

Chapter One

Introduction

1.1 Statement of the Problem

Economic growth or development both as an instruments and outcome, are not the prime objectives of policy makers and policy implementers of a nation any more. Improving the conditions in which people live, and providing them the environment that enables them to live a life dignity, self esteem and freedom are now universally accepted societal goals. The inquiry about the development levels of a nation or a region, and about the quality of life of its residents, will not take us far. Neither is knowledge about real per capita income of nations of much use to policy makers today as because some fundamental dimensions of well-being and quality of life are not captured by real per capita income.

The interest is not about the wealth of a society in terms of money, but rather about the process through which the monetary wealth translates into a live with at least some acceptable level of human dignity, pride, self esteem, happiness and freedom at the societal level. In many situations this translation may not happen at all, or may occur at a lacklustre rate depending upon institutional, social, religious or perhaps other reasons. One may argue that a society may be happier and may enjoy higher dimensions of freedom even with lower levels of per capita real incomes. In a nutshell purchasing power of people is important but may fail to promote quality of life if certain other vital dimensions of freedom are lacking due to institutional, socio-psychological, religious or other reasons.

Like Adam Smith, Sen (1983) emphasises that economic growth and the expansion of goods and services are necessary for human development. However, like Aristotle, he reiterates the familiar argument that ‘.....wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else’ (Sen, 1990, p.44). In judging the quality of life we should consider what people are able to achieve. Sen argues that neither opulence (income, commodity command) nor utility (happiness, desire fulfilment) constitute or adequately represent human well-being and deprivation. Instead what is required is a more direct approach

that focuses on human functioning(s) and the capability to achieve valuable functioning(s). The objective of human development is not only to produce more goods and services with highest possible efficiency, and to live a luxurious life, but to enhance capabilities of all people to lead full, productive and satisfying lives. The new development paradigm intends to put people back at the centre of developmental thinking. Along with the traditional goal of life sustenance, the human development paradigm advocates for dignity of all individuals in the society and most importantly freedom. Therefore, the objective of development is to expand capabilities (opportunity freedoms) and to support people's agency (process freedom). Sen uses the term 'capability' in a broader sense to refer to 'the alternative combination of functionings the person can achieve, from which he or she can choose one collection' (Sen, 1993, p.31). These functionings are comprised of a combination of various doings and beings so that these represent the things that a person manages to do or be in leading a life. This approach thus views the life that a person leads as a combination of various doings and beings (i.e. functionings). The examples of some elementary functionings are: being well nourished, properly housed, remaining healthy etc. The somewhat complex doings and beings are, for instance, having self-respect, enjoying human dignity, being integrated with ones community and so on. Thus, Sen (1999) provides the broadest possible definition of development – *expansion of freedom*. The availability of choices or expansion of opportunities makes an individual free from illiteracy, ill-health, racial as well as ethnic discrimination, gender disparity etc. The role of every individual in decision making has been emphasized in such a manner that everybody recognizes his or her presence in the development process. Freedom of different types has been viewed not only as the primary end of development but has also been described as one of its principal means.

Sen argues that quality of life of a person is promoted by anything that enhances freedom to live the way one would like, thus living freely, an availability of freedom of choosing between alternatives. It is thus clear that facilities like education, healthcare, housing, etc. improve the capabilities of the people to lead more satisfactory lives and thereby can improve their quality of life. In this sense, the capability of a person corresponds to the freedom that a person has, to lead one kind of life or another. Thus, the real objective of development is to

enhance human freedom (Dreze and Sen, 2010:3) or increase people's development choices (UNDP, 1991:13). The new development paradigm intends to put people back at the centre of developmental thinking. So, development is always to be seen from the point of people's development as "People are the real wealth of a nation" (UNDP, 2010:1). Human resource development identifies human beings merely as inputs to produce a greater output of commodities and treats people as 'human capital'; while 'human development' takes welfare of people as a final goal of development (UNDP, 1996: 54). The main aim of a society is to achieve human development as it has a definite and positive effect on growth by enhancing economic achievements through greater freedom and capabilities. It is a well accepted fact that improved health and nutrition, and quality education can contribute to economic growth of a nation (Ramirez, Ranis and Stewart, 1997). Improved health, nutrition, and education raise the productivity of workers which definitely reduce deprivation, poverty and also income inequality in a society.

On the eve of independence, Indian economy was characterized by a predominantly agrarian with semi-feudal structure. There was widespread poverty, high rate of literacy, geographically and culturally isolated population, a rigid social structure and **poor infrastructure and almost a stagnant economy**. The state leaders and policymakers during the initial years of development planning were also not adequately acclimatised to development activities. In view of the impediments to social and economic development, the fulcrum of the planning process had been pivoted on the strategic goal of 'economic development with social justice'. Thus, the planning process in India, over the years, underscored the development of backward areas and disadvantaged population groups. From the inception of development planning in India the policies of the government have continued to be guided by the firm conviction that rapid economic growth is the prime mover in uplifting the poor by offering them more productive employment and enhancing their income. They have been fighting with the objective of reconciling growth with justice. 'Justice' may be either 'economic' or 'social'. Economic injustice indicates inequalities in distribution of income or wealth, while social injustice is related to inequalities arising out of socio-cultural institutions. These institutions include caste, class, religion, gender, etc. (Bandyopadhyay, 2007). The main objective of the

five year economic planning is to achieve inclusive growth with justice. The growth must advance equitable opportunities for economic participants during economic growth with benefits incurred by every section of society. It is required to have social equity, removal of poverty, integrity of the physical environment, effective delivery of public services, removal of gender biases and disparities, etc. to have an equal society ensuring better quality of life of the people (Dreeze and Sen, 2010). However, the outcome of the planning in the country has not been able to reduce poverty and so fails to achieve inclusive growth with justice. India's deep-rooted group inequalities and inherent limitations of its policies to support the excluded groups continue to be a barrier not only for its faster poverty reduction and improvement of human development indicators, but indeed also for the potential for economic modernization and growth. The public policies of India have all been challenged by the inequalities. Therefore, the formulation and implementation of progressive policies addressing the group inequalities is only the viable step to curb inequalities in our society.

In India there is a coexistence of both class based as well as caste based exclusion. The word 'exclusion' indicates that someone or something is being shut out by another. Social exclusion focuses attention on a broad range of factors that prevent individuals or groups from having opportunities that are open to the majority of the population. Social exclusion occurs across a number of dimensions such as social, political, economic and cultural. Also there are multiple bases of exclusion. Some common bases are race, ethnicity, gender, religion, region, language, caste and education. For example, women in backward societies are socially excluded from education and also participation in gainful economic activities. Similarly, illiteracy is a disability that excludes a person from all aspects of economic, social and political participation. These different forms of disadvantages form a self-reinforcing cycle. Exclusion can also take place in a number of areas ranging from legal, health and education systems to the household and communities. Dalits, women, children, disabled, minorities, adivasis and tribes are often the most deprived and excluded groups in a country like India. It leads to deprivation and massive rate of poverty and poor standard of living of excluded people.

Tribal people generally have lower income, poorer physical living conditions and less access to health care, education etc. The poverty and social exclusion experienced by tribal people

may be large due to discrimination at social and institutional level during colonial and post independence era. At the same time it may be due to their living in the hills and jungles and remote areas where the basic amenities of modern civilization have a lower reach. The basic way of life for almost all the tribal people is doing cultivation either in the hills or plains. The practice of jhum cultivation and changing place from one area to other areas is making their way of living, ancient. This may be the cause for which other sections of the society try to remain away from them or they themselves also remain away from the main stream of the society. Main stream of the society think that tribals are less civilized, terrifying people and may attack other sections which is creating a gap to understand each other's culture and respecting one another in the process of socio-economic development. All these factors may be responsible for the social exclusion of the tribal people from the main stream of the society.

