INTRODUCTION

The Brahmaputra ranks fourth among the large rivers of the world in terms of discharge at the mouth. (Goswami 1982). From its source it covers a length of 2,880 kms out of which 918 is in India. It has a catchments area of 1, 90,000 sq km in India. The length of this river bed in Assam is around 800 kms. The river can be divided broadly into three reaches—upper Assam reach, lower Assam reach and the Bangladesh reach. The present study is going to focus on the char areas of Barpeta District on lower Assam reach.

2.1 Background of Humanisation

“Human occupancy in the char areas is of recent origin compared to other parts of the Brahmaputra valley. Chronically affected by flood and poorly endowed by nature, the chars are, in fact, the last of the ecological niches to attract human habitation. In spite of that certain external and internal factors caused people to move into and settle down gradually during the recent past. So the settlers of the char except for a very few are not of indigenous origin. They are mostly immigrants from erstwhile East Bengal (present Bangladesh) and Nepal. Thus, the present population inhabiting the chars of the Brahmaputra is composed of immigrant Muslims, Bengali refugees,
Nepali immigrants and a very small number of indigenous people” (Bhagawati 2005).

The colonial administrators have experimented with the Geographical boundaries of Assam since February 6th 1874 when Assam was separated from Bengal and turned into Chief Commissioner’s Province along with Cachar, Goalpara, Garo Hills and other Hill districts. The new province was regarded as a region having vast virgin tracts, forests and rich cultivable lands. The province was vast in terms of geographical area but small in terms of population (2,443 thousand) and meager in terms revenue potential. In order to rectify it Sylett was incorporated into Assam in September 1874 (Guha 1977).

North Eastern area is very interior and inaccessible part of the country. The Brahmaputra is one of the major rivers of the country, in its long bed in Assam is dotted with innumerable river islands. The Brahmaputra originating in a glacier called Ianchuk Kombab in the Kailash Range of the Himalayas at an elevation of 5,300 meters flows through China, India (Arunachal Pradesh, Assam, West Bengal) and Bangladesh for a length of 2,880 Km. The chars are an integral part of the very complex fluvial regime of this river.

Assam is situated in the north-east corner of India. It has the longitude from $89^{0}42^{\prime}$ East to $96^{0}10^{\prime}$ East and latitude from $24^{0}08^{\prime}$ North to $27^{0}09^{\prime}$ North. The state covers a geographical area of 78,438 sq. km.
2.2 The life of char dwellers

Although recent in evolution, the cultural landscape of the chars is getting rapidly transformed. This transformation has been basically directed by the peculiar physical made up of the chars and articulated eventually by the ability of the dwellers to the situation. More recently, the growing interaction between the char dwellers and the neighboring indigenous people and increasing relation with the urban culture have perceptibly accelerated the process of ecological-cultural transformation in the char areas (Bhagawati 2005).

The char dwellers are economically poor, culturally backward and many of them live a kind of nomadic life (Bhagawati, 1994). Due to heavy and unpredictable bank erosion the char dwellers worse affected and they have to change their settlement site. Due to the environment uncertainty and poverty these people can’t afford construction of modern permanent dwellings. So they have to be satisfied with small and temporary huts and sheds made of locally available building materials just to accommodate the family and the domesticated birds and animals. Of course the types of houses differ from caste to caste. The plots of land accommodating the small basties are normally perpendicular in alignment to the channels, which enable the households to enjoy the facilities for bathing, washing, boating and fishing provided by the river.

Agriculture is the main source of livelihood of the Char dwellers and they have to adopt a cropping practice suitable to their peculiar environment of their habitats. The farming systems in the char
basically characterized by the methods of multiple cropping and interculture. These methods have been developed traditionally to suit the local ecological conditions in the line what is elsewhere called ‘eco-farming’ (Krings 1990). The plant biomass, weeds, animal dung and rain water are constantly integrated into the farming process following a unique crop-calendar developed by farmers themselves in the consonance with the seasonal rhythms of the Brahmaputra. Flood which is the main natural constraint, is however, perceived by the char-dwellers in the spirit of living with it, while deciding the cropping pattern. For them, a timely flood of low magnitude is not a hazard, but a useful natural phenomenon, which makes soil more fertile and fish abundant. As most of the chars get inundated during the summer, they select the periods of sowing and harvesting in such a way that the damage of flood remains minimum (Bhagawati 2005).

It is interesting to note that the char-dwellers do not generally grow the same crop in a plot of land for years together. They often follow a suitable system of crop rotation. For example, the plot put to ahu rice during the current year is never put to it next year. After cultivating rabi crops for more than one year, ahu is again cultivated in that plot of land, Sone, Khesari and some variety of pulses having special ability to fix nitrogen in the soil are also grown as early rabi crops which considerably enhance the yield of the subsequent crops.

