



IMPACT OF FLOOD ON TRADITIONAL OCCUPATIONAL PATTERN: A CASE STUDY IN DHEMAJI DEVELOPMENT BLOCK, DISTRICT DHEMAJI, ASSAM

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ABSTRACT Flood in Assam has been a recurring feature since early times. The annual flood and its associated erosion of the exposed surface of the plain and the river banks cause heavy damage to the agricultural lands, residential areas and buildings. Even in some places erosion completely engulfs large number of villages. In this backdrop, this paper aims to find the impact of flood on the traditional occupational pattern among the flood affected people of Dhemaji Development Block, district Dhemaji, Assam.

KEYWORDS : Flood, Occupation, Agriculture, Land, Erosion.

INTRODUCTION

Flood in Assam has been a recurring feature since early times. As soon as the monsoon starts, most of the rain water runs into the streams causing high stage in the Brahmaputra and Barak rivers and their tributaries. Particularly the Brahmaputra River, carrying high volume of water and sediment load, when additionally charged with heavy concentration of rain during monsoon, obviously becomes capable of creating enormous flash floods. Besides the natural factors, the human induced factors are also highly responsible for devastating floods in the state. Deforestation and unwise tree felling in the high catchment areas of the Brahmaputra and Barak are the important causes of flood in the plains. The absence of protective cover of vegetation accelerates soil erosion, and finally results in silting up of the river beds. The shifting cultivation practiced in the hill districts of Karbi-Anglong and North Cachar hills has substantially reduced forest cover. As a result, enormous sediments are generated and continually getting deposited on the river beds. The flood problem has become more serious due to certain other human induced factors like large scale human occupancy in the flood plains, destruction of wetlands and the poorly managed embankment network etc¹. Records show that riverside towns like Sadiya, Dibrugarh, Palasbari, etc. as well as the river island of Majuli with rich cultural heritage have been damaged partially or substantially by flood. In case of Majuli, the largest river island of India, some ancient *Satras* (Institutional centers associated with Vaishnavism) like Kamalabari are partially destroyed by erosion. Some areas like Dhakuakhana, Dhemaji, Lakhimpur, etc. located in North bank of the Brahmaputra are also being eroded rapidly. Some important towns of the South bank like Dibrugarh in upper Assam are facing the danger of erosion all along the length of the city.

Occupation is the basis of livelihood and it influences the total life of a society. The occupation of an individual refers to his trade, profession and type of work. The occupational structure of a society is the products of a number of intimately related factors². The major source of economy of Assam is predominantly agrarian. The Agriculture sector in the state provides employment to more than 50 percent of the rural people. The area covered under Paddy cultivation was 25.71 lakh hectares. Hence, agriculture still forms the hub of Assam's economy. In addition to providing food, agriculture is the main source of raw materials for several key industries³.

More or less every occupation in rural areas of Assam depends on environmental factors. Agriculture is the principal occupation of Dhemaji Development Block. Sericulture, fishing and driftwood business are also practiced in smaller scale. In recent times sand deposition, erosion and other adverse affects of chronic floods on fertile agricultural land have made even affluent farmers landless. Therefore, a large number of such people shift their major traditional occupation and move to the urban areas for better earning. In this backdrop, this paper aims to find the impact of flood on the traditional occupational pattern among the flood affected people of Dhemaji Development Block, district Dhemaji, Assam.

MATERIALS AND METHODS

Micro-field: 03 severely flood affected villages viz. Kekuri, Samarajan and Goraimari in Dhemaji Development Block were selected for the present study. The location of the villages are about 8-9 km. away from the district headquarter i.e. Dhemaji. The river Jiyadhul

(one of the major tributaries of Brahmaputra) that passes by the side of the villages is the main cause of flood in the study villages. The total households in Kekuri, Goraimari and Samarajan are 56, 96 and 43 respectively.

Methods used: Both primary and secondary data were collected. The primary data was collected from the study villages through observation, personal interviews, questionnaire survey and case study during the period from January to December, 2017. A total of 195 respondents (one respondent from each family) i.e. 56 respondents from Kekuri, 96 respondents from Samarajan and 43 respondents of Goraimari were randomly selected for the study. The secondary data was collected from the various documents, journals, news paper reports and records published by the state government and other relevant sources.

RESULTS AND DISCUSSION

More than 85% of the people of Dhemaji district depend upon agriculture. But, after the heavy flood of 2003 and the perennials floods afterwards majority of the cultivators had lost their paddy fields which they previously used for cultivation. As a result, large number of people had to change their traditional occupation i.e. agriculture. Frequent floods every year in Assam have been destroying standing crops, creating water logging, soil erosion and affecting large crop areas and thus threatening the sustainability of the drive towards higher productivity and production of various crops in the state⁴.

