthritis	-	-	-	-	-	-	-	-	-	-
Asthma	-	01 100.00	-	-	-	01 100.00	-	-	-	-
Blood Pressure	07 100.00	05 100.00	01 14.29	-	05 71.43	05 100.00	01 14.29	-	-	-
Cancer	01 100.00	-	-	-	01 100.00	-	-	-	-	-
Cough & cold	15 100.00	09 100.00	-	02 22.22	08 53.33	05 55.56	06 40.00	02 22.22	01 06.67	-
Diarrhea	04 100.00	09 100.00	-	01 11.11	04 100.00	02 22.22	-	06 66.67	-	-
Fever	05 100.00	03 100.00	03 60.00	-	02 40.00	-	-	03 100.00	-	-
Fracture	-	-	-	-	-	-	-	-	-	-
Gastric	-	01 100.00	-	-	-	-	-	01 100.00	-	-
Giddiness	-	-	-	-	-	-	-	-	-	-
Headache	-	-	-	-	-	-	-	-	-	-
Heart disease	-	-	-	-	-	-	-	-	-	-
Jaundice	04 100.00	07 100.00	04 100.00	07 100.00	-	-	-	-	-	-
Malaria	06 100.00	02 100.00	-	-	-	-	06 100.00	02 100.00	-	-
Miscarriage	-	-	-	-	-	-	-	-	-	-
Pneumonia	-	-	-	-	-	-	-	-	-	-
Skin disease	02 100.00	01 100.00	-	-	-	-	02 100.00	01 100.00	-	-
Stomach ache	-	02 100.00	-	-	-	02 100.00	-	-	-	-
Tuberculosis	02 100.00	01 100.00	-	-	-	01 100.00	02 100.00	-	-	-
Tumor	01 100.00	-	-	-	01 100.00	-	-	-	-	-
Ghost attack	01 100.00	-	01 100.00	-	-	-	-	-	-	-
Snake bite	02 100.00	-	-	-	-	-	02 100.00	-	-	-
Total	50 100.00	43 100.00	09 18.00	11 25.58	21 42.00	17 39.53	19 38.00	15 34.88	01 02.33	-

**TABLE: 4.3.2 PREFERENCE OF TREATMENT IN MITRAN GAON**

Disease related symptoms/ misfortunes	Total persons suffered		Types of treatment						No treatment	
			Traditional		Modern		Both			
	M	F	M	F	M	F	M	F	M	F
Anemia	-	01 100.00	-	-	-	01 100.00	-	-	-	-
Arthritis	01 100.00	02 100.00	-	-	-	02 100.00	01 100.00	-	-	-
Asthma	01 100.00	-	-	-	-	-	01 100.00	-	-	-
Blood Pressure	-	03 100.00	-	-	-	03 100.00	-	-	-	-
Cancer	-	-	-	-	-	-	-	-	-	-
Cough & cold	-	-	-	-	-	-	-	-	-	-
Diarrhea	01 100.00	02 100.00	-	-	01 100.00	02 100.00	-	-	-	-
Fever	-	-	-	-	-	-	-	-	-	-
Fracture	01 100.00	-	-	-	-	-	01 100.00	-	-	-
Gastric	-	-	-	-	-	-	-	-	-	-
Giddiness	-	-	-	-	-	-	-	-	-	-
Head ache	-	-	-	-	-	-	-	-	-	-
Heart disease	01 100.00	-	-	-	01 100.00	-	-	-	-	-
Jaundice	03 100.00	04 100.00	03 100.00	02 50.00	-	02 50.00	-	-	-	-
Malaria	04 100.00	05 100.00	-	01 20.00	02 50.00	02 40.00	02 50.00	02 40.00	-	-
Miscarriage	-	-	-	-	-	-	-	-	-	-
Pneumonia	01 100.00	-	-	-	-	-	01 100.00	-	-	-
Skin disease	-	02 100.00	-	01 50.00	-	-	-	01 50.00	-	-
Stomach ache	-	-	-	-	-	-	-	-	-	-
Tuberculosis	03 100.00	02 100.00	-	-	03 100.00	02 100.00	-	-	-	-
Tumor	03 100.00	02 100.00	-	-	03 100.00	02 100.00	-	-	-	-
Ghost attack	01 100.00	-	-	-	-	-	01 100.00	-	-	-
Snake bite	01 100.00	-	-	-	01 100.00	-	-	-	-	-
<b>Total</b>	18 100.00	21 100.00	03 16.67	04 19.05	08 44.44	14 66.67	07 38.89	03 14.29	-	-

**TABLE: 4.3.3 PREFERENCE OF TREATMENT IN PUJA GAON**

Disease related symptoms/ misfortunes	Total persons suffered		Types of treatment						No treatment		
			Traditional		Modern		Both				
	M	F	M	F	M	F	M	F	M	F	
Anemia	-	-	-	-	-	-	-	-	-	-	-
Arthritis	-	02 100.00	-	-	-	-	-	02 100.00	-	-	
Asthma	-	-	-	-	-	-	-	-	-	-	
Blood Pressure	01 100.00	-	-	-	01 100.00	-	-	-	-	-	
Cancer	-	-	-	-	-	-	-	-	-	-	
Cough & cold	-	-	-	-	-	-	-	-	-	-	
Diarrhea	02 100.00	02 100.00	-	-	02 100.00	02 100.00	-	-	-	-	
Fever	-	02 100.00	-	02 100.00	-	-	-	-	-	-	
Fracture	-	-	-	-	-	-	-	-	-	-	
Gastric	-	-	-	-	-	-	-	-	-	-	
Giddiness	-	-	-	-	-	-	-	-	-	-	
Headache	-	-	-	-	-	-	-	-	-	-	
Heart disease	-	-	-	-	-	-	-	-	-	-	
Jaundice	02 100.00	03 100.00	02 100.00	03 100.00	-	-	-	-	-	-	
Malaria	05 100.00	04 100.00	-	-	03 60.00	04 100.00	02 40.00	-	-	-	
Miscarriage	-	01 100.00	-	-	-	01 100.00	-	-	-	-	
Pneumonia	01 100.00	-	-	-	-	-	01 100.00	-	-	-	
Skin disease	03 100.00	-	03 100.00	-	-	-	-	-	-	-	
Stomach ache	01 100.00	01 100.00	01 100.00	-	-	01 100.00	-	-	-	-	
Tuberculosis	04 100.00	01 100.00	-	-	04 100.00	01 100.00	-	-	-	-	
Tumor	-	-	-	-	-	-	-	-	-	-	
Snake bite	02 100.00	-	-	-	02 100.00	-	-	-	-	-	
Ghost attack	01 100.00	-	01 100.00	-	-	-	-	-	-	-	
<b>Total</b>	22 100.00	16 100.00	07 31.82	05 31.25	12 54.55	09 56.25	03 13.64	02 12.50	-	-	

**TABLE: 4.3.4 PREFERENCE OF TREATMENT IN MONDAL GAON**

Disease related symptoms/ misfortunes	Total persons suffered		Types of treatment						No treatment	
			Traditional		Modern		Both			
	M	F	M	F	M	F	M	F	M	F
Anemia	-	09 100.00	-	-	-	07 77.78	-	02 22.22	-	-
Arthritis	-	-	-	-	-	-	-	-	-	-
Asthma	-	02 100.00	-	-	-	-	-	02 100.00	-	-
Blood Pressure	01 100.00	03 100.00	-	-	01 100.00	-	-	03 100.00	-	-
Cancer	-	-	-	-	-	-	-	-	-	-
Cough & cold	12 100.00	-	02 16.67	-	10 83.33	-	-	-	-	-
Diarrhea	04 100.00	-	-	-	04 100.00	-	-	-	-	-
Fever	06 100.00	08 100.00	-	-	-	08 100.00	06 100.00	-	-	-
Fracture	02 100.00	-	-	-	02 100.00	-	-	-	-	-
Gastric	-	-	-	-	-	-	-	-	-	-
Giddiness	-	-	-	-	-	-	-	-	-	-
Head ache	-	02 100.00	-	-	-	02 100.00	-	-	-	-
Heart disease	02 100.00	-	-	-	02 100.00	-	-	-	-	-
Jaundice	05 100.00	04 100.00	04 80.00	03 75.00	-	-	01 20.00	01 25.00	-	-
Malaria	07 100.00	04 100.00	-	-	07 100.00	04 100.00	-	-	-	-
Miscarriage	-	02 100.00	-	-	-	02 100.00	-	-	-	-
Pneumonia	-	-	-	-	-	-	-	-	-	-
Skin disease	-	-	-	-	-	-	-	-	-	-
Stomach ache	03 100.00	-	01 33.33	-	01 33.33	-	01 33.33	-	-	-
Tuberculosis	02 100.00	-	-	-	02 100.00	-	-	-	-	-
Tumor	-	-	-	-	-	-	-	-	-	-
Snake bite	01 100.00	02 100.00	-	-	-	02 100.00	01 100.00	-	-	-
Ghost attack	-	-	-	-	-	-	-	-	-	-
Total	45 100.00	36 100.00	07 15.56	03 8.33	29 64.44	25 69.44	09 20.00	08 22.22	-	-

**TABLE: 4.3.5 PREFERENCE OF TREATMENT IN PANCHAYAT GAON**

Disease related symptoms/ misfortunes	Total persons suffered		Types of treatment						No treatment	
			Traditional		Modern		Both			
	M	F	M	F	M	F	M	F	M	F
Anemia	-	01 100.00	-	-	-	-	-	01 100.00	-	-
Arthritis	-	01 100.00	-	-	-	-	-	01 100.00	-	-
Asthma	01 100.00	02 100.00	01 100.00	-	-	-	-	02 100.00	-	-
Blood Pressure	04 100.00	02 100.00	04 100.00	-	-	-	-	02 100.00	-	-
Cancer	-	01 100.00	-	-	-	01 100.00	-	-	-	-
Cough & cold	23 100.00	16 100.00	08 34.78	-	11 47.83	05 43.75	04 17.39	09 56.25	-	-
Diarrhea	03 100.00	-	-	-	03 100.00	-	-	-	-	-
Fever	25 100.00	28 100.00	-	07 25.00	25 100.00	21 75.00	-	-	-	-
Fracture	04 100.00	10 100.00	01 25.00	-	-	09 90.00	03 75.00	-	-	01 10.00
Gastric	02 100.00	01 100.00	01 50.00	-	-	01 100.00	01 50.00	-	-	-
Giddiness	02 100.00	-	01 50.00	-	-	-	01 50.00	-	-	-
Headache	03 100.00	-	01 33.33	-	-	-	02 66.67	-	-	-
Heart disease	-	01 100.00	-	-	-	01 100.00	-	-	-	-
Jaundice	04 100.00	02 100.00	04 100.00	02 100.00	-	-	-	-	-	-
Malaria	18 100.00	18 100.00	-	-	18 100.00	18 100.00	-	-	-	-
Miscarriage	-	-	-	-	-	-	-	-	-	-
Pneumonia	-	01 100.00	-	-	-	01 100.00	-	-	-	-
Skin disease	-	01 100.00	-	-	-	01 100.00	-	-	-	-
Stomachache	01 100.00	01 100.00	01 100.00	-	-	01 100.00	-	-	-	-
Tuberculosis	07 100.00	02 100.00	-	-	07 100.00	02 100.00	-	-	-	-
Tumor	-	-	-	-	-	-	-	-	-	-
Snake bite	05 100.00	01 100.00	-	-	05 100.00	01 100.00	-	-	-	-
Ghost attack	02 100.00	-	-	-	-	-	02 100.00	-	-	-
<b>Total</b>	104 100.00	89 100.00	22 21.15	09 10.11	69 66.35	64 71.91	13 12.50	15 16.85	-	01 01.12

