CHAPTER - I

INTRODUCTION
The Topic:

On the birth of the billionth child on May 10, 2000 in Delhi’s Safdarjung Hospital, the then Prime Minister of India Sri Atal Bihari Vajpayee said, “India will become the world’s most populous country by the middle of this century and essential requirements like drinking water, shelter and health will be difficult to meet” (Agrawal and Maiti: 2005)

Health is no doubt a major concern of community development. The WHO has defined health as “A state of complete physical, mental and social well-being and not merely the absence of diseases or infirmity” (WHO: 1948)

Health is an important asset of a community and a healthy community is the foundation of a strong nation. The health problems of the tribal need special attention and this is primarily for two reasons. Firstly, many of the tribal communities are backward and some of them are living in isolated or remote areas where modern health facilities are comparatively less available and secondly, the tribals strongly believe in the interference of supernatural agency and effectiveness of herbal medicinal use. Therefore, the socio-cultural activities revolve round God and Spirit. The supernatural powers have been identified with a group of powerful focus and deities that control and influence the happening in the community.
Good health is always related to good medical care, good nutrition and hereditary factors (Nagla : 2005).

The term 'health' may carry different meanings to groups involved in the emerging field of population. Health may refer to public health or environmental health. Public health refers to the general well being of a group of people and the factors that ensure that well being. The term environmental health is used in a variety of ways, but it is usually applied to the well-being of the people and the natural health (De Souza et al.: 2003).

Health is an important determinant of economic and social development, because disease is indirectly related to low earning capacity as well as productivity. Therefore, a nation should give adequate attention to the health and health care of its people.

Man is unique in having cultural environment, which is deeply related to the health of human being. Nagla in 2005 found that 44% people believe that a healthy person is one who has no disease in the body and different functions of the organs work properly; 41.3% believe that a person is healthy who keeps normal temperature or who does not suffer from any disease; 4% people believe that healthy person is one who can adjust with diverse situations and is capable of taking different food and water of different places. In this study, Nagla viewed that a healthy person
should be in a position to adjust mentally and physically in diverse situations and they are mentally fit, social, extrovert, polite and capable of fulfilling the basic needs.

Health is an important aspect of the society for a productive environment and it is an outcome of various socio-environmental factors (Agarwal and Maiti : 2005).

According to 1991 census of India, 80% of India’s populations are living in rural areas as against 20% in urban areas. Urban areas are attracting center for economic activities and services like health, transport etc. and as a result a large number of hospitals, dispensaries, clinics and medical care centers are found in urban areas; but in rural areas people are having improper health care facilities. These people suffer from general poverty as well as balanced and nutritional diet. Lacks of awareness of people regarding health practices, personal hygiene, sanitation, cleanliness etc are some regular features of rural areas.

Safe drinking water facilities, sanitation facility, place of residence, influence of education, types of houses are the main factors responsible for morbidity of rural people (Agarwal and Maiti : 2005).

Education enables people to learn many kinds of valuable behaviour relevant to health, but the way that functions may depend on exogenous norms and values.
Kunitz (2007) stated that education encourages greater investment in one's own health and the health of other family members. Cultural factors of course, have unique influences on health, but education often interacts powerfully with these influences. Scholars like Caldwell (1979), Martin et al. (1983), Hobcraft et al. (1984) pointed out that parental education specially education of mother is the most important factor influencing infant and early childhood mortality.

The evidences for the importance of education across time, place and diverse measures of health are quite robust, Educational attainment has had an important place in theories of social development, modernization and determinants of health (Mechanic: 2007).

Children are the most valuable assets of a nation. Their welfare strengthens its social and economic development in future; they have to be protected and looked after well if the country is to thrive and prosper in all spheres of human activities. Unfortunately, 10 million babies die every year in the world before reaching their first birthday. In India, one out of every three babies born has low birth weight, one in eight dies before its first birthday and an estimated three millions die each year. A constant monitoring on the health conditions of children of 0 to 14 years of age is very important (Baj khaif and Mahadevan: 1993).

Morbidity indicates the present state of health of a community. It
also shows the changing socio-economic and demographic situations of various groups of people. The morbidity scenario and its causes vary from community to community. In a country like India though the mortality rate is decreasing slowly and the life expectancy of the people is increasing, the presence of various communicable and infectious diseases is seen. Of all the age groups the infants and children fall early victims of various types of diseases. The various dimensions of morbidity are the socio-economic, cultural, demographic and health practices of the communities. The household variables like the provision of basic needs of food, clothing, shelter, protected water play a major role in morbidity. The child morbidity depends upon the facts like personal hygiene, immunization, sickness care, dietary practices and nutritional status.

