

CHAPTER-6

SOCIO-ECONOMIC IMPACT OF EROSION

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6.1 INTRODUCTION:

Recurring occurrence of flood and erosion is the burning problem in Assam. The mighty river Brahmaputra and Barak with their numerous tributaries causes havoc in Assam in the form of flood, bank erosion and drainage congestion. The flood in plain Assam is more acute than anywhere in India.

In earlier time, flood was considered as blessing than a problem because it deposited fertile soil in the agricultural field every year which helps the farmers. But after 1950, the great earthquake rises up the bed of the river and damage due to flood has been on the rise. The river once identified as the life process and culture of people become to be considered as menace.

The intensity of flood and river bank erosion has increased in recent years in terms of areas and victims. It is to be mentioned here is that the erosion made people more victims than that of the flood. The victims of flood can go back once the flood recedes, but the victims of erosion could not go back to their original land. The Brahmaputra has wiped out 4000 sq. km area (i.e., 80 sq km per year) destroying more than 2500 villages and displaced more than 5 million of people (Herald, 2010).

The National Flood Commission estimates 31.60 lakhs hectares of land as flood vulnerable in Assam where as it is 335.16 lakhs hectares in the whole country. That Assam has 9.4 percent of flood vulnerable areas of the country. The State Water Resource Department states that 388476 hectares of land was lost in erosion during the period of 1954

to 2002, i.e., 8000 hectares per year. It implies that displacement of 90,700 families' of 2534 villages (Talukdar, 2011).

Due to flood, the state of Assam has lost of Rs 3100 crores in last five decades. According to a report of National Flood Commission, out of 31 lakhs hectares of flood vulnerable areas only 16 lakhs hectares areas could be protected from flood in last 53 years of action (Bulletin, 2011).

The socio-economic impact becomes more acute when people are more vulnerable to natural disaster. This is what happens in Asian countries. High population density and poor economic condition of the people make consequences of natural disasters more devastating. A major portion of population is bound to stay in high-risk area like banks of meandering rivers. Bank erosion is a threaten for their safety and shelter as well as their sources of livelihood (Brouwer, 2007). Riverbank erosion caused landlessness, unemployment and poverty in every year and is increasing year after year. This increasing trend of poverty and unemployment creating instability of the social peace in the country (Rahman, 2013). Those who suffer most during floods are the low income, poor and informal settlers living along river banks and low-lying areas that are most vulnerable to rising tides and increasing water levels (Romualdez, 2013).

The Brahmaputra River was occupied 4000 sq. km in the 1920s in the entire valley and it is increased to 6000 sq. km in recent years (Phukan, 2012). The Brahmaputra has been taken away the area of land through its erosion every year 72.5 to 80 sq km during 1997 to 2007. Bank erosion of Brahmaputra has been destroyed more than 2500 villages and 18 towns affecting the lives of nearly 5,00,000 people including sites of cultural heritage and tea gardens in the state. It is regretful to mention here is that there found no systematic information in respect of the effect and damage by flood and erosion in char area

(Chakraborty 2009). Newspaper and media published few information during the flood time and remain as the source of information.

6.2 IMPACT OF RIVER BANK EROSION:

Riverbank erosion have multi-fold impacts viz. social, economic, health, education and sometimes political. The loss of shelter is that the primary impact of abrasion. People haven't any option aside from migration once they face erosion. Erosion like natural disaster causes forced migration where people are affected by several crisis. Due to the loss of property and occupation, they're face acute poverty (Iqbal, 2010). Displaced poor people involved many criminal activities also. Another important impact of abrasion is that of the psychological state of the migrated people. People where they migrate aren't welcome them, but denied mostly. Erosion bring another impact associated with medical and health facilities to the displaced population. All existing establishment of medical and health care services are lost in eroded place and within the new place, these services were found to be absent. So, so as to possess medical treatment they need to travel longer distances than before and sure to bear extra cost. Similarly, for education children of those displaced households are to travel long distant villages and towns. Above all, thanks to loss of occupation and sources of livelihood, they become helpless and unable to get essential goods and services like food, cloths, education and medical services within the new place where they take shelter after migration. the last word consequences are that they compel to live in a vicious circle of poverty.

6.3 EROSION OF BRAHMAPUTRA IMPACT:

Scholars are engaged in identifying the causes of abrasion and its impact at different angles. Such studies and findings help the important person to adopt suitable measure to

regulate erosion in affected area (Sarma and Acharjee, 2012). But there found only a few studied concerning the assessment of loss of property thanks to erosion. But the erosion of Brahmaputra causes poverty and features a long-term impact with none compensation mechanism (Talukdar, 2012). It's documented to all or any is that bank erosion of Brahmaputra has been washed away a huge area of the state including people habitation, crop land river port, commercial centres and reserve area.

People displaced on erosion are migrated to the closest villages, towns and reserve areas (Khan, 2012). Agriculture was the main occupation and source of livelihood in chars. Due to erosion, agricultural land is declining and farmers lost their land become landless labourers. The share of landless labours to the entire working force in char area is 90% of Barpeta district where the district average is merely 16%. This increasing share of landless labour resulting from erosion obviously put an impression on their livelihood. The poverty among the people is common because the number of BPL population here was found to be quite double as compared to district average of Barpeta district.

Like Mandia of Barpeta district, char villages of Bilasipara, Bagribari, Dhubri and South Salmara Revenue Circles of Dhubri district are badly suffering from flood and erosion. Only in South Salmara Revenue Circle of the district, 107 villages out of 201 villages are completely washed away in erosion since 1962 (Sheikh, 2000). The devastating flood that begins in 1980's took three historical trading centres viz. Fakirganj, South Salmara and Sukchar of the district for ever from the map of Assam. In 1989, the South Salmara towns become the target of Brahmaputra and in 1991-92, all institutions, offices, business firms etc are destroyed and transferred to a different place. Under such a condition, people of char areas of the district are frequently displaced and moving from one place to a different. Most of the displaced households are moving one char to a different new char and are victims of

abrasion. within the course of study, it's found that though agriculture is that the main occupation of the people but majority of them (i.e., 89.3%) become daily earner and among this 42.8 percent are landless earner. Literacy rate among the people of displaced char dwellers of the district was found as 32.5 percent where it's 59.36 percent and 73.18 percent within the district and state respectively. The portion of population below the poverty level within the surveyed char areas of the district was 92.5% much above the district average.

Because the erosion deducts all means, displaced people fall into acute poverty. This acute poverty again causes to rise many other problems like illiteracy, malnutrition etc. the prevailing school and medical centres are destroyed and within the newly occupied place these facilities are found either absent or nor adequate.

6.4 SOCIAL IMPACT:

Both flood and erosion bring several social impacts on the people displaced. The primary social impact that the displaced people are to face is discrimination. They become victimised when move from chars to other place in search of job etc. On looking their language, religion, dress etc, the mainland people suspect them as illegal immigrants across international boarder (Gorky, 2012). They become assault and harassment by some proactive groups and organisation. Sometimes they were driven out from the work place. within the labour marker, the displaced labours from chars are paid lesser wage than existing rate. The media and organisation who termed them as illegal immigrants just on suspicion, remains ignorant and silent to trace out the rationale of their frequent migration from the char areas. This sort of propaganda creates mistrust, suspicion and discord between char people and indigenous groups. Under such a situation, the identity-based politics become the political issues in every election of the state. This coloured and biased issue now become a simple way

for the political parties to win election which carpeted the sensible issues like poverty, illiteracy and development (Gorky, 2012).

6.4.1 DEMOGRAPHIC ASPECTS:

Due to uncertainty of chars about their existence, it is not easy to determine the number of char and their population. Appear and disappear of a new char is frequent. Number of char villages were 1256 in 1985 which increased to 2089 in 1991-92 and 2251 in 2002-03. Population of char area was 16 lakhs in 1991-92 which increased to 25 lakhs in 2002-03. Except *Majuli* all other chars are dominated by East Bengal origin people. District wise char population is given in Table 6.1 along with literacy rate.