The peasants of the char areas mostly use crude farming technology and traditional variety of seeds that are cheap and easily available. The traditional practice has relevance to the skill of the peasants, their life, environment and mode of production and is
horizontally integrated with the way of life, (Rao and Verghese, 1989). They are not generally interested in cultivating the high yielding varieties of crops, which are costly and highly vulnerable to insects and diseases.

2.3 Char Areas of Assam and Barpeta District at a glance

The study is done on the char areas of Barpeta District. Some of the villages selected in the area are temporary and some are permanent. The flow of the river, the changes in its course and the distance from the chars are found to be having a considerable influence on the permanency of these chars.

So far as the villages covered under study are concerned, it is seen that some of the chars are found to be surrounded by the rivers on all sides taking the form of small lands while some are found to be located far from the river water which have constituted the chars.

The villages surrounded by rivers are more prone to threat of erosion. On the other hand, on the positive these are better linked with other parts.

The villages situated at a distance from the river flow have a limited risk but the disadvantage of limited accessibility.

Although the sample villages in the block are mainly located on and along the river Brahmaputra, other rivers are found to be flowing
alongside the villages. These are *Jaljali*, *Bhelengi*, *Beki* and small tributaries (*suti*) of the Brahmaputra.

As per Socio-Economic Survey, 2002-03 conducted in the Char areas of Assam, there are 2251 numbers of Char villages from Sadiya to Dhubri under 60 numbers of Community Development Blocks of 23 Civil Sub-divisions within 14 numbers of District comprising 3.60 lakh hectares of land and 24.90 lakh population. Out of the total population, 19.31 percent are literate and 67.88 percent people in average are living below poverty line. The details of the population structure of the char areas of Assam are shown in Annexure: 1.

Barpeta has the distinction of possessing the highest number of permanent and semi permanent char areas next to Dhubri in the lower Brahmaputra valley. The population of the Char areas of Assam comprises of Muslim, Hindu and Nepali. But in the Barpeta district majority of the people of the char areas are Muslims.

Agriculture is the primary source of earning livelihood of the char area and the farmers mainly use traditional methods of cultivation. An important fact noticed is that they are found to be using a traditional method of sowing 'Dhumsa' and 'Songuti' which fix nitrogen in the soil and thereby increasing the fertility of land. 'Dhumsa' plant also helps to control erosion and used as firewood.

It is seen that cultivation is carried out both during the *rabi* and *kharif* seasons and rice, wheat, jute, lentil, black gram, mustard, rapeseed, sesamum and variety of seasonal vegetables are the main produce of the area. They give more importance on *rabi* crops as
during the *kharif* season most of their land remain idle, due to rise of the Brahmaputra water in summer.

In the agriculture major percentage of cultivated land is under rice and jute. In case of rice ‘*Aush*’, ‘*Amam*’, ‘*Boro*’ and ‘*Iri*’ are common varieties that are cultivated. ‘*Iri*’ is a new verity and is being cultivated in the char areas since last 10/12 years, which require huge amount of water, fertiliser and man power. This is a high yielding variety (yield is around 20 mounds per bigha, which is more than thrice of the yield of other varieties).

The farmers in the char area are unable to earn reasonable profit due to lack of awareness and lack of market information. Lack of transport facility is one of the major problems suffered by the people due to which markets are not well connected with the chars and limited numbers of households have access to information.

In the char area most of the households have livestock and poultry. The domesticated livestock (including cow) are used mainly in the fields or for the utilisation of the produce for family consumption. The same can be said for the poultry as well. As far as selling the products, the livestock or poultry is concerned, it is done more when there is immediate need of money and as such it can be said that livestock and poultry rearing have become economic activity more out of compulsion.

There is no banking and non-banking financial institution in the char area. The growth of micro-finance is also very low.
Among the char dwellers there are significant disparities of wealth and income. It is found that major areas of cultivable land are owned by a few, while a substantial number of landless farmers are found to be either working on tenancy basis or as labour in other’s cultivation.

Char areas are yet to be brought under the programme of rural electrification due to which they are not able to use the facilities provided by power supply.

The people in the char areas get fresh air. There is no question of air pollution due to lack of vehicles and industry. Floras and faunas are available in the char area. They also have grazing land for livestock and can collect firewood. The char areas are rich in natural capital. Erosion is the main problem, which causes a loss of natural capital.