The caste societies were the integral part of Hindu caste system. The Scheduled Castes, generally the lowest in the social rank, have socio-cultural and economic dependency on other caste groups. Thus, exclusion of such societies is due to its social customs, work attachment and legend mandated by social authorities present among the greater Hindu society. The perceived and manifested exclusions are mostly due to the fact that the other part of the society thinks them not suitable to be in the same line of interaction. From these two explanations one can draw the difference of exclusion: Tribal groups are excluded groups because they are not a part of the greater traditional Hindu society. At best they may be termed as the parallel segments in a different domain. Scheduled Castes, on the contrary, a part and parcel of the greater Hindu society, are excluded as neglected parts thereof (Thakur, 2012).

The post independence inclusion of tribal territories into development map of the state has displaced lakhs from tribal people of their homes, making them dependent on others mercy. The excluded area concept was mostly used for political gain in terms of security and smooth administration in and around tribal areas in contrast to the general view that it was meant for the betterment of the tribal people. Since the exploitation of resources and the breakdown of tribal tradition were in vogue in those areas, the political exclusion had some definite impact

on tribal societies. The economic development, education and infrastructure etc were suffered in those excluded areas (Sonowal, 2008).

The various literatures of Indian society from the past immemorial illustrates that the mainstream of the Indian society regarded tribals as uncivilized and always made a gap with them. As the main society regarded them as inferior, therefore such tribes remained out of various socio- economic and cultural activities of life. This further made the tribals constricted within their group and regarded the mainstream as an enemy to their way of life. This enhances exclusion of the tribal society with the main land. The neglect of their tribal religious way of living by the rigid Hinduism practice of the main land people latter helped the Christian missionaries to spread Christianity in most parts of the tribal belt in the country, especially in the North-East. It appears that they are now closer to western culture than with the Indian culture.

1.2 Tribes of Assam

‘Tribe’ is a term used in reference to certain human groups or society. The first use of the word ‘tribe’ in English referred to the Hebrews. Till 1000 B.C., the Hebrews was loosely organized into 12 groups. The use of the word ‘tribe’ was extended to mean any group of families who had a common ancestor. With passage of time, the word ‘tribe’ acquired the meaning of ‘primitive groups’. Etymologically, the English word ‘tribe’ finds mention in 13th century English literature. The word is derived from old French word ‘tribu’. This is again derived from Latin word ‘tribus’. ‘Tribus’ referred to the original three ethnic division of the Romans state, namely, ‘Tities’, ‘Ramnes’ and ‘Lucre’s’. As the word ‘tribus’ in Latin referred to the three ethnic divisions of Rome, the origin of the word ‘tribus’ ultimate origin can be traced to the Latin word ‘tres’ which implies from or for three.

In India the tribes are known to be the autochthonous people of the land. Tribals are often referred to as Adivasi, Vanyajati, Vanvasi, Pahari, Adimjati and Anusuchit Jan Jati, the latter being the constitutional name (Basu, 2000). Tribe as a category, separate from the mainstream caste society, is an invention of the British administrators. According to Singh (1995), “The notion of a tribe was introduced by colonial administrators. It was part of the universal trend to dichotomize the indigenous people and colonizers, the savage and the civilized, the

tribals and non-tribal.” Several anthropologists however hold the view that a tribe is no different from a caste (Ghurye 1943; Beteille 1974; Bailey 1960). The term ‘tribe’ has been defined in different ways by different individual scholars and hence there is no universally accepted definition. Beteille (1974) concluded that in India, “there really is no satisfactory way of defining a tribal society.” According to Imperial Gazetteer of India, “tribe is a collection of families bearing a common name, speaking a common dialect, occupying or professing to occupy a common territory and is not usually endogamous, though originally it might have been so”. The term ‘tribe’ in that sense refers to a type of society and marks a stage of evolution in the human society. As a type of society, the term signifies a set of characteristic features and as a stage of evolution; it connotes a specific mode of social organization. The most acceptable definition of tribes in the Indian context is propounded by D.N. Majumdar (1958). According to him, “a tribe is a collection of families or groups of families bearing a common name, members of which occupy the same territory, speak the same language and observe certain taboos regarding marriage, profession or occupation and have developed a well-assessed system of reciprocity and mutuality of obligations.”The tribal population in India, though a numerically small minority, represents an enormous diversity of groups. They vary among themselves in respect of language and linguistic traits, ecological settings in which they live, physical features, size of the population, the extent of acculturation, dominant modes of making a livelihood, level of development and social stratification. They are also spread over the length and breadth of the country though their geographical distribution is far from uniform (Tribal Committee Report, May-June 2014; page-24). According to the Census of India 2011, the total Scheduled Tribe population is 10, 42, 81,034 persons which constitutes 8.6 per cent of the total population of the country. The tribal communities in India are enormously diverse and heterogeneous. There are wide ranging diversities among them in respect of languages spoken, size of population and mode of livelihood. The number of communities that find their place in the list of the Schedule of the Indian constitution is reflective of this diversity. As per the Census of India 2011, the number of individual groups notified as Scheduled Tribes is 705.

North East India comprises the states of Arunachal Pradesh, Nagaland, Meghalaya, Mizoram, Manipur, Assam, Tripura and Sikkim. It shares international border with countries like Bangladesh, Bhutan, China and Myanmar which has made the region strategically important. The total land area of Northeast India is 255168 square kilometres. The region has a unique history, distinct demography and socio-economic features. It has been an abode of several ethnolinguistic and cultural groups since ancient time. Since time immemorial, people of different races, languages and cultures have come and settled in different parts of North East. Hypothetically, the earliest settlers of this part of the country are believed to be of Austro-Asiatic stock of human races (currently identified with Khasis) who came from eastern Mediterranean and had been settling in the region since 2500 BC. They were followed by Indo-Mongoloid group of people migrating from central Asia such as China, Mongolia, Tibet and Siberia at about 1000 BC. They settled down in different parts of North East India and ruled over the region for many centuries.

Assam, the gateway of Northeast India, is distinct from the mainland Indian sub-continent for its diverse cultures, customs, cuisines, languages and dialects of different ethnic tribes, multiple ethnic identities and competing ethnic aspirations. Geographical area of Assam is 78,438 sq. km which is about 2.39 per cent of all India total area (3,287,240 sq. km). Total population of Assam (31,205,576) constitutes 2.58 per cent of total population of India (1,210,193,422). Of the total population of Assam, around 85.90 per cent live in rural areas (against the all India level of 68.8 per cent) and 14.10 per cent in urban areas (against national average of 31.2 per cent) (Census, 2011). Low per capita income signifies the economic backwardness of a state. The most striking fact is that per capita income (at constant 1980-81 prices) in Assam (Rs 1173.00) was 4 per cent above national average (Rs. 1127.00) in 1950-51 (Government of Assam, 2001). In 2013-14, per capita income of Assam (Rs 46354.00 at current prices and Rs. 24533.00 at constant 2004-05 prices respectively) was 38.13 per cent below the national average at current prices (Rs 74920.00) and 38.61 per cent below the national average at constant (2004-05) prices (Rs. 39961.00) (Source: Directorate of Economics and Statistics, Assam; CSO, Government of India).

Assam is a land of great cultural diversity, the theme of ‘unity in diversity’ is more evident here than that in rest of the Indian sub-continent. Assam is a melting pot of many ethnic groups, sub-ethnic groups, castes, tribes and different communities. The cultural assimilation of these different groups has made up a distinct Assamese culture. The STs are a major contributor of religious rituals, culture, language, farming and agricultural methods to the State. Table 1.1 depicts that total tribal population in the state, according to the Census of India 2011, has been recorded as 38, 84,371 accounting for 12.4 per cent of state population. The decadal growth rate of tribal population from 2001 to 2011 in the state is estimated as 17.40 per cent as compared to 16.93 per cent of total state population growth. On the other hand, during the same period Lalung (Tiwa) has registered a decadal population growth of 17.75 per cent. The percentage distribution of major STs to total tribal population of Assam is shown in table-1.1.

