impact of brahmaputra river: a case study among the char dwellers of sipajhar development block in darrang district, assam

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# Impact of Brahmaputra River: A Case Study Among the Char Dwellers of Sipajhar Development Block In Darrang District, Assam

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#### **Abstract**

The fabric of agricultural activities in India reflect the spectrum of socio-economic variation of different socio-cultural groups. In other words the agricultural scenario reflects the intense physical heterogeneity across the socio-economic aspect. Agriculture is main occupation of the majority of population of Sipajhar development block of Darrang district. But this block is very prone to flood and bank erosion because of its topographical and hydrological characteristics. This area is characterized by frequent flooding of large magnitude, high frequency and extensive devastation. The river Brahmaputra flowing in the southern part of the area create flood year by year which plays a significant impact upon the existing landform and also upon the agricultural activities of the area. The impact of river Brahmaputra on agriculture is a tremendous way. The char dwellers of the Sipajhar development block has adjust themselves in different ways to cope with such burning problems. Loss of agricultural land and residential area is very big issue which bring threat to the dwellers.

Here an attempt has been made to focus the overall scenario of impact of Brahmaputra river on agriculture among the Char dwellers of Sipajhar development block.

Key words: agriculture, fabric, Brahmaputra, flood, erosion, dwellers

#### 1.Introduction:

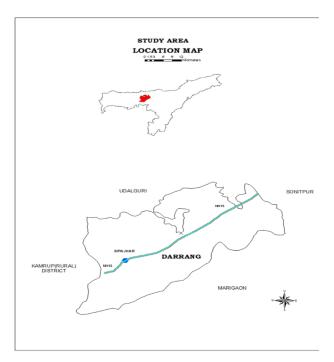
River is the dynamic arteries of earth surface which have hydrolic, geomorphologic, ecologic and environmental significance. The way of livelihood of the people is determined by the environment of the river basin. All aspect of human life that is social, cultural, economic, political etc. is influenced by river and day to day lives of the inhabitants are dependent on river. The Brahmaputra, one of the major rivers of Asia, is a trans-boundary which is also known as Tsangpo-Brahmaputra. Often over shadowed by Ganga, Yamuna, Indus and even the lesser Narmada, this massive international river is the lifeline of the North-east besides being a potential hydro-power house. The Brahmaputra plays a very important role in focusing the North-east India culturally and linking Assam with the rest of

India from time immemorial. Assam for ages together has been a riverine civilization, society and economy. Even today largely it continues. So the recent changes in its society and economic structures. The foundation and centre of this riverine society and economy has been and continues to be the mighty river Brahmaputra.

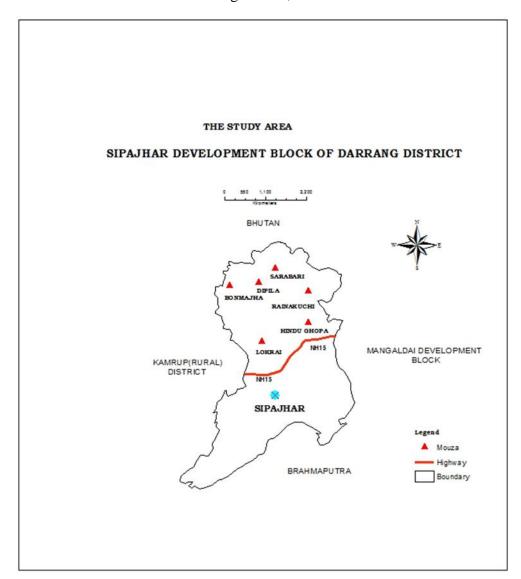
Agriculture is the key development in the human civilization. Cultivation of crops on arable land and the pastoral herding of livestock on rangeland remain at the foundation of agriculture. Agriculture has played a key role in the development of human civilization. Until the Industrial revolution, the vast majority of the human population labored in agriculture. Agriculture is the principal source of livelihood or a majority of the people in largely agrarian state of Assam. Despite having a number of multiple benefits of agriculture to society, there is a diversity of views when it comes to actual policy implication. This can be explained by differences in agricultural and rural economic structures, different positions in agricultural trade and the different stages of societal and socio-economic development.