**TABLE: 4.3.6 PREFERENCE OF TREATMENT IN SUBBA GAON**

Disease related symptoms/ Misfortune	Total persons suffered		Types of treatment						No treatment		
			Traditional		Modern		Both				
	M	F	M	F	M	F	M	F	M	F	
Anemia	-	-	-	-	-	-	-	-	-	-	-
Arthritis	01 100.00	01 100.00	-	-	01 100.00	-	-	01 100.00	-	-	
Asthma	-	01 100.00	-	-	-	-	-	01 100.00	-	-	
Blood Pressure	09 100.00	05 100.00	-	-	03 33.33	05 100.00	06 66.67	-	-	-	
Cancer	-	-	-	-	-	-	-	-	-	-	
Cough & cold	-	-	-	-	-	-	-	-	-	-	
Diarrhea	-	-	-	-	-	-	-	-	-	-	
Fever	03 100.00	03 100.00	-	-	01 33.33	01 33.33	02 66.67	02 66.67	-	-	
Fracture	-	-	-	-	-	-	-	-	-	-	
Gastric	02 100.00	-	-	-	-	-	02 100.00	-	-	-	
Giddiness	01 100.00	-	-	-	-	-	01 100.00	-	-	-	
Head ache	02 100.00	06 100.00	-	-	01 50.00	05 83.33	01 50.00	01 16.67	-	-	
Heart disease	-	-	-	-	-	-	-	-	-	-	
Jaundice	04 100.00	06 100.00	04 100.00	05 83.33	-	-	-	01 16.67	-	-	
Malaria	18 100.00	11 100.00	-	-	18 100.00	11 100.00	-	-	-	-	
Miscarriage	-	01 100.00	-	-	-	01 100.00	-	-	-	-	
Pneumonia	02 100.00	-	-	-	02 100.00	-	-	-	-	-	
Skin disease	01 100.00	02 100.00	-	-	01 100.00	02 100.00	-	-	-	-	
Stomach ache	02 100.00	03 100.00	-	-	02 100.00	-	-	03 100.00	-	-	
Tuberculosis	06 100.00	03 100.00	-	-	06 100.00	02 66.67	-	01 33.33	-	-	
Tumor	02 100.00	-	-	-	02 100.00	-	-	-	-	-	
Snake bite	-	01 100.00	-	-	-	01 100.00	-	-	-	-	
Ghost attack	02 100.00	04 100.00	02 100.00	04 100.00	-	-	-	-	-	-	
<b>Total</b>	<b>55 100.00</b>	<b>47 100.00</b>	<b>06 10.91</b>	<b>09 19.15</b>	<b>37 67.27</b>	<b>28 59.57</b>	<b>12 21.82</b>	<b>10 21.28</b>	<b>-</b>	<b>-</b>	

**TABLE: 4.4 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES**

Name of the Sectors		Total population	Delivery places		
			Home	Health Centre/ Hospital	
				P.H.C.	Hospital
Category : 1	<b>Dhumci gaon</b>	158 100.00	121 76.58	36 22.78	01 00.63
	<b>Mitran gaon</b>	132 100.00	124 93.94	04 03.03	04 03.03
	<b>Puja gaon</b>	152 100.00	139 91.45	08 05.26	05 03.29
	<b>Total</b>	442 100.00	384 86.88	48 10.86	10 04.26
Category : 2	<b>Mondal gaon</b>	105 100.00	81 77.142	23 21.904	01 00.95
	<b>Panchayat gaon</b>	296 100.00	279 94.26	14 04.73	03 01.01
	<b>Subba gaon</b>	327 100.00	305 93.27	09 02.75	13 03.98
	<b>Total</b>	728 100.00	665 91.35	46 06.32	17 02.34
<b>Grand Total</b>		1170 100.00	1049 89.66	94 08.03	27 02.31

**TABLE: 4.4.1 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES (DHUMCI GAON)**

Age groups	Total population	Delivery places		
		Home	Health Centre/ Hospital	
			P.H.C.	Hospital
0-4	22 100.00	10 45.45	12 54.55	-
5-9	15 100.00	03 20.00	12 80.00	-
10-14	26 100.00	16 61.54	10 38.46	-
15-19	22 100.00	20 90.91	02 09.09	-
20-24	18 100.00	18 100.00	-	-
25-29	19 100.00	18 94.74	-	01 05.26
30-34	07 100.00	07 100.00	-	-
35-39	06 100.00	06 100.00	-	-
40-44	05 100.00	05 100.00	-	-
45-49	03 100.00	03 100.00	-	-
50-54	04 100.00	04 100.00	-	-
55-59	02 100.00	02 100.00	-	-
60-64	06 100.00	06 100.00	-	-
65-69	03 100.00	03 100.00	-	-
70 & 70+	-	-	-	-
<b>Total</b>	158 100.00	121 76.58	36 22.78	01 00.63

**TABLE: 4.4.2 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES (MITRAN GAON)**

Age groups	Total population	Delivery places		
		Home	Health Centre/ Hospital	
			P.H.C.	Hospital
0-4	22 100.00	12 54.55	06 100.00	04 18.18
5-9	23 100.00	22 95.65	01 04.35	-
10-14	24 100.00	22 91.66	01 04.17	01 04.17
15-19	16 100.00	16 100.00	-	-
20-24	10 100.00	10 100.0	-	-
25-29	16 100.00	16 100.00	-	-
30-34	10 100.00	10 100.00	-	-
35-39	10 100.00	10 100.00	-	-
40-44	07 100.00	07 100.00	-	-
45-49	05 100.00	05 100.00	-	-
50-54	01 100.00	01 100.00	-	-
55-59	03 100.00	03 100.00	-	-
60-64	04 100.00	04 100.00	-	-
65-69	01 100.00	01 100.00	-	-
70 & 70+	-	-	-	-
<b>Total</b>	152 100.00	139 91.45	08 05.26	05 03.29

**TABLE: 4.43 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES (PUJA GAON)**

Age groups	Total population	Delivery places		
		Home	Health Centre/ Hospital	
			P.H.C.	Hospital
0-4	19 100.00	13 68.42	03 15.79	03 15.79
5-9	27 100.00	26 96.30	01 03.70	-
10-14	25 100.00	24 96.00	-	01 04.00
15-19	15 100.00	15 100.00	-	-
20-24	08 100.00	08 100.00	-	-
25-29	09 100.00	09 100.00	-	-
30-34	05 100.00	05 100.00	-	-
35-39	02 100.00	02 100.00	-	-
40-44	07 100.00	07 100.00	-	-
45-49	10 100.00	10 100.00	-	-
50-54	02 100.00	02 100.00	-	-
55-59	-	-	-	-
60-64	02 100.00	02 100.00	-	-
65-69	01 100.00	01 100.00	-	-
70 & 70+	-	-	-	-
<b>Total</b>	132 100.00	124 93.94	04 03.03	04 03.03

**TABLE: 4.4.4 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES (MONDAL GAON)**

Age groups	Total population	Delivery places		
		Home	Health Centre/ Hospital	
			P.H.C.	Hospital
0-4	02 100.00	-	02 100.00	-
5-9	17 100.00	06 35.29	10 58.82	01 05.88
10-14	13 100.00	08 61.54	05 38.46	-
15-19	13 100.00	07 53.85	06 46.15	-
20-24	15 100.00	15 100.00	-	-
25-29	09 100.00	09 100.00	-	-
30-34	09 100.00	09 100.00	-	-
35-39	07 100.00	07 100.00	-	-
40-44	05 100.00	05 100.00	-	-
45-49	04 100.00	04 100.00	-	-
50-54	05 100.00	05 100.00	-	-
55-59	02 100.00	02 100.00	-	-
60-64	04 100.00	04 100.00	-	-
65-69	-	-	-	-
70 & 70+	-	-	-	-
<b>Total</b>	105 100.00	81 77.14	23 21.90	01 00.95

**TABLE: 4.4.5 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES (PANCHAYAT GAON)**

Age groups	Total population	Delivery places		
		Home	Health Centre/ Hospital	
			P.H.C.	Hospital
0-4	31 100.00	22 70.97	06 19.35	03 09.68
5-9	32 100.00	28 87.50	04 12.50	-
10-14	40 100.00	38 95.00	02 05.00	-
15-19	42 100.00	41 97.62	01 02.38	-
20-24	33 100.00	32 96.97	01 03.03	-
25-29	23 100.00	23 100.00	-	-
30-34	20 100.00	20 100.00	-	-
35-39	18 100.00	18 100.00	-	-
40-44	22 100.00	22 100.00	-	-
45-49	22 100.00	22 100.00	-	-
50-54	03 100.00	03 100.00	-	-
55-59	04 100.00	04 100.00	-	-
60-64	04 100.00	04 100.00	-	-
65-69	01 100.00	01 100.00	-	-
70 & 70+	01 100.00	01 100.00	-	-
<b>Total</b>	296 100.00	279 94.26	14 04.73	03 01.01

**TABLE: 4.4.6 DISTRIBUTION OF POPULATION ON THE BASIS OF DELIVERY PLACES (SUBBA GAON)**

Age groups	Total population	Delivery places		
		Home	Health Centre/ Hospital	
			P.H.C.	Hospital
0-4	24 100.00	15 62.50	05 20.83	04 16.67
5-9	61 100.00	51 83.60	04 06.56	06 09.84
10-14	46 100.00	43 93.48	—	03 06.52
15-19	39 100.00	39 100.00	—	—
20-24	26 100.00	26 100.00	—	—
25-29	31 100.00	31 100.00	—	—
30-34	24 100.00	24 100.00	—	—
35-39	28 100.00	28 100.00	—	—
40-44	15 100.00	15 100.00	—	—
45-49	14 100.00	14 100.00	—	—
50-54	08 100.00	08 100.00	—	—
55-59	03 100.00	03 100.00	—	—
60-64	06 100.00	06 100.00	—	—
65-69	02 100.00	02 100.00	—	—
70 & 70+	—	—	—	—
<b>Total</b>	327 100.00	305 93.27	09 02.75	13 03.98

**TABLE: 4.5 ATTENDING/ATTENDED ANGANWADI (0-9 YEARS)**

Name of the Village Sectors		Male				Female			
		Yes	No	New born	Total	Yes	No	New born	Total
Category:1	Dhumci gaon	14 73.68	05 26.32	-	19 100.00	12 66.67	02 11.11	04 22.22	18 100.00
	Mitran gaon	14 66.67	05 23.81	02 09.52	21 100.00	20 83.33	01 04.17	03 12.50	24 100.00
	Puja gaon	18 66.67	06 22.22	03 11.11	27 100.00	13 68.42	05 26.32	01 05.26	19 100.00
	<b>Total</b>	52 77.61	10 14.93	05 07.46	67 100.00	50 81.97	03 04.92	08 13.11	61 100.00
Category: 2	Mondal gaon	05 45.45	05 45.45	01 09.09	11 100.00	06 75.00	02 25.00	-	08 100.00
	Panchayat gaon	19 50.00	17 44.74	02 05.26	38 100.00	16 64.00	09 36.00	-	25 100.00
	Subba gaon	34 72.34	13 27.66	-	47 100.00	22 57.89	16 42.11	-	38 100.00
	<b>Total</b>	58 60.41	35 36.46	03 03.13	96 100.00	44 61.97	27 38.03	-	71 100.00
<b>Grand Total</b>		110 67.46	45 27.61	08 04.91	163 100.00	94 72.73	30 22.73	08 06.06	132 100.00

**TABLE: 4.6 TAKING OF POLIO**

Name of the Village Sectors		Male			Female		
		Yes	No	Total	Yes	No	Total
Category: 1	<b>Dhumci gaon</b>	26 53.06	23 46.94	49 100.00	19 52.78	17 47.22	36 100.00
	<b>Mitran gaon</b>	14 32.56	29 67.44	43 100.00	18 42.86	24 57.14	42 100.00
	<b>Puja gaon</b>	26 52.00	24 48.00	50 100.00	19 52.78	17 47.22	36 100.00
	<b>Total</b>	66 46.48	76 53.52	142 100.00	56 49.12	58 50.88	114 100.00
Category: 2	<b>Mondal gaon</b>	13 65.00	07 35.00	20 100.00	16 64.00	09 36.00	25 100.00
	<b>Panchayat gaon</b>	49 59.76	33 40.24	82 100.00	37 58.73	26 41.27	63 100.00
	<b>Subba gaon</b>	63 62.38	38 37.62	101 100.00	45 65.22	24 34.78	69 100.00
	<b>Total</b>	125 61.58	78 38.42	203 100.00	98 62.42	59 37.58	157 100.00
<b>Grand Total</b>		191 55.36	154 44.64	345 100.00	154 56.83	117 43.17	271 100.00

