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Causes And Problems Of Population Displacement Of The Mishings Of Dhemaji Due To Flood Vulnerability

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Abstract

The Government has identified Dhemaji district as the most backward and poorest district in the State, mainly due to the fact that most portion of the area is affected by yearly floods. The population inhabited by different people groups such as Mishing, Bodos, Deories, Assamese, Adivasi, Muslim and various non tribal groups. The total current population of Dhemaji is 688077. The male & female population showcasing 353043 and 335034 respectively. The Mishing community constitutes the largest population of the area. The Mishing people are active agriculturists. Their main occupation for livelihood is agriculture. In the past, they had a practice of shifting cultivation in the hills but after settling down in the plains, they are now practicing settled cultivation. The literacy rate of the Mishing people is poor. The State literacy rate has gone up to 73% percent whereas the Mising literacy rate is at 45% in the district. This is due to a lack of proper educational institutions, a lack of awareness and also due to the yearly flood disaster in the district. Education has been given very little priority. The health status of the people is very poor. Water-borne diseases in the area are rampant due to floods and stagnant water after the disasters. The yearly flood have been destroying their cultivable land by soil erosion or by sand deposition, damaging educational institutions, washing away their properties that is private property as well as public property and even sometimes taking away peoples life. The frequent flood disasters in the area have been increasing the percentage of BPL card holders yearly. Aftermath of flood disaster this particular tribe lack rehabilitation tribulations due to various factors. It has been observed that their simple way of settlement pattern has been affected by flood resulting displacement of households to elsewhere. In the recent year we have been seen that a new trend of settlement pattern that is settlement in the broken embankments or high platforms or highland areas. Therefore, in order to analysis the actual facts within the districts a case study were conducted in the Machakhowa Dev. Block and Sissiborgaon Dev. Block. The research paper is entitled as "Causes and Problems of Population Displacement of the Mishings of Dhemaji due to Impact of Flood Vulnerability".

Objectives

- 1. To highlight the improvement in the standard of living of Mishings in the age of globalization.
- 2. To analyze their (Mishings) main causes migration and displacement due flood.
- 3. To establish and analyze the underlying causes of vulnerability of the people in Mishing community;

- 4. To trace if there is any changed in settlement pattern due to flood.
- 5. To assess the occupational change forced by flood.
- 6. To evaluate the overall impact of flood on the community.

Introduction

Around the world a great number of people are hit by catastrophic events like floods, earthquakes, droughts, storms, or tsunamis; they have to prepare for such events and cope with their consequences. Disaster has two important facets; magnitude of hazards; and fabric of the society vulnerablity. The increasing frequency and severity of narural and technological disasters particularly, but not exclusively, in the developing world place them in the center of debates on human-environment of development relations and issues sustainability. Disasters occur at the interface of the society, technology, and environment and are fundamentally the outcomes of the interactions of these features. In very graphic ways, disasters signal the failure of a society to adapt successfully to certain features of its natural and socially constructed environment in a sustainable fashion. Basically, the increase in number and severity of natural and technological disasters constitutes one of the clearest tests available of the lack of resilience and sustainability of many current human environmental adaptations. Any account of human environmental adaptation in the past or present that fails to consider the interaction of the social, technological, and natural processes of hazards and disasters is far from complete. Although awareness of the centrality of these phenomena in human-environment interaction is now emerging in the social sciences, until quite recently there has been a general failure to consider the interaction of the social, technological, and natural processes that produce hazards and disasters in our accounts of human environmental adaptation. Recent concerns about global warming in producing and intensifying hazardsand disasters reflect and enhanced understanding of hazards and disasters as indicators of social adaptation. Anthropologists study how humans conceive of and deal with disasters, how disasters affect social worlds and every-day life. The study of natural disasters is a field of growing importance within social and cultural anthropology.