Table 1.1: Distribution of major STs to Total Tribal Population of Assam				
Major STs of Assam	Total Population		Percentage to Total STs of Assam	
	2001	2011	2001	2011
Bodo	13,52,771	1361735	40.9	35.05
Miri	5,87,310	6,80,424	17.8	17.51
Karbi	3,53,513	4,30,452	10.7	11.08
Sonowal Kachari	2,35,881	3,56,305	7.1	9.17
Rabha	2,77,517	2,96,189	8.4	7.62
Lalung (or Tiwa)	1,70,622	2,00,915	5.2	5.17
Dimasa	1,10,976	1,22,663	3.4	3.15
Deori	41,161	43,750	1.2	1.12
Others	1,78,819	3,91,938	5.3	10.09
Total Tribal Population	33,08,570	38,84,371	100	100

Source: Census of India, 2001 & 2011.

Among STs, Bodo represents more than one third of the total ST population of the state. Miri (17.51 per cent), Karbi (11.08 per cent), Sonowal Kachari (9.17), Rabha (7.62 per cent) and Lalung (5.17 per cent) are the other major STs, each having 5 per cent or above of total STs. Along with Bodo they constitute about 90 per cent ST population of the state. The rest of the Scheduled Tribes are very small in their population size.

1.2.1 Historical Origin of Tiwa Tribe

The Lalungs who are also known as Tiwas are one of the major tribes of Assam. Tiwa tribe has a mythological and historical origin. Mythology believes that Lord Siva, created, a god whose name was 'Lungta Mahadeo'. 'Lung' means a steam of juice arising out of Lord Siva and 'La' means the formation of a living being out of that juice. The union of Lord 'Lungla' and Jayanti Devi (Goddess Durga) produced three daughters. From the eldest, the Karbis were created while Boro Kacharis and Lalungs had their origin from the second and the youngest daughters respectively. Another legend behind the word 'Lalung' is that originally the Lalungs were ruled by the demon king Bali who was a faithful devotee of Lord Vishnu. The king wanted that all his subjects should adhere to the royal religion. A section of the Lalungs refused to accept the religion and as a result, the king's fury fell heavily upon them. As a punishment for their misbehaviour they were compelled to bear a red imprint (Lal) on their forehead and then were turned out of the country. Later on those bearers of red mark on their forehead came to be known as Lalungs. Yet another mythological story behind the origin of the word 'Lalung' is prevalent among the Lalungs. Once Lord Mahadeo was heavily intoxicated with rice beer and while he was lying unconscious, a stream of saliva ('Lal') came out from the mouth of Lord Mahadeo. The Lord created two human beings out of his saliva and they came to be known as Lalungs (human beings created out of Lord's 'Lal'). A similar story with some slight variation is also prevalent among the Lalungs. Once upon a time, Lord Mahadeo and his consort Parvati were enjoying the scenic beauty of Manas-Sarovar Lake. The soothing beauty of the lake area enchanted the Lord so much that he fell asleep on the bank of the lake. As he woke up, he saw five drops of saliva at the place where he was resting. The Lord created five human beings out the divine saliva they came to be known as Lalungs. These five 'original Lalungs had the unique privilege of seeing the creator in the form of human being and therefore the Lalungs call Lord Mahadeo as 'Manus Mahadeo'.

Although there is no clear cut date about the migration of the Lalungs to the plains of Assam, yet it can be assumed that they had migrated to the plains sometime in the middle of the 17th century A.D. 'In 1658, Promota Rai rebelled against his grandfather Jasa Manta Rai, Raja of

Jayanita and called on the tributary chief of Gobha to help him. The latter refused and Promotta Rai there upon destroyed four of his villages. He appealed for help to the Kacharis who were preparing to come to his assistance when the local Ahom officials intervened and said that, as the Ahoms were the paramount power it was they whose protection should be sought. The Gobha chief accordingly went with seven hundred men to Jayadhwaj Singha and begged for help. Orders were issued to the Borphukan to establish him in Khagarijan corresponding more or less to modern Nagaon and this was accordingly done' (Gait, 1963). The process of migration thus started along with this incident and later on batches of Lalungs began to enter the plains of Assam due to various socio-religious as well as political reasons. Grierson (1967) who did extensive research among the ethnic groups during British days did not mention about the date of migration of the Lalungs to Nagaon 'How the Lalungs came to their present site or when is not known. They are neither mentioned by the Ahom historians nor in the accounts of Koch kingdom. In Nagaon they are said to have a tradition that they came from the Jayantia Hills while some of the Lalungs in the latter district say that their ancestors immigrated thither in the reign of the Jayantia Raa U Mon Gohain. Another account, however says that the Lalungs claim to be the autochthones of the Jayantia hills.' A legend goes that Lalungs, originally inhabiting the Jayantia hills, moved into the plains of Nagaon district (Khagarijan) because they disliked matriarchal and matrilineal systems and human sacrifice of the Jayantias. Lyall (1908) mentions that Lalungs were living in the contiguous areas of the Mikirs. 'Side by side with the Mikirs dwell in the Mikir hills, the Rengma Nagas (who are recent immigrants from the eastern side of the Dhansiri) in the Jamuna and Diyaung villages, the Dimasa or Kacharis in the Jayantia Hills and along the Nagaon and Kamrup borders of Lalungs and a few settlements of Kacharis'.

Although the Tibet region is believed to be the original homeland of the Lalungs, yet their migration to the plains is shrouded in mystery. As the Lalungs landed on the plains following the course of the river Brahmaputra, they introduced themselves as 'Tiwa' to the inquisitive non 'Tiwans'. The name 'Lalung', they opine, was given by the non Lalungs. The Lalungs belong to the great Bodo race in which tribes like Boro Kachari, Chutiya, Deori, Rabha, Mech, Tippera, Tipra, Garo etc. are included. 'The Kacharis are believed to be very closely allied to

the Koches and also so far at least as language is concerned to the Chutiyas, Lalungs, Morans of the Brahmaputra valley and to the Garos and Tipperas of the southern hills' (Bhuyan, 1951). Endle in his ethnography on the Kacharis' has claimed the following tribes of Assam within the fold of the great Bodo race. They are Rabha, Mech, Dimal, Koch, Solanimiyas, Mahaliyas, Phulgurias, Saranias, Dimasas, Hojais, Lalungs, Garos and Hajongs.

1.2.2 Location of Tiwa settlements

A remarkable peculiarity of the Lalung is their division into two sub-groups i.e. hill Lalungs and plain dwelling Lalungs. The hill Lalungs reside in the western most area of Karbi Anlong district (Assam) and north-eastern area of Ri-bhoi district (Meghalaya). Plain Lalung concentrations are mainly found in the plains of southern bank of Brahmaputra Valley, in the districts of Morigaon and Nagaon in Central Assam. Besides, there are a few Lalung villages in Dhemaji and Kamrup district. It is to be noted that the topography and ecology of the plains and hills have influenced the Lalungs considerably so much so that certain aspects of socio-cultural life of the hill Lalungs became distinct from that of the plains Lalungs. Thus food habit, dress, pattern of houses, agricultural pattern etc., of the hill Lalungs are different from those of the plains Lalungs. The Lalung villages of Morigaon and Nagaon and other plains districts are not found in exclusive areas. They are interspersed with non Lalung villages.