In the Indian context, the decade of 1990s had experienced many changes with respect to economic policies, health policies and technological development. Soon after the Cairo conference (1994) India has adopted the reproductive and child health approach in the country. The target oriented approach has provided reproductive and child health services (Tarafdar: 2004).

Lack of access to food, poor feeding practices are the major causes of poor health of the children. The new WHO child growth and nutritional standards confirm that children born anywhere in the world and given the
optimum start in life have the potential to develop within the same range of height and weight. Thus it can be said that significant differences in childrens’ growth up to age five or more is influenced by feeding practices, environments and heath care practices rather than genetics or ethnicity (Reddy : 2006).

Anthropometric measurements are commonly used for assessing nutritional status of the children which is directly related to child health (Reddy : 2006).

The attraction for using anthropometric methods is strong, because it has the accuracy and precision required for a body composition assessment technique. The vast majority of such studies of nutritional status use Quetelet’s Index or Body Mass Index (BMI) to adjust weight for height to measure nutritional status (Devi : 2002).

Worldwide observations have established the fact that inadequate diet and malnutrition may produce stunted growth of body and mind. Malnutrition during childhood delays growth and appearance of the adolescence (Tanner : 1962). Food factors are therefore basic to growth and developmental process.

Investigations have revealed that menarche is also greatly influenced by the quality of nourishment provided to the girls (Tanner : 1962).

Malnutrition is not a disease that causes sufficient pain to demand
immediate attention and treatment. There are however, a number of symptoms that are helpful in identifying children suffering from malnutrition. These may be classed as general symptoms like low body weight, gradually having sunken eyes etc.

Social and behavioral scientists, epidemiologists and medical scientists are aware of the large and persistent relationship between social class and mortality around the world but have long been intrigued by the fact that some very poor nations and regions have maintained low mortality whereas other much more affluent populations have done relatively poorly (Caldwell : 1986 ; Schultz : 1984).

Many of the improvements in infant morality are closely related to living conditions, appropriate health behaviour and parents’ skills and access to basic health care. More recent advances in medical technology have had an important role (Folley : 2007).

Reliable data on mortality in India is rather scanty, civil registration data are poor and are not good enough for any meaningful analysis (Goyal : 1994). According to him there was a clear picture, which showed continued downward trend in mortality rate in both urban and rural. In Assam (rural) the Infant mortality rate (IMR) was 141 in 1971-1975, 115 in 1976-1985 and 98 in 1986-1990, in comparison to India’s 89,74,64 and 59 respectively.
Among the infants and children the risk of death is very closely related to the environment in which they grow. The death occurs because of poor medical facilities to deal with infections, inadequate food and lack of elementary hygiene (Ko. Ko : 1987). Mehadevan et al. (1985) focused that mortality is comparatively high in India and is likely to vary in different social and cultural groups within and among the states.

It has been observed that social and cultural traditions of any community are of significance in welfare and development and treatment reflects the social solidarity of a family (Kar : 1986). Tribal groups of Assam inhabit in widely varying ecological and geo-climatic conditions in different concentrations throughout the state. The widely varying prevalent health practices, use of indigenous herbal medicines, taboos and supernatural beliefs are also responsible for determining the health and diseases of the tribal groups. It is well understood that the tribal groups are at the lowest rung of civilization, perpetuating the misconceptions, beliefs and taboos emanating from their primitive socio-religious system. These have an additive effect on mortality, morbidity and health among the tribal groups (Basu : 1986).

In the area of folk society, Joseph in 1958 described the practices of the Hutterites, of New York, which reveal a curious mixture of understanding of cause-effect relationships and beliefs in supernatural
causes in obstetric and pediatrics fields.

Despite the fact that relatively improved medical facilities in the form of modern medicines and improved equipments are available, there are many tribal, who still rely mainly on the ‘Ojha’ the local medicine men. The tribal people believe that these medicine men have spiritual and magical knowledge of curing diseases (Kar : 1986).

It is true that tribal people have prolific knowledge about herbal medicines. The tribal people are tradition-bound and one such tradition is the use of ethno medicine. For cure of all types of ailments their first preference is ‘Ojha’ (the man who performs magical charms) and then ‘Kabiraj’ (one who performs herbal treatment for curing diseases). When complications develop and the chance of survival diminishes then they go to consult the nearby doctors.

REVIEW OF LITERATURE:

Health is common theme in most cultures. In fact, all communities have their concepts of health in their culture. In some cultures health and harmony are considered equivalent. Health is defined as “The process of continuous progressive improvement of the healthy status of population” (WHO : 1984).