TABLE 6.1: Char population and Literacy.

Sl No	District	No. of Char Villages	Char Population	Literacy Rate %
1	Darrang	121	135876	10.12
2	Barpeta	351	275525	12.90
3	Kamrup	148	105687	16.85
4	Nalbari	58	62892	7.90
5	Bongaigaon	150	110215	12.58
6	Goalpara	187	130007	8.38
7	Dhubri	313	233206	19.06
8	Morigaon	41	55581	8.02

9	Nogaon	29	45161	9.44
10	Dhemaji	95	68998	14.44
11	Lakhimpur	182	110200	14.01
12	Sonitpur	118	92061	12.63
13	Tinsukia	86	33034	14.20
14	Jorhat	210	141901	31.90
Total		2089	16,00,244	15.45

Source: Socio-Economic Survey, 1992-93.

Directorate of Char Areas Development has conducted another survey in 2002-03 (Table 6.2) and according to that survey char area constituted around 25 lakhs population covering 2251 villages and 14 districts. From Table 6.1 and 6.2, it may clear that both the number of char and population live there vary time to time.

TABLE 6.2: District wise Demographic Profile of Char areas of Assam.

Sl. No	District	Area (Sq km)	No. of Char Villages	Area under char (sq km)	% Area under char %	% Area under cultivation	Total Char Population	% Char Population	Sex Ratio	Literacy	Density
1	Dhubri	2798	480	999.0	35.2	67.1	689909	42.2	998	14.6	690
2	Bongaigaon	2152	117	142.5	5.6	66.7	135809	14.9	930	12.4	953
3	Goalpara	1824	179	198.6	10.8	66.6	186826	22.7	955	13.6	940

4	Barpeta	3245	277	366.5	11.3	67.4	268344	16.3	948	17.6	732
5	Nalbari	2257	32	134.3	5.9	66.9	83602	7.3	957	16.2	622
6	Kamrup	4345	175	171.7	3.9	67.8	154508	6.1	974	15.1	899
7	Darrang	3481	134	167.5	4.8	67.0	142405	9.4	917	12.3	850
8	Sonitpur	5324	145	141.1	4.6	67.9	145729	8.6	940	16.9	1032
9	Lakhimpur	2277	109	215.2	9.4	67.1	143235	16.1	956	18.5	665
10	Dhemaji	3237	149	169.8	5.3	66.8	91203	16.0	912	15.6	532
11	Nogaon	3973	43	120.4	3.1	66.9	89803	3.8	982	17.5	745
12	Morigaon	1551	39	119.3	7.0	66.6	91324	11.7	906	18.5	765
13	Jorhat	2851	293	421.7	14.8	66.4	215095	21.7	962	60.5	510
14	Tinsukia	3790	79	140.9	9.7	67.3	52605	5.5	931	14.0	373
Total		78438	2251	3609	4.6	67.17	2490097	9.35	931	14.0	689

Source: Socio-Economic Survey, 2002-03.

As mentioned earlier that except a little portion of indigenous char dwellers sleep in upper Assam, all people living in chars are immigrant Muslim (Bhagabati 2005). A couple of numbers of Bengali and Nepali refugees also found in char area of the state. Char people are accustomed with their own cultural heritage. People living in char area are poor and backward. Many studies including Report of the Sachar Committee (2005) recognised them as marginalised group of population. Demographic profile is a crucial determinant of a marginal group. In Assam, Muslim population features a significant growth. It had been 24% in 1971 and it rose to 30.9% in 2001. Kar (2008) have an analysis that pattern of growth of population among different groups aren't uniform. If this process goes on, then in near future

demographic structure of Assam would change. Actually, he was acknowledged the fear of accelerating trend of char population without taking into consideration the socio-economic background and illiteracy of char people. Because the most reason of high rate of growth among char people is their ignorance and illiteracy. Bose (2005) has rightly found that the geographical and financial condition are more prevailing factors liable for high growth of population than that of the faith. But it is often said that the devastating flood and erosion for long period has changed the demographic composition of the char areas. In char areas there have been live a substantial portion of scheduled caste and backward caste people belong to Hindu. They were engaged in various occupations like fishing, blacksmith, small business, different craftsmen etc including agriculture. Due to continuous erosion and loss of their place of business alongside other reasons they shifted themselves from char areas and settled nearby towns and other permanent places. as an example, it is often said that in char villages like Bhogdahar, Dighaltari-I and Dighaltari-II there was a substantial number of schedule caste Hindu people. In Bhogdahar there have been 98 out of 1017 people and in Dighaltari-II, 81 out of 1003 people were belonged to Hindu (Census, 1961). Again Dighaltari-I was a witness of 150 people belong to Hindu out of 1601 (Census, 1971). But the census report, 2011 shows that the whole population living in char villages of the district are belong to Muslim community. Likewise, char villages of South Salmara and Bilasipara revenue circle were also witness of existence of individuals belong to Hindu up to 1980's. After the good flood occurred in 1972, 1974 and 1978 and erosion, leaving those poor farmers belong to Muslim all has removed from char areas. Now char areas become more unstable than before and only poor farmers ahead of whom there exist no alternatives live in char villages. Thus, it is often seen that the demographic composition of the char areas has changed thanks to recurring flood and continuous erosion happening per annum.

Fluctuation of size of population of a specific village is a crucial characteristic of char area. That's continuous increase of the dimensions of population of a specific village may be a rare picture. The census data since 1951 reveals the very fact. Fluctuation of population were as 652 (1951), 369 (1961), 227 (1971) and 1755 (2011) in Aminerchar, 154 (1951), 371 (1961), 522 (1971) and 1333 (2011) in Dalsingar alga Part I, 1842 (1951), 856 (1961), 1076 (1971) and 2455 (2011) in Jhaleralga Part I. These fluctuations happen thanks to frequent river bank erosion. the other picture also found available within the char villages which are comparatively permanent. Such villages show endless increase of population. For evidence census data for such villages could also be taken. In Nayeralga Part I, we see population on continuous increases as 802 (1951), 275 (1961), 438 (1971) and 1536 (2011). Similarly, we've 481 (1951), 526 (1961), 1048 (1971) and 3833 (2011) in Nayer alga Part II and 649 (1951), 1226 (1961), 3626 (1971) and 9969 (2011) for Nayer alga Part III. Thus, we may say that although the speed of growth of population in char area is so high but the dimensions of the population of a specific village may or might not increase over period of your time.

6.4.2 NATIONAL REGISTER OF CITIZEN (NRC) AND CHAR AREAS:

The National Register of Citizens (NRC) is a register of Indian citizens maintained by the Government in the state of Assam. This register was first prepared after the 1951 Census of India and since then it has been kept without any update. In recent years the process of updating the NRC is being taken up to include the names of all those persons whose names were already appeared in the 1951-NRC and and/or of their descendants living in state of Assam.

As an amendment carried out in the Citizenship Act, 1955, the Register of Citizens for the state of Assam has also been held to be legal to contain the names of all persons, whose names appeared at least in any of the Electoral Rolls published up to midnight of 24 March

1971 and also of descendants of such persons presently having permanent residence within the state.

The process of updating of NRC in the state of Assam started in the year 2013, when the Supreme Court of India passed an order for its updating was monitoring the entire process. The entire process is conducted by an IAS officer designated as the State Coordinator of NRC, Assam and is carried out under the continuous monitoring of the Supreme Court of India. The court was holding time to time hearing to all stakeholders on representations.

The Final NRC has been published on 31 August 2019 (Wikipedia). As per final NRC, a total of 3,30,27,661 persons applied to the registering authority through 68,37,660 application forms and out of which 3,11,21,004 persons were found eligible for inclusion of their names in the final NRC leaving out 19,06,657 persons (News18). People whose names were not included in the complete and final draft of NRC shall have to approach a Foreigners' Tribunal with an appeal against non-inclusion.