Amongst all the districts of Assam Dhemaji is the worst affected district due to flood. The district has five main tributaries of Brahmaputra namely

Simen, Demow, Jalakiasuti, Gai, and Jiadhal causing flood havoc every year. The NH 52 which connects Dhemaji District with rest of the country through roadways usually breached at various points due to massive erosion by the Sili River at Santipur Village, Demow and Jalakiasuti River at Silasuti thereby cutting-off Jonai Sub-division as well as a huge area of Sissiborgaon Block (Dhemaji Sub-Division) with rest of the country through roadways. Similarly, the River Jiadhal has caused severe damage to the NH 52 at two points at Samarajan thereby causing great threat to the roadways connectivity of the District with rest of the country.

Flood produces widespread impacts in both rural and urban areas. Any type of agricultural, commercial, or residential development located in a floodplain is vulnerable to flooding. Increasing urbanization is some areas enhance the threat of flooding where drainage systems cannot cope with the increased input of storm water runoff. In rural areas, property damage caused by flood is devastating to farmers. When flooding occurs during the growing season, farmers can suffer widespread crop loss. In some cases, there may be an opportunity for a second planting of a less profitable crop. Livestock farmers may lose livestock if they are unable to find safety from rising floodwaters. This threat is primarily associated with flash flooding. Flooding poses several threats to residential and commercial properties. In villages thatched houses are damage to the extent of beyond repair. Even some pucca buildings experience significant damage, sometimes beyond repair, due to flooding. Household furnishings and business inventories can be lost if there is not adequate time to remove items to safe locations. Even wild animals, forced out of their homes and brought into contact with humans by floodwaters, are being a threat. Severe flooding causes extensive damage to public utilities and disruptions to the delivery of services. Loss of power and communications can be expected.

Drinking water and wastewater treatment facility may be temporarily out of operation.

Thus, all these enhance the sufferings of the people. Social system gets affected, as families in large number come to reside in temporary camps leaving their all belongings behind their inundated houses to get damaged. Camp life provides a completely different system of environment where there is neither any social control mechanism nor any social institution to rely on. Social economic and political institutions remain defunct and even after recession of floods it takes time to re-establish and reviving these institutions. The impact and incidence of flood on the families varies differently depending upon their occupational categories in the district of Dhemaji. It is acute in the case of the farm families who completely rely on agriculture for their living. Destruction of crops brings miseries to their lives even after rescission of floods; while it is not in case of the non farm families. The incidence of flood Non farm families is in most cases indirect. It is also seen that many families are displaced or migrate to elsewhere due to impact of flood disaster in the area.

The Mising Tribe (formerly known as Miris) belong to Tibeto Burmese group has agriculture as their main occupation. In "Topography of Assam", John M'Cosh (1837) had written "The Miris occupy that strip of alluvial land along the northern bank of the Brahmaputra from large island Mujali to the river Dihong the northern branch of the Brahmaputra and bounded on the north by hilly country of the Abors." At present the Misings inhabit districts of Dhemaji, Lakhimpur, Sibsagar, Sonitpur, Jorhat, Tinsukia and Golaghat. Mising people found the most fertile land on the banks of River Brahmaputra and settled on sides of the river. Though their production was great, frequent floods prevented them from climbing the economic ladder. The main festival of Mishing tribe is Ali-Aye-Ligang the month of February which is the harvest festival. They speak language

known as Mishing language. They continued their practice of living in thatched houses raised on bamboo stilts, known as Chang ghar. It was a protection against flood waters during the rainy season, although the original logic behind raised houses was protection from wild beasts. The yearly floods ensured that the Mishings lived a life of abject poverty and misery. Agriculture being their main occupation, flood affects them in more ways than one. Moreover, due to their affinity towards living close to river banks brings about Malaria and other water-borne diseases. But 90% of them still continue to live along the banks of Brahmaputra and its tributaries, unfazed by the disasters striking them. Flood disaster affects the Mishings in every form of their livelihood. The impact of flood has result a migrating trend of the Mishings to high land areas and also settlement in the broken embankments living their original places of habitation.