Haas in 2007 classified an important finding that childhood health is strongly associated with adult health along various dimensions. Those who
report poor childhood health have increased odds of reporting poor-self-rated health, a work limited disability, a physician-diagnosed chronic disease, and a decline in their health over a two-year period. These findings parallel similar results obtained from the 1946 British cohort data (Colley et al. : 1973). These results suggested that disadvantaged socio-economic status of the family of origin may be an important determinant of poor health. However, childhood health is one mechanism by which childhood socio-economic status manifests itself.

Studies of social disparities in health have shown that when people do not have enough money or are not well enough educated they could not make rational choices regarding their health (Kunitz : 2007).

Empirical studies find that indicators like education, income and occupation have independent effects beyond their joint influence. The relative effects of each indicator vary depending on the outcomes in question (Mechanic : 2007).

There has long been a dialectical tension between the view that health and disease are most fundamentally shaped by broad social, cultural and environmental factors and the view that specific pathogens and risk factors are most important to understanding and combating illness and death (Brandt : 2007).

Health and diseases are widely understood as being influenced by
many factors, such as the “upstream factors” like cultural and social structure, socio-economic status, and social and environmental factors, typically described as non-medical determinants, and “downstream factors” such as blood pressure, cholesterol, diet, exercise and genetic risks (Mechanic: 2007).

Dr. Harish Kumar (2008) focused that it has to be remembered that malnutrition and low birth weight (LBW) are contributors to about 50% death among infant and children under 5 years of age.

The natural experiments based on the Dutch famine in 1944-1945 and more recently, the Chinese famine of 1959-61 support a link between poor fetal nutrition and some neuro-developmental disorders.

Barker (2004) has suggested a number of pathways through which early nutrition might affect varying disease status (Mechanic: 2007).

Prenatal and early nutrition are inevitably associated with the nature of resources (Mechanic: 2007).

Height measurements have long been considered as a significant index of nutrition and health of a population. There are a large number of evidences pointing to the relationship between height, mental function and mortality (Gopalan: 1988).

The natural nutrition policy adopted by the country recently has included several indirect measures to achieve the nutrition goals such as
food security, improving purchasing power, strengthening of the public
distribution system, improvement in literacy and community participation
(Ahmed and Brabby: 2008).

Preschool children are one of the most nutritionally vulnerable
segments of the population. Some of earlier studies carried out by
Nutrition Foundation of India (NFI) have shown that BMI (Body Mass
Index) for age is a more effective tool for detection of both under and over
nutrition in school children (Ghosh and Ramachadran: 2007).

Nikhel Virani in 2005 found that within the regulated and high
socio-economic environment of Sri Aurobindo Ashram, Indian children
grow up and reach similar structure irrespective of ethnic origin.

Over the past two decades, there has been renewed interest in studies
focusing upon the infant and child mortality in the developing countries
(Ruhul Amin: 1989).

Some past studies indicated that the declining trends in infant and
child mortality might be attributed to the introduction of medical
technology and corresponding socio-economic development
(Caldwell: 1979).

An extensive well organized and low-cost system of health services
and a vigorous malaria eradication programme as well as relatively high
levels of female education explained Sri Lanka’s low infant mortality
Similarly, public health programme implemented during the 1970s are estimated to account for nearly three-fourths of Costa-Rica’s infant mortality decline (Rosera-Bixby : 1986).

Ruhul Amin et al. (1989) clarified that the persistence of high infant and child mortality in Bangladesh in excess of desired levels is a puzzle. It is not possible to improve child survival in Bangladesh without concomitant socio-economic gains. The study showed that tetanus is the single most powerful killer of infant and children, and fever and respiratory problems also two major causes of infant and child mortality.

Mortality studies were initiated in certain rounds of the National Sample Survey (NSS) in which differences in overall death rates were attempted with respect to religion and residence etc. during February 1963 to January 1964 (Mukhopadhyay : 1989).

Sandhya (1986) attempted to find the influence of socio-cultural factors on infant mortality in a case study of Andhra-Pradesh and found that factors like type of family, childbirth practices, infant feeding practices and preference for sons in giving medical attention have significant impact on infant mortality.

Mukhopadhyay (1989) studied the differentials of infant mortality in Rural West Bengal and found that in order to raise the standard of life of people at large in terms of higher expectation of life at birth, lower infant
mortality etc. and different emphasis should be put on the enhancement of socio-cultural factors of life of the people.

Since the middle of 1960's, there have been a large improvement in the United States in infant mortality rates for both black and white, but as often noted, the percentage of disparity between black and white infants mortality is more than double (white-5.7%, black-13.4%) between 1950 and 2004 (Mechanic: 2007).