Complete Draft Stage:

There about 40 lakhs of people were excluded from the final draft of NRC which has been published on 31 July, 2018. This has caught the attention of various stakeholders across the country. Though the media has brought out cases of large number of well-established individuals but the stories of fear anxiety of marginalised and vulnerable sections still remained unreported.

In the char areas those abled people to raising their voice and have proper documents were able to apply and their names were found to appeared in the NRC draft. But the scenario of remote char villages is completely different from the above. As reported by the

respondents near about 40 percent names are not in the list and those excluded are mostly women and children.

The main reason behind this exclusion is the lack of linkage documents. As most of the women in char areas are illiterate and hence to establish linkage with the legacy person, they were provided Panchayat Certificates which has been rejected. Again, due to several reasons' child born in char areas are not registered with the authority. The discussion in the char village cantered on the Panchayat certificate and delayed birth certificate. Initially these certificates were accepted by the NRC authority but later they declined to accept birth certificates and started scrutinizing Panchayat certificates 'strictly'.

Every year char dwellers suffers from flood and erosion and frequent move from one place to another is normal fact. In the last two decades, thousands of households have shifted their residence twice or thrice often taking shelter in the temporary relief camp during the flood. Safe keeping of valuable documents becomes a major challenge for these people who are often move one place to another during flood and erosion.

More than 4.7 million married women were submitted certificate secretary to establish relationship with their parents out of which 1.7 million women were under "original inhabitants" category. All of these women were rejected to enter at the verification process. However, Muslims and Bengali Hindus in Assam were nor recognised as original inhabitant category. Thus, Muslim women from the char areas, although from one of the marginalised social groups, had to go through a tough verification process. Leaving those 'original inhabitants' about 2.9 million 'unfortunate' women were submitted Panchayat certificate as linkage proof in NRC and most of them are from char areas that comprises nearly 10 per cent of the population of the state.

According to the survey by Government in 2002-03, as many as 68% of char people live under the below poverty line (BPL) and over 80 per cent of them are illiterate. Assam Human Development Report (2014) says that the Mean Year of Schooling (MYS) in char areas is 4.76 years. This is the lowest among all marginalised communities in Assam.

Reasons why women of char areas were submitted Panchayat certificate is the abysmally low female literacy rate. Due to lack of educational documents higher number of women submitting Panchayat certificate from these areas.

Another reason that is equally responsible for making the char women most vulnerable in the NRC updating process is the feudal legacy and continuance of core patriarchal practices like child marriage.

National Family Health Survey (NFHS 4) data reveals that in char dominated districts nearly half of the women get married before the age of 18. When a woman got married before the age of 18, they miss the opportunity to enter name into the voters list in their parental house. In absence of educational document, it effectively delinks them from their parents and bound them to use Panchayat certificate as linkage with parents. If they were had been married after getting their names in the voters list at parental address, they could have used the voter's document for linkage which is very rare in char area.

Final Stage of NRC:

After published the final draft several organisations submitted PIL at the supreme court to consider the matter of Panchayat certificate. The Hon'ble Supreme Court has please to accept the said certificate and ordered the official to accept it after a strong verification of their authenticity. This made a relief to those thousands of women submitted Panchayat

certificates. From observation it is found that 5 to 8 percent people are not finds their name in the final list of NRCs. The major reasons of this exclusion are as follows;

1. **Mistake found in names.** As most of the people in char areas are illiterate, they could not read or write their names correctly. They can't verify what the other person has written for them.
2. **Inconsistent age of relatives.** As it well known that the birth rate is unimaginably high among the households in char villages. One couple has several children and there is no sense of birth registration. The differences between two births are minimum and after few years' parents are forgotten the ages of their child which leads to an inconsistency of ages among the children. In some cases, it is found that difference between father/ mother and elder son/ daughter is less than 10 years.
3. **No documents for children.** In most of the households in char villages it is found that there exists one or more un-enrolled child. These children have no document to proof a linkage with their parents.
4. **Loss of documents.** As we know that all of the char villages are plagued of with flood and erosion. Keeping valuable documents in safe guard becomes a major problem for these people.
5. **Indifferent attitude of Government official.** As many of the respondents reported that they got ignorant attitude from Government official at different stages of documentation in NRC process. It is of their view that after loss their valuable document during either flood or erosion they apply Government offices for them re issue. But official in the offices did not give it at time.
6. **Inappropriate presentation on hearing.** Illiterate and un-awesome people of char areas were called for hearing at different places and districts of the state. Due

to lack of proper awareness, education and knowledge of language they could not present themselves properly before the officials on hearing of NRC.

6.4.3 FAMILY SIZE AND COMPOSITION:

The size of the family is an important characteristic of char dwellers. As there found a high growth rate of population, number of members in a family is to be more than in any other part of the state. Again, most of the household have two or more generations among the members. There has been found a change on the size and composition in the household of char areas. Few decades before, Joint family was the tradition in char areas. A joint family (also undivided family) is a large and undivided family where members from more than one generation live together. There found two, three or more generation member in a family. All workable male members were work in agriculture and female members were did all household job. This system of joint family start declining with the devastating erosion taken place at large scale. As erosion take away all land, assets, homestead and means of livelihood, it become harder to a large joint family to settle down at one place and one home. A large family bifurcates into several micro families and settled down at different places. Small or micro families so formed move into towns or work field. In the study it is found that some worker working in Coal field of Meghalaya and Bricks field in the state or outside the states are gone with families i.e., spouse and children. On composition of the family whether it is joint or nuclear, it is found (Table 6.3) that the percentage of joint family is 61.2% where 38.8% was nuclear families.

TABLE 6.3: Family Size and Composition.

	Joint	Nuclear
Char Near Towns	30	90
Attached to Mainland	39	81
Far from Towns	111	9

Disjoint Char	114	6
Total	292	186
Percentage	61.2	38.8

Source: Field Survey.

There found a close relationship between the location of char and types of families. Near the village to town or permanent mainland, the number of joint families declines. The correlation coefficient between these two variables (i.e., distance of char from town etc and number of Joint families) is found as high as $r = 0.92$. This implies that higher the communication with urban or semi urban area the number of nuclear families in char area in increases.

6.4.4 CHILD LABOUR:

Child labour assumes to be the centre of a social problem as it distorts the natural growth process of the child to attain its development. The problem of child labour is arising with a plenty of causes. When adults of the household could not get employed any way, there left no option except to depend on their children's employment. Child can get job as because it is cheap to employers.

It is a fact that children are more obedient, submissive and ready to do all types of work, cannot organize union, do not demand overtime and are more needy and active. Illiteracy and ignorance of parents in the rural poor is mainly responsible for child labour in the district. Like many underdeveloped areas, the char areas, in the district are still deprived of modern scientific education. Low-income earner large families often fail to provide protected childhood to their children. For them, more children mean more income. In Dhubri town, hotels and factories mostly employ child labour.

Some of the root cause of child labour in the district are unfavourable conditions at home, tensions, parent separation, illness, physical unfitness, etc.

In India, there were 12.6 and 4.3 million of child labour as per census 2001 and 2011 respectively between the age group 5 to 14. In Assam, these figures were 3.5 and 0.9 lakh for 2001 and 2011 respectively. At present this figure is about more than 2 crores and female child labour is about 70 lakhs. They are working for long duration at low wage in unhealthy atmosphere.

Due to various measures taken by Government, number of child labours is reducing in recent days. Government through its Acts like Factories Act, 1948 and the Mines Act, 1952 banned the practice of using children below the age of 14 and 18 in their respective production processes. The Child Labour (Prohibition and Regulation) Act, 1986 have made provision to prevents the employment of children below the age of 14 years in life-threatening occupations. The life-threatening job identified in a list by the law and finally the Juvenile Justice (Care and Protection) of children Act, 2000 made the employment of children a punishable offence. The Right to Education Act, 2009, was an important step from Government side and it was supposed to go beyond punishing people for child labour. However, even after all these measures child labour continues to be the norm in a lot of industries.