Background of the Research Area

Muktiar GP, situated in the south east of the Sissiborgaon RC (i.e. near to north bank of mighty Brahmaputra) is selected for the study. The RC is located in the middle of the Dhemaji District and North East side of Dhemaji Sub-division. The Circle is bordered by Arunachal Pradesh to the north, Jonai Circle on the east, Dhemaji circle on the west and then mighty Brahmaputra on the south. The area of the circle is 921.6 sq. Km with a population of 2,34,172 (India Census 2011). The area of this circle is a narrow strip of plains stretching from Brahmaputra to the foothills of Arunachal Pradesh. The Revenue Circle has 380 nos of revenue villages. The Circle has identified 81 nos of highly flood prone villages with a population 29213. The inhabitant of this area is the Mishing Tribe of Assam. And very often this area has been experiencing natural disaster like flood. The inhabitant of the GP suffers from angles although there is rare development in the area.

Sissimukh GP of Machkhowa Dev. Block is situated north bank of river Brahmaputra. This GP is also a flood affected GP of the district. So, the yearly flood disaster and result of breaching of embankment from time to time have resulted in rural poverty of the Mishings. The total geographical area of the block is 4777 Bigha with a population of 26657 (2001 Census). The Revenue Village of the block is 51 Nos. with 5 Nos. of Gaon Panchayat and agricultural land under cultivation is 3700 Bigha.

A Brief historical flood profile of the study area:

- 1. The August 2014 flood water breached the chapori embankment submerged of 15 villages in Sissi RC and washed away 20 dwelling houses of Rekha chapori under Muktiar GP. various lost of livestock has been reported. In this particular GP severe flood had occurred in the year 1987, (embankment was breached Arnechapori village) and 2000.
- 2. It was in Machakhowa Dev. Block that on 24 June 2012 flood water rises to it danger mark thus breaking the northern Brahmaputra Embankment mainly in three places that are Jotmichukh, Namdang and

Lutarchukh area under Sissimukh GP. From the five GP under the block, four GP which was very badly affected were Sissimukh GP, Pup Machakhowa GP, Machakhowa GP and Jurkota GP. In the Jotmichukh village 29 houses was washed away by the water and four GPs was totally submerged under flood water nearly for three months. The effect of the disaster is even today not recovered by the people and the Government.

Methodology

The district Dhemaji with a population of 688,077 (Census-2011) people has been divided into five development blocks namely Dhemaji Development Block. Sissiborgaon Development Block. Machkhowa Development Block, Bordoloni Development Block and Murkongselek T. D. Block, Jonai. From these two blocks that is Sissiborgaon and Machkhowa have been chosen for study. Within these two blocks the Muktiar GP (August flood of 2014) and Sissimukh GP (June flood of 2012) was taken for sample survey study. And sample accumulated was comparatively studied and compiled systematically.

Findings and Discussions

Figure: 1

	Muktair GP														
	Sunarigaon 🚣						Rekhachapori 📤								
Erode d/wash ed away h/h	House hold (prese nt)	Migrat e to nearby areas	Migrat e to far off places	Educational institution washed away	Youth moved out for income source		Eroded /washe d away h/h	Househ old (presen t)	Migrate to nearby areas	Migrate to far off places	Educatio nal instituti on washed	Youth moved out for income source			
Û	û	Û	Û	û	Û		Û	Û	û	Û	away	Û			
Û	Û	Û	Û	Û	Û		Û	Û	Û	Û	Û	Û			
							20	21 h/h (plain) &	05	02	01 (Rekhach apori LP	09			

17	,	16	12	09	Very close to the river bank (25 metres)	06		13 h/h in EMB K			School)	
N.I	N.B.: the sample above is with the time period of 2012 - 2014											

From the figure-1, in the both the village 37 households have been eroded or washed away by flood water with 2012-2014. With affect of the recent August flood 2014 altogether 13 household families have settling in the broken embankment on the northern dyke of river Brahmaputra. From, the two surveyed villages 17 nos. of household have migrated/shifted to nearby places for safety. And

11 families have migrated to far off places. 15 nos. of persons have moved out from the village for income purposes. The only educational institution of Rekhachapori village was washed away and the educational institution of Sunarigaon is also in very critical position because only few meters away from the north bank river Brahmaputra to be eroded.