Table 1: Occupational Background of the Respondents

| Category | Village Name | | | |
|--------------|-----------------|-----------------|-----------------|------------------|
| | Kekuri | Samarajan | Goraimari | Total |
| Agriculture | 13 (13.21) | 10 (10.41) | 9 (20.93) | 32 (16.41) |
| Business | 15 (26.78) | 20 (20.83) | 7 (16.27) | 42 (21.53) |
| Service | 2 (3.57) | 3 (3.12) | 3 (6.97) | 8 (4.10) |
| House Wife | 12 (21.42) | 27 (28.12) | 12 (27.90) | 51 (26.15) |
| Dependent | 5 (8.92) | 12 (12.5) | 7 (16.27) | 24 (12.30) |
| Daily Wage | 7 (12.50) | 19 (19.79) | 5 (11.62) | 31 (15.90) |
| Driver | 2 (3.57) | 5 (5.20) | 0 | 7 (3.58) |
| Total | 56 (100) | 96 (100) | 43 (100) | 195 (100) |

Out of the total 195 respondents of the three study villages, only 32 (16.41%) respondents [13 (23.21%) of Kekuri, 10 (10.41%) of Samarajan and 9 (20.93%) of Goraimari] depends on agriculture; 42 (21.53%) respondents [15 (26.78%) of Kekuri, 10 (10.41%) of Samarajan and 7 (16.27%) of Goraimari] depends on business; 8 (4.10%) respondents [2 (3.57%) of Kekuri, 3 (3.12%) of Samarajan and 3 (6.97%) of Goraimari] depend on government service; 24 (12.30%) respondents [5 (8.92%) of Kekuri, 12 (12.5%) of Samarajan and 7 (16.27%) of Goraimari] are found to be dependent on others; 31 (15.90%) respondents [7 (12.50%) of Kekuri, 19 (19.79%) of Samarajan and 5 (11.62%) of Goraimari] depend on daily wage; 7 (3.58%) respondents [2 (3.57%) of Kekuri, 5 (5.20%) of Samarajan] are vehicle drivers; and 51 (26.15%) respondents [12 (21.42%) of Kekuri, 27 (28.12%) of Samarajan and 12 (27.90%) of Goraimari] are housewife (Table 1).

After the flood there are marked changes in the ecological settings of the study areas. Every year large areas of land which are used for

cultivation are destroyed by the flood water and turned into barren land. It was also evident that the agricultural fields which were damaged by floods were their main *khari* crop field. After the loss of the agricultural lands majority of the people have to change their traditional occupation i.e. agriculture and engaged themselves in other occupation for their livelihood. Now, they are mainly engaged as daily wage earner, workers in garage, salesman in shops, drivers, small business, etc. which effecting their traditional occupation, their economic life and also their social status. A study conducted in Bangladesh also reports that due to the submerged condition of agricultural land the agriculturist people have been forced to change their occupation and started working as fisherman, laborer, rickshaw puller, as they could not continue their agriculture⁵.

Table 2: Number of respondents who change their occupation after flood

| Change of occupation | Kekuri | Samarajan | Goraimari | Total |
|----------------------|-----------------|-----------------|-----------------|------------------|
| Yes | 42 (75.0) | 90 (93.75) | 23 (53.48) | 155 (79.48) |
| No | 14 (25.0) | 6 (6.25) | 20 (46.51) | 40 (24.61) |
| Total | 56 (100) | 96 (100) | 43 (100) | 195 (100) |

Table 2 shows that out of the total 195 respondents of the three study villages, 155 (79.48%) respondents [42 (75%) of Kekuri, 90 (93.75%) of Samarajan and 23 (53.48%) of Goraimari] have mentioned that they had to change their traditional occupation and the remaining 40 (24.61%) respondents [14 (25%) of Kekuri, 6 (6.25%) of Samarajan and 20 (46.51%) of Goraimari] mentioned that they have not changed their traditional occupation after the 2003 flood.

In the micro-field, river Jiyadhool is the chief reason for heavy flood every year. The major factors responsible for the loss of agricultural land are - (a) Soil Erosion and (b) Sand and silt deposition. Soil erosion is the result of number of factors, working in isolation or in association with one another. Sand and silt deposition due to flood in agricultural field is another important problems for the cultivators. Due to the deposition of sand and silt in the agricultural field it becomes unfit for cultivation. In every year floods affected on an average of 0.8 million hectares of land, and in some years affected more than 4 million hectares of land out of a total area of 7.54 million hectares in Assam⁶. The people, thus helpless try out various short term measures for their cultivation, some with little success and most without.

Table 3: Reasons of occupational change

| Reasons | Village Name | | | Total |
|---|-----------------|-----------------|-----------------|------------------|
| | Kekuri | Samarajan | Goraimari | |
| No change | 14 (25) | 6 (6.25) | 20 (46.51) | 40 (24.61) |
| Sand & silt deposition on agricultural land | 25 (44.64) | 69 (71.87) | 13 (30.23) | 107 (54.87) |
| Erosion of Agricultural land | 17 (30.35) | 21 (21.87) | 10 (23.25) | 48 (24.61) |
| Total | 56 (100) | 96 (100) | 43 (100) | 195 (100) |

Table 3 shows that out of the total 195 respondents of the three study villages, 155 (79.48%) respondents had to change their traditional occupation after the flood. Out of which 107 (54.87%) respondents [25(44.64%) of Kekuri, 69 (71.87%) of Samarajan and 13 (30.23%) of Goraimari] have changed their occupation due to sand and silt deposition in their agricultural fields, and 48 (24.61%) respondents [17 (30.35% of Kekuri, 21 (21.87%) of Samarajan and 10 (23.25%) of Goraimari] have changed their occupation due to soil erosion in their agricultural fields.

CONCLUSION

Agriculture was the major traditional occupation of the micro-field before flood. But after the flood, due to changes of ecological settings, loss of agricultural land, and sand and silt deposition in agricultural land majority of the people had to change their traditional occupation and engaged themselves in other profession for their livelihoods which in turn affect their traditional economic life and also their status in society.

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