The picture of child labour in chars is more acute. Flood and erosion affected chars are very backward and undeveloped. 90 percent of the people living here are marginal and landless farmer. Flood and erosion taken place in last five decades broke the backbone of the agricultural economy and most of the farmers become unemployed. Unemployed and occupation less household earn their livelihood on *rikshaw* pulling, *thella* pulling, *kuliwala*

like non-traditional job and their rootless children bound to work in different field in very unhealthy and un hygienic condition.

Among agricultural labours in chars most of them are child labours. They do all sorts of works. It is found that household displaced in erosion flies to other places in search of job along with their family and hence their children also. Children having no other business, they join their parent's job.

Types of Child Labour in Char:

Child labours are found in different forms in different situation in the society. In char areas child labour found in following types-

1. **Child labour in fishing:** Children are involved in fishing without the use of protective equipment. Fishing boat employs children recruited from poor neighbourhood. Children are in water up to 12 hours. Sometimes they have been attacked by poisonous fish and snakes.
2. **Children in construction work:** Children undertaking heavy work and carrying massive loads in the construction work. Many times, their body becomes deformed because of the excessive stress being placed on the bones.
3. **Migrant child labours:** Children who migrate from rural to urban areas alone or with their families are migrant labour. They migrate in search of better job or to escape from family bondage. Some mis guided agencies picked up them and supplies to factories.

4. **Domestic child labour:** This is one of the important forms of child labour in chars. They are employed within the household for domestic works. Most of the domestic workers are girls and are as young as five to six years old. They generally belong to very poor and illiterate family.
5. **Bonded labours:** A person become bonded labour when their labour is demanded as a means of repayment for a loan. This type of labour also known as debt slavery. As most of the farmers are poor and when such farmer is fall under river erosion, they bound to take loan from the rich farmers and Mahajans. Finding no other alternative for repayment of the loan they bonded their children as labour.

In India, Child labour has been banned and declared as crime. If some practice below 14-year-old children as labour for self-interest then it would be considered as crime in India. Instead of various measures taken by the Government, child labour practice could not be stopped. In backward areas like chars and other remote areas child labour is a normal phenomenon. Following are some causes of child labour:

1. **Poverty:** Poverty is the main causes of child labour. There are many households in Char areas that cannot fulfil their day-to-day requirement for their household as well as for their children. They send their children to work somewhere to earn something for their families. Children of these families leave their school after just enrolment or did not enrol them in any schools. They go for working in field, cattle feeding, begging etc.
2. **Lack of proper Implementation of the Act:** There are many Acts for prevention of child labour. Some important Act were as 'Child Labour Act, 1986', 'The Juvenile Justice of Children Act, 2000', 'The Right of Compulsory and Free Education Act,

2009' etc. All these Act were aimed at to prevent child labouring, but fails to achieve their goal in most extend. In Assam, implementation of these child protections Act is very lower stage. This is as because of the fact that the Government alone cannot prevent this type of crime without the cooperation from the public. The rate of cooperation is too low. Public cooperation is low as they are illiterate. Illiterate people do not that child labour is a crime and they are not aware about the right of children.

3. **Migration for work:** Every year large numbers of families migrated to towns and other places in search of job. They migrate with their whole families. In work place, they get no education and other facilities to their children. So, they engage their children in work.
4. **Lack of Morality:** Due to lack of morality on the part of the employer is another cause for child labour. Employer finds it wage bill saver and most obedient work force. Ignoring the human rights of the children of under age, most of the industries and commercial institutions employed child labours.

6.4.5 FREQUENT MIGRATION:

In Lower Assam, Dhubri and Goalpara districts are two areas of that experience very high rate of erosion and floods every year (Dasgupta, 2001). Recurrently after every five to ten years most of the weak chars are washed away. People living there become displaced and moved or migrate to another place. In Dhubri, most of the displaced char people find shelter on tops and sides of the hillocks along the river, such as *Rakshashini Hills*, *Kosutola Hills*, *Shonamukhi Hills*, *Rangamati Hills* and *Dudhnath Hills*. Migration from one place to another due to erosion and flood is become indispensable for the people particularly live-in char areas.

The extreme deprivation arrived at peak level to the people in *char* when the floods begin around June or July every year. Along with the other riparian areas of Assam, thousands of the flood and erosion induced displaced from the *char* areas are seen crowd together in temporary shelters on bunds, by the side of the highways or in the school houses of the neighbouring mainland villages. During floods people of *char* areas become jobless because of the off season in respect of agriculture. In search of their livelihood, they flee into another place. The towns and cities become a source of income to some people only in times of floods and therefore their migration is seasonal. Once the flood over, the migrants slowly returns their way back to the *chars*. But over the years due to a growing environmental degradation and the increasing irritation of the Brahmaputra, large numbers of permanent migrants are being attracted to the cities. Most of these people are lost their all lands and means of livelihood due to the river erosion. They never return to their *chars*.

As erosion is a continuous process, peoples are displacing every year in *char* area. Only an able portion of the displaced people is shifted to other permanent places. Most of the poor people are bound to stay there and they only shifted one *char* to another. Most of the *char* land is still *khas* land and so that it is easy to them to settle in any new *char* when they become displaced due to erosion.

For both shelter and livelihood frequent migration is to be seen as a common character of the people among *char* areas. In our surveyed population, it is found that 55.4% of households have migrated from somewhere. Among these household, 89.8% household were migrated due to erosion of their original habitat village. Only 10.2 % have been reported to have migrated due to other factors like for the search of better living.

TABLE 6.4: Migration of displaced people

Migration			Causes of Migration		
Response	Yes	No	Erosion	Flood	Other
Numbers	266	214	239	00	27
Percentage	55.4 %	44.6%	89.8%	00%	10.2%

Source: Field survey.

The reality of phenomenon of frequent migration of char dweller can easily accessed through the census data. One can easily find that some char villages shown no population in certain census which may be recorded as much populated in another census. For example, char village like Bhasani char, Bhogdahar, Boyejeralga part I, II, III, Dalsingeralga are recoded no population in 1951 census but subsequent census is recorded huge population in these villages. Again, some villages like Boldiaralga part II, Falimari, Ilshamari, Khererchar were found much populated human settlement in 1951 census, but subsequent census shows population nil in these said villages. Therefore, it is obvious fact that there found a frequent migration of people in between the char villages. Only a minor portion could out migrate from chars but majority of the poor household or people remain migrating within the char area.

6.5 ECONOMIC IMPACTS:

6.5.1 VICIOUS CIRCLE OF POVERTY IN CHAR AREAS:

The people in char areas have been trapped in a vicious circle of poverty and under development. The continuous poverty among the char dwellers is due to high growth of population, low literacy, poor health infrastructure, inadequate physical infrastructure and uncertain livelihood opportunities. These variables cause poverty and poverty subsequently causes further deterioration in these variables. In this causation circle the physical environment gets damaged. This has taken place when poverty and population growth force these people either to migrate into nearby towns/cities or to occupy any other inhabited char areas nearby. In the latter case, it affects the environment negatively by making the char areas more prone to erosion.

As mentioned earlier that the people in the char areas are victims of poverty, illiteracy and high population growth. All these situations set off the environmental degradation and leading erosion. Poverty and high density of population compels the char inhabitants to look beyond their present areas of homestead and cultivation. They are confronted with two choices before them, i.e., either to migrate to nearby towns/cities or inhabit new char arise in the river bed. In the lateral case people start deep ploughing in the new char for cultivation. As Gorky Chakraborty (2010) writes this deep plough leads to severe damage to the structure of new born earth. This disturbance of the soil profile on surfaces also disturbs the natural drainage system and it became more prone to erosion during the next flood. In addition to this, people bring in more and more areas under cultivation and they clear all the natural vegetation, shrubs etc. This again makes the catchment areas too vulnerable for erosion during floods.