**Table: 4.7 TAKING OF PULSE POLIO (0-5 years)**

Name of the Village Sectors		Male			Female		
		Yes	No	Total	Yes	No	Total
Category: 1	Dhumci gaon	14 100.00	-	14 100.00	12 100.00	-	12 100.00
	Mitran gaon	15 100.00	-	15 100.00	17 94.44	01 05.55	18 100.00
	Puja gaon	19 100.00	-	19 100.00	09 90.00	01 10.00	10 100.00
	<b>Total</b>	48 100.00	-	48 100.00	38 95.00	02 5.00	40 100.00
Category: 2	Mondal gaon	06 100.00	-	06 100.00	05 100.00	-	05 100.00
	Panchayat gaon	28 100.00	-	28 100.00	21 95.45	01 04.55	22 100.00
	Subba gaon	28 93.33	02 06.67	30 100.00	27 100.00	-	27 100.00
	<b>Total</b>	62 96.88	02 03.13	64 100.00	53 98.15	01 01.85	54 100.00
<b>Grand total</b>		110 98.21	02 01.79	112 100.00	91 96.81	03 03.19	94 100.00

**TABLE: 4.8 IMMUNIZATION (UPTO 24 YEARS)**

Name of the Village Sectors		Male			Female		
		Yes	No	Total	Yes	No	Total
Category: 1	<b>Dhumci gaon</b>	24 43.64	31 56.36	55 100.00	19 39.58	29 60.42	48 100.00
	<b>Mitran gaon</b>	26 55.32	21 46.81	47 100.00	27 56.25	21 43.75	48 100.00
	<b>Puja gaon</b>	39 75.00	13 25.00	52 100.00	23 54.76	19 45.24	42 100.00
	<b>Total</b>	89 57.79	65 42.21	154 100.00	69 50.00	69 50.00	138 100.00
Category: 2	<b>Mondal gaon</b>	18 60.00	12 40.00	30 100.00	18 60.00	12 40.00	30 100.00
	<b>Panchayat gaon</b>	56 54.90	46 45.09	102 100.00	36 47.37	40 52.63	76 100.00
	<b>Subba gaon</b>	47 40.52	69 59.48	116 100.00	37 46.25	43 53.75	80 100.00
	<b>Total</b>	121 46.89	127 49.22	258 100.00	91 48.92	95 51.08	186 100.00
<b>Grand Total</b>		210 52.23	192 47.76	402 100.00	160 49.32	164 50.62	324 100.00

**TABLE: 4.10 AWARENESS ABOUT PROTECTION AND PRESERVATION OF FOOD (FAMILY WISE)**

Name of the Village Sectors		Total Number of Families	Opinion	
			Yes	No
Category: 1	Dhumci gaon	33 100.00	14 42.42	19 57.58
	Mitran gaon	29 100.00	12 41.38	17 58.62
	Puja gaon	22 100.00	10 45.45	12 54.55
	Total	84 100.00	36 42.86	48 57.14
Category: 2	Mondal gaon	24 100.00	18 75.00	06 25.00
	Panchayat gaon	62 100.00	43 69.35	19 30.65
	Subba gaon	68 100.00	39 57.35	29 42.65
	Total	154 100.00	100 64.94	54 35.06
<b>Grand Total</b>		238 100.00	110 46.22	102 42.86

**TABLE: 4.10 TAKING OF COUNTRY LIQUOR/ ALCOHOL (15 to 70 years)**

Name of the Village Sectors		Male			Female		
		Yes	No	Total	Yes	No	Total
Category:1	Dhumci gaon	40 85.11	07 14.89	47 100.00	37 84.09	07 15.90	44 100.00
	Mitran gaon	34 75.55	11 24.44	45 100.00	23 60.53	15 39.47	38 100.00
	Puja gaon	26 76.47	08 23.53	34 100.00	19 70.37	08 29.63	27 100.00
	<b>Total</b>	100 79.37	26 20.63	126 100.00	79 72.48	30 27.52	109 100.00
Category:2	Mondal gaon	23 62.16	14 37.84	37 100.00	21 58.33	15 41.67	36 100.00
	Panchayat gaon	78 74.29	27 25.71	105 100.00	57 64.77	31 35.22	88 100.00
	Subba gaon	89 82.41	19 17.59	108 100.00	66 75.00	22 25.00	88 100.00
	<b>Total</b>	190 76.00	60 24.00	250 100.00	144 67.92	68 32.08	212 100.00
<b>Grand Total</b>		290 77.13	86 22.87	376 100.00	223 69.47	98 30.53	321 100.00

**TABLE: 4.11 SMOKING HABIT (15 to 70 years)**

Name of the Village Sectors		Male			Female		
		Yes	No	Total	Yes	No	Total
Category :1	<b>Dhumci gaon</b>	22 46.81	25 53.19	47 100.00	02 04.54	42 95.45	44 100.00
	<b>Mitran gaon</b>	30 66.67	15 33.33	45 100.00	-	38 100.00	38 100.00
	<b>Puja gaon</b>	18 52.94	16 47.06	34 100.00	-	27 100.00	27 100.00
	<b>Total</b>	70 55.55	56 44.44	126 100.00	02 01.83	107 98.17	109 100.00
Category :2	<b>Mondal gaon</b>	27 72.97	10 27.02	37 100.00	-	36 100.00	36 100.00
	<b>Panchayat gaon</b>	84 80.00	21 20.00	105 100.00	-	88 100.00	88 100.00
	<b>Subba gaon</b>	77 71.29	31 28.70	108 100.00	02 02.27	86 97.72	88 100.00
	<b>Total</b>	188 75.20	62 24.80	250 100.00	02 00.94	210 99.06	212 100.00
<b>Grand Total</b>		258 68.62	118 31.38	376 100.00	04 01.25	317 98.75	321 100.00

**TABLE: 4.12 OWNERSHIP OF DOMESTIC ANIMAL (FAMILY WISE)**

Name of the village Sectors		Total Number of Families	Have	Do not have
Category :1	Dhumci gaon	33 100.00	30 90.91	03 09.09
	Mitran gaon	29 100.00	26 89.66	03 10.34
	Puja gaon	22 100.00	21 95.45	01 04.55
	<b>Total</b>	84 100.00	77 91.67	07 08.33
Category :2	Mondal gaon	24 100.00	23 95.83	01 04.17
	Panchayat gaon	62 100.00	60 96.77	02 03.23
	Subba gaon	68 100.00	65 95.59	03 04.41
	<b>Total</b>	154 100.00	148 96.10	07 04.55
<b>Grand Total</b>		238 100.00	225 94.54	13 05.46

**TABLE: 4.13 PLACE OF KEEPING DOMESTIC ANIMALS (FAMILY WISE)**

Name of the Village Sectors		Separate animal house	Beneath room	Inside home	Total
Category :1	Dhumci gaon	08 26.67	22 73.33	-	30 100.00
	Mitran gaon	06 23.08	18 69.23	02 07.69	26 100.00
	Puja gaon	03 14.29	17 80.95	01 04.76	21 100.00
	<b>Total</b>	17 22.08	57 74.03	03 03.89	77 100.00
Category: 2	Mondal gaon	16 69.57	07 30.43	-	23 100.00
	Panchayat gaon	19 31.67	41 68.33	-	60 100.00
	Subba gaon	17 26.15	48 73.85	-	65 100.00
	<b>Total</b>	52 35.14	96 64.86	-	148 100.00
<b>Grand Total</b>		69 30.67	153 68.00	03 01.33	225 100.00

**TABLE: 4.14 AWARENESS ABOUT FAMILY PLANNING**

Name of the Village Sectors		Opinion		
		Yes	No	Total (couple)
Category:1	Dhumci gaon	22 81.48	05 18.52	27 100.00
	Mitran gaon	21 72.41	08 27.57	29 100.00
	Puja gaon	08 40.00	12 60.00	20 100.00
	Total	51 67.11	25 32.89	76 100.00
Category: 2	Mondal gaon	17 73.91	06 26.09	23 100.00
	Panchayat gaon	37 61.67	23 38.33	60 100.00
	Subba gaon	31 49.21	32 50.79	63 100.00
	Total	85 58.22	61 41.78	146 100.00
<b>Grand Total</b>		136 61.26	86 38.74	222 100.00

**TABLE: 4.15 METHODS USED FOR FAMILY PLANNING**

Name of the Sectors		Traditional	Operated	Modern method	Not followed any method	Newly married	No issue or First issue	Total Couple
Category:1	Dhumci gaon	02 09.09	03 13.64	07 31.82	05 22.73	03 13.64	02 09.09	22 100.00
	Mitran gaon	01 04.76	06 28.57	07 33.33	02 09.52	04 19.05	01 04.76	21 100.00
	Puja gaon	01 12.50	02 25.00	-	04 50.00	01 12.50	-	08 100.00
	Total	04 07.84	11 21.57	14 27.45	11 21.57	08 15.69	03 05.88	51 100.00
Category:2	Mondal gaon	01 05.88	05 29.41	07 41.18	02 11.76	02 11.76	-	17 100.00
	Panchayat gaon	03 08.11	07 18.92	21 56.76	03 08.11	02 05.41	01 02.70	37 100.00
	Subba gaon	01 03.23	05 16.13	18 58.06	07 22.58	-	-	31 100.00
	Total	05 05.88	17 20.00	46 54.12	12 14.12	04 04.71	01 01.18	185 100.00
<b>Grand Total</b>		09 06.62	28 20.59	60 44.12	23 16.91	12 08.82	04 02.94	136 100.00

CHAPTER – V

GENERAL OBSERVATION  
AND  
CONCLUSION

All communities have their own concept of health, as part of their culture. Health, one of the most common themes is variable from culture to culture, one society to another. But study of health is considered in each context to be absence of disease or the state of positive well being whether physical, psychological or both. It involves not only study of definitions and theories of disease but also that of all those cultural and social conditions and elements which contribute to the person's concept of health and his or her development and relationship to the world and to others. This has to be attended by every person and has to be considered as social goal.

Every culture, irrespective of its simplicity and complexity has its own beliefs and practices concerning disease and evolves its own system of medicine in order to treat disease in its own way. Every known human society has developed a pharmacopoeia and a therapy be it magico-religious, secular, empirical or scientific according to western system. The presence of professional healers and the practice of medicine have been cultivated as part of health care system also in India for several centuries before. There have also been instances of definite system of medicine based on nature on the earliest Indian Literature. The traditional professional healers have been reported since the time of Rig Veda. This system has survived after centuries neglect. In this global era this system has emerged as an alternative to the modern medicine. A substantial number of rural as well as tribal people still depend on this alternative system of medicine as this system is intermingled with their culture.

India is the seventh largest country of the world. 70% of Indian lives in villages. Inhabiting mainly in rural India, the tribal folk forms about 8.08 % of the total population. About 67.5 million people have been enumerated in the country as being member of indigenous population. The independence of India from British dominance however has been a turning point in India's destiny and consequently of its huge tribal inhabitants. The tribal, for the first time became a political entity and incorporated as section of society needing special attention in matters concerning education, employment and health condition. The planned development made special provision for the tribal regions and this was closely monitored through the constitutional bodies. Although, after fifty years of independence still majority of them goes hungry nights, lack access to even the basic necessity like safe drinking water, sanitation and live in a state of object poverty. In the developing countries like India, the threats to health security are usually greater for the poorest people in the rural areas and particularly among the tribal.

It is stated that the present study is made to explain the concept of health, disease, medical system, medical belief, related religious practices, diagnostic process and treatment among the Totos of Totopara, Alipurduar Sub Division, District- Jalpaiguri, West Bengal, India. Village Totopara was selected because Totopara was the only residence of the primitive tribe Toto population. With their own unique cultural identity the only primitive tribe of North Bengal Toto population only resided in that particular village partially secluded from the main stream population. But the region was tribal dominated area and number of tribes resided in the surrounding location. The village was also surrounded by dense forest which was helpful for ethno- medical enquiry. As the present study deals with the health behavior, disease pattern, treatment process i.e. health condition among the Totos, so objectives were made considering the facts of different situation. Depending on facts and considering the situation data were collected. Data were collected about types of disease, healing techniques preferred, traditional medicines among the said tribe along with the magico-religious as well as ethno-medical healing processes. Role and activities of traditional healers were evaluated. Individual as well as community level health related cultural and religious practices were also evaluated in detail. Study was also made to know the role of modern Medical Institutions in their life. Particularly the infrastructure and facilities which were extended to the studied tribe were evaluated in detail from the ground level medical institution Sub-Centre, Primary Health Centre (PHC) to Madarihat Block Primary Health Centre (BPHC) and State General Hospital at Birpara. The role, activities and acceptance of the modern medical practitioners were also evaluated. One of the objectives of the present study was to know the implementation and extend of success of different Government initiated preventive and promotive health care services (such as Integrated Child Development Service). Special emphasis was also given to the health hygiene concept and child health condition of the population. Attention was given on drinking water, sanitation and also family planning concept among the studied tribe.