The spread of Tiwa population across the districts of Assam is, however, not even. The total Tiwa population of Assam as per Census of India Report, 2011 is 2, 00, 915. The Tiwas, the tribe of this study, are mostly concentrated in five districts of Assam namely, Morigaon, Nagaon, Karbi Anlong, Kamrup and Dhemaji. The Tiwa concentration in these districts of Assam to total Tiwa population (2011 census) is shown in table 1.2

District	Total ST Population	Total Tiwa Population	Proportion to total Tiwa Population	Proportion of Tiwa to District's Total Tribal Population
Morigaon	136777	109530	54.51	80.07
Nagaon	115153	58511	29.12	50.81
Karbi Anglong	538738	18180	9.04	3.37
Kamrup	75121	7318	3.64	9.74
Dhemaji	325560	6130	3.05	1.88

Source: Census of India, 2011.

Table 1.2 gives an idea of the composition of total tribal and Tiwa population in the Tiwa concentrated five mentioned districts of Assam. The share of Tiwa population varies significantly across the districts of Assam. The highest share of Tiwa population is recorded in Morigaon District with over 54 per cent of total Tiwa population, followed by Nagaon with 29.12 per cent, Kamrup with 9.74 per cent. Thus it is observed that about 83 per cent of total Tiwa population resides in Morigaon and Nagaon districts of Assam. Again in these two districts, Tiwa is the highest concentrated among all STs. In Morigaon, Tiwa constitutes 80.07 per cent to total STs and in Nagaon they constitute about 50.14 per cent to their total STs. Besides Morigaon and Nagaon, there are few Tiwa people in Karbi Anglong (9.04 per cent), Kamrup (3.64 per cent) and in Dhemaji (3.05 per cent). Table-1.3 shows sex ratio, child sex ratio and literacy rate of major STs of Assam. It is a heartening fact that sex ratio among Twas is found to be 1000, but child sex ratio is slightly lower at 990. The male literacy rate of Tiwa is 80.1 per cent, while the female literacy rate isn't satisfactory as it is 66.6 per cent only. The overall literacy rate of Tiwa is 73.3 per cent.

Tribe	Sex	Child Sex	Literacy Rate		
	Ratio	Ratio	Total	Male	Female
Bodo	994	963	70.6	77.9	63.2
Miri	968	946	69.3	77.4	60.9
Sonowal Kachari	984	939	85.4	90.4	80.5
Rabha	989	960	75.1	81.5	68.7
Lalung	1000	990	73.3	80.1	66.6
Dimasa	1023	965	84.6	88.6	80.7
Deori	994	907	83.3	89.3	77.3

Source: Census of India, 2011.

Table 1.4 depicts literacy trends among major scheduled tribes in the state. Literacy rate among Tiwas was 51.53 per cent in 2001 which increased to 73.3 per cent in 2011. Almost all

selected major tribes of Assam have shown a considerable improvement in literacy rate. Though the decadal improvement of literacy rate of Tiwas is 21.77 per cent, the Tiwas are still lagging behind especially in terms of female literacy rate. This has been observed from (Table-1.4). Other tribes like Sonowal Kachari, Dimasa , Deori, Rabha are on the way leading faster than Tiwas in terms of literacy rate. Total tribal literacy rate which was 62.52 per cent in 2001 in the State has increased to 72.1 per cent in 2011.

Tribe	2001			2011			Decadal Improvement (Per cent)
	Total	Male	Female	Total	Male	Female	
Bodo	51.48	59.81	43.00	70.6	77.9	63.2	19.12
Miri	49.12	58.42	39.43	69.3	77.4	60.9	20.18
Sonowal Kachari	70.52	76.22	64.66	85.4	90.4	80.5	14.88
Rabha	56.37	64.33	48.20	75.1	81.5	68.7	18.73
Lalung	51.53	59.77	43.17	73.3	80.1	66.6	21.77
Dimasa	49.14	57.28	40.58	84.6	88.6	80.7	35.46
Deori	65.46	72.72	58.03	83.3	89.3	77.3	17.84
State	62.52	72.30	52.40	72.1	78.6	68.2	9.58

Source: Census of India, 2001 & 2011.

1.3 Profile of the Study Area

The geographical area of this study comprises Morigaon and Nagaon districts of Assam.

1.3.1 A Brief Profile of Morigaon District

Morigaon is situated between 26.15 degrees North and 26.5 degrees North latitude and between 92 degree East longitudes. Morigaon town, the headquarter of the district is situated 78 Kms. from Dispur, the state capital. The district is bound on the North by the mighty river Brahmaputra, on the East by Nagaon district, on the South by Karbi Anglong Hill district with a small tract of Meghalaya and on the West by Kamrup district. There is a line of hills of different heights on the Southern boundary of Morigaon district namely Amsoi, Nelli, Jagiroad and Nakhola. There are small hillocks namely Baghara, Kumoi, Tetelia, Monoha, Bahar, Buraburi, Mayang add Kachasila on the western part of the district. The hills provide the much needed house building materials and fire wood in addition to the herbs, roots, creepers, medicinal plants, etc. The tribal people, particularly the Tiwas, use the forests as venue for their place of worship (than) where various socio-religious festivals are held through the year. The non tribal villagers too, use the forests for collecting fire wood, house building materials,

herbs, fruits, etc. Besides the low lying forest lands provide the daily requirement of fish. Morigaon has large numbers of swampy lands and beels which are rich sources of fish. The Kachadhara, Charon, Udari, Gouranga, Gotonga, Tihulia beels provide economic benefits to the people to a large extent as fishes are sold in nearby cities markets at high prices. The Pabitora National Forest, famous for its thick forest resort of the one horned rhino, is situated on the South Western part of the district.

In Morigaon, agriculture is the sole means of livelihood for the people belonging to both tribal and non tribal persons. Due to fragmentation of the land holdings consequent upon division of the paternal properties among the sons, and also due largely to the adoption of old technique of cultivation, the economic life of the people is far from satisfactory. The mighty Brahmaputra flows along the northern boundary of the district. Killing, Kalong and Kapili rivers flow through the southern part of the district. Almost every year, Morigaon has been witnessing devastating floods due to high water levels in the Brahmaputra and its tributaries. Frequent floods every year have been destroying standing crops, creating water logging, soil erosion and affecting large crops and harvest areas and thus leaving them in a miserable situation and threatening their livelihood. As a result, most of the farmers are living in abject poverty, struggling with life and just managing to survive by scraping for a living through multiple informal economic activities such as casual work in non-agriculture. This of course means immense toll in the livelihoods of families, especially those living in the rural areas.

The district of Morigaon does not possess industries except the Hindusthan Paper Corporation Mill, Jagiroad. This single industry has not contributed much towards the economic prosperity of the people of the district. On the other hand, Morigaon district has various natural resources like minerals, forest wealth besides adequate water from many rivers covering major part of the district. The district is also endowed with resources for the development of sericulture, handloom, handicrafts, etc. It has potential for agro-processing units like rice mills, flour mills and mustard oil extraction mills. Dry fish, an important item produced and supplied to the entire North Eastern Region, has good potential for financing by banks. The district lacks good transportation, marketing and power supply system. Lack of awareness on

the part of beneficiaries is the basic reason for the poor success of various schemes in the district. The extension services need to be strengthened to improve the awareness among the people.

Although the connectivity from Morigaon to Guwahati, Jagoirad and Nagaon is satisfactory, the same is not the case with the remote and interior areas, whose inhabitants, mainly the rural poor, suffer badly as they have to walk for miles to the nearest bus stop. The district headquarter does not have a railway office. The main station is at Jagoirad which is, 23 Kms away. Thus, the people of Morigaon town do not enjoy the benefit of railway connection. Apart from this, all cargo has to be carried through road transport, which has adverse effect on prices.

