

Laki Akter; Survival Strategies of a Pioneer Women against Hazardous Flood and Riverbank Erosion

Flood and Riverbank Erosion is the common natural hazards of Bangladesh. Every year, huge portion of people are seriously affected by riverbank erosion that destroys standing crops, farmland and homestead land. It is estimated that about 5% of the total floodplain of Bangladesh is directly affected by riverbank erosion. At present, bank erosion and flood hazards in nearly 100 upazilas have become almost a regular feature. Of these, 35 are severely affected. In addition that 30 to 35 percent of the total land surface of the country is flooded every year during wet monsoon (Milliman et al. 1989). The impacts of flood hazard on agricultural food production are global concerns and that are very important for Bangladesh. Agriculture is the single most and the largest sector of Bangladesh's economy, accounting for about 35% of the GDP and about 63% of the labor force. Agriculture in Bangladesh is already under pressure both from huge and increasing demands for food, and from problems of agriculture land and human life style.

Sirajganj district is one of the most disaster (Flood and Riverbank Erosion) prone areas of Bangladesh, lies on the bank of the most treacherous river Brahmaputra. In monsoon, river water rises so high that it regularly overflows the banks and creates flooding in most of the upazilas of Sirajganj district. It is an area of perennial floods and its image is that of an area which is always flooded. Every part of the district is not equally vulnerable to flood. Some upazilas are more vulnerable than other due to their location. Chauhali, Kazipur, Sirajganj Sadar, Belkuchi, Ullahpara and Shahjadpur are most flood and river erosion affected upazilas because major parts of these upazilas lay in the mighty Brahmaputra River. These areas are affected by normal and flash flood almost every year. Tarash and Ullahpara upazila is also exposed to flood. Raiganj and Kamarkhanda are comparatively less flood affected upazilas. Severe periodic flooding is also common in the district. Every flood that strikes in Bangladesh affects Sirajganj district. Sirajganj is more or less flooded almost every year, however, severe floods of 1949, 1956, 1961, 1962, 1966, 1968, 1974, 1979, 1987, 1988, 1996, 1998, 2002, 2004, 2007, 2008 and 2016 are worth mentioning (NDP, 2007). Extensive floods greatly affect the marginal population, who lose whatever assets they have and suffer from lack of work and wages. People who live in perennial flood zones in the bank of the Brahmaputra River have low indicators in all sectors of health, nutrition and education.

Reference:

- Milliman JD, Broadus JM and Gable F (1989). Environmental and economic implications of rising sea level and subsiding deltas: the Nile and Bengal examples. *Ambio*, 18(6), p. 340-345.
- NDP (National Development Program) (2007). Flood situation report of Sirajganj district -2007 as on 04.08.07.
- http://en.banglapedia.org/index.php?title=Riverbank_Erosion

Laki Akhter, a hardworking and self-employed woman has been living in Mansurnagor Union of Kazipur Upazila under Sirajganj District for the last 38 years. She was born in 1978, Shalgram village of Mansurnagor Union. She got married with Nazrul Islam in 1997. Nazrul Islam is a school teacher and they have two daughters and one son. All of them are studied in nearby local primary school. She shifted her house 4 times because of destructive river erosion. In 1984 her family was shifted in Charsishua village of Mansurnagor Union under Kazipur Upazila. She experienced the massive flood of 1988. In that time all of her assets, houses and crops were gone under water. Then she along with his family moved to Shalgram village in 1989. In 1991, her houses and assets again gone into river due to massive attack of river erosion and they were shifted the other part of the village. Unfortunately in 1992, the other portion of Shalgram village also gone into river due to sudden attack of massive river erosion. At that time they were bound to move South Kumaribari Village of Mansurnagor Union under Kazipur upazila Sirajganj. She told us that her father had 24 capita agricultural land in Shalgram village, all of the land were gone into river due to this massive river erosion. At that time her family was in a phenomenal economic crisis. All of their assets, agricultural lands and houses were destroyed in that time. Laki Akhter was the elder child of her parents and she had to struggle a lot in that time.



After her marriage in 1997, she started living permanently in South Kumaribari Village of Mansurnagor Union. She told us that the village is not far away from the mighty Brahmaputra River (1 kilometer away) that's why they are always scared to be victim of river erosion. She said that almost every year flood occurred in this area and destroyed their crops and assets. She said that flood occurs especially in the month of Ashar, Srabon and Vadra and almost three months of a year flood water remains in this area. She told us that in last 10 years they faced three massive flood in 2003, 2007 and 2016. Among them the flood in 2016 was up to the list. In that time the flood water flowed over 7 feet from the danger level. She said us that floods create huge problem on their lives and livelihoods. During flood, women and girls faced difficulties for sanitation and hygiene management. Drinking water and fuel wood is become a major problem during flood time.