Thus, people in the char areas of Assam live their lives in an environment of uncertainty, illiteracy, poverty and inadequate basic infrastructure. Their socio-economic life is rounded in a vicious circle of poverty and underdevelopment. This has its negative impact on the larger physical environment where in they live. To take them from this vicious circle of poverty external intervention from the Government and other important non-state developmental players are much needed.

TABLE 6.5: Number of BPL Household

	Yes	No
Char Near Towns	84	36
Attached to Mainland	96	24
Far from Towns	114	6
Disjoint Char	117	3
Total	411	69
Percentage	85.6	14.3

Source: Field survey.

In the table-6.5, it is found that 85.6 % of the surveyed household living below the poverty line and only 14.3 % households found to be of the above the line. It is found that there is a close relation between Illiteracy and Occupation. The correlation coefficient between illiteracy and occupation like agriculture or labour is found as $r = 0.91$ which implies a high degree of correlation. This is as because that illiterate people are unskilled and could not engage themselves in modern sector like business etc. Again $r = 0.98$ is found between occupation and poverty. Occupation like agriculture and labour could not provide them a

sufficient income so as they can afford a better life. So, the under developed and temporary nature of agriculture and labour like occupation are not in a position to uplift them from poverty line.

6.5.2 IMPACT ON LIVELIHOOD AND INFRASTRUCTURE:

After the devastating earthquake in 1950, the Brahmaputra brings unbearable miseries to the people of Assam. These miseries took in the form of increased river bank erosion, have directly and indirectly affected the livelihood of the people through deteriorating situation in the front of displacement, loss of livelihood, land and jobs. Phukan (2012) have reported that river bank erosion has been destroyed more than 2500 villages and 18 towns affecting the lives of nearly 5,00,000 people including sites of cultural heritage and tea gardens. Total land loss due to erosion of Brahmaputra estimated at from 72.5 to 80 sq. km/year during 1997 to 2007–08. Since 2009 almost every year flood hits Assam. However, the flood of 2004 broke all the previous records of flood damage. The flood of 2004 was affected 28.5 million hectare of land, 12.3 million people, 12.57 million hectare of cropland, and 10,560 villages. This year flood claimed death to 251 human lives and innumerable cattle and wildlife. All the 27 districts were affected by the flood and the total damage was estimated at Rs 6500 crores. Erosion of the Brahmaputra was extremely severe in several vulnerable regions of the state like *Majuli, Palasbari, Rohmorja, Bhuragaon, South Salmara* etc.

Northwest Hydraulics Consultants (2006) found in its study that floods affected 0.8 million hectares of land on an average every year. In recent years flood affected more than 4 million hectares of land which is nearly 50 percent of the state. Such devastating floods inundated at least 2,000 villages along with destroying other infrastructures. Due to riverbank erosion, about 8,000 hectares of land along the River were damaged. People displaced due to erosion has compel to migrate other villages, towns and reserve area. Char society is based on

agriculture and agriculture is their source of livelihood. Bank erosion causes loss of agricultural land and it leads to an increase of landless labourers. Reduction of land due to erosion and the growth of landless labourers affected their live and livelihood.

During last three or four decades, a major change has taken place in regard of occupation of the char people. The pressure on land is increasing day by day due to both growth of population and land erosion. The 60 above senior inhabitants were of their past experience that there was enough land. All people were engaged in agriculture and were self-sufficient. They were proud as farmer and there was no tendency to move outside the village. Only a negligible number of people were out of agricultural farming and they earn their livelihood from other job in towns. After 1950, the behaviour of Brahmaputra become changed, it come more anguish and taken away vast area of fertile agricultural land. Flood every year covers other vast area with sand. These sandy lands are unsuitable for farming or cultivation. So, both flood and erosion are reducing the agricultural land and its fertility.

Due to lack of sufficient land in chars, agriculture is not in apposition to feed all of its inhabitants. Having no scope of earning opportunities, people use to migrate to cities and other places in search of livelihood. Without any base of industries, trade and commerce people flee to nearby town as *thella* puller, rickshaw puller, areal and other type of labour. The changes of occupation found at the time of the study as shown in the table 6.6. In the table it is shown that only 35.0 percent of the household have the occupation of agriculture and following that 52.7 percent people are basically landless and hence depends upon the occupation of labour. Only a few portions (12.5 percent) of people are taken up small trade and commerce as their occupation. Service in Government and non-Government sector provides livelihood to only 3.9 percent of people in the char areas. So, it is found that there

has been taken place a drastic change in respect of occupation of the people in the char areas due to erosion.

Agriculture is a prestigious job than manual labour. Once all of the household were farmers and now 52.7 percent of them have shifts as labour, as they reported, due to lack of any other option for livelihood when their farming land were eroded by the river.

TABLE 6.6: Occupation of Households.

	Service	Agriculture	Labour	Other
Char Near Towns	5	33	49	33
Attached to Mainland	9	44	45	22
Far from Towns	2	42	73	3
Disjoint Char	3	49	66	2
Total	19	168	233	60
Percentage	3.9	35.0	52.7	12.5

Source: Field survey.

During the course of study, most of the respondent of age above 60 was of the view that few decades ago almost all the household living in char villages were earned their livelihood from agriculture or from allied farming. But the present scenario is quite different. Presently more than half of the char dwellers are landless. From the table-6.6, it is seen that nearly 65 percent of the household living upon the occupation other than agriculture. 52.7 percent

household solely depends on their daily wage and most of the wage earners are landless. They work in different towns and cities, Coal fields, Bricks field and so on.

6.5.3 EDUCATION:

Education is the backbone of a society. No society could develop without the modern education. In Assam, the literacy rate is recorded 88.8 percent where male literacy is 91.8 percent and female literacy is 85.7 percent (Census, 2011). On literacy rate the Dhubri district lagging behind the state rate. As per census, 2011, the literacy rate in the district is 81.3percent. The male literacy is 86.3 percent and the female literacy recorded as 77.1 percent. Char areas in Assam is a backward region in respect of education. It is after the 1970's modern schools were established in the area. The literacy rate among the people of char area is much low as compared to the other regions of the state as well as the country. It was only 14.0 percent at an average for char areas in Dhubri (Socio Economic Survey, 2002-03) and 48.6 percent in all char area as compared to 88.8 percent of the state rate of literacy.

Survey conducted during the study reveals that educational status is a backward one. The table 6.7 reveals that out of 480 household only 242 head of household are literate i.e., the rate of literate household is 50.4 percent. There are 3.7 percent household having at least one-member graduate, having member secondary or more is found as 9.7 percent and 36.0 percent household have only members with education level at primary. There are 49.5 percent household have no member literate.

In recent days, due to effort of Sarbo Sikhsa Abhiyan (SSA) enrolment picture has been somehow improved. The rate of enrolment has increased in considerable level. Table No. 6.7(a) shows that children of 89.3 percent of household have enrolled their name in

schools and till now 10.6 percent household have deprived off enrolment of their children into any schools.

Again, in days of privatization, all conscious parents send their children to a private school for getting quality education. As we found in the study (Table No. 6.7.b), most of the children (81.8 percent) of char areas get enrol them in Government sector schools where quality education is a far reach. Only 7.2 percent lucky parents are able to send their kids to private schools. Other 10.9 percent children remain out of the circle of the modern education. These children go to charity funded religious educational institutions. The rate of dropout children also found to be at high. 50.6 percent children get lost their education in the mid-way. High rate of dropped out children is a major problem of char areas. This has found valid in our study also. Among the household's 46.6 percent household have admits that they have dropped out children in their families. The main reason of dropped out is acute poverty and child labour.

TABLE 6.7: Education of the Head of the Family.