As regards cottage industry, almost every household is self sufficient with materials like agricultural implements, fishing implements and other items of day to day use. Every adult woman is an expert weaver and they weave clothes for all the members of the family. The Endi chadars woven by women folk fetch good prices in the market. They also rear poultry. goats, ducks, etc. and the income is utilised for purchasing yarn. The district is inhabited by various castes and tribes. Besides Tiwas there are scattered villages of Boro Kacharis and Karbis. There is good number of Scheduled Caste villages in the district whose main profession is agriculture and fishing. The district is also inhabited by exclusive pockets of Char inhabitants who are mostly found in the riverine areas.

1.3.2 A Brief Profile of Nagaon District

Nagaon district is located in the very centre of Assam. In fact, it is at the centre of the entire North-Eastern India. With headquarters at Nagaon town, the district covers an area of 3993 square km. The district of Nagaon is bounded on the North by the river Brahmaputra and Sonitpur, on the East by Golaghat district and east Karbi Anglong, on the South by the Karbi-Anglong and North-Cachar Hills district and on the West by Morigaon district. The district lies between 25'-45" North to 26'-45" North Latitude and longitude 92'-33' to 93'-20' East. It

is an old district which dates back to 1833, which is the second most populous district with 2,823,768 population (2011 census).

The district is largely a plains area with sizeable swampy low lying lands bounded by hills on the Eastern and Southern boundary with varying heights. Mention may be made of the Kathiatali, Kandali, Sagonbahi, Basundhari, Amsoi, Lanka, Chapanala, etc. The mighty river Brahmaputra flows along the northern periphery of the district. Other major tributaries meandering through the district such as Kalong, Kapili drain into the Brahmaputra. The river Kapili originating in the hills of Karbi Anglong flows through the South Eastern part of the district. The river has provided the population with the much needed water for irrigation purposes. Besides, the river is a source of drinking water for many villagers including the tribes. Another river of importance is the Kalong which flows through the heart of the district. The life and culture of the people is largely moulded by this river. Each year low lying areas of Nagaon are also flooded but the affected people very often consider the flood as a boon because the flood water carries with it much manure which makes the agricultural lands fertile. Perhaps for this reason the local people of Assam consider Nagaon as one of the best granaries of Assam. The flood water provides additional benefit to the fishermen as the receding water leaves behind fishes in the swampy lands and beels, contributing immensely towards the betterment of economic condition of the rural people, particularly of the scheduled castes whose main profession till recently was fish catching and selling.

The district has good number of forest resources and better quality of commercial timbers. The reserved forests not only provide timber for firewood but these are also potential sources of fishery. The Laokhoa Reserved Forest is an important source of revenue for the state. Agriculture is the primary source of sustenance for the people and Rabi and Kharif crops are widely grown. The farmers, however, are not able to reap the economic benefits of the increased prices of winter crops as they are in the unorganised sector. Industrial progress is sluggish in the district. The soil of Nagaon is suitable for growing and selling their products at reasonable prices. The low swampy lands are favourable for growing jute and the jute pro-

duced by the villagers are purchased by the Jute Mill authority of Silghat. The Nagaon Paper Mill at Jagiroad lies at the border of both Nagaon and Morigaon districts.

The demographic pattern in Nagaon district is characterised by existence of various castes and tribes such as Brahmin, Koch, Kalita, Nath (Jogi), Keot, Ahom, Chutia and Muslims. There is a sizeable population belonging to the Char areas who live mostly in the riverine areas. The Tiwas (Lalungs), Boro Kacharis and Karbis are the major scheduled tribes. The Lalungs are the pre-dominant ethnic community in both the districts who are largely assimilated and at a glance one can hardly distinguish a Lalung from a non-Lalung. The scheduled castes, belonging mostly to the Kaibartas, Namasudras and Hiras are also dispersed communities. There is nothing to identify a scheduled caste from their living pattern or material culture. They are part and parcel of the greater population of the district. The other Schedule Caste population like Muchis, Bansphors, etc are mostly floating inhabitants of the district. They are mainly found in the urban centres. There are good numbers of tea and ex tea garden labourers also who are now an assimilated group in the greater Assamese society, as they are settling in the vicinity of the tea gardens doing agriculture and most of them labourers.

Lying at a distance of 123 kilometers by road from Guwahati, Nagaon town constitutes a vital corridor linking the Upper Assam districts of Golaghat, Jorhat, Sivasagar, Dibrugarh, Tinsukia and the North Assam districts of Sonitpur and North Lakhimpur.

Table 1.5 represents some important demographic features of Morigaon and Nagaon districts on the basis of secondary data. According to 2011 census of India, the rural Schedule Tribe population of Assam is about 94.36 per cent as compared to 89.99 per cent of rural Schedule Tribe of India. On the other hand, the percentage of rural tribal population in both Morigaon and Nagaon districts is above 95 per cent indicating the fact of rural inhabitants of tribal people in the study districts. The rural tribal population is found to be 95.44 per cent in Morigaon district and 95.13 per cent in Nagaon district.

Table 1.5: Some Selected Demographic features of Morigaon and Nagaon districts of Assam

Demographic Features	DISTRICTS			
	MORIGAON		NAGAON	
	2011	2001	2011	2001
Actual Population	957,423	776,256	2,823,768	2,314,629
Male	486,651	398,926	1,439,112	1,190,950
Female	470,772	377,330	1,384,656	1,123,679
Population Growth (Per cent)	23.34	21.35	22.00	22.26
Area Sq. Km	1,551	1,551	3,973	3,973
Density/km ²	617	501	711	582
Proportion to Assam Population(Per cent)	3.07	2.91	9.05	8.68
Sex Ratio (Per 1000)	967	946	962	944
Child Sex Ratio (0-6 Age)	956	966	964	975
Average Literacy	68.03	58.53	72.37	61.73
Male Literacy	71.90	65.15	76.51	68.27
Female Literacy	64.04	51.51	68.07	54.74
Total Child Population (0-6 Age)	163,819	148,765	459,940	426,265
Male Population (0-6 Age)	83,746	75,676	234,203	215,800
Female Population (0-6 Age)	80,073	73,089	225,737	210,465
Literates	539,902	5,312,396	1,710,716	16,988,329
Male Literates	289,698	2,872,529	921,850	9,245,497
Female Literates	250,204	2,439,868	788,866	7,742,832

Source: Census of India, 2001 & 2011.

Morigaon district has a population of 9, 57,423, out of which 4, 86,651 are males and 470772 are females in 2011. On the other hand, Nagaon district has a population of 2,823,768, out of which 1,439,112 are males and 1,384,656 are females in 2011.

Due to high rate of growth of population, density of population in Morigaon district has increased from 501 per sq kms in 2001 to 617 per sq kms in 2011 and the same has increased from 582 per sq kms to 711 per sq kms in Nagaon district during the same period. The sex ratio, females per 1000 males, of Morigaon district has increased from 946 in 2001 census to 967 in 2011 census. During the same period, the sex ratio of Nagaon district has increased from 944 to 962. But, the child sex ratio has declined from 966 as per 2001 census to 956 as per 2011 census in Morigaon district, while in Nagaon district the same ratio has declined from 975 to 964. The average literacy rate in Morigaon district has increased from 58.53 per

cent in 2001 to 68.03 per cent in 2011, whereas the literacy rate in Nagaon district has increased from 61.73 per cent to 72.37 per cent during the same period. Compared to male literacy rate, female literacy rate is considerably lower in both the districts. The male and female literacy rate in Morigaon district in the year 2011 are 71.40 per cent and 64.04 per cent in 2011 respectively, the corresponding figures are 76.51 per cent and 68.07 per cent in Nagaon district.