Figure: 2

Sissimukh GP															
Jotmichuk Gaon 📤							Bahir Tapit Gaon 📤								
Erode d/wash ed away h/h	House hold (prese nt)	Migrat e to nearby areas	Migrat e to far off places	Educational institution washed away	Youth moved out for income source		Eroded /washe d away h/h	Househ old (presen t)	Migrate to nearby areas	Migrate to far off places	Educatio nal instituti on washed away	Youth moved out for income source			
•	•	•	V	•	Û		Û	Û	Û	Û	Û	Û			
Û	Û	Û	Û	Û	Û		Û	Û	Û	Û	Û	Û			
23	25 h/h plain 16 h/h EMB K	05	04	O1 (Jotimichu k LP School was destroyed causing almost impossible for any recovery)	17		06	29 h/h (plain) & 08 h/h in EMB K	08	03	01 (Bahir Tapit LP School)	1 1 2 1			

From the figure -2, in both the survey villages 29 household was washed/eroded away June flood of

2012. 24 household have been sheltering in the embankments and 13 household have shifted to

nearby areas due flood havoc. As par the accumulation of the sample in the studied villages the only educational institution washed away and also causing damage to Jotimichuk LP School causing almost impossible for any recovery. And altogether 29 person have moved out from the villages for earning purpose living their behind families.

Summarization as par secondary and primary sources

- As a result of the August flood of 2014, nearly 75000 people of 246 villages were displaced by flash floods under Jonai Sub Division.
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- The surging waters from the breached portion of the embankment at rekhachapori have also affected the Bogibeel project. It also inundated five PWD rural roads like Kulajan-Deorighat, Deorighat- Sonarighat, Kebaranga-Belong Gaon, Bormuria-Arne chapori, Bormuria-Tangani majgaon.
- Two person lost their life due flood under Jonai Sub division.
- \$\footnote{\sigma}\$ 30 relief camps were set up at Sissi RC. For the shelter of the peoples 26, 575 peoples took shelter in the relief camps.
- The principal reasons for migration or displacement of population in the study area is due flood disaster.
- In the Muktiar GP under Sissiborgaon RC the migration is due to river bank erosion. As par sample accumulated huge area of forest land has been eroded and the villagers dwelling area of Sunarighat have been eaten up by the river Brahmaputra River.

- Reductions of land and forest resources due to flood have been causing problems in the areas (Sunarighat, Medhi pamua, Dighali pam).
- Reduction of land use has been recorded due to sand casting after the result of embankment being breached by flood water in the two studied GPs.
- A new trend of settlement pattern (Embankment settlement) has been found emerge in both the Development Blocks due to impact of flood disaster.
- Embankments are preferred for immediate shelter during floods and some people who have lost their homes stay back for a long time, and even permanently, on the embankment. Being much higher than the flood plains, people on the embankment are protected physically, but the possibility of erosion and breaches make them vulnerable also. If the embankment breaches in the midst of a flood, the people on it become isolated and damage and loss of life can be greater than if they had taken shelter in other places.
- Some of the household have built their houses in a raised platform and whereas some have heightened the level of their chang ghar in order to prevent them from flood water.
- A raised platform are observe in the in the sample studied villages for the safety of the animals during disaster.
- A change in their occupational pattern have been recorded due to impact of flood, that is from agriculture to non agricultural occupations likes day labourer, firewood sellers, fishing, log business etc.
- As par observation and data collected from the sample villages it has been found that most of the women folk are seen busy preparing clothes for income purpose in order to assist in running their houses.