Situated along the north bank of the Brahmaputra Barpeta has the longitude from $90^040’,56”$ East to $91^024’,54”$ East and Latitude from $26^003’,45”$ North to $26^050’,25”$ North. The district was formed in 1983 the area of which is 2677.33 Sq. Km. and is 140 km far from Guwahati by road distance. According to 2001 census, the total population of the district stands at 16, 47,201 covering 2, 92,924 households and 851 villages. The density of population is 526 per sq. km. There are 62283 BPL families in the district. The total road length of the district is 1322 km, which is 80 km per lakh population. It has two subdivisions and the literacy rate of the district is 56.24 percent. The district is dominated by Muslim people. The percentages of the composition of
population by religion are as follows: Muslim- 59.37, Hindu- 40.19, Christian- 0.32, Sikh- 0.02, Buddhist- 0.01 and Jain- 0.04.

There are 12 Development Blocks in Barpeta district. Out of which 5 Blocks have Char areas. These are Mondia, Barbaradi (Goma), Chenga, Keutkuchi and Rupshi. Number of char villages in Mondia block are 164, Barbaradi (Goma) block are 23, Keutkuchi block are 06, Chenga block are 42, and Rupshi block are 42. The total number of people living in this areas are 2, 68,344.

2.4. Development programmes of the Government

Char areas are underdeveloped and neither to aloof from the mainstream population of the state. Economic conditions of the people are very poor as they are living in areas which are facing flood ravages annually causing to huge loss to lives and properties. So it needs special attention of the Government. In order to look into implement developmental activities in the areas Government of Assam constituted the Assam State Char Areas Development Authority in 1983 and it was up-graded to a full-fledged Directorate in 1996. The Directorate looks after developmental works under various plan schemes and Government grants received from time to time. Agricultural development is the main activities in the area and the Directorate has implemented various schemes with the funds made available. The schemes implemented by the Directorate under ‘Special Area Programme’ covers Agriculture, Cottage Industry, Public Health,
Education, Medical and Health, and Veterinary and Dairy. The components of the developmental programmes are stated below:

1. **Agriculture:**
   a) Jute seeds
   b) Wheat seeds
   c) Power pump
   d) Power tiller
   e) Spray machine
   f) Paddy thresher
   g) Paddy weeder

2. **Cottage Industries:**
   a) Sewing Machine
   b) Hand Loom
   c) Training on Sewing and Embroidery.

3. **Public Health:**
   a) Hand Tube-well
   b) Water filter

4. **Education:**
   a) G.C.I. Sheets
   b) Repairing of school building
   c) Stenography
   d) Sports goods
   e) Books
   f) Scholarship

5. **Medical and Health:**
   a) Nurse/ANM Training.

6. **Veterinary and Dairy:**
   a) Earthen Platform
2.5 Implementation process

The role of local MLA is very crucial in implementation of the scheme. The Directorate of Char Development Authority is the final authority for prioritization of schemes. Along with the local MLA Project office and Gram Panchayat are involved at implementation stages.

The materials and goods are sanctioned by the Directorate and released to the concerned Project Office on the basis of the number of blocks under the office. The beneficiaries are selected by the Secretary of Gram Panchayat in consultation with the local MLA on the basis of their applications. They obtain the information from the Panchayat Office and are able to get the benefits directly from the Project Office.

Since 2011 the selection process of the beneficiary has changed. The office of the Director sends a guide line along with the materials to form a (5/6 member) committee to select the beneficiary. The selection committee is different for different schemes. As for example, in the agriculture scheme the committee will include the officers from Agriculture Office, experienced farmer etc. In case of inputs scheme like spray machine, the number of members of the committee should be more which include chairman of Zila Parishad, members of the Project Office, members of Panchayat etc.

The progress report is to be submitted to the Directorate by the Project Office after completion of the distribution of benefits.
Monetary benefits like scholarship are distributed by the Office of the Directorate itself.

The villagers and beneficiaries have no role in the implementation process.

In absence of the Project Office in some areas, the benefits are distributed by the supervisors of the Block Development Office.

Monetary benefits like scholarship are distributed through the educational institution as per the recommendation of the IS Office up to undergraduate level. In case of higher education and technical education, the beneficiaries are recommended by the DC office.

**Conclusion**

It is found from the above study that the population inhabiting the chars is mostly immigrants from erstwhile East Bengal and is composed of Muslims, Bengali and Nepali, but the sample population in the study area of the Barpeta district comprises of Muslims and most of them are economically poor. The area is rich in natural capital like floras, faunas and fresh air. The Special Area Programme has been implemented in the area to develop the livelihood of people which comprises of six main schemes including twenty sub-schemes. These are implemented through the Project Office and the Block Development Office.