1.4 Theoretical and Conceptual Framework

1.4.1 Inequality

Inequality can be defined as the dispersion of the distribution of income or some other welfare indicator (Litchfield, 1999). Inequality implies the state of not being equal, especially in status, rights, and opportunities. Inequality is a broader concept than poverty in that it is defined over the entire population, and does not focus only on the poor. It matters for society as a whole. It is a concept very much at the heart of social justice theories. Inequality hinders social cohesion, obstructs social mobility, and stimulates social unrest and political instability (UNDP, 2014:39). Above all, it hampers the freedom of choices (UNDP, 2014:37). It tends to mean different things to different people. Many authors distinguish “economic inequality”, mostly meaning “income inequality”, “monetary inequality” or, more broadly, inequality in “living conditions”. If we compare total income to a cake, inequality can be thought of as deriving from the way that a cake is divided among individuals. In this sense, inequality is the way an actual income distribution deviates from a benchmark for income distribution. Economic attitudes, as well as ideological and intellectual positions, may cause differing views about the size of inequality, its relevance and policies that might be implemented to deal with it. Furthermore, income inequality might be seen as a part of a more general concept of economic inequality, even though income conditions are often a good proxy for economic conditions, because income shapes people’s living standards and it is generally highly correlated with other well-being indicators. Concerning economic inequality, much of the discussion has boiled down to two views. One is chiefly concerned with the inequality of outcomes in the material dimensions of well-being and that may be the result of circumstances beyond one’s control (ethnicity, family background, gender, and so on) as well

as talent and effort. This view takes an achievement-oriented perspective and mostly put aside distributional part. The second view is concerned with the inequality of opportunities, that is, it focuses only on the circumstances beyond one's control, that affect one's potential outcomes. There is a relation between the two concepts, as inequality of outcomes may well be derived from inequality of opportunities. For example, if a talented individual cannot afford to go to university because he/she is poor (inequality of opportunities), he/she is likely to have a lower income level (inequality of outcomes) in his/her life cycle.

There are two types of inequalities: i) Horizontal Inequalities (HIs), that is inequalities between groups and ii) Vertical Inequalities (VIs), that is, inequalities between individuals. The groups included in HIs are, for example, age, gender, national, racial, ethnic, and religious. Most of the analysis of inequality relates to vertical inequality, and confined to a few economic variables, viz. income, and consumption. For this purpose, Lorenz curves and the Gini coefficient are used. But, in such cases, HIs should not be ignored (Stewart, Brown & Mancini, 2005:3). VIs is decomposed into two elements: between group inequality and within group inequality. As, HIs are a component of Vertical Inequality (VI), therefore VIs is possible to be greater than HIs. It is an important issue to examine the correlation between HIs and VIs (Stewart, Brown & Mancini, 2005:5; Atkinson, 1983).

There are two different forms of inequality in the multidimensional context. The first form of inequality is called distribution sensitive inequality that is based on the single-dimensional inequality concerned with distribution, whereas the second is called association-sensitive inequality based on the existing correlation among the components of human development. Both these two forms are incorporated in the construction of the multidimensional poverty indices (Tsui, 2002) and inequality indices (Decancq and Lugo 2008). The traditional HDI are not sensitive to these two forms of multidimensional inequality. Therefore, a class of modified human development indices has also been proposed to incorporate both forms of inequality (Seth, 2009:1-2). Instead of incomes or consumption, Sen emphasizes on the use of extensive multidimensional space of capabilities to measure inequality. The selection of space depends on the matter of assessment. In many cases, income or consumption are very poor indicators as they do not incorporate access to public goods, distribution within the

family, the ways of translating income into capabilities (Stewart, Brown and Mancini, 2005:7). Income or consumption inequality is just one dimension of inequality. Other dimensions of inequality are inequality in skills, education, health, opportunities, happiness, life-spans, welfare, assets, social mobility etc.

The Role of Axioms in Inequality Measurement

There are various ways to measure inequality. The ones most frequently used in practice usually conform to a certain set of axioms. Axioms help to choose the inequality indexes. Choice of an inequality index implies that inequality measurement has an axiomatic approach. These axioms or 'desirable properties' are the following.

The Pigou-Dalton Transfer Principle: An income transfer from a poorer to a richer person should register a rise in inequality, or at least not a fall (Litchfield, 1999). Most of the inequality measures, such as, the Generalized Entropy class, the Atkinson class and the Gini coefficient, satisfy this principle. Exceptions are the logarithmic variance and the variance of logarithms (Cowell, 1995).

Income scale independence: Inequality measures should be unaffected if there is a uniform proportional change in households' income (Litchfield, 1999).

Decomposability: This requires that overall inequality should be related consistently to constituent parts of the population such as population sub-groups (Litchfield, 1999).

Principle of population: Inequality measures should be invariant to replications of the population. For example, merging two identical datasets should not alter the distribution (Litchfield, 1999).

Anonymity or symmetry: The inequality measure should be independent of any characteristics of individuals (or households) other than their income (or the welfare indicator whose distribution is being measured) (Litchfield, 1999).

The Descriptive and Normative Approach to Inequality

There are two main approaches to treat the issue of income inequality i.e. Descriptive Approach and Normative Approach. In the Descriptive Approach, value judgements about the nature of inequality are not explicit. Descriptive approach makes no explicit use of any

concept of social welfare. No Social Welfare Function (SWF) has yet been specified (Cowell, 1977). Some examples of Descriptive Approach are coefficient of variation, relative mean deviation, Theil measure, Gini coefficient, Lorenz curve etc. The main features of the Descriptive Approach are:

i) In the Descriptive Approach, the analyst takes a picture of inequality as it is in state A and describes changes in income distribution under different scenarios, for instance, state B, but he/she does not dispose of devices to state whether A is better than B or vice versa. Descriptive indexes are generally mathematical formulas and so they have mathematical properties. Mathematical properties drive the way the index behaves when an income distribution changes from state A to state B. In other words, mathematical properties drive the mechanics of the inequality index. The way the index actually behaves because of its mathematical properties and the way we would like it to behave according to our judgement, may not necessarily be the same.

ii) Descriptive inequality indexes are many. To choose among them, we can take help by specifying axioms. For example, if we think income inequality would be lower if richer people transfer income to poorer people, we should choose an index with this mathematical property.

iii) Different inequality indexes have different mathematical properties, and not every index may reflect our personal feeling. So, it might be the case to have different indexes giving conflicting results on inequality changes from state A to state B. This is a very important matter that requires a better understanding of the inequality index used.

b) Normative approach of income inequality is based on an explicit formulation of social welfare and the loss incurred from unequal distribution. By linking and integrating the measure of inequality with social welfare, normative measures rely on value judgments and a properly defined welfare function. The Normative Approach enables the analyst to compare income distributions based on priori value judgement. This approach implies specifying if inequality is bad or good, how much of inequality is bad or good, how much society benefits or loses from it, and how to compare individual incomes. To this extent, the Normative

Approach requires specifying the SWF (Champernowne and Cowell 1998). The important examples of normative measures are the Dalton measure and the Atkinson index. The main problem of using a Normative Approach is that there might be as many SWFs as there are people in a society, reflecting subjective judgements. Income inequality might therefore appear more or less severe depending on the SWF chosen.