A great deal of research has documented the relatively favorable health and mortality outcomes between the Mexican American and Mexican immigrant population. The first hour, first day and first week mortality among the infants born to Mexican immigrant women in the United States are because of their low income, low education and poor health practice qualities (Hummer et al.: 2007).

According to Ruzicka and Kanitkar (1972), educational level of mother and socio-economic status of the family, are the most effective factors determining the level of infant, neo-natal and post neo-natal mortality.

Arriaga and Way (1987) had suggested that the factors influencing differentials in child mortality are generally the genetic differences, environmental factors and cultural factors (Devi: 2002).

Agarwala in 1988 commented that the economically advanced
countries were able to reduce their death rates (less than 10 per 1000) largely by providing their people with adequate and wholesome food, pure drinking water, better hospital facilities and better sewage disposal and by taking proper measures to control various diseases.

Patterns of mortality in two Herbriden Islands namely Harris and Barra are related to the socio-economic changes (Clegg: 2003).

Death rate is considered as the index of the well being of nation. Countries which are economically advanced and where people enjoy a high standard of living have lower death rates than the countries, which are economically backward.

According to the “The state of World’s Children 1992” released by UNICEF, India recorded a notable decline in the under five mortality rate. It has come down from 250 per 1000 live birth in 1947 to 146 in 1991. There has also been a steady decline in the infant mortality rate (IMR) from 160 in 1947 to 94 in 1988, but India is still among the high IMR countries of the world.

In India though a declining trend in infant death rate is seen, yet, it is much higher in comparison to western countries. The significant growth in India’s population in one hand and increasing infant and child mortality on other hand is a matter of serious concern.

Acute respiratory infection (ARI) and lower respiratory tract
Infection (Pneumonia) are two major causes of death in children, accounting for about 30% of under-five-deaths (Kumar : 2008). DLHS III data show that 16% children under the age of 3 years experienced cough with fast breathing during the two week preceding the survey. As per WHO 2007 figure, India is one of the leading countries as far as pneumonia deaths are concerned.

Diarrhoea is one of the leading causes of child death. NFHS II showed that 19% children under the age of three suffer from diarrhoea, 14% children with diarrhoea have dysentery also (Kumar : 2008).

Dr. Harish Kumar in 2008 mentioned that the IMR varies from as low as 14 in Kerala to as high as 96 in Orissa. Weaker states like Uttar Pradesh, Rajasthan, Madhya Pradesh, Orissa and Assam have IMR higher than the national average.

Irrespective of the primary causes of deaths, over three-fourths of neonatal deaths occur among infants who are born with low birth weight (weighing less than 2500g at birth). NFHS III estimated that, in India one third of all neonates are low birth weight and this rate is the highest in the world.

Some major studies have been carried out in different parts of India, generating primary data on mortality. For example, Simmons et al. (1978) and Smucker et al. (1980) conducted a study in Uttar Pradesh. They
focused on the most important causes of death and its associated factors. The main causes broadly identified were neonatal tetanus caused by unscientific birth practices like cutting the umbilical cord using non-sterilized material by the indigenous Dhais. Non-utilization of health facilities, extremely backward socio-economic status and poor health of the mother, miserable environmental sanitation and early age at conception are some of the additional causes.

Compared to general population mortality and morbidity among the tribes are generally high. This is mainly because of their habits of eating, drinking, type of occupation and socio-ecological conditions.

The herbal Traditional therapy has emerged as an alternative system of medicine in the country particularly in the tribal areas. It is observed that nearly 80% of people in tribal areas rely on traditional medicine for their health care needs (Hardiman et al. : 2008). Taylor (1978) has estimated that the organized health services in tribal area provide only about 10 percent of the modern medical care and the remaining is split between home remedies and indigenous practitioners.

Hardiman et al. (2008) points out that traditional medicine still remains the only source of care for majority of people in tribal villages. This is because traditional medicines are easily available to patients.

The disease and treatment, particularly in the tribal areas, cannot be
understood in isolation. Health and treatment are very much connected with the environment. The traditional health system and treatment are based on their deep observation and understanding of nature and environment (Hardiman et al. : 2008).

Zhang reports that over two-thirds of birth in the world are assisted by local or traditional midwives or birth attendants. In tribal areas traditional birth attendants are the only source of assistance and care (Reddy : 2006).

In comparison to rest of India, the works on mortality is not few in North East India. Das and Das (1982) have studied child mortality among several population groups of rural Assam. Das et al. (1989) investigated certain biosocial variables among three population groups of Assam viz, the Hindus, the Muslims and the Mongoloid. Adak (1993) studied mortality pattern and biosocial proximities on tribal population of Shillong.