## 2. Study Area:

The word "Sipajhar" is derived from two terms the 'Sipha' referring to an ancient river passing through this area and the 'Jhar' to the woods grown on the bank of the river and eventually which come to known as Sipajhar. The area is extend latitudinally from 26°12′42" to 26°32′25" and longitudinally from 91°44′49" to 91°57′18". It is located in the middle part of the Brahmaputra valley of and is surrounded by river Saktola in the east, Barnadi in the west, Mangaldai-Majikushi Road in the north and the mighty Brahmaputra river in the south. The study area of this paper is focused on char areas of sipjhar development block comprising the villages Dhalpur-1, Dhalpur-2, Dhalpur-3, Fuhuratali, kuruagaon, Bhenichapari and kirakataChapari. These villages are predominantly inhabited by non indigenous people muslims and by some hindu refugees, while the built up region lying to the north of char areas is largely inhabited by the indigenous non tribal group who are the non tribal Hindu and Muslim.



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# 3. Significance Of The Study

The Char areas of Sipajhar development block in Darrang district are far lagging behind for the development is concerned. Agriculture is the mainstay of of their livelihood. The char areas of Sipajhar development block are not suitable for summer cultivation like rice crops because of flood. The Char areas of Sipajhar Development block is being a part of Brahmaputra valley is no exception to problems of frequent floods. At present flood is a regular phenomena and a biggest problem of this area. The river Brahmaputra and other rivers of this area are creating flood causing severe loss and damages every year. In that time the river Brahmaputra river carry huge volume of water during the period of summer. Keeping these points on view, the researchers considers it important to undertake an analytical study on impact of Brahmaputra river in the char areas of Sipajhar development block in Darrang district.

# 3. Review Of Related Study

Taher, M. (1975) successfully analyzed the physical basis of planning for agricultural development in the Brahmaputra valley. He correlated the pattern of cropping with different ecological settings in

the valley. Bhagabati, A.K. (1984) made an attempt to investigate and evaluate the pattern of agricultural development of Brahmaputra valley, their changes and processes involved so that a proper micro-regional planning can be undertaken for the future economic development of the region. Goswami, P.C. (1963) discussed various aspect of flood and its impact on agriculture of Assam and advocated for reorganization of the cropping pattern and crop rotation according to the flood environment to ensure sustainable developments of agriculture. Nath, S.R. & Saikia, R. (2016) Made an attempt to find out the cause and affect of flood and bank erosion on agriculture, property as well as on human life of Sipajhar development block in Darrang district.

# 4. Objectives of the study:

The objective of the study are outlined as follows:

- 1. To study the impact of river Brahmaputra on agriculture of the study area
- 2. To examine socio-economic life of the char dwellers of the study area.

#### 5. Discussion:

Agriculture is the main occupation of 90% of the total population in the district. Out of total geographical area, 52.72% is devoted to agricultural activities. The kinds of crops cultivated and the amount of land used for agriculture is not uniform in all parts of the district. Darrang district like its counterparts in Assam produces a variety of crops such as food crops, fibre crops, oil seeds, pulses, fruits, vegetables, sugarcane, tobacco, tea, and spices. The Sipajhar development block is popularly known as 'rice bowl' of the district where 95% of the total population is engaged in farming activities.

The drainage system of a region has significant impact on the distribution of settlements and the socio-economic growth of a region. The immediate south bank of the Brahmaputra being the southern boundary, a portion of this river is included within the Sipajhar region. The Char areas of the Brahmaputra are occupied by alluvium of recent origin. Every year silts are deposited layers after layers. So this part of the region is most fertile for the cultivation of oilseeds, pulses, Ahu paddy, onion, potato etc. Formerly the area had many vacant places covered with tall reeds and grasses and were used by cattle and buffalos reared by the farmers of the near by areas. At present these place have been occupied by immigrant peasants. The Sipajhar Development block is badly affected by flood on human occupancies and settlement. The man devastating agent is the high amount of water discharge and sediment load which also operate as a damage agent after recession of flood. In the char and chapraris of the study are the concentration of population is quite high. It is only because of the facilities available in the floodplain tract such as fertile land for agriculture, available water resource for domestic, irrigation and industrial purposes, level and plain land for construction of houses etc.