1.4.2 Quality of Life

The term 'Quality of Life' is a more comprehensive one and it includes in its ambit a wide range of factors and indicators that are directly related to the well being of the population. Quality of life encompasses not only physical and economic wellbeing, but also the social, cultural, spiritual and even the political ideas of a community. The term “quality” means the degree of excellence of a characteristic, different people may assess different areas of life, and therefore quality of life means different things to different people (Bowling 2003). Several studies, researches, debates and discussions have been carried out in this direction, especially during the past few decades. Ben Chieh Liu (1974) accepts that the understanding and definition of the quality of life can be as heterogeneous as the people are. Practically everyone seems to know what it means, but no one can adequately define, classify or measure it. Although the term “Quality of Life” is relatively new, but the idea about a “good life” was found in the writings of Aristotle. Philosophers have long considered happiness to be the highest good and ultimate goal for human action. The founder of utilitarian doctrine, Francis Hutcheson, argued that the policy should have the target to achieve the greatest happiness for the largest number. Macall (1975) tries to define ‘quality of life’ is as “the life in a certain society”. Paul Del Harwood (1976) attempts to define it from materialistic aspect as to him “quality of life” are the aggregate of goods and services, situations and state of affairs which are essential contributor to constitute “the basic needs of human life.” Szalai (1980) observed that the age old question “how are you?” and “quality of life” of an individual are in many ways similar as both of them tried to evaluate the conditions of health, welfare and prosperity. Mourn (1983) defines ‘Quality of Life’ is a function of living condition such as income, housing, work and occupational life, leisure, interpersonal relation, social and political participation etc.

Approaches of Quality of life Measurement

Two groups of scholars are found regarding the researches on 'Quality of Life'. These two approaches are Objective Approach and Subjective Approach. Diener (1984) remarked these approaches as "the new scientific approaches to measuring QOL".

Subjective Approach

Although it is assumed that the accumulation of goods and services serves as an instrument through which people enhance their feelings of well-being, researchers (e.g., Campbell, Converse & Rodgers, 1976) have shown that there is not necessarily a strong relationship between affluence and standard of living (SQL). SQL assessments measure perceptions of well-being--how people feel about their lives. Dalkey and Rourke (1973) defined the term 'Quality of Life' to mean a person's sense of well-being, his satisfaction or dissatisfaction with life, or his happiness or unhappiness". The literature on SQL is therefore concerned with how and why people experience their lives in positive ways, including cognitive judgments and affective reactions (Diener, 1984). The subjective measures directly address life experiences, for example of happiness, well-being, and life satisfaction (Megens and van Meijel, 2006). The "common man himself" is considered to be the best expert to evaluate his quality of life in terms of subjective well-being. The measures that have most frequently been used in the subjective approach are measures of satisfaction and happiness.

Objective Approach

Objective approach measures the 'Quality of Life' exclusively on the basis of objective indicators. These indicators indicate the social functioning and living conditions, such as education, employment, finance, housing, and leisure activities (Zizzi et al. 1998; Haas 1999). An Individual is considered as an active, creative being, and the autonomous definer of his own end. The resources are the means to achieve the end (Thålin, 1990: 166). Resources are defined in terms of money, property, knowledge, psychic and physical energy, social relations, security and so on (Erikson & Uusitalo, 1987: 189). Large multi-national quality of life research programs, such as that of United Nations Educational, Scientific and Cultural Organization (UNESCO) and the member countries of the Organization for Economic Cooperation

and Development (OECD), have thus far concentrated on the development of objective indicators. This work is predicated on the assumption that a single notion of well-being can be broadly applicable to all countries, and those identical measures and measurement techniques can be used in the different countries (Verwayen, 1980). The OECD member countries have developed a slate of social concerns and are seeking to develop social indicators to measure each of them. This group has defined a social indicator as a direct and valid statistical measure that monitors levels and changes over time in a fundamental social concern. A social concern is defined as an identifiable and definable aspiration of fundamental and direct importance to human well-being. Literacy is an example of this. Working groups, each composed of individuals from several countries, have been assigned to each concern with the task of developing indicators for that concern.

Quantitative Measurement of Quality of Life

Quantitative expression of quality aspect becomes important in order to grasp the meaning objectively. Initially, per capita income was used to measure Quality of Life in different parts of the world as an index of measuring QOL which determines the pattern and level of expenditure on different goods and services and also an indicator of development of an economy. The reasons mentioned above were enough for supporters of using per capita income as an index of measuring economic welfare and so also the QOL of the people. Economic growth has a tendency to automatically trickle down to the poor and if it fails to do so, the government would take corrective measures (Streeten and Hicks, 1979). Unfortunately, it is observed that despite increase in per capita GDP, level of living of the common people remained unchanged in many countries, because development in the level of living depends on to what extent per capita GDP is transformed into social development (Mazumdar: 1996: p.245). However, critics of using per capita income as a measuring index of QOL argued that besides per capita income, quality of life depends upon various factors. Further, growing attention to the social, political, economic and environmental health of the nation has led to the quest for the other indicators, which will more adequately reflect the overall “health of the nation and its well being” (Liu: 1974: p.187). Having confirmed the inadequacy of GNP for measuring human welfare and economic development, the search now began for an alterna-

tive approach or measure. The result was the introduction of the concept of social indicators to evaluate the human welfare and economic development.

History of Development of Social Indicators

The use of social indicators in social science research began to take shape in the United States during 1960s. It all started with the study of National Aeronautics and Space Administration (NASA) to detect and anticipate the impact of the space program on American society. The study observed the lack of data and proper methodologies to conduct the research. The director of the project, Raymond Bauer, defines the term “social indicator” as “statistics, statistical series, and all other forms of evidence that enable us to assess where we stand and are going with respect to our values and goals” (Bauer, 1966: 1). One of the most useful and comprehensive definitions has come from the Australian Bureau of Statistics. It defines “Social indicators are measures of social well-being which provide a contemporary view of social conditions and monitor trends in a range of areas of social concern over time” (McEwin, 1995: 314-315). Another important definition is observed in the United Nations document where social indicators are defined as “statistics that usefully reflect important social conditions and that facilitate the process of assessing those conditions and their evolution. Social Indicators are used to identify social problems that require action, to develop priorities and goals for action and spending, and to assess the effectiveness of programmes and policies”(United Nations, 1994). Thus, social indicators are the means of assessing the social well being of individuals and groups in the society. Social indicators dimension are much broader than the dimensions of economics. In fact, economic indicators are a part of social indicators. It can be said that social indicators have been used lightly to include a whole range of human, economic, social, cultural and political indicators. Essentially, social indicators need to provide a specific social idea, be valid and meaningful, be sensitive to the underlying phenomenon, be like a summary in nature, be available as time series, be able to be disaggregated, be intelligible and easily interpreted, and relate where appropriate to other indicators (McEwin, 1995: 315).

Composite Indices

Of late, development of social indicators has given way to emergence of “composite indices” which appears to be more efficient in measuring various aspects of life. Resultantly, a good amount of work has gone in with a view to replace GNP meaningfully by these sets of statistics (Streeten: 1991:p.61). UNRISD (1966) developed “the level of living index” and again in McGranahan et al.(1972) constructed “Development Index” basing on 18 core indicators. Overseas Development Council (ODC), under the guidance of Morris D Morris (1985) constructed Physical Quality of Life Index (PQLI) which uses three simple indicators with equal weights to attempt to measure fulfilment of “minimum human needs, life expectancy at age one, infant mortality and literacy”.

By applying the composite indices almost everything of a society like health, nutrition, housing, income distribution, aspects of culture and social development, economic development, education, sanitation, water supply etc. can be measured quantitatively with good accuracy. These composite indices include not only social indicators but also all types of indicators such as political, economic, culture, level of living, welfare, development indicators as well as Quality of Life indicators.