	Illiterate	Primary	Secondary	Degree	Total Literate
Char Near Towns	52	48	12	8	68
Attached to Mainland	59	38	16	7	61
Far from Towns	68	45	6	2	52
Disjoint Char	63	42	13	1	57
Total	242	173	47	18	238
Percentage	50.4	36.0	9.7	3.7	49.5

Source: Field survey.

TABLE 6.7 (a): Enrolment Status

	Yes	No
Char Near Towns	110	10
Attached to Mainland	110	10
Far from Towns	105	15
Disjoint Char	104	16
Total	429	51
Percentage	89.3	10.6

Source: Field survey.

TABLE 6.7 (b): School type.

	Government	Private	Others
Char Near Towns	91	14	5
Attached to Mainland	86	17	7
Far from Towns	89	0	16
Disjoint Char	85	0	19
Total	351	31	47
Percentage	81.8	7.2	10.9

Source: Field survey.

TABLE 6.7 (c): Household of Dropout Students

	Yes	No
Char Near Towns	45	75
Attached to Mainland	67	53
Far from Towns	49	71
Disjoint Char	63	57
Total	224	256
Percentage	46.6	53.3

Source: Field survey.

It is a recognised fact that education is the backbone, power and the only way to uplift a society. But the char areas are lagging this. There are many reasons for which the household living in char areas could not afford the education in proper way. The study found following factors responsible for the backwardness of people of chars in respect of education are-

- 1. Acute poverty:** Majority of the household in chars are living below the Poverty Line. They spend their whole afford to feed their family members. They have no time and space to think other than food. Many respondents tell us that they welcome new born male baby because when they become at age 6 or 7 years, they become able to help their earning job. According to them, more hands mean more earnings for the family.
- 2. Frequent change of living place:** Due to many factors, Char dwellers are bound to change their living place frequently. 88.4 percent of the household has changed their original living place in last 10 years or more. The major reason of such

changes is river bank erosion. After erosion people lost their land, residence and also educational institutions as well. Therefore, it becomes impossible for the displaced household to send their kids to schools. Those kids were in schools are also bound to leave their learning due to lack of schools in convenient area.

- 3. Insufficient road communication:** In char areas road communication is in very worse condition due to several factors. There exist lots of canal and channels of river among the char villages. These canals and channels stand as barrier to construction of road communication. Lack of road facilities pulled out the society in every respect. That is why, little kids of one habitant could not go for school situated in another habitant.
- 4. Lack of awareness among the Parents:** Parents of the char areas are not aware about the importance of education. Illiterate parents are not interested to send their children schools. Instead of they want to join their children in earning jobs as early as possible.
- 5. Lack of schools:** Existence of insufficient number of schools is another important reason of illiteracy in the char areas. As per RTE Act, 2009, there should be at least one primary school in one KM radius. But this norm is failed in chars. Due to geographical and other bottlenecks many of the inhabitants have no school at all.
- 6. Irregular schooling:** It is found at the time of investigation that schools existed in the char villages are not going on proper way. Irregularities in different form are found existent and this led to illiteracy in the area.

6.5.4 WOMEN AND CHILD HEALTH:

One of the important goals of UN Sustainable Development Goal to be achieved by 2030 was health and well-being to all. A standard health is a fundamental right. Many countries have committed to universal access to health for all in general and reproductive health for women in particular.

The Government of Assam has adopted its State Development Goal (SDGs) in 2016. Significantly SDGs of the state has selected Char areas of the state as models. The Char areas of the Brahmaputra valley have a unique feature of development exclusion. This exclusion is coupled with geographical isolation, hostile terrain, naturally disaster prone with a society afflicted by poverty, illiteracy, population explosion and heavily gender biased. Lack of health services and the distances the that the char dwellers have to cross to access the health services is a major challenge. The health issue of women live in chars is of prime importance as it surpasses SDG 3 (Gender Equality).

The public health service within the char areas of Assam is nearly said to be absent. They need no awareness about health and hygiene. Anaemia may be a common among char women. Most of the char people no idea about hygienic food and beverage. Normally most of the people in char area want to choose open defecation.

National Foundation for India, New Delhi has been made a study on women of Char areas and SDGs covering 9 districts of Assam including Dhubri district. the prevailing health care scenario and ladies found during a pathetic state altogether Char areas.

The status of public health in Dhubri district is found to be a pathetic. Only in name only, few Primary Health Centres are found within the district. they're at Bhogdahor, Boraibari, PHCs in Airkata, Birshing, Katlamari, Mahamaya Char, Nayaralga, Masaneralga

and at Geramari (MPHC) and Kachokhana (SD). As char villages are scattering at different locations of the river, hence these health centres are too far away from the villages in remote chars. Char area witnessed that 92.2 percent of the deliveries of kid are happening reception. Only 9.7 percent of the ladies from the chars are parturition to their child in Government hospitals (Ahmed, 2007).

So far as assistance in delivery of kid is concerns, majority of them relying more on the untrained dhai. Home delivery in chars is found to be above the national average of 51.3%. the advantages of the ICDS scheme are found also non-existent.

The concept on contraception isn't popular within the char areas of Assam. Early marriage is one among main problem exist in char area. For this reason, women in chars receives an extended duration for parturition. In most of the households in char has quite two generation. Women are considered reproductive tool. There found an entire ignorance about the health and wellbeing of girls in chars.

Another factor that reduces the dignity of girls is polygamy. Polygamy induces many births of kid during a household. thanks to lack of proper education and awareness, polygamy remains continuing activity found in chars.

Women in char areas are found to be unaware about hygiene and wash issues. Only 1.4 percent of households in char areas have sanitary toilets. During their menstrual periods, thanks to lack of awareness and facilities, women face many troubles. Open defecation remains quite common.

To realize the target of SDG (2016), healthiness and Well Being is included together of the most indicators. Government linked the Health & Family Welfare department with Education, Public Health Engineering (Water and Sanitation) as primary departments. From

these developments there's an expectation on change and transformation of health generally and for women's health especially in Char areas for Assam.

It is clear from the above discussion that the general scenario of river bank erosions and their impacts are miserable. As a results of riverbank erosion and displacement, forced migrants bring insecurities in several form. Economic insecurity like unemployment, erosion of agricultural land, social insecurity thanks to deprivation of civic rights, health insecurity thanks to lack of basic infrastructure etc are to face. Forced migration cause insecurities and led to deprivation, destitute. Thus, riverbank erosion has negative impact on human life. Conversely, human activities even have liable for riverbank erosion. People cultivate on riverbanks due to its fertile land. No fertilisers are needed. River banks provide better productivity than upland farming and for this reason, there's over-cultivation, poor management of cultivated fields, and indiscriminate lowering of trees. All this results in riverbank erosion alongside river sedimentation, pollution and fish habitat alteration (Kaunda and Chapotoka, 2003). So, natural resources management including riverine resources in poverty-stricken communities is of very complex nature.

6.5.5 LAND OWNERSHIP

In a rural agrarian society, land is regarded as important element. The ownership of land resource is the main indicator of the status of a household in the society. The family owned more land regarded as wealthier as because land is the prime source of livelihood in any agrarian society. The char areas are one of the traditional agricultural societies in the state of Assam. Almost all the household in the char areas are depend directly or indirectly upon the land for their livelihood. Due to flood and erosion, changes are taking place in the basic agrarian society of chars. Erosion reducing land for agriculture. Along with the reduction of

land, growth of population leading many people to opting daily wage labour and many other non-agricultural occupations.

The patterns of land distribution are found to be very unequal among the tillers in char areas. As the survey conveyed for the purpose reveals that 62.0 percent of the households owned no land for agriculture and among these 24.16 percent house have no land at all. Only 38.0 percent fortunate household of char area has their own land for cultivation purpose. Among the land owner household 19.5 percent has land range from 0.5 to 2.0 Bigha only, 12.5 percent possesses 1.0 to 5.0 Bighas of land. Only 5.8 percent dwellers are lucky enough to possess more than 5.0 Bighas of land.