From reliable sources and data collected from the Sissimukh GP, it has been found that the Government so far has not done any necessary steps to rehabilitees the affected peoples in the areas. The govt.'s deft ear to such disaster has being affecting the growth and development of the Mishing society.

Flood disaster had stricken the Machkhowa Dev Block in 2012 but till today govt. has not taken any necessary steps for the rehabilitation of the people.

The people have been sheltered in the broken embankments and highland areas. The fear or the mental trauma is still found in the mind of the people. When we interacted with the people, they recite their happening very hopeless.

Due to migration from the outside embankments, a very congested way of settlement pattern have found inside the embankments in the studied areas.

The preparation of local country boat in the sample studied areas indicates that there is every possibility of future flood disaster.

The Mishing people store food and save money for bad times and try to keep themselves informed about flood situations and warnings as preparatory measures, sometimes using their folk beliefs and observational experiences.

They take shelter on high platforms close by or on the road or on embankments with their cattle if they are in danger of being displaced and have to move houses or villages. No creativity or innovation is associated with this option; it is rather a compulsion when no other high ground is available nearby.

Transportation during floods is usually on rafts made from the wood of the banana tree and they help each other in rescue and evacuation operations. Most of the villagers are skilled swimmers and know how to use boats and rafts.

They try various methods of cultivating paddy of different varieties whenever there is a slight respite from floods. Some of them have grown alternative crops and vegetables with consistent efforts but on a subsistence scale. Other villagers have engaged in alternative livelihoods, such as daily-wage labour, fishing, selling dry fish and country liquor (sometimes against cultural taboos), and providing menial labour for government projects, whereas others have migrated to get work. Their adaptive capacities need to be augmented by well-designed interventions aimed at making people more proactive and communities self sustained so that they are ready to face future hazards.

It used to be a common practice for the Mishing people of the studied areas to leave their old homes and settle in new areas when their old villages were engulfed by the river or became too vulnerable to erosion. Moving the whole village or a certain number of families to safer paces worked well as an adaptation strategy in the past because there was no dearth of land where new villages and colonies could be established. At present there is not enough vacant land in which large numbers of people can settle. So, as a strategy, it has become less viable.

Recommendation

- ⇒ Natural Disaster Management should be strengthening.
- ⇒ Rehabilitation legislation and policy should be strengthening.
- ⇒ Proper long term policies and programmes with regards to flood must be taken up by the government authority.
- ⇒ Strong community participation in flood related problems during and flood aftermath.

- ⇒ People must pressurize the government for the proper resettlement of the people after flood disaster.
- ⇒ The role of mass media in focusing and discussing flood relate issues can play a vital in overcoming flood disaster.
- ⇒ Qualitative rather than quantitative development of human well-being.
- ⇒ Global rather than regional or national perspective on environmental issues.

Conclusion

After reviewing of various flood related articles from different sources and overall analysis of the findings we could sum up that the entire population of the district is affected directly or indirectly by flood. The flood problem has been more acute in case of the agrarian Mishing society because they totally depend on agriculture for their livelihood. With the age of climatic fluctuation, the rapid growth of population, the reduction of biodiversity resources is creating complex situation for the simple lifestyle living Mishing society. The recent severity of flood in the flood affected districts of Assam has result lots of displacement and migration from one place to other causing problems in the living standard of the populace. The simple Mishing Community of the district has been very badly affected by sand casting, soil erosion/river bank erosion, destruction of their houses and natural surroundings. These factors results for unplanned and very congested settlement patterns in the form of displacement and migration in times of emergency for safety life. So, the best way to overcome flood disaster could be the application of their simple traditional technology in mitigating the flood vulnerability and prevention and protection of their surrounding for the betterment of tomorrow.

Acronyms and abbreviations:

GP - Gaon Panchayat NH - National Highway, RC - Revenue Circle, LP - Lower Primary, H/H - Household, EMBK -Embankment

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