The char is a sandy island of small size located along river bank of within a stream course. Major portion of char chapari residents are East Bengal rooted those were brought to Assam during the British era for cultivate the wetland by direct patronizing the Government. There are six char village under the Sipajhar development block named Dhalpur-1, Dhalpur-2, Dhalpur-3,

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Bhenichapari,,phuhuratali and kirakara. The char areas of Sipajhar development block are not suitable for summer cultivation like rice crops because of flood. The Charareas of Sipajhar Development block is being a part of Brahmaputra valley is no exception to problems of frequent floods. At present flood is a regular phenomena and a biggest problem of this area. The river Brahmaputra and other rivers of this area are creating flood causing severe loss and damages every year. In that time the river Brahmaputra river carry huge volume of water during the period of summer. So the dwellers of char areas do not practices the summer crops because of severe flood. Summer crops are totally absent in summer season. But some of the people are practices the Bodo rice in summer season. The fabric of agricultural activities in India reflect the spectrum of socioeconomic variation of different socio-cultural groups. In other words the agricultural scenario reflects the intense physical heterogeneity across the socio-economic aspect. Agriculture is main occupation of the majority of population of Sipajhar development block of Darrang district. But this block is very prone to flood and bank erosion because of its topographical and hydrological characteristics. This area is characterized by frequent flooding of large magnitude, high frequency and extensive devastation. The river Brahmaputra flowing in the southern part of the area create flood year by year which plays a significant impact upon the existing landform and also upon the agricultural activities of the area. The impact of river Brahmaputra on agriculture is a tremendous way. The char dwellers of the Sipajhar development block has adjust themselves in different ways to cope with such burning problems. Loss of agricultural land and residential area is very big issue which bring threat to the dwellers. People in the char area develop their own adapting techniques to geared against the flooding. These characteristics of flood are very important as the external determinant of the cropping techniques. These characteristics include the height of flood water and the frequency and duration of flooding, influence people's adaption of coping techniques.

Floods and bank erosion cause heavy loss in all aspect of human life as the loss of life and property leads to poverty, agricultural deficiency, starvation, unemployment and many more problems arise in the study area. In every year the river Brahmaputra silted the cropland of the study area. So the people of this area change their agricultural activities. Due to the frequent flood the people of this area are face some big problems like communication problem, drinking water problem etc. But the people of the char areas of Sipajhar Development Block are adjust themselves with the frequent floods.

So the people of *Char* areas are cultivate the winter crops like different types of vegetables like, cabbage, brinjal, potato, chili, lentil, blackgram and Ahu rice, jute, Maize etc. In this study, it is found that the farmers of Char areas in Sipajhar development block are want to practice the maize cultivation instead of jute. Because they found that the maize cultivation is more fruitful instead of jute. And also they are interested to practices the Bodo paddy instead of Ahu paddy. Mainly the char village are inhabited by the Muslim immigrant origin. Agriculture is the main occupation of these people. For the economic development of the district the char area of Sipajhar development block are play an important role. They are very hard working people in agricultural sector and now they are engaged in different sectors of activities.

### 6.Conclusion:

Due to flood river erosion terrestrial and fresh water biodiversity are lost. These are indirectly effects on environment. Flood has not only demerits but also has merits. Flood carries silt which falls on the fields and makes the land fertile. This is natural manure which saves artificial fertilizers. As a result many kinds of crops grow.

Agriculture is the main occupation of these people but some of the people of these village primarily depend on the age old agriculture in an uncertain climate which forces majority of the people to live below the poverty line. Many of them are now engaged in other works instead of agriculture like rickshaw or thela pulling and daily wage labour in construction of building and road making in the urban areas. And also these area are severely affected by the flood every year and there is also lack of communication and transportation facilities. For this they used country boats and steamers, carts drawn by bullocks are the main means of transportation. Although the contribution of these three village of Sipjhar development block in to the economic condition of Darrang district is very high. Because they are main source to managed the agricultural side of the district. They are very hardworking people in agricultural field. So that we are very lucky to say that the Darrang district is world famous for the different types of vegetables.

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