Barua T. (1992) discussed about some aspects of the child mortality of the Phakes in her study “A Demogenetic study of the Phakes of Assam.”

In 1991 Das, R studied the differential fertility and child mortality among two caste groups of Mirza area in Kamrup district of Assam.

Baruah, S. K. (1980) studied the Khasis of Meghalaya and discussed certain problems of fertility and mortality.

Das, P B and Das, B M (1973) studied the incidence of child mortality in a Kachari village.


Chakraborty, M (1995) studied the infant and child mortality among the Jayantias of Meghalaya.


Mandal, B (1997) studied the causes and effect of low birth weight in his study "Birth weight and Biosocial proximates : A study of four populations of Meghalaya".


In 2006, K. V. Devi studied the gastronomy and nutritional status of Tarao Tribes of Manipur.
SURVEY AREA:

Assam is the nerve-centre of North Eastern Region. It is a paradisiacal state to study Anthropology and sociology for its colourful tribal populations like Karbi, Bodo, Kachari, Dimasa, Mishing, Tiwa, Rabha, etc. and castes like Brahmin, Kalita, Kaibarta, Hira, Kumar etc.

Assam has no sea coast and it is connected with the rest of India by a narrow corridor running between Bhutan and Bangladesh. Cultural traditions, folklore, myth, legend and history of Assam are very rich which carry traces of ancient civilization. Bihu dance is the expression of the joy of life, which has got world-wide fame.

Assam is the land of blue hills, luxuriant vegetation and rich minerals. The mighty river Brahmaputra is flowing from east to west through the heart of the state.

As per census of India 1991 the total number of towns in Assam is 93, inhabited village 21,995, development block 135. At present, Assam is divided into 27 districts. Morigaon is one of the beautiful districts of Assam, which is rich in flora and fauna. There is a wild life sanctuary named ‘Pobitara’ where one horned rhinoceros are available besides wild pig, buffalo, elephant, dear and varities of birds. Many migratory birds come to the sanctuary in every winter season.

Morigaon was upgraded to a district from a subdivision on October
1, 1989. It is situated on the south bank of the river Brahmaputra. Nagaon district is situated on its east, Darang on the north, Kamrup on the west and southwest and Karbi Anglong on its south. Morigaon district covers an area of 15,877 sq km with a total population of 7,75,874 (3,98,930 males and 3,76,984 females) approximately according to 2000 census. Rural population is 6,05,754 and 1,70,120 is the urban population.

The Assam Government signed on April 13, 1995 the Tiwas (Lalung) Accord with the agitating Lalung Tribe, a Lalung Autonomous council, with executive powers over thirty four subjects. It has also Lalung village councils. As per the accord, interim Lalung Autonomous council includes 144 villages in Kamrup and Morigaon districts and all these villages will have village councils. An apex council will be formed with thirty members of whom fifteen will be from the Lalungs.

Morigaon district has three urban areas, viz. Morigaon town, Jagiroad and Jagiroad Paper Mill Area. Paper and fiber industries and dry fish industries are the main industries of the district. Main tributary rivers like Kalong, Sonai etc. and natural lakes called Gauranga beel, Mori beel, Soran beel, Jon beel etc are situated in this district, which are famous for fish production of the district.

Two rock shelters namely ‘Ghogra Air Moth’ and ‘Koina Bandha’ of Baghara indicate the ancient history of the district. Besides these, old
“Rajapukhuri” (Royal Pond), ancient coin, bronze seal, ancient weapons and various rock statues of gods and goddesses are also associated with the history of the area.

Centuries of human civilization have helped mankind to adapt them to live in a wide variety of climates. Both climates and weather have powerful impact on human life and health issues. In Morigaon district most of the areas are submerged by flood water in the rainy seasons. In the years 2002, 2003, 2004, and 2007 floods heavily affected Morigaon district (in 2003 three times in a year) triggering tremendous disasters. On the other hand in 2006, excessive drought adversely affected the people of the district. Most of the Tiwa people are wet-landers and hence they are agriculturists and agriculture related workers. Both floods and drought affect them much and also trigger epidemics. In the district six P.H.Cs. two mini P.H.Cs. and one Civil Hospital are there. Though 124 medical sub-centers are found yet no doctor is available in the remote areas during night. One Nursing Home is there but it is in its infancy.

THE PEOPLE:

The Tiwa (originally known as Lalung) is one of the scheduled tribes of Assam and have settled in Morigaon and Nagaon districts. Some are found in Amri area of Karbi Anglong district, southeastern part of Kamrup district and eastern part of North Lakhimpur also. The division of
the Tiwa living in the hills is called the Hill Tiwa.