It has already been stated that there were six village sectors where the studied population resided. Considering the scope and objective of the proposed study all the six village sectors were selected and all households were also covered. For pursuing specific objectives the village sectors were categorized. Categorization was made on the basis of certain criteria viz. distance from the local Primary Health Centre and market place. Literacy rate and economic condition were considered criteria while categorization was made.

Category-1:- Located farthest from the said market place and from the only modern medical institution (Totopara PHC). So, limited health facilities were available in close proximity. Very ill equipped communication was noticed to the local PHC or any other place. The absence of quack was also additional parameter. Three village sectors were chosen under this category viz. Dhumci gaon, Mitran gaon and Puja gaon.

Category-2:- Those were nearest to the modern medical institution and market place. Communication was good in comparison to the category-1 village sectors. Three village sectors were chosen under this category viz. Mondal gaon, Panchayat gaon and Subba gaon.

The only modern health institution Primary Health Centre (PHC) was situated in Panchayat gaon. Main market place was located just at the junction of Mondal gaon and Subba gaon. The house of only quack of Totopara village was situated in the Panchayat gaon village sector. Libraries, Bank and Post Office were situated in Panchayat gaon.

In general it could be said that the studied tribe distributed in all the six village sectors had supernatural belief. It was also found that the belief was particularly prevalent in connection to health (both in case of individual well being as well as community well being) disease and disease related symptoms and misfortunes. Differences were although found in terms of level of observances of different norms and regulations. Differences in belief pattern and in understanding about the role of supernatural agencies behind the causation of misfortune were also observed. Belief upon the supernatural forces was very prominent among the villagers of category-1 village sectors, especially among the villagers of Dhumci gaon. The belief was less prominent among the villagers of category-2 village sectors, especially in the village sector Mandal gaon. Point to be noted that literacy rate was higher in category-2 village sectors in comparison to the category-1 village sectors. Further those village sectors were well communicated with Health Centre and market place where interaction with the outside people was possible. So, it is seen that education, modern medical system and communication are important factors for stimulating people to less belief in supernatural power.

Differences were noticed between the villagers of category-1 and category-2 village sectors regarding the level of participation in community level worship. In community level festivals

like *Ongchu*, *Mayu* and *Sordey*, participation of category-1 village sectors was much more prominent which intern indicated more dependence on the supernatural power among the people of category-1 village sector. Eventually, that dependence sometimes molded their psychology regarding choosing option of treatment procedure. It was also observed that the young generation of category-2 village sectors did not prefer active participation in religious festivals. One point should be mentioned here that supreme deity *Senja*, worshipped for the well-being of the community is compulsorily propitiated in the festival of *Ongchu* and *Mayu*. So in the context of worship of the prime deity a small difference was found between category-1 and category-2 village sectors which often diversely reflected in their health behavior.

All the villages had some belief upon ghost and soul in relation to attack of specific disease and disease related misfortunes. In majority of the cases, there was no specific demarcating character between ghost and soul. According to the villagers, character of soul or ghost is always malevolent in nature and always causes harm to the people. This concept was equally supported by both category-1 and category-2 village sectors. One point should be added here that villagers from category-2 village sectors reported that ghost could be seen in category-1 village sectors as forest was situated in close proximity. Surprisingly, the fact was supported by the villagers of category-1 village sectors. So, the presence of the concept of ghost or soul was recorded, although it was less prominent in category-2 village sectors, particularly among the villagers of Mondal gaon and Panchayat gaon. Higher percentage of literate people seems to be the main influensive factor to overcome from such belief.

But in case of health related family level worship and clan level worship a clear demarcation was also observed between category-1 and category-2 village sector. Family level worships were performed regularly with all the required ingredients in number of Toto families in category-2 village sectors (viz. Mondal gaon and Panchayat gaon). But the same family level worships were not regularly observed among the villagers of category-1 village sectors although they wished to perform all those rituals. Economic solvency may be the only probable cause behind this phenomenon.

The issue of village level participation was reported for observing taboos and worshipping deities in relation to health, disease, treatment and over all well-being at community level disease causation. For example, community level participation was observed at the time of

worship of supreme deity *Senja* although the extent of participation varies sector to sector as well as family to family. So the taboo and restrictions connected with *Senja* were more or less followed by the community members irrespective of sectors. But, in case of disease causation at individual level, disease related taboos and restrictions were mainly confined within the family members only. Village level participation was not reported for observing taboo and worshipping deities (related with particular disease) at individual disease causation. Many of the villagers, particularly from the category-2 village sectors realized that disease and health was the individual personal affair and should be handled at personal level. Nothing could be achieved through community participation. Sometimes the young generation did not prefer the family level participation also and the disease related taboo and restriction was followed by the affected individual only. Overall village level participation was reported to decrease among the studied tribe particularly in the context of health and disease causation. Changes in the concept of health, disease and treatment may be reshaped their health behavior.

Very crucial role and activities of traditional healers were noticed and reported in various circumstances. In case of category-1 village sectors (no modern health facility in close proximity), *people were much dependent upon them as the healers were living in those village sectors*. So, people could access them whenever they needed their assistance. There was a difference found between men and women folk. Women were much much fond of traditional healing process (table 3.6). Distance of Primary Health Centre could be the probable cause of their reluctance towards modern medical technique. People from category-2 village sectors were found comparatively less interested regarding choosing traditional treatment in comparison to the category-1 village sectors. One point should be mentioned here that while choosing the treatment procedure, the type of disease or disease related misfortunes were evaluated separately by the patient himself (personalistic belief system) or the family members. For example, quantitative data showed that patient suffering from jaundice always preferred traditional medicine, not the modern one. On the other hand, in case of malaria and high fever they preferred to consult modern medical practitioners in Totopara Primary Health Centre. This phenomenon was observed among all the studied villagers irrespective of sectors. Psychological assurance and faith could be the prime cause of choosing traditional treatment. On the other hand, fast relief from fever seems to be the cause of choosing modern treatment in case of Malaria (table 4.3.1-4.3.6).

As observed reluctance towards health related magico religious practices had arose among the studied tribe particularly in Mondal gaon and Panchayat gaon. As reported by the villagers, death of number of traditional medical practitioners could be the probable cause. The descendants of the traditional healers were not so much interested to acquire or to learn the process of traditional treatment because they did not have much faith on traditional healing process. They also opined that, only through magico-religious practices recovery from diseases like malaria, tuberculosis were possible. One point should be mentioned here that, traditional healing practices had never been primary occupational pursuit among the Totos. All the traditional healers took traditional healing practices as secondary occupation or sometimes they exercised it as a welfare task. So, in one hand if decreasing faith towards traditional medicine was considered one cause, lack of monetary gain or business profit should be the another probable cause behind that reluctance. Faith on herbal medical practice was another striking feature among the studied population. This phenomenon was seen among the villagers of all the six sectors although faith on magico-religious practitioners (without the applications of herbs) was decreasing among the people. Particularly the younger generation argued clearly that disease or misfortunes could not be ward off only through magico-religious practices. As reported, the long term treatment of traditional healer was no more accepted among the community people. They wanted quick relief. Instances were reported, to achieve quick recovery sometimes they took overdose of the prescribed medicine. Villagers reported that serious patient could not be tackled by the traditional healers (particularly in case of high fever, loose motion). According to the villagers of all the six sectors, if cause of disease was considered supernatural, then they preferred to avail the traditional way of treatment, considering the availability and efficiency of the healers. Regarding the belief pattern, differences were much more prominent between the present generations and previous generation rather that sectors.

So, variations in the educational attainment particularly among the present generation could be the responsible factor for changing conception among the studied tribe. Tendency of less dependence towards traditional treatment arose due to non availability and less efficiency of the traditional healers. Less tolerance and demand of quick recovery of the patients were another two responsible factors which often reshaped their traditional concept of achieving well-being.

Restriction to forest accession and monocultural forestry were another two important causes for not getting proper treatment through the traditional healing procedure. As part of commercial afforestation betel nut, ginger cultivation took place at Totopara at a large scale. Sal, Segun, Gamari etc were newly introduced as part of forest policy which often replaced the previous forest ecology. As a result, important as well as essential medicinal plant species were gradually disappearing from the surrounding forests. Deforestation was another important factor. Due to monocultural forestry, deforestation and commercial afforestation various medicinal plants were unavailable to the traditional healers which intern adversely affected the whole traditional treatment system of the Toto society.

The belief in the interference of supernatural agency in the context of health was still found among the studied tribe. The idea that different deities and spirits were connected with various disease and disease related misfortunes was very much found among the elderly folk of the population. The above facts gave a valuable support that role of traditional healer was important in Toto society particularly among the elderly folk of the studied tribe. Same cultural value of healers and patients actually portrayed a positive picture.

Since independence, Government of India has been planning various centrally sponsored programmes for the overall development of the tribal population. Main responsibility of infrastructures and manpower lays on State Government which is supplemented by Central Government and external agencies (like World Bank, UNICEF, WHO etc). The primary responsibility for providing drinking water and sanitation facilities in the country rests with the State Government and more specifically the local bodies in both rural and urban areas. The central allocates funds. Regarding the family welfare and disease control program, India became the first country to formulate a National Family Planning Programme in 1952. The focus of Indian Health Services right from the early 1950s has been health care for women and children also. Successive five years plans have been providing the policy frame work and funding for the planned development of nationwide health care infrastructure and manpower. For example, centrally funded Integrated Child Development Scheme provides food supplement to the mother and child.

At the time of independence, healthcare services were hospital based and curative, but unfortunately urban. However, efforts were made to improve coverage and extend the integrated maternal and child health care services to rural areas as part of block development

programme. In 1960s safe effective vaccines for the prevention of 6 childhood disease became available. During 1970s initiatives were made to improve the health and nutritional status of women and children. The massive dose Vitamin A programme, National Anemia Prophylaxis programme, food supplement to the pregnant and lactating women and pre-school children through ICDS were major initiatives. The major thrust during the 1980s was to operationalize the WHO's Alma Ata declaration of health for all by 2000 AD by establishing a network of centers in urban and rural areas to provide essential primary health care. To meet the need Government made effort to build up primary, secondary and tertiary care institutions and link them through appropriate referral system. The national health policy gave high priority to provide health services to those residing in the tribal, hilly, backward areas as well as to detect and treat endemic disease affecting the tribal population.

The studied tribe came under the umbrella of modern health care system after the establishment of Totopara Primary Health Centre. Various Government initiatives came into reach of the studied people after 1993. In the present study it was noticed, at primary level all the village sectors were covered by the sub-centers. As it was mentioned in the previous section of study, there were only one sub-centre in the studied village and it was attached with Totopara Primary Health Centre. Villagers from category-1 village sectors (distant from Primary Health Sector and market place) had to face difficulties to access the sub-centre due to long distance and adverse road condition along with natural barriers such as rivulets. They had to face much more difficulties particularly in rainy days. Despite the said constrains, villagers went to the sub-centre for various immunization purpose. Accession of sub-centre was quite easy for the people of category-2 village sectors. Sub-centre was situated itself on Panchayat gaon and close vicinity to Mondal gaon and Subba gaon.

In the context of PHC, the villagers from all the six studied village sectors were reported to avail it as per requirement, because that was the only modern medical institution of the village. As stated the communication between the category-1 village sector and PHC was not good enough and also difficult in rainy days. The villagers from category-1 village had to travel 2-5 Kms to reach PHC. This could be one of the probable cause that women folk from category-1 village sectors preferred to avail the traditional healing system in comparison to the women folk of category-2 village sectors (table 3.6). But the institution was easily accessible to the villagers of category-2 village sectors, as it was situated in close vicinity. The reverse scenario was observed among the population of category-2 village sectors.

Regarding the male-female differentiation, female population in comparison to male, much preferred the modern institution of the village. According to them as the PHC was situated as close vicinity, they could easily access the institution any recess time at anyday even after completion of regular household activities.