TABLE 6.8: Land Holding of Households (Bigha)

	Nil	Up to 0.5	0.5 to 1.0	1.0 to 5.0	More than 5.0
Char Near Towns	35	38	27	14	6
Attached to Mainland	34	43	23	14	6
Far from Towns	27	48	21	17	7
Disjoint Char	20	53	23	15	9
Total	116	182	94	60	28
Percentage	24.1	37.9	19.5	12.5	5.8

Source: Field survey.

Maximum holdings of land used for cultivation by a single family are found more than 40 Bigha. The main reasons of low holding of land and unequal distribution are found as-

- Recurring flood destroys land use for agriculture.
- Divesting erosion decline the area of char land.
- Growth of population at high rate.
- Fragmentation of land among the successor and
- Indebtedness of the farmers.

6.5.6 NATURE OF HOUSES:

One of the prime necessities of human being is shelter i.e., residential house. People of char areas are indeed poor and they lack their residential home. Traditionally people live in thatched roof and jute barrier house with bamboo post and *kachha* floor. Now a day, due to lack of such nature originated items like thatch, jute etc people start to use aluminium tin for roofing for their house. Cement made post are in use in place of wooden one and floor remain *kachha*. Government is also aware of the fact that the char areas are most temporary and is not suitable for any permanent construction. Due to recurring flood and erosion house and another establishment are subject to frequent move or shift from one place to another. The Government department prepares a special model of houses to be constructed in char areas for different purpose like Educational institutions, Anganwadi Centres, Community hall etc. Even, the model and sanction amount for the house provide by the Government to the BPL household are also different from the model etc allotted in other parts of the district as well as the state.

Home or shelter is an important ingredient of standard of living. After the whole day labour in work field people rest at home. An improved condition of home could improve both the physical and mental health which in turn could improve the efficiency and ability to work.

The temporary nature of char land due to flood and erosion make this area as different from the rest part of the district. The socio-economic condition of char people greatly affected by the its temporary nature. Condition of most of the char houses is not hygienic. In the studied areas, it is found that the status of shelter house is very poor. Out of total household surveyed 90.0 percent of the household live in kachha houses. Kachha house meant for the house made from traditional elements like bamboo, thatched etc. Only 9.3 percent houses are found to be *pacca* in the sense that floor and post are made of cement etc.

Most of the households owned their own houses. No household found to be live in rental houses. Only 4.2% households are living at the houses owned by other. Most of the families living in other's houses are bonded labour and they live together with their master families. Following table presents the scenario of shelter houses in the studied areas.

TABLE 6.9: Types of House

	Kachha	Pacca
Char Near Towns	103	17
Attached to Mainland	99	21
Far from Towns	116	4
Disjoint Char	114	6
Total	432	48

Source: Field survey.

6.5.7 DURABLE CONSUMER GOODS:

The status of a family depends upon the wealth they belong to. More wealth a household belongs treats as richer than others. Again, the comfort of life mostly depends upon the items used for the purpose. Wealth or asset may be of different kind. It may be Land, House, Durable consumer good, Lives stock etc. Use of Durable consumer good improves the standard of living of the household. Urban household lives an improved life than rural counterpart as because they use more comfort items. Poor people remain busy with their minimum necessities and hence use of durable and comfort items is less.

Char area of Assam is economically more backward than any other rural part of the state. Recurring flood and erosion have breaks down the backbone of the economy of chars. Household living there suffers from lack of agricultural land, roads, trade and commerce, education, health and other basic amenities of the modern live. Majority of the household is either marginal farmer or landless labour. Considering the number of durable consumer good, they own, it is found that people of char area is living in a miserable condition.

As most the families or household live below the poverty line, wealth they belong are also found to be very low level. Only 7.5 percent of the household owned a bike in the char areas as a modern tool for transport. 19.3 percent of the household owned a bicycle for their transportation. Remaining major portion of people still using on foot for go here and there. For the purpose of communication, 76.8 percent of the household use mobile phone. There found very few families those have more than one mobile phone in their families. Radio and Television are found in 3.1 percent and 11.2 percent of the household respectively. No families were found that keeps and read newspaper of any language.

TABLE 6.10: Holding of Durable Goods

	Bike	Cycle	Radio	TV	Mobile
Char Near Towns	21	36	0	17	103
Attached to Mainland	15	24	0	6	108
Far from Towns	0	18	2	1	84
Disjoint Char	0	15	3	1	79
Total	36	93	5	25	374
Percentage	7.5	19.3	1.0	5.2	77.9

Source: Field survey.

6.5.8 LIVESTOCK:

Livestock is commonly defined as domesticated animals rose in an agricultural setting to produce labour and commodities such as meat, eggs, milk, leather, and wool (Wikipedia). Livestock production in Assam is characterised by rural smallholder production using indigenous cattle, buffalo, pigs, goats and chicken. The livestock population of Assam mainly belongs to the indigenous nondescript type for which the average productivity of livestock in Assam is poor.

Once the char land was considered as waste and grassing land and was used for feeding cattle etc. Till the last decades of 20th century char areas was abundant in livestock. Each and every household of char villages had livestock particularly cow, buffalo, goat, sheep, duck and hen. Maintenance of goat, duck and hen was the job of women. It is the only way to earn for women in char villages. They support their family with the income earned from the livestock they had. People living in char villages was the main producer of milk, egg and chicken to the towns and cities particularly in lower Assam including Guwahati. Along

with some other factors, the divesting flood and erosion have changed the scenario of the chars. Due to hardship of feeding and sheltering the livestock faced by people, char area lost her position in respect of livestock. Many households give up maintaining pet animals particularly cow and buffalo.

In the course of our study, it is found that a major portion of the household has no livestock particularly cow and buffalo. As stated in the Table 6.11 it is seen that only 68.7 percent household have feeding cow, 85.6 percent feeds goat. Duck and hen nurtured 66.8 percent and 95.8 percent of the household respectively. That is 31.1 percent of the household have no cattle due to either no land to feed or shelter them.

TABLE 6.11: Holding of Livestock

	Cow	Goat	Duck	Hen
Char Near Towns	60	75	66	81
Attached to Mainland	71	84	75	78
Far from Towns	84	112	115	116
Disjoint Char	103	112	83	114
Total	318	345	339	389
Percentage	66.2	71.8	70.6	81.0

Source: Field survey.

6.5.9 ENERGY SOURCE FOR COOKING AND LIGHTENING:

One of the basic components of living is the use energy for the purpose of lightening and cooking. Use of improved energy source leads the standard of living to higher level. For lightening purpose either kerosene lamp or electric bulb could be used. The electric bulb is more convenient and comfortable than kerosene lamp. Likewise, for cooking there exists various options or sources viz. traditional wooden fuel, natural gas, and electric burner etc. More advance a household use more advance source of energy. As the char households are lacking all basic amenities of living, they are deprived off all improved sources of energy in their daily life. Hence their living standard is also found to be very low.

Uses of energy for lightening and cooking purposes are found very low and traditional among the household of erosion affected char area. The Table-6.12(a) depicts the information collected from the field survey. For the purpose of lightening 26.8 percent households use kerosene, 13.5 percent uses electricity and 59.5 percent are use solar energy. The use of kerosene is higher in mostly distant and disjoint chars. Electricity used up more in near town chars. Households from both near town and distant-disjoint char villages are using solar energy as a source of lightening in recent years.

As the displaced households are poor, they are lagging behind the use of modern amenities and hence the level of living standard is also below the standard level. We found in the course of study that 81.4 percent (Table No. 6.12.b) of the household in the erosion affected chars are use traditional fuel like wood, leaves etc for the purpose of their cooking. Only 18.5 percent of household and mostly of them are from near town chars are uses LPG Gas as their cooking fuel.

TABLE 6.12(a): Source of Lightening.