The Tiwas belong to the Mongoloid featured Tibeto-Burman speaking Bodo sub group. Some rural Tiwa octogenarians believe that their forefathers were the Jaintias (Das : 1962). There is a mythological story that once Lord Mahadeva was heavily intoxicated with rice-beer and was lying unconscious on a road with saliva (lal) coming out of his mouth. From this saliva, he created one male and one female human being and their descendents were known as Lalung. In Tiwa language “Tiwa” means superior or elevated.

According to Sharma Thakur (1972-90), they entered Assam through the northeastern hilly tract from their original habitation, the Tibetan Plateau.

According to the Tiwas, there were two races “Dev” and “Daitya” and they have descended from the Daitya race (Sen : 1999). They are divided into twelve exogenous clans (kul). Ghosh in 1992 said that the Tiwas of each clan can be identified by certain common surnames. He mentioned their clans, sub-clans and surnames as follows:
<table>
<thead>
<tr>
<th>SL NO</th>
<th>CLAN</th>
<th>SUB-CLAN</th>
<th>SURNAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Machereng</td>
<td>Machereng, Magor</td>
<td>Deoraja</td>
</tr>
<tr>
<td>2</td>
<td>Madur</td>
<td>Ladur, Puru, Sagara</td>
<td>Deka doli, Gaonkhaza</td>
</tr>
<tr>
<td>3</td>
<td>Maloi</td>
<td>Fangaong, Pumbe</td>
<td>Bordoloi, Konwar</td>
</tr>
<tr>
<td>4</td>
<td>Dafor</td>
<td>Mithi, Lowfoi</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sukai</td>
<td>Kharani</td>
<td>Senapati, Das, Deori</td>
</tr>
<tr>
<td>6</td>
<td>Amfli</td>
<td>Aagara, Chanchara</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Lasa</td>
<td>Mithi</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Chalang</td>
<td>Muni, Metang</td>
<td>Deori, Konwar</td>
</tr>
<tr>
<td>9</td>
<td>Amchong</td>
<td>Amchi</td>
<td>Amgi, Pator</td>
</tr>
<tr>
<td>10</td>
<td>Kakhor</td>
<td>Aagari</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Darnong</td>
<td>Damiong, Kholre</td>
<td>Lorak</td>
</tr>
<tr>
<td>12</td>
<td>Lorok</td>
<td>--------</td>
<td>Bordoloi, (Common surname) Kakati, Manta, Doloi, Bharali etc.</td>
</tr>
</tbody>
</table>

The status of Machereng clan is considered seems to be superior.

**ETHNIC ORIGIN:**
According to Sen (1999) they belong to Bodo group. They are
yellow skinned Asiatic Mongoloid. The face is almost broad with a mesocephalic head. They are of medium stature. Their eyes are with epicanthic fold. The nose is mesorrhine.

FESTIVALS:

The Tiwa festivals are mostly related to religion. Their important festivals are Malo Puja, Bison kuwari puja, Thal puja, Sani puja, Diwali puja, Jankan puja etc. All these are performed in forests. There are some other important pujas-like Garakhia puja, Nam bhatima, Kalika puja etc. These are performed in “Thanghar” (sacred place of worship). From January to April every year, they perform certain religious festivals and these are - Lakshmi puja, Sutkil Bhakat sewa Madahi bhakat sewa and Najania bhakat sewa. The fairs called Gobha Raja’s Mela, Magh Bihu (Pisu), Bohag Bihu (Pisu) are worth mentioning. They consider Friday and Wednesday as auspicious to perform any festivals. Lord Mahadeva is their benevolent god.

In the fairs locally known as ‘Jonbeel mela’, ‘bangia mela’ exchanging, purchasing and selling are conducted by the Tiwa people. “Jonbeel mela” has a speciality. In this mela the plain Tiwa people exchange goods with hill Tribes like the Karbis and the hill Tiwas. The barter system of economy prevails in this mela. The hill tribes bring many food products like tubers, roots, medicinal plants, fruits, dry fish etc. to the
mela. The plain Tiwa people exchange these food items with rice cake, country liquor, eggs and other food materials. In the middle of the month of January, they perform ‘magh pisu’ and select an auspicious day i.e. mainly Friday or Wednesday for it. Three days after ‘magh pisu’ the ‘mela’ is started for three days. The “Na-khola Raja” (king) and ‘Guva Raja’ (king) participate in this mela wearing their traditional dresses and ornaments. Though the traditional system of economy is still prevailing the modern commercial items have also entered. Now a days different types of furniture, garments, fruits, vegetables are also sold in this mela, which have declined the charm of the ‘Jonbeel mela’.