Villagers availing the treatment of PHC were more or less satisfied by the treatment and existing infrastructure. Doctor, nurse and health staff tried to extend maximum service with their limited infrastructure. After the establishment of PHC, in a general sense it could be said that for any type of ailment, the studied population prefers the only PHC of the village. This fact can be supported by quantitative finding also (table 3.6). But critical patients were referred to Madarihat BPHC or Birpara State General Hospital depending on the condition of the patient. But the natural barriers such as river and rivulets caused obstruction in the referral service system, particularly in monsoon. Ambulance facility was available and serious patients could be transferred to Birpara State General Hospital. But it was difficult particularly in rainy season: Villagers had to face lots of difficulties for shifting the patients. Almost 24 hours emergency service was provided by the PHC as reported by the villagers. Steady supply of medicines was also reported except few.

Villagers of all the studied six sectors were availing the facilities of Madarihat BPHC (upgraded rural hospital) but it was mainly confined within OPD except delivery cases. As reported in the previous chapter the concern BPHC was upgrading to the rural hospital during the field survey, so only one category of patients was admitted and they were the malaria and fever patients. There was no such bed available for admission, so the people were not getting the full facilities. As reported by the BMOH villagers can get all the facilities after completion of the whole process of up gradation including in patient provision. One point should be mentioned that the studied villagers visited Madarihat BPHC mainly for snake bite purpose if medicine was not available in Totopara Primary Health Centre. According to the studied villagers, facilities provided by Madarihat BPHC and Totopara PHC were almost same.

The Birpara State General Hospital was one of the most preferred hospitals among the studied villagers of all the six sectors of Totopara village. The communication and road condition between Birpara and Totopara was so adverse and it was totally cut off during rainy days. It was noticed that they had to spend whole day for OPD treatment only. So, for further

diagnosis they had to stay either in Madarihath or Birpara which was difficult to afford by the poor section of the studied villagers. For that reason, they preferred to take admission in the hospital to carry out the whole process of treatment at a stretch. The study also reported that people from both the poor and rich section of Toto Society accessed State General Hospital. But as reported by the villagers, they were not fully satisfied with the medical aids from the hospital. Purchasing of expensive medicines from the outside shop was found to be one of the important causes. They also complained about the out of order pathological as well as diagnostic instruments. They also had to face difficulties for managing free beds.

A conspicuous psychological and cultural difference was found between the modern medical practitioners and the studied tribe. The modern medical practitioners who came to Totopara PHC belong to different cultural background and hence in various cases they did not able to understand the conception of the studied tribal patient. Not only that, they were always in hurry to change their job place and to get transfer outside Totopara. As an obvious result, they even not eager to know the actual consequence of the diseases and patients perception about that. So, there was always some gap found between the two. It was observed; sometimes patients were not properly guided by those practitioners regarding the causes, precautions of the diseases. Only the course of the medicines was prescribed. Doctor from Totopara PHC did not involve with private practice, although doctors from Birpara State General Hospital were reported to engage with private practice. As the study showed, villagers did not frequently visit private medical practitioners. Only few well-to-do families could afford the expanses of private medical practitioners. According to them, the behavior was noticed to change in case of same person doing his Government duty and private practice. This said persons were reported more conscious and friendly while doing private practice.

The study showed that the concerned tribe was also comfortable to visit the quack than a doctor. As stated in previous chapter there was only one quack in the whole Totopara village. As he was residing in the village since a long period, he was well aware about the perception of the studied community. He was well known about the socio-cultural framework of different strata within the community itself. That knowledge helped him a lot regarding clinical diagnosis and also at the time of prescribing medicines. On the other hand, villagers reported that the quack had more patience to listen the problem in the patient's own way and also gave the prescribed medicines at a minimum cost. Villagers also reported that, they

consulted quack for some specific minor ailment because he was failed to treat the critical patients, and referred to Cooch Behar. According to the people from the six village sectors, remedy from the quack treatment was less than that of the hospital doctor. As the quack was an aged person and he himself maintained his chamber, he was unable to properly maintain the overall hygiene and sterilized environment of his chamber. In spite of various constrains, villagers from all the studied sectors consulted with the quack, for various minor ailments. It was also seen from the present study, there was a difference found between the male and female section of the population. Male folk was found much more dependent on quack in comparison to the female folk. Quantitative data obtained from table 4.1.6 also supported the above said fact.

Regarding the child birth, before the establishment of Totopara PHC, villagers were very much accustomed with homebirth as there was no other alternative. Ill communication and distance between Totopara and nearest medical institution (before the establishment of Totopara PHC) and also the poor economic condition compelled them to depend upon the home birth. According to the villagers, there was a time when almost all the elderly women could perform the task of *dai* (midwife) for the said purpose. During the field study period it was found, the trend of home birth had been changing, specifically after the establishment of Totopara PHC. Villagers from both category-1 and 2 village sectors were found satisfied with the treatment regarding prenatal and post natal care of the mother and were willing to avail the service provided from PHC. Education and large scale campaigning could be the probable cause behind the recent trend. Apart from that 'Janani Suraksha Yojana Scheme' was found to be another important factor which attracted the poor tribal for choosing hospital delivery. Through that scheme a mother could get up to Rs 500/- for the said purpose. As noticed, not only poorer section of population, many well to do families who could afford the private doctor or nursing home they also largely depend on Totopara PHC for the delivery purpose. For cesarean cases, the studied villagers had to go at least Birpara State General Hospital, although communication was no good-particularly in rainy season. Further the Totopara PHC had also ambulance facility for smooth referral procedure.

More or less all the studied people had grown a concept about immunization programmes particularly polio vaccine and pulse polio dose. They had realized the necessity of polio dose. In this context, Primary Health Centre, Sub-Centre and Anganwadi centres played very vital role. The concept had grown because of large scale campaigning. Education and interaction

with outside world could play a vital role. Villagers also reported that they came to know the National Polio dates through various T.V Channels also. It was already stated that category-1 village sectors (distant villagers with no modern medical facilities) had been facing problems regarding the polio dose, as the polio distributing centre (the only sub-centre) was located in category-2 village sector Panchayat gaon. So, the villagers had to travel 2-4km distance to reach the location. To solve the problem Anganwadi centres were engaged as polio distribution camp in various village sectors. Apart from that all the village sectors were covered by the ASHA (Accrediated Social Health Activists) workers for regular polio dose. But the studied tribe showed interest about polio dose and pulse polio programmes and general awareness had risen up to the mark.

Government funded ICDS (Integrated Child Development Service) Scheme was properly executing though Anganwadi centre. Villagers were also getting the facilities provided in ICDS Scheme. As noticed, it was not always upto the mark as recommended by Family Welfare Department. Irregular food supply was also noticed in various cases. As noticed, altogether twelve ICDS centers were working in all the six sectors of the said village. Angandwadi worker and helpers were reported regular in their work schedule. Irregular payment sometimes made them reluctant in their job. It was found that cooked food was the main attraction of the centre. The timing of the centre (8am to 11am) sometimes clashed with the parents work schedule, so they could not accompany their kids; for that reason many small kids did not feel interest to attain the centre. There were various instances that small kids alone came to the ICDS centres. This was particularly true among those whose houses were situated at close proximity to the ICDS centres.

The role and activities of few Anganwadi teacher and worker was not satisfactory as recommended by the Government rule. They did not take regular initiatives to inform the parents and communicated the idea and concepts about the actual role of Anganwadi Centres. This was particularly true for those teachers who came from outside the Totopara. They were found always in hurry to close the centre right at 11:00 am. One striking feature was noticed among the studied population; they compulsorily registered the name of their children and sent their kids to the centre twice or thrice in a week for retaining their name in the centre. They do that compulsorily for getting the certificate which is inevitably needed for taking admission in the primary school. Another point should be mentioned that, sometimes communication gap was noticed between the Non-Toto teachers or helper and the Toto

parents. Apart from that, as the Totopara village was overall Nepali dominated, so the Nepali kids got more attention than that of Toto children. It was also noticed that pregnant mother very frequently visited the ICDS Centre. Less campaigning may be the cause of such kind of reluctance.

Regarding the health hygiene concept, the studied population was found not very much conscious. But there was a difference found between the poorer section and the economically solvent families. It was noticed, those who were living in concrete houses they maintained proper hygiene. But it was lacking among the poor section of population. Unfortunately due to poor economic condition they were not able to purchase many things which were necessary for the said purpose. Due to economic crisis they were unable to construct separate house for keeping domestic animals. This compelled them to share same courtyard and even same house with them. Due to the long practice of cohabitation with the domestic animals, they were habituated to stay together. They do not even feel the urge to construct separate animal houses. As a result, numbers of villagers were found to suffer from various animal borne diseases. Comparing to the main stream population, general health hygiene concept among the studied population did not reach up to the mark and needed much more attention from the Government. Regarding the dust pollution, the people did not know how to fight against the problem. They adjusted with the said problem, but they had a long term demand of concrete road. According to majority of the villagers, permanent metal road could minimize the dust problem.

The studied population was also devoid of getting pure and safe drinking water. Not only the safe drinking water, water scarcity had been the acute problem of Totopara village, and the problem was equally same in all the studied six sectors. Swajal Dhara Scheme under Rajiv Gandhi National Drinking Water Mission could not be possible due to natural constraints. As stated earlier, water of "Tading Khola" from Bhutan was stored in tanks used for drinking water purpose. As noticed it was insufficient as per the requirement of the population. The poor villagers were not able to construct individual tank for personal use only. They usually stored the supplied water once or twice in a day in some big containers and use as per the requirement. The poor section of population personally did not use any purifying agent to purify the water which they store for drinking purpose. This was common in particular for category-1 village sector. But many well to do families in category-2 village sectors,

particularly in Panchayat gaon and Mandal gaon used separate personal purification system. But it was noticed that whole village had been suffering from acute water crisis.

It was noticed that Total Sanitation Programme was not properly implemented in studied village. This was due to poor economic condition and also lack of awareness. The villagers were not well aware about the water borne as well as infectious diseases that can be happened due to improper sanitation. Further, it was also noticed that few villagers had enough awareness but due to bad economic condition many of them were not in position to purchase the required material for sanitation as recommended by the Government. There was a sectarian difference found between category-1 and 2 village sector. In category-2 village sectors altogether 62 numbers of families had scientific latrine. In comparison to that, in category-1 village sectors only 38 numbers of families had scientific sanitation. If lack of awareness was one prime cause of this difference, economy was another important cause. Lack of educational attainment also made some difference in various cases. Apart from that, enough space within the village (particularly in case of category-1 village sector) also made them reluctant to make sanitation and helped them to continue their traditional practice. An intensive and right way of campaigning about the issue was not noticed in all the studied village sectors, particularly among the category-1 village sector.

Concept of family planning is very sensitive and controversial issue among the studied tribal population. As the tribe is categorized as Primitive Tribal Group; so, permanent or surgical ligation is restricted to the said population as per the Government rule. But present study reflected a reverse scenario. Use of contraceptives was very much found among the studied villagers. This was particularly preferred by the young generation. Because contraceptives were easily available and they could get that from local Primary Health Centre at totally free of cost. As result of population control campaigning, people started to avoid using the traditional method. Unavailability of herbal medicines and also the traditional practitioners were also the added criteria in this regard. Study also showed that, hiding their identity many of the studied tribals went for surgical ligation in various places outside Totopara village. This trend was found mainly among the young generation.

Government afford to increase the population size of the concerned tribe is not working because of the above said mal-practice. Poor economic condition is to be the prime cause behind such misdeed. In case of many diseases, it was found that the studied people were

confused about choosing the treatment procedure. They used to go for specific treatment for the particular disease. For example, in case of malaria they preferred modern treatment technique whether in case of jaundice they preferred traditional way of technique. But in case of tuberculosis, people used to go for both traditional and modern way of treatment. This was supported by the quantitative data also (table 4.2.-4.3.6.). So, it was found that the studied tribe had their own perception whether to undergo traditional or modern treatment considering the nature and cause of ailment. In various cases, simultaneously they acquired both traditional and modern method of treatment. But unfortunately did not get expected result, because of less availability and patience in one and not taking the prescribed medicines properly in the other. In this globalized era, they expected quick recovery which was not possible for traditional treatment. Due to various forest laws, restriction was imposed to them for the easy accession of the forest resources essential for traditional treatment. Due to deforestation many important plant species extinct from the village and surrounding forest which adversely affect their indigenous treatment process.