	Kerosene	Electricity	Solar
Char Near Towns	30	75	15
Attached to Mainland	48	6	66
Far from Towns	24	0	96
Disjoint Char	15	0	105
Total	117	81	286
Percentage	24.3	16.8	59.5

Source: Field survey.

TABLE 6.12(b): Use of Energy for Cooking.

	Firewood	LPG
Char Near Towns	36	84
Attached to Mainland	48	72
Far from Towns	114	6
Disjoint Char	117	3
Total	285	195
Percentage	59.3	40.6

Source: Field survey.

6.5.10 BANKS and INSURANCE:

Banks and Insurance are two basic financial institutions of modern society. A moderate transaction could not operate without any banking system. Banks are the institution where public can deposit their saving, borrows funds for their any need whether it is domestic, commercial and so on. Banking system today developed up to its super level. All financial assistance including subsidy, old age pension etc directly to its beneficiary through the bank account. Banks are introduced Digital Money which means transaction without cash or it may call cashless transaction.

Like banks, insurance is also another modern tool of modern society. People are afraid of many unseen outcome and insurance companies are come forward to cover such unseen happenings to provide relief from there. Insurance provide both insurance and savings to its customers. Thus, peoples are benefited from insurance policies if they opted for it.

Char areas are lacking both banking and insurance facilities. In our surveyed areas it is found that 71.9 percent of household have no bank accounts in their name. Only 28.1 percent of household reported as they have their own bank account. Most of the accounts are recently opened for the purpose to avail the old age pension and house for homeless. Again, it is found that most of the accounts are operative only based on the government contributions. Deposits into such accounts from the owner's side are near to be nil and almost all accounts opened for the purpose of house becomes inoperative just after the purpose was served.

In the surveyed areas only 28.1 percent households found (Table-6.13) to be the owner of a bank account and remaining 71.9 percent households have no bank accounts. So far as bank loan is concerned, only 1.3 percent household reported to have get loan from any bank and 98.7 percent have no idea about bank's loan.

TABLE 6.13: Status on Bank and Insurance.

	Bank A/C		Bank Loan		Insurance	
	Yes	No	Yes	No	Yes	No
Char Near Towns	36	84	6	114	12	108
Attached to Mainland	54	66	0	120	3	117
Far from Towns	24	96	0	120	0	120
Disjoint Char	21	99	0	120	0	120
Total	135	345	6	374	15	365
Percentage	28.1	71.9	1.3	98.7	3.1	96.9

Source: Field survey.

TABLE 6.14: Status on Savings and Indebtedness

	Savings		Indebtedness	
	Yes	No	Yes	No
Char Near Towns	9	111	30	90
Attached to Mainland	6	114	36	84
Far from Towns	3	117	96	24
Disjoint Char	0	120	90	30
Total	18	462	252	228
Percentage	3.7	96.2	52.5	47.5

Source: Field survey.

In regard of insurance, only 3.7 percent of household reported to have any kind of insurance policies in their families. The lion share of population (96.2 percent) has no relation with any kind of insurance policies. Savings is an important component of capital formation

of the society. In the char villages, savings behaviour is a utopia. As the study reported that 96.2 percent house has no savings either in banks or in own hands. Only 3.7 percent household reported to have saving at a minimum level. Indebtedness is a feature of a backward society which exists among char dwellers. Of the total 52.5 percent household have their debt with their relatives, friends and *Mahajans*. Though the majority of the people are in indebtedness, but they could not avail banking loan facility as there exist no banking branch in char areas. Post office banking service is also rare to be found in service.

Deprivation of banking and insurance policies has due to following reasons:

1. **No bank branch:** There found no bank branch in char areas. Bank branch of any bank whether it is nationalized bank or regional bank have their branch located in towns. Even some branches named after some greater char area is also located in nearby towns.
2. **Lack of land document:** Lack of proper document is also another reason to have no account in banks for char people. This document issue hampered the people of char areas to avail loan from banks. As the land in char areas are *khas* land and have no record in government offices and hence people could not produce any documents based on lands.
3. **Reluctant attitudes:** Banks, either nationalised or regional, are found to be reluctant to provide loans to farmers, unemployed youths, SHGs, small enterprises etc of rural areas. They are interested to provide home loan to Government servant, established business man of town and cities.
4. **Lack of Awareness:** People living in char areas are illiterate. They have no awareness about the schemes and policies of the government. Due to lack of

education and awareness, they could not approach the bank for financial service. As reported by the household at the time of investigation, it is acknowledged that many of the parents lost the scholarship amount of their children due to failure to open an account in the bank against the name of their children.

5. **Existence of middlemen:** Existence of middlemen is an important bottleneck to get agricultural loan by the farmers. Bank personnel are favoured those middlemen who prepares list of beneficiaries for loans like KCC etc. General public of the concerned area are not aware of the list. Finally, the bank personnel and middlemen take pocket the whole amount keeping farmers in darkness.

6.6 SOCIO CULTURAL AND POLITICAL IMPACT:

Assam is a multi-cultural, multi ritual state. A variety of caste, creed, religion, language is found among the people of Assam. There are some caste and creed living in the state for which the other caste or creed knows a little or nothing. The state has lost more than 7 per cent of its area to erosion due to floods. People living in the eroded areas become displaced and they move nearby places for shelter. Mostly these people take resorts of government land, reserve forests etc.

Land loss due to erosion compelled those displaced people to migrate to other place without any economic and social security (Rahman, 2010). After losing all options of means of livelihood, they started migrating to various towns and cities of Assam as well as to different north-eastern states. Assam witnessed 6 yearlong 'Assam Agitation' during 1979 to 1984. The main slogan of the movement was to detect and deport illegal immigrants from the state. The affected people in the riverbank erosion when started going to various towns and

cities of Assam and north-east states, the then AASU leaders thought that these people were coming from newly created Bangladesh. The reason behind this thinking might be attributed to the similarity in language, dressing and mainly in religion of these people. In the name of detecting and deporting illegal immigrants, the descendants of the genuine Indian citizen who came to Assam and settled there in since latter part of 19th century were being targeted and harassed. Many were even killed in the genocide in *Neli* (Ahmed, 2016). Thus, we see that the riverbank erosion was indirectly influencing the political situation of Assam as the displacement of the riverbank erosion affected people from one place to another added the fuel in the flame in Assam agitation.

Displaced char people victimised at different angle, once they migrate from chars. Their appearance on mainland created a suspicious scenario. This suspicion arises because the language, religion, dress, behaviour etc of char people are different from that of the most land. This has led to misunderstanding among main land people and char people. Some por-active groups termed them as illegal immigrants and labelled the as 'Bangladeshi' also. They're assaulted, harassed and oppressed in their work place. Discrimination against them were also found just in case of labour market. they're paid much lesser wage than the prevailing market rate. Sometimes they were driven out from the work field by some pro-nationalist groups. Both print and electronic media publish and circulated the news of illegal immigrants, but they always remain silent about the basis causes of migration of those people from their char land. This has induced mistrust among communities which can't be good sign of a peaceful society.

It is clear from the above discussion that the overall scenario of river bank erosions and their impacts upon the people live in char area are very depressing. Due to the erosion induced displacement, people compel to forced migration that took them at the risk of

insecurities in different form. The uncertainties that they are to face in their life are economic insecurity due to unemployment, loss of capital and indebtedness, social insecurity due to deprivation of civic rights, health insecurity for absence of basic infrastructure etc. All these insecurities led to deprivation and vulnerability of the families. Thus, riverbank erosion has negative impact on human life. Human activities also have responsible for riverbank erosion. People cultivate on riverbanks because of its natural fertility. No fertilisers are needed. River bank land provide better yields than upland farms. For these kinds of benefits, there happened over-cultivation and poor management of cultivated fields (Kaunda and Chapotoka, 2003). All these factors are inducing riverbank erosion along with river sedimentation. So, it can be said that natural resources management including riverine resources in poverty affected communities is complex matter.