The Tiwas follow Hindusim. The place where they worship the household deities is called “Barghar”. They have a priest to perform the Pujas and he is known as “Loro”. “Chongkhong fiza” is a festival that they celebrate when they prepare themselves for ploughing in the agriculture field. “Sagra mesewa” is celebrated before harvesting the ripe paddy from the paddy field.

**DIALECT:**

The Tiwas have their own dialect. According to George Abraham Griarson, linguistically belong to the Bodo group speaking the Tibetan-Burman language (Sen:2005). Some common terms in Tiwa language are -
The Tiwa people have their own dialect but they speak Assamese language in their day to day life.

VILLAGE ADMINISTRATION:

Generally Tiwa families of the same clan live together. Each village
has strict rules and regulations. There is the dormitory system among the Tiwas. The youth dormitory is known as “Chamadi”. In Chamadi the young boys (thra-panthai) and small boys (thorkiya-panthai) learn rules and regulations of their village. “Barika” is the person who has the duty to inform all the villagers about the meetings. “Huruma” is a person who cleans the village.

All the complicated disputes are settled by the village council, which is formed by the elderly persons of the village and presided over by the ‘Gaon Bura’ (Village head man). Ordinary disputes are settled by the Gaon Bura. The Tiwas of Morigaon have a king. He resides in a village called Na-Khula, Guva near Jagiroad. On ‘Darbar’ or meeting day the king wears his royal dresses to attend the meeting.

**DRESS AND ORNAMENTS:**

Dresses are primarily a category of material culture of a people in the sense that dresses are the items of the concrete or tangible part of the culture of a people (Devi : 2002).

The Tiwas are very simple in their dresses and ornaments. Generally, the elderly males wear ‘dhoti’ or ‘gamocha’ and a ‘banion’, while at home. Occasionally they wear a kurta called “Nemai Sola”. Some of them put on a turban locally known as “langri”. A kind of jacket locally known as “Taglar” is wore by the males in special occasions. They put on
a waist band also and it is known as “Tangali”. The elderly women wear a piece of long cloth called “Mekhela” which covers breast to the knees. The upper part of the body is covered by a piece of cloth called “Chaddar”.

The young boys and girls, wear modern dresses like trousers, shirts, salwar kamij, sari etc.

The Tiwa women are expert weavers. Most of the clothes are prepared by them in their own looms.

The winter clothes are “khania kapur” and “Bor kapur”. These are shawls. Now-a-days the Tiwa women dress like the Assamese women. They wear special dresses for various festivals. These dresses are – “Singkhap Mekhela”, “Riha”, “Sondia Kapor”, “Thenus”, “Seleng”, “Sakathia”, “Farke”, “Mankapor”, “Borkapor”. “Tongali” is a waist band which they wear while working at home.

The Tiwa women use traditional ornaments. Necklaces, earrings, finger rings, bracelets and nose rings are basically made of gold. Silver and bronze ornaments are also preferred by thems. Aged women also wear heavy ornaments. On the days of Darbar (meeting) or in the traditional Mela, the Tiwa king put on traditional dresses and also ornaments. Otherwise the males rarely use any ornament.

MARRIAGE:

The male head of a Tiwa family is known as “Borjela” (“Bor”
means elder and “jela” means male) and similarly if the head is a female, she is known as “Borhari” (“Hari” means female). When a girl or boy attains marriage age his or her Borhari or Borjela takes the initiative for his or her marriage.

The local priest suggests an auspicious day for marriage and the bridegroom with his close family members go to his bride’s house at night. The bride’s parents welcome the groom’s family and request them to take their seats, in a house where some relatives, well wishers and Gaon-bura (village head man) are already present. The parents of the bride serve rice beer (laopani) and betel nut and betel leaf along with other food. In presence of the Gaon-bura and priest the bride and the bridegroom exchange garlands and promise to be husband and wife for future. In every formality of the marriage ceremony feast is essential for them. They serve chicken or pork with rice and country liquor as primary food items. Tea, ricecake, sweets, is used as secondary food item. Use of betel nut and tobacco is common among the Tiwas.

Their clans are exogamous. No marriage can take place between members of the same clan. Monogamy is their rule. A younger brother can marry the widow of his elder brother, but not the viceversa. Cross-cousin marriage is preferred. Marriage between the Tiwa and the Karbi is allowed. The Tiwa Marriage resembles that of the Hindus, but they do not perform
"Hom" i.e. sacred fire as an offering to god.

**CHILDBIRTH:**

Every society has its own traditions and beliefs. After the confirmation of pregnancy of a woman, the family members perform several rituals time to time. The pregnant woman also follows some rules and restrictions, viz. she would not visit a mourning household because they believe that an evil spirit may harm the baby in the womb. There are restrictions in taking some food and vegetables like pineapples, papayas etc. during pregnancy which may cause abortions.