Present study reveals that there was a definite concept about health, disease and treatment among all the studied villagers. It seems to be the admixture of both traditional and modern way of treatment. Interactions with the surrounding environment often reshape their perception towards disease and influence their choice at the time of opting treatment procedure. Even in the same village sector, variations were found considering the education and economy. The study also revealed the present status of existing traditional medical system, availability of modern medical system, impact of modern medical system among the studied tribe. It was also seen that traditional medical system and modern medical system is cohabiting side by side in Toto society.

So, in brief it could be said that the concept of health, disease and treatment is changing and losing its traditional way due to impact of modernization. It was specifically true in case of magico-religious practices. On the other hand, wide acceptance of modern medical system among the studied people still needs time. There are some possible recommendations for the well being of the community.

- The best possible way for maintaining any indigenous culture is to preserve and encourage the culture. The indigenous Toto society had their own concept

of health, disease and treatment as part of their indigenous culture which should be protected, preserved and encouraged.

- The studied tribe Toto had a huge knowledge of traditional medicine (both plant and animal originated). This traditional medical knowledge should not only be protected but also should be cultivated.
- Majority of the traditional medicine men of Toto society belong to lower economic group. Help should be extended from the Government in such an extent that they could devote their life only in cultivating traditional knowledge without any interruption. Government should provide separate infrastructure, so that they can manufacture their indigenous medicines.
- In majority of cases, descendants of Toto traditional medicine men did not show any interest to learn or practice the traditional medical knowledge of their ancestor. As a result, after death of traditional healers various indigenous healing techniques disappeared from their culture. Government should take necessary step for documenting the indigenous knowledge of Toto society, so that it could be used for larger society.
- Government should take step to aware this forest dwelling tribe regarding the protection of their own environment. They should be involved directly for the said purpose.
- Regarding the modern medical system, there was only one Sub-centre for serving the whole population of Totopara village (more than 3000 population) which was not sufficient. Number of sub-centre should be increased for providing quality service as well as to cover the whole population. Sub-centre should be more equipped with medicines and instrument. It was observed during the study days that sub-centre was using refrigerator of PHC. There was an urgent need of separate refrigerator for sub-centre. It was also found that there were only three working and timing was from 8.00 a.m. to 1.00 p.m. It was a demand from the studied population that the sub-centre should be open in all working days instead of three days. Timing should also be extended, so that the people can access the institution for longer time.
- Condition of only PHC of Totopara village should be improved. According to the working doctor of Totopara PHC, it should be equipped with more instruments. Gyne ward should be introduced. Operation theatre was an urgent

need especially for the purpose of cesarian delivery. PHC also needed a full time gynecologist. During the study days it was observed number of delivery cases were referred to Birpara State General Hospital only due to lack of OT and specialized gynecologist. Apart from that steady and regular supply of medicines should always be maintained. It was noticed that the Totopara health centre suffered from scarcity of anti-venom. Regular supply of anti-venom in PHC can save life of the poor tribals specifically in rainy season. Another point should be mentioned over here, that generator facility should be introduced in Totopara PHC for uninterrupted power supply. Because power cut was a regular and common problem of Totopara village.

- As per the demand of the studied population, Madarihat Block Primary Health Centre (BPHC) upgraded Rural Hospital should be more equipped, through establishing separate departments like ENT, Cardiology, Eye and Orthopedics. Diagnostic tools, X-ray machines should be maintained properly, because numbers of machines were found out of order during the study days. Government aided ambulance facility was not available, but should be introduced urgently for executing proper referral system.
- According to the superintendent, Birpara State General Hospital needed a burn unit & Child health care unit.
- In every institution (from PHC to District hospital) separate section should be introduced for tribal patients (both in Indoor and Outdoor) particularly the tribal dominated area like duars. Timing should be extended. Considering the economic condition of the studied people, the population should get the modern health facilities totally free of cost.
- Awareness campaigning in Totopara village should be more extensive on Government part for enhancing the people's knowledge about safe drinking water, sanitation and immunization.
- Regarding the establishment of Anganwadi centres distance of village sectors and natural barriers should be considered properly. Anganwadi teachers, helpers, local health officers and teachers should play more active role regarding the health education.

- Regarding the execution of treatment doctor, nurse and health workers should be more attentive keeping in mind that the beneficiaries carry a separate socio cultural identity.
- Population control programs should be executed in such a way that the balance could be maintained between the demand of the population and the Government.
- Government should be more careful to initiate any health scheme, keeping in mind the poor economic condition, education attainment, faith and of course distinct ideology.

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## BIBLIOGRAPHY

## Bibliography:

- Bairathi, S. 1991, *Tribal Culture Economy and Health*, Rawat Publications, Jaipur, India.
- Baru, R.V. 1998, *Private Health Care in India Social Characteristics and Trends*, Sage Publications India Pvt. Ltd. New Delhi, India.
- Basu, S.K. and D. Dhali 1980, *Underdeveloped Tribes – Projects on the Totos of Jalpaiguri*, Cultural Research Institute, Calcutta, Government of West Bengal.
- Basu, S. 1995, *Toto Bhashar Ruprekha* (in Bengali), unpublished Ph.D. Dissertation, University of North Bengal.
- Bhadra R.K. 1997, *Social Dimension of Health of Tea Plantation Workers in India*, N.L.Publising, Dibrugarh.
- Bhasin, M.K. (ed.) 1990, *Habitat Habitation and Health in the Himalayas*, Kamla Raj Enterprises, Delhi, India.
- Bhattacharya, M. 1998, *Toto at Cross Roads*, Aparna Book Distributor, Calcutta.
- Bhowmick P.K. 2004, *Primitive Tribal Groups in Eastern India Welfare and Evolution*, Gyan Publishing House, New Delhi, India.
- Bodding, P.O. 1940, *How the Santals Live*, Institute for Sammenliagennde Kyulturforskingn, Oslo.
- Bose, A., U.P. Sinha and R. P. Tyagi (eds.) 1990, *Demography of Tribal Development*, B.R. Publishing Corporation [Division of D.K. Publishers Distributors (P) Ltd.], Delhi, India.
- Bose, P. K. (ed.) 2006, *Health and Society in Bengal A Selection from Late 19<sup>th</sup> Century Bengali Periodicals*, Sage Publications India Pvt. Ltd., New Delhi, India.
- Brown, P.J. 1998, *Understanding and Applying Medical Anthropology*, Mayfield Publishing Company, Mountain View, California, London, Toronto.
- Bruce, G. 1997, *Soul Healing*, Pustak Mahal, New Delhi.
- Bury, M. and J. Gabe (eds.) 2004, *The Sociology of Health and Illness*, Routledge, London EC4P 4EE, UK.
- Carstairs, G.M. 1955, *Medicine and Faith in rural Rajasthan* In B.D. Paul (eds.) *Health, Culture and Community*, Russel Sage Foundation, New York.
- Census of India 2001, Office of the Registrar General, India, New Delhi.
- Census of India 2011, Office of the Registrar General, India, New Delhi.

- Chacko, P. M. 2005, *Tribal Communities and Social Change*, Sage Publications India Pvt. Ltd. New Delhi, India.
- Chadha, D.K. (ed.) 1992, *Environmental Crisis in India*, International Book Distributors, Dehradun, India.
- Chakraborty, P. and K. Chattopadhyaya 1964, Some Aspects of Toto Ethnography In *Bulletin of Cultural Research Institute*, Vol. 3, No. 3 and 4, Calcutta.
- Channa, S.M. (ed.) 1998, *Medical Anthropology Health Healers and Culture*, Cosmo Publication Div. of Genesis Publishing Pvt. Ltd., New Delhi, India.
- Channa, S.M. (ed.) 2002, *Tribal Religion and Economic Life*, Cosmo Publications, New Delhi, India.
- Chaudhuri, B. 1967, *Magic vs Medicine in a Tribal Village* In *Adibasi*, Vol.9, pp-3-9.
- Chaudhuri, B. (ed.) 1986, *Tribal Health: Socio-Cultural Dimensions*, Inter India Publication, New Delhi (India).
- Chaudhuri, B. (ed.) 1990, *Culture and Environmental Dimensions on Health*, Inter India Publications, New Delhi (India).
- Chaudhuri, B. 1993, Health, Culture and Environment: The Tribal Situation in India In M. Miri (ed.) *Continuity and Change in Tribal Society*, Indian Institute of Advanced Study, Simla.
- Chaudhuri, B. 1994, Tribal Health and Development: A Study with special Reference to Tribals of Bihar In U.P. Sinha and R.K.Sinha (eds.) *Population and Development in Bihar*, B.R. Publishing Corporation, New Delhi.
- Chaudhuri, B. 2001, *A Bibliography on Tribal Studies in India*, CARID, Kolkata.
- Chaudhuri, B. 2003, *Health Forest and Development: The Tribal Situation*, Inter India Publication, New Delhi.
- Chaudhuri B, D. Das Gupta and K. Chatterjee 1990, *Tribal Medicine*, Regional Research and Study Centre, Midnapore.
- Chaudhary, S.N. (ed.) 2012, *Tribal Health and Nutrition*, Rawat Publications, Jaipur.
- Chowdhuri, M.K. 2005, The Totos, In S.K. Chaudhari and S. Sen Chaudhari (ed.) *Primitive Tribes in Contemporary India*, Mittal Publications, New Delhi, India.
- Clement, F. 1932, *Primitive Concepts of Diseases*, University of California Publications in American Archeology and Ethnology, Vol. 32.
- Dalton, E.T. 1872, *Descriptive Ethnology of Bengal*, Reprint 1960 by Indian Studies: past and present, Firma KLM, Calcutta.

- Das, A.K. and S.K. Banerjee 1962, Impact of Industrialization on the Life of Tribals of West Bengal In *Bulletin of the Cultural Research Institute*, Tribal Welfare Department, Government of West Bengal, Calcutta.
- Das, A.K., R.N. Saha and others (eds.) 1992, *West Bengal Tribes*, SP No. 35, Cultural Research Institute, Calcutta, West Bengal.
- Das, M. 2004, Disease and Illness and their Ethnomedical Treatment among the Rathwas of Suskal, Gujarat In A.K. Kalla and P.C. Joshi (eds.) *Tribal Health and Medicines*, Concept Publishing Company, New Delhi, India.
- Das, S. 1982, *A Comprehensive Five Year Plan for the Development of the Totos*, Jalpaiguri District Welfare Committee for the Scheduled Caste and Scheduled Tribes(unpublished Mimeograph).
- Deb Burman, P. 1986, Disease: Is it Individual or Societal? In B. Chaudhuri (ed.) *Tribal Health: Socio-Cultural Dimensions*, Inter India Publications, New Delhi.
- Debnath, D. 2003, *Ecology and Rituals in Tribal Areas*, Sarup and Sons, New Delhi.
- Department of Health and Family Welfare, *Annual Report 2009-2010*, Ministry of Health and family Welfare Government of India.
- Doshi, S.L. 1995, *Anthropology of Food and Nutrition*, Rawat Publications, Jaipur, India.
- Elwin, V. 1943, Conception, Pregnancy and Birth among the Tribesmen of the Mikir Hills In *Journal of the Rova Asiatic Society of Bengal*, Vol. 9.
- Elwin V. 1955, *The Religion of Indian Tribe*, Oxford University Press, London.
- Ferraro, G. and S. Andreatte 2010, *Cultural Anthropology: An Applied Perspective*, Wadsworth 10 Davis Drive, Belmont, USA.
- Finkler, K. 1998, Sacred Healing and Biomedicine Compared In P.J. Brown (ed.) *Understanding and Applying Medical Anthropology*, Mayfield Publishing Company, California.
- Foster, G. and B.G. Anderson 1978, *Medical Anthropology*, Wiley, New York.
- Geest, S. V. D. and K. Finkler 2004, Hospital ethnography: introduction In *Social Science and Medicine*, Vol. 59, pp-1995-2001
- Ghosh, B. 1974, Census 1971, *District Handbook Jalpaiguri*, Census 1971 Part X A & B Series -22, Superintendent of Government Printing, Calcutta.
- Ghosh, B.C. 1970, *The Development of Tea Industry in the District of Jalpaiguri (1869-1968)*, W. Newman, Calcutta.
- Ghosh, S.N. 1987, *District Handbook Jalpaiguri*, Census 1981 Part XIII B Series -23, Superintendent of Government Printing, Calcutta.