Indicators Use in Quality of Life Studies

Different scholars have taken different indicators in their study relating to quality of life. Ganguli and Gupta (1976) calculated the level of living for fifteen major states of the Indian union for three periods of time, i.e., 1955, 1960 and 1965 using seven indicators such as nutrition, housing, medical care, education, clothing, leisure, and security and environment to study the level of living in India. Wilson (1981) had considered state of individual, equality, democratic process, education, economic growth, technological changes in agriculture, living conditions, and health and welfare as indicators in his study about inter-regional and inter-state variations in Social Quality of Life in United States where he had used seven indicators. Economic, political, environmental, health and education and social indicators were taken to study quality of life in US metropolitan areas Liu (1974). United Nation (1977) considered food and nutrition, education, condition of work, employment situation, aggregate consumption and savings, transportation, housing, clothing, recreation and entertainment, and social

security and human freedom to evaluate the level of living of the people. Drewnowski and Scot (1966) had included nutrition, clothing, shelter, health, education, leisure, security, social environment, and physical environment as indicators in the construction of levels of living index. Morris .D. Morris (1985) had used three indicators i.e. life expectancy, adult literacy and infant mortality to measure the composite index well known as the Physical Quality of Life Index. Organisation for Economic Co operation and Development (OECD) had considered health, individual's development through learning, employment and quality of working life, time and leisure, personal income situation, physical environment, personal safety and administration justice, social opportunity and participation, and accessibility as indicators to study the social aspect. Bose (1996) had constructed Household Misery Index to find out the deprivation of the household of basic needs considering pucca housing, safe drinking water, toilet facilities, electricity, and availability of proper fuel for cooking. Gonzalez (1988) had used per capita GDP, diet, health and education to construct his Socio-Economic Development Index. Devis F. Johnston (1988) Comprehensive Quality of Life Index considered health, public safety, education, employment, earnings and income, poverty, housing, family stability, and equality as indicators of the study.

It is noticed that most of the studies on Quality of Life have been carried out in developed countries. During the early 70s, the American society was also much concerned with the Quality of Life. With the western countries sinking deeper into the quick sands of over industrialisation and over urbanisation, the quality of at least mental life in those countries is deteriorating fast. In contrast, industrialisation and urbanisation in the developing countries like India, Pakistan, Bangladesh and other developing countries is still at a lower level. Concepts developed in the developed countries may not be suitable for a better understanding of the situation in the developing countries. On the other hand, the studies conducted in India by Ganguly, Morris, Ashish Bose etc. could cover only few aspects of life. Hence the need for a micro level study on quality of life especially for rural areas is strongly felt. It is essential for the assessment of various aspects of social progress and accounting and is useful for national goal setting, project planning, priority ranking, programme implementation and performance evaluation and is highly useful in micro level planning. The indicators used in these studies

and the methodology adopted do not match with the prevailing social system in developing countries like India. Hence it is felt that, a new list of indicators should be explored to study the quality of life at micro level which will be useful in micro level planning.

Considering the need for the study of Quality of Life, at micro level, present study mainly focuses on 'Quality of Life Indicator Approach'. An indicator is a token or symptom of some condition. Some indicators are highly reliable while others are less reliable. A single indicator may not indicate exactly what we want to indicate. In order to reduce the inaccuracy between indicator and indicated, one has to use more than one indicator to express what one wants to indicate. An attempt has been made in this study to include most of these indicators. The indicators to measure Quality of Life should be easily available, measurable and easy to understand. They must also be comparable among different geographical areas and time-periods. The indicators should be same or different at micro and macro level depending on the availability of data. Targets and indicators not only concretize various aspects of the Quality of Life but also constitute the major mechanisms for governments to commit themselves to change, and civil society to hold its government(s) accountable.

The current study mainly focuses on understanding the Quality of Life of the Tiwa tribe who mostly inhabitate Nagaon and Morigaon, two major Tiwa dominated districts of Assam. To measure the household level Quality of Life among the Tiwa tribes in the foresaid districts of Assam, four indicators are chosen i.e. economic, education, health, housing and basic amenities of life.

1.5 Rationale of the Study

The study is expected to be a useful addition to the growing literature and research on the problem of Inequality and Quality of Life. In order to have a better idea about the impact of economic progress on the life of tribal people, we have to make a study about the inequality existing among them and the physical quality of life they are enjoying. This study will examine the severity of Inequality and Quality of Life standard among the Tiwa tribe in the study area. Hence, the present study will provide means and ends to improve the Quality of Life among tribal people like the Tiwas.

Through the present study we try to find out occupational patterns and contribution of different occupations to total income and total expenditure, also to identify factors that determine women's participation in economic activities.

This study is unique and innovative in view as it has adopted a comprehensive method of knowing physical Quality of Life of the tribal people. The findings of the study are expected to be expedient in formulating, designing, and implementing policies and programmes for improving the Quality of Life of the tribal people of Assam in particular and India in general. The important factors identified in the study are expected to help policy makers to prioritise resources for interventions to improve factors significantly contributing towards QOL of tribal people.

This study will make both the policy makers and the government aware of the type of occupational structures and also job opportunities available for them in the study area. The study will also help to know the participation of women in economic activities. It will help them to undertake appropriate policies, analyse the present policies designed to raise the participation of women in economic activities and block the loopholes in them.

The Tiwa tribe has been chosen for study: first, it is one of the important Scheduled Tribes (plains) of Assam; second, as compared to the other indigenous tribes, the Tiwas have been losing much of their traditional traits because of their large scale contact with non Tiwas. The economic backwardness and consequent poverty among Tiwas needs to be examined in the context of their socio-economic structure.

Nagaon and Morigaon districts have been chosen on the ground that, Morigaon is highly flood-affected and rural district with the highest Tiwa population, whereas Nagaon is a less flood-affected district with semi-urban character with a moderate level of Tiwa population. Principal occupation in Morigaon is agriculture and that in Nagaon is diversified. These include service, self-employed, labourer etc. other than agriculture and allied activities. Nagaon is one of the oldest districts with urban character, whereas, Morigaon is purely rural in character. It may be described as a newly developing or a semi-urban district.

In order to assess the progress made by major tribal groups of Assam and other parts of the North-eastern region it is necessary to conduct systematic and statistically robust studies on these groups. Consequently those regions are chosen for the study where these groups are more concentrated as far as settlements are concerned. Progress of the Tiwa society may be assessed on the basis of a number of indicators – both social and economic. The UNDP convention of assessing or measuring standards of living and standards of Quality of Life runs in terms of the fundamental dimensions of human development, namely purchasing power or the command over resources, physical health or longevity and the capacity to know or acquire knowledge about one's surroundings (i.e., education). However these indicators or variables are very fundamental and there are actually a host of other associated factors both internal and external to the households in question, which may directly and indirectly influence both standards of living and the Quality of Life. Macro-level studies and surveys often do not bring out specific causes of backwardness of social and ethnic groups as because these studies or surveys look at the overall socio-economic picture without delving into the micro-level details or features that may credibly explain the causes of backwardness of certain groups compared to others located in the same region. It is thus very vital to disentangle endogenous and exogenous factors that might have a bearing upon the level of socio-economic progress of a community or ethnic group.

The present study specifically considers the micro-perspective which is more likely to unveil the true levels of socio-economic development and progress along with the Quality of Life of the Tiwa people settled in Nagaon and Morigaon districts of Assam. Further, the study would address the key areas of concern by suggesting set of effective policy prescriptions aimed at improving the quality of life of the Tiwas in the medium to long run.

1.6 Objectives

Keeping broad theoretical and empirical perspectives in mind, the present study designed for Tiwa tribe residing in Morigaon and Nagaon districts has the following objectives –

1. To study occupational patterns, occupational sustainability and income distribution.
2. To estimate female work participation rate and to identify its socio-economic determinants.
3. To examine inequality in income, education and health across occupations.
4. To measure overall Quality of Life across occupations.

1.7 Hypotheses

The following hypotheses are proposed to be tested through the empirical study:

- (1) There is positive association between education, health and economic wellbeing at the household level.
- (2) Female work participation raises the quality of life at the household level.
- (3) Quality of life varies across types of occupations.