Most of the deliveries take place in home with the help of midwife (Dhai). In return to her service, rice beer, a piece of new cloth and betel nuts with some amount of money are given to her. After the birth of the baby, the mother observes her impure period till the umbilical cord of the newborn drops off. Soon after that the purification ceremony is observed. The Borjela (head man) of the family worships four gods ‘Narayana’, ‘Goneswa’, ‘Mahadeva’ and ‘Yama’ separately with ‘Tulsi’, ‘Dubori’ and rice on four banana leaves.

**FUNERAL RITES:**

The Tiwas cremate the dead bodies. The dead bodies of children and persons having unnatural deaths are buried. In case of a natural death, the body is covered with a piece of white cotton cloth and the body is laid
down on a mat. When a death occurs in the village, the village men and relatives assemble at the house of the deceased to bid him/her farewell. The corpse is carried from the house by nearest kins of the deceased to the funeral site (samsan). The pyre is prepared with a number of layers of logs. The elder/eldest son sets fire to the mouth of the corpse. After the corpse configures to the flame, the relatives or the elders pickup home a small piece of burnt bone (Asthi) of the deceased and keep it in a sacred manner. After seven days of cremation, the family member offer rice, meat, fish, eggs, beer etc to the departed soul. They do not have any fixed day for ‘Shraddha’ (death-rite) or purification. The family must perform the “Karam” the last rite whenever convenient for them.

SAMPLE:

The data for the present study have been collected from seven randomly selected villages inhabited by the Tiwa community. A total of 1400 children of 0-14 years of age and belonging to 400 families constitute the sample for the present study. The children are grouped into different age groups like infant (<1 year), pre-school age (1-4 years) and school going age (5-14 years). <1 year is represented by 214 infants 113 males, and 101 females); 1-4 years is represented by 518 children (258 males and 260 females) and 5-14 years age group is represented by 668 children (331 males and 337 females).
The seven villages are namely ‘Bonpara’ (80 households), ‘Buragaon’ (60 households), ‘Ghuligaon (45 households), ‘Dandua Gaon’ (55 households), ‘Golchepa’ (40 households), ‘Bangthaigaon’ (75 households) and ‘Sukhnagog’ (45 households). The total number of boys is 702 and girls 698.

AIMS & OBJECTIVES:

The aims and objectives of the present study are-

i. To study the demographic and socio-economic background of the Tiwa population.

ii. To study the health services available in the survey area.

iii. To study the patterns of morbidity of the children belonging to 0-14 years of the age.

iv. To study the nutritional status of the children.

v. To see the effect of environmental factors, drinking water facilities, sanitation and personal hygiene on the health of the children.

vi. To see the awareness of the parents regarding the health and disease of their children.

vii. To find out the nature of treatment (Allopathic, Homeopathic, Ayurvedic, Indigenous) of the diseased children.

viii. To see the effect of some cultural practices on health and disease.
ix. To see the effect of socio-economic status of the family and education of parents on the health condition of the children.

x. To find out the patterns of mortality and its causes.

METHODOLOGY:

The materials for the present study were collected during July 2005 to July 2006. The data for the present study have been collected in two phases. At first with the help of a preliminary census survey schedule, house to house survey was conducted to collect information on demographic and socio-economic background of the population. In the second phase, families having 0-14 years aged children were visited again to collect data on health, morbidity and mortality. Specially prepared schedules were used for this purpose.

Anthropometric measurements like height and body weight were taken using an anthropometer and a weighing machine. To assess the nutritional status of the children BMI was calculated and the classification of Viswerswara Rao (1995) was applied accordingly (NCHS standard). Weight for age and height for age in the three age groups i.e. 0–1 year, 1–4 years and 5–14 years were taken for assessing the nutritional status. The girls and boys were considered separately. The formula and classification were quoted from Nelson’s Text book of Pediatrics (2000).

The data were collected with personal interview method. The adult
members of the families were the main informants. Parents, mostly, the mothers were interviewed, because they were the best care takers of their children. Direct observation method was also applied side by side. The help of local doctors and hospital authorities were also taken whenever necessary.

To study the use of ethno medicine, the interview method was mainly applied. The help of village medicine men was taken in various occasions. The data had been analyzed using simple statistics and were presented in the tabular forms. Some tables were represented by graphic presentation also. Proper care was taken to ascertain the actual age of the children.

All the data for the present study were based mainly on primary sources i.e field information. The secondary information were obtained from the libraries and other reliable sources.

******