- Ghurye, G.S. 1943, *The Aborigines So-called and Their Future*, Third edition, The Scheduled Tribe, 1963 Popular Prakashan, Bombay.
- Government of India 1989, Report of the Working Group on Development and Welfare of Scheduled Tribes during Eight Five Year Plan, Ministry of Welfare MN, New Delhi.
- Government of India 1989, An introduction to Rural Water and Sanitation Programme in India, Rajiv Gandhi National Drinking Water Mission Ministry of Rural Development, New Delhi.
- Government of India 1999, Integrated Child Development Service (ICDS), Ministry of Human Resources Development, New Delhi.
- Government of India 2001, National Health Policy, Ministry of Health and Family Welfare, New Delhi.
- Government of India 2002, National Health Policy, Ministry of Health and Family Welfare, New Delhi.
- Grierson, G.A. 1909, *Linguistic Survey of India*, Superintendent of Govt. Printing, Calcutta.
- Grierson, G.A. 1967, *Linguistic Survey of India*, Vol. I Part I, Vol. III Part I, II, Vol. V Part I, II, Reprint, Motilal Banarasidas, Delhi, India.
- Grunning, J.F. 1911, Eastern Bengal and Assam Gazateers- Jalpaiguri, Allahabad Pioneer Press.
- Guha, B.S. (ed.) 1951, *The Tribes of India*, Bharatiya Adimjati Sangh, New Delhi.
- Gulati, S.C. 1988, *Fertility in India*, Sage Publications India Pvt Ltd. New Delhi, India.
- Hiramani, A.B. 1997, *Cultural Correlates of Tribal Health*, B.R. Publishing Corporation, Delhi, India.
- Hunter, W.W. 1872, A Statistical Accounts of Bengal, District of Darjeeling and Jalpaiguri and State of Kuch Behar, Vol X, Turbner & Co, London (Reprint 1974 D. K. Publishing House, Delhi).
- Jain K. A. and P. Visaria (eds.) 1988, *Infant Mortality in India*, Sage Publications India Pvt. Ltd. New Delhi, India.
- Jain, S.K. 2003, *India- The Land and The People Medical Plants*, National Book Trust, New Delhi, India.
- Joshi, P.C. and A. Mahajan (eds.) 1990, *Studies in Medical Anthropology*, Reliance Publishing House, New Delhi.

- Kar, R.K. 1990, Health and Sanitation Versus Culture: An Appraisal of Tea Labour in Assam In B. Chaudhuri (ed.) *Cultural and Environmental Dimensions on Health*, Inter India Publications, New Delhi.
- Kar, R.K. 1993, Health Status of Noctes in Arunachal Pradesh In *Social Change*, Vol. 23, Nos. 2 and 3.
- Kar, R.K. 1997, Anthropology and Health In F.A. Das and R.K. Kar (eds.) *Health Studies in Anthropology*, Dibrugarh University, Dibrugarh.
- Kar, R.K. 2004, Ethnomedicine and Tribal Health: An Illustrative Appraisal In A.K. Kalla and P.C. Joshi (ed.) *Tribal Health and Medicines*, Concept Publishing Company, New Delhi, India.
- Kaushal, S. 2004, Healing Practices amongst the Gaddi Tribe of Himachal Pradesh In A.K. Kalla and P.C. Joshi (eds.) *Tribal Health and Medicines*, Concept Publishing Company, New Delhi, India.
- Kohli, K.L. 1977, *Mortality in India*, Sterling Publishers Pvt. Ltd., New Delhi, India.
- Kshatriya, G. K. 2004, Tribal Health in India: Perspectives in Medical Anthropology In A.K. Kalla and P.C. Joshi (eds.) *Tribal Health and Medicines*, Concept Publishing Company, New Delhi, India.
- Kumari, P. 2003, Asur Festivals In T. D. Robin (ed.) *Fairs and Festivals of Indian Tribes*, Discovery Publishing house, Delhi, India.
- Landy, D. (ed.) 1977, *Culture, Disease and Healing: Studies in Medical Anthropology*, Macmillan Press Ltd., New York.
- Leslie, C. 1967, Professional and Popular Health Culture in South Asia, Needed Research in Medical Sociology and Anthropology In *Understanding Science and Technology in India and Pakistan*, New York State University, Foreign Area Material Centre, Occasional Publication, New York.
- Lewis, O. 1959, Medicine and Politics In B.D. Paul (ed.) *Mexican Village in Health, Culture and Community*, Rossel Sage Foundation, New York.
- Majumdar, A.B. 1984, *British and Himalayan kingdom of Bhutan*, Bharat Bhawan, Patna.
- Majumdar, B. 1978, Toto Upajatir Pujaparban O Samajit Riti Niti (in Bengali) In *Tribitta* (a Bengali journal) North Bengal Special Number, Vol. 10, 1978, Cooch Behar.
- Majumdar, B. 1983, Toto Upajatir Samskritik Pariprekshit – Vyadhi O Chikitsa (in Bengali) In *Manabman* (a Bengali journal) Oct-Dec 1983 No. 4. Calcutta: Pavlov Institute.
- Majumdar, B. 1991, The Doyas: A Small Community of Bhutan In T.B. Subba and K. Dutta (eds.) *Religion and Society In Himalayas*, Gian Publishing House, New Delhi.

- Majumdar, B. 1991, *A Sociological Study of Toto Folk Tales*, The Asiatic Society, Calcutta, India.
- Majumdar, B. 1993, Cultural and Economic Transformation of a Small Tribe in the Sub-Himalayas- A Study of the Totos, unpublished Ph.D. Dissertation, University of North Bengal.
- Majumdar, B. 1998, *The Totos*, Academic Enterprise, Calcutta.
- Majumdar, D.N. 1944, *Race and Cultures of India*, Bombay: Asia.
- Majumdar, D.N. 1993, Disease, Death and Divination in Certain Primitive Societies in India In *Man in India*, Vol. 13.
- Marriot, M. 1955, Western Medicine in the Village of North India In B.D. Paul (ed.) *Health, Culture and Community*, Rossel Sage Foundation, New York.
- Mathur, I. and S. Sharma (eds.) 1995, *Health Hazards, Gender and Society*, Rawat Publications, Jaipur, India.
- Milligan, J.A. 1919, Final Report on the Survey and Settlement Operation in Jalpaiguri District (1906- 1916), Bengal Secretariate Book Depot, Calcutta, West Bengal, India.
- Mitra, A. (ed.) 1954, District Census Hand Book of West Bengal, Jalpaiguri District, 1951, Calcutta, Government of West Bengal.
- Mohanty, P.K. 2005, *Encyclopedic of Primitive Tribes in India*, Vol.1, Kalpaz Publication, Delhi, India.
- Mahanti, N. 1994, Traditional Health Care System among the Tribals In N. Mahanti (ed.) *Tribal Issues: A Non-Conventional Approach*, Inter-India Publications, New Delhi.
- Mukherjee, M. 1939, Final Report on the Land Revenue Settlement Operation in the District of Jalpaiguri (1931-1935), Superintendent of Government, Calcutta, West Bengal.
- Murdock, G.P. 1949, *Social Structure*, Macmillan Co., New York.
- Nagla, M. 1997, *Sociology of Medical Profession*, Rawat Publications, Jaipur, India.
- Naik, I. 2001, *Nutrition and Tribal Health*, Anmol Publications Pvt. Ltd., New Delhi, India.
- Opler, M. E. 1958, Spirit Possession in a rural Area of Northern India In *Reeder in Comparative Religion: An Anthropological Approach*, W.A. Lessa and E.Z. Vogt Row, Peterson Publishing Company.
- Opler, M.E. 1963, The Cultural Definition of Illness in Village India In *Human Organisation*, Vol. 22, No. 1.
- Oraons, M. 1965, *The Santals: A Tribe in Search of Great Tradition*, Detroit: wayne State University Press.

- Park, K. 2005, *Park's Text Book of Preventive and Social Medicine* 18<sup>th</sup> edn. M/S Banarsidas Bhanot Publishers, Jabalpur, India.
- Paliwal, M. 2004, Risk Factor of HIV/AIDS among Tribals in India In A.K. Kalla and P.C. Joshi (eds.) *Tribal Health and Medicines*, Concept Publishing Company, New Delhi, India.
- Pokarna, K.L. 1994, *Social Beliefs, Cultural Practices in Health and Disease*, Rawat Publications, Jaipur, India.
- Prasad, R.S. and P.K. Sinha 2012, *Indian Tribal Life*, Anmol Publications Pvt. Ltd., New Delhi.
- Rajyalakshmi, P. 1999, *Tribal Food Habits*, Gyan Publishing House, New Delhi, India.
- Rani, D. U., M.V. S. Reddy, M. Sreedevamma 2003, *Nutrition and Religion*, Discovery Publishing House, New Delhi, India.
- Rivers, W.H.R. 1924, *Medicine, Magic and Religion*, Har Court Brace, New York.
- Rizvi, S. N. H. 1991, *Medical Anthropology of the Jainsaris*, Northern Book Centre, New Delhi, India.
- Rodrigues De Areia M.L. 1998, *Angola, bibliografia antropológica*, Departamento de Antropologia, Universidade de Coimbra.
- Roy Barman, B.K. 1958, Problems of Family Planning Among the Scheduled Tribes of West Bengal In *Vanyajati*, Vol. 6, No. 4.
- Roy Barman, B.K. 1961, Dynamic of Persistence and Change of a Small Community – The Totos, unpublished Ph.D. Dissertation, Calcutta University, Calcutta, West Bengal.
- Roy Barman, B.K. 1964, A Note on Socio-Medical Survey among Totos In *Bulletin of Cultural Research Institute*, Vol. 3.
- Roy Barman, B.K. 1990, Development Hazards to Health in Tribal India In B. Chaudhuri (eds.) *Cultural and Environmental Dimensions on Health*, Inter India Publications, New Delhi.
- Roy Burman, J.J. 2003, *Tribal Medicine*, Mittal Publications, Mohan Garden, New Delhi, India.
- Sabarwal, B. 1999, *Community Nutrition and Health*, Commonwealth Publishers, New Delhi, India.
- Sahu, C. 2002, *Tribes of North East India*, Sarup and Sons, New Delhi, India.
- Sanyal, C.C. 1973, *The Meches and The Totos*, North Bengal University.

- Sarkar, A. 1991, *Toto: Society and Change (A Sub-Himalayan Tribe of West Bengal)*, Firma KLM Private Ltd., Calcutta, India.
- Sen, P. (ed.) 2003, *Changing Tribal Life: A Socio- Philosophical Perspective*, Concept Publishing Company, New Delhi.
- Sengupta, S. (ed.) 1999, *Health, Healers and Healing: Studies in Medical Anthropology*, N.L. Publishers, Assam.
- Sengupta, S. 2003, *Perception of Folk Environment*, Classique Books, Kolkata, India.
- Senior, K. and R. Chenhall 2013, Health Beliefs and Behavior: The Practicalities of “Looking after Yourself” in an Australian Aboriginal Community In *Medical Anthropology Quarterly*, Vol. 27, Issue 2, pp. 155-174.
- Sharma, A.K. 1987, *Fertility and Family Planning in Rural Areas*, Mittal Publications, Delhi, India.
- Singh, B. and N. Mohanti 1995, *Tribal Health in India*, Inter-India Publications, New Delhi, India.
- Singh, Y. 2002, *Modernization of Indian Tradition*, Rawat Publications, Jaipur and New Delhi.
- Sinha, A.K. and B.G. Banerjee 2004, Tribal Witchcraft and Personalistic Disease Theory: Concepts and Issues In A.K. Kalla and P.C. Joshi (eds.) *Tribal Health and Medicines*, Concept Publishing Company, New Delhi, India.
- Sunder, D.H.E. 1895, Survey and Settlement of the Western Duars in the District of Jalpaiguri, 1889-95, Bengal Secretariate Press, Calcutta.
- Tarafdar, P. 2004, Health and Tribal Halers: Different Consequences In *Bulletin of Cultural Research Institute*, Vol. 22, No. 1.
- Tarafdar, P. 2005, A Development Programme in the Tribal Villages In *Journal of the Department of Anthropology*, Vol. 9, Nos. 1 and 2, University of Calcutta.
- Tarafdar, P. 2006, Child Healthcare among the Santals and the Koras of Jhargram sub division, District Midnapore, West Bengal In *Tribal Health Bulletin*, Vol. 12, No. 1 and 2, Indian Council of Medical Research, Jabalpur.
- Tarafdar, P. 2007, Health Development: Displacement of Traditional Culture In B. Chaudhuri and S. Chaudhuri (eds.) *Health, Environment, Development and Other Essays: Anthropological Perspective*, Inter India Publication, New Delhi.
- Tarafdar, P. 2007, Life Cycle related Rituals and Health-Care practices among the Santhals and Kora of Jhargram In *Bulletin of Cultural Research Institute*, Vol. 23, No. 1.
- Tarafdar, P. 2008, Right to Health: The Tribal Situation In *Indian Anthropologist* (Journal of the Indian Anthropological Association) Vol. 38, No. 1.

- Tarafdar, P. 2009, Concepts and Techniques of Population Control among the Santals and the Koras of Madnapore (West) District, West Bengal In *South Asian Anthropologist*, Vol. 9, No.2, New Series, Official Organ of Sarat Chandra Roy Institute of Anthropologist Studies, Ranchi.
- Tarafdar, P. 2009, Indigenous knowledge and Tribal Healers: Some case studies In Dipak K. Midya (ed.) *Indigenous People in India: Identity, Empowerment and Discontent*, APH Publishing Corporation, Darya Ganj, New Delhi, India.
- Tarafdar, P. 2010, *Cultural Dimensions on Tribal Health: A Study among the Santal and the Kora of Jhargram Sub-division District- Midnapore (West), West Bengal, India*, Lambert Academic Publishing, Germany.
- Tarafdar, P. 2010, Traditional Health care Practices among the Totos of Totopara District- Jalpaiguri, West Bengal, Unpublished Report, U.G.C, Minor Research Project.
- Tarafdar, P. and R. Dutta, 2011, Indigenous Rights and Folk Medicine: the Toto Context In B. Chaudhuri (ed.) *Human Rights, Anthropology and Ethnology Today Series*, Beijing, China.
- Tribhuwan, R. D. and K. Sherry 2004, *Health, Medicine and Nutrition of Tribes*, Discovery Publishing House, New Delhi.
- Tylor, E.B. 1871, *Primitive Culture*, John Murray Albemarle Street, London.
- Vidyarthi, L.P. and B.K. Rai, 1976, *Tribal Culture of India*, Concept Publishing Company, New Delhi.
- Verma, L.N. 1991, *Environmental and Human Habitation*, Himanshu Publications, Udaipur, Rajasthan, India.
- Vyas, N.N. 1967, Banjaras: The Merchantile Nomads of Rajasthan In *Tribe*, Vol. III, No. 2, Uaipur.
- WHO, 1997, The World Health Report, World Health Organization, Geneva.
- WHO, 1998, The World health Report 1998; Life in the 21<sup>st</sup> Century-A Vision for All, World Health Organization, Geneva.
- WHO, 2000, General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine, 2000, Hong Kong SAR, China.
- World Development Report 1993, Investigating in Health, Oxford University Press, New York.

## Website References:

<http://ramm.hubpages.com/hub/AYURVEDA-THE-INDIAN-SYSTEM-OF-MEDICINE>

(Accessed Date:12.06.2012, Time: 13.00 hrs)

[http://www.sanatansociety.org/ayurveda\\_home\\_remedies/what\\_is\\_ayurveda.htm#.U4IBe\\_mSxBo](http://www.sanatansociety.org/ayurveda_home_remedies/what_is_ayurveda.htm#.U4IBe_mSxBo)

(Accessed Date:12.06.2012, Time: 13.30 hrs)

[http://www.dsir.gov.in/reports/ittp\\_tedo/ism/ISM\\_USM\\_Intro.pdf](http://www.dsir.gov.in/reports/ittp_tedo/ism/ISM_USM_Intro.pdf)

(Accessed Date:12.06.2012, Time: 14.00 hrs)

<http://nccam.nih.gov/health/naturopathy/naturopathyintro.htm>

(Accessed Date:12.06.2012, Time: 14.40 hrs)

[http://herbsandhakim.in/unani\\_medicinces.html](http://herbsandhakim.in/unani_medicinces.html)

(Accessed Date:12.06.2012, Time: 15.00 hrs)

<http://ism.kerala.gov.in/index.php/about-sidha.html>

(Accessed Date:12.06.2012, Time: 16.00 hrs)

<http://planningcommission.nic.in/plans/planrel/fiveyr/7th/vol2/7v2ch11.html>

(Accessed Date:12.06.2012, Time: 13.00 hrs)

<http://planningcommission.nic.in/plans/planrel/fiveyr/9th/vol2/v2c3-2.htm>

(Accessed Date:12.06.2012, Time: 13.00 hrs)

<http://planningcommission.nic.in/plans/mta/mta-9702/mta-ch19.pdf>

(Accessed Date:12.07.2012, Time: 11.00 hrs)

[http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/v2\\_ch2\\_9.pdf](http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/v2_ch2_9.pdf)

(Accessed Date:13.07.2012, Time: 11.00 hrs)

<http://planningcommission.nic.in/plans/planrel/fiveyr/9th/vol2/v2c3-6.htm>

(Accessed Date:19.07.2012, Time: 11.30 hrs)

<http://medind.nic.in/ibl/t11/i3/iblt11i3p326.pdf>

(Accessed Date:21.07.2012, Time: 13.00 hrs)

<http://apps.who.int/medicinedocs/documents/s18023en/s18023en.pdf>

(Accessed Date:21.07.2012, Time: 14.00 hrs)

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3026119/>

(Accessed Date:22.07.2012, Time: 11.00 hrs)

<http://nrhm.gov.in/communitisation/asha/about-asha.html>

(Accessed Date:02.07.2012, Time: 11.00 hrs)

<http://203.193.146.66/hfw/PDF/asha.pdf>

(Accessed Date:05.08.2012, Time: 11.00 hrs)

<http://www.biomedcentral.com/1753-6561/6/S1/P1>  
(Accessed Date:06.08.2012, Time: 11.00 hrs)

<http://www.indianyोजना.com/health-yोजना/accruited-social-health-activist.htm>  
(Accessed Date:07.08.2012, Time: 11.00 hrs)

[http://www.nihfw.org/pdf/Guidlines\\_MPHW\(M\)\\_29dec2011.pdf](http://www.nihfw.org/pdf/Guidlines_MPHW(M)_29dec2011.pdf)  
(Accessed Date:07.08.2012, Time: 13.00 hrs)

<http://www.mapsofindia.com>  
(Accessed Date:25.05.2013, Time: 19.30 hrs)

# PHOTOGRAPHS



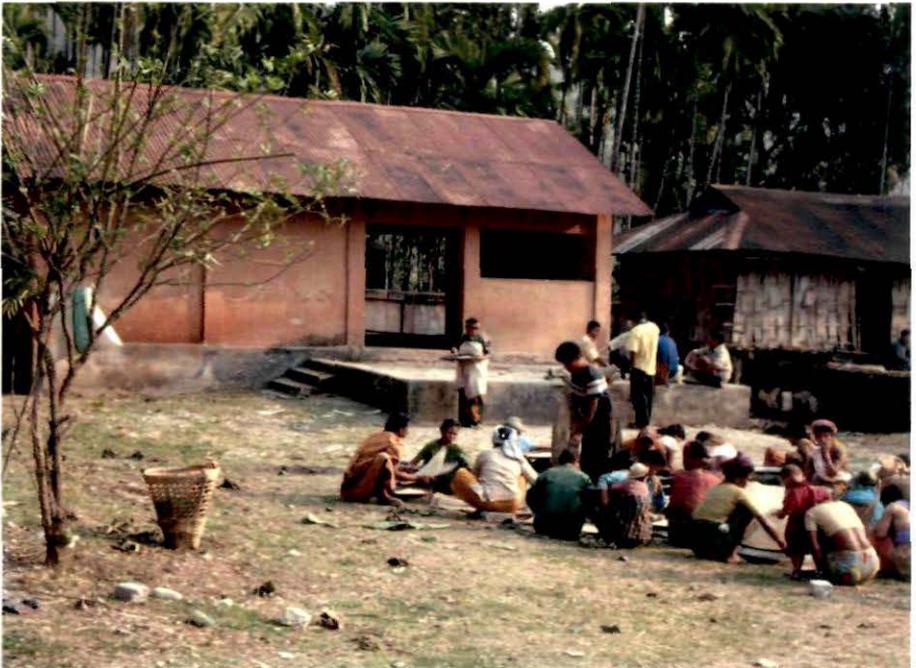
Traditional House Pattern at Mitran gaon (Category-1 Village Sector)



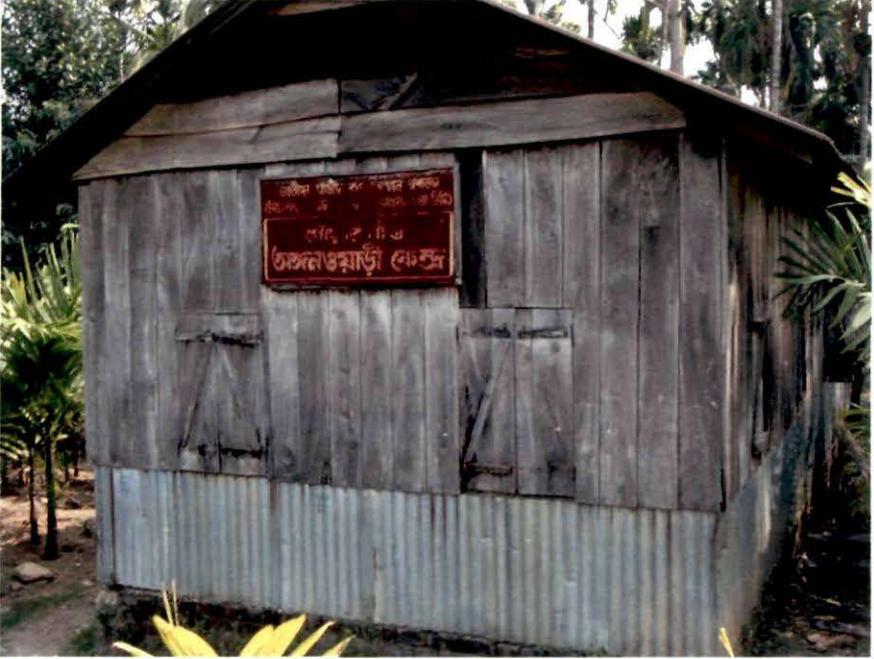
Traditional House Pattern at Subba gaon (Category-2 Village Sector)



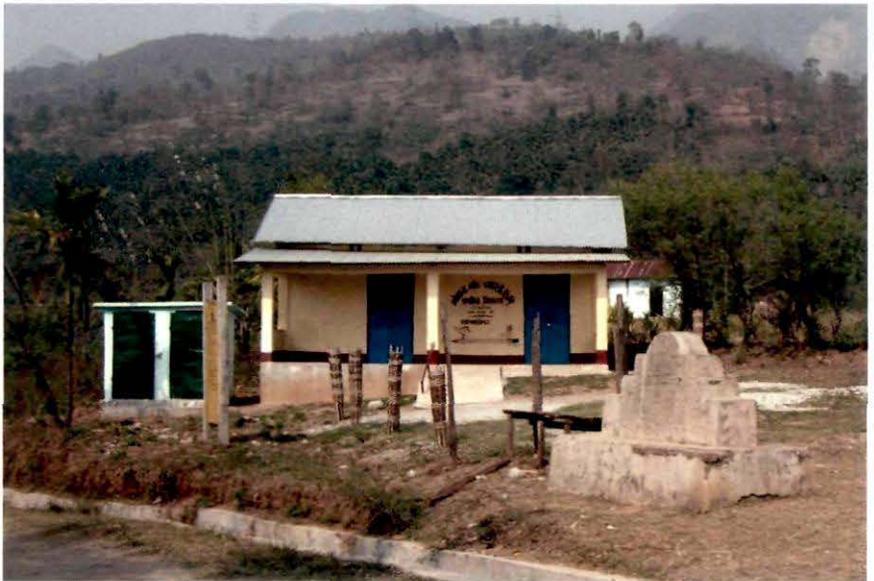
*Old Demsha*



*New Demsha*



Anganwadi Centre at Category-2 Village Sector Panchayat gaon



Government Primary School at Category-1 Village Sector Dhumci gaon



A Toto Magico-religious Practitioner



Traditional Healer Demonstrating the Preparation of Herbal Medicine



Totopara Primary Health Centre



Modern Medical Practitioner at Totopara Primary Health Centre