Agriculture is the main occupation as well as earning source of the villagers for their livelihoods. People are generally engaged in Agricultural works. Most of them are tenant farmers and only few of them have their own land for cultivation. People are also engaged in fishing but they are very few in number. Major crops for production are Maize, pepper, mustard, paddy, jute, pulse, paddy, nuts, onions, Kalijira and some sorts of vegetables. In ten years ago people were also cultivated wheat and potato crops. Laki Akhter said that only one season (Boro) cultivation is possible in South Kumaribari village because in rainy season, all the agricultural land are gone

under water. LakiAkher has 4 capita agricultural land and they cultivate maize, pepper, paddy, jute, and vegetables in their crop land. In the month of Chaitra (Bengali month), they harvest Maize and In Jaistha (Bengali month), they harvest IRRI Paddy. Most of the farmers are now produce Maize in the replacement of Paddy. Because it needs minimum labor and provides much profit. Women in this village, also extensively engaged with agriculture. Generally women cultivate pepper and nuts and they are also worked as an agri-labor. Women also participate in paddy harvesting, pepper harvesting, livestock rearing and hiring in the field.

Ground water is generally used for irrigation. Shallow pumping (90 feet) generally used in Mansurnagor union for irrigation purposes. 3 to 4 times irrigation is needed for both Maize and Pepper cultivation. There is no need for irrigation water in mustard cultivation. In case of Paddy cultivation, irrigation water is also essential but now a day people are more focused on cultivating Maize, Pepper and Mustard crops. Participants said that 1 liter diesel oil is needed for 1 hour irrigation (approximately 65 taka per liter). They also mentioned that due to excessive price of diesel oil, they have to face an acute problem for maintaining continuous irrigation. Another important issues are char areas soil absorb much water that's why they have to irrigate their crop land continuously.

People generally use tube-well water for drinking purposes. Few safe water options are available in this area and those are far away from their place of residence and they have to spend a lot of time for availing waters from the tube-wells. Especially women and girls suffered a lot on this purposes. In the time of natural disasters all the drinking water options are gone under water and they faced an acute crisis of safe drinking water. At that time they mix Fitkiri with the river water for purification and then use for drinking. People also use river water for bathing and washing their cattle's and household chores. People who are living beside the bank of the river they use river water for irrigation purposes. During flood, women face a lot of problems and it is hard to bring up their children, cook and collect drinking water for their family because they have to collect water from other villages by boat. She also told that during flood several waterborne diseases breakout in an epidemic form such as diarrhea.

Poverty is one of the major problem in this village and most of the people of this village live below the poverty line. Disasters like flood and river erosion destroy their livelihoods and they have to remain unemployed around half of a year. As a result people changes their occupation and they have to move other areas in search of better livelihoods. Seasonal or temporary migration rate is relatively high in this village because of the geographical location of this village (three districts (Jamalpur, Bogra and Sirajganj are situated from the boundary line of the village). People of this areas migrate to other places (Jamalpur, Barishal, Sylhet, Dhaka and Mymensing) in search of employment and generally engaged with day laboring works like rickshaw pulling, garments, jute mills, road and building construction. In the time of disaster male are going outside in search of livelihoods and women are in stayed in the village for taking care of their children and other family members.

Women in this area have the rights for taking decision both at household and society level. Laki Akter herself engaged in several social development works. Since 2003 she started working as a female volunteer of Souhardho project implemented by Care Bangladesh. This project mainly worked for Household Plinth Level Raising, Homestead Gardening, Water, Sanitation and Hygiene (WaSH), DRR training for women and Women's participation in income generating activities. In 2007 she was also involved with Jamuna River Development Project (JRDP) which was mainly worked for elder and Mass education. In 2011 she was also worked with Char Livelihood Programme (CLP) Project. This project mainly worked for providing livelihood training and support, social awareness raising, health and nutrition support, flood protection and employment generation, Water, Sanitation and Hygiene activities and Market Development. In 2013, she again worked with Care Bangladesh on their Souhardho – 2 Project which was mainly worked for agricultural and communication development of Sirajganj district. She is an active member of village level child marriage protection committee. She also encouraged other women for participating social works and several income generating activities.

Laki Akter said that people of this area have limited knowledge on water policies and treaty for trans-boundary Brahmaputra river water management issues. Unfortunately they have no clear perception on this issues. People of this area don't get any sorts of benefits or facilities through these government water laws, policies and water treaty. They always struggle for their basic rights and most important



one is that for their existence. CARE Bangladesh, a non-government organization provide some sorts of support to cope up with the natural disaster. Under this project they raised poor household's plinth level and also constructed some roads for ensuring good communication system. Because of occurring flood at regular interval, unfortunately all the roads are destroyed. Local government institution also provide some VGD and VGF support especially for poor and marginalized families. Unfortunately the support are very low in amount and very few in number. There is no Flood shelter in this village. In disaster period, people took shelter in nearby primary schools and market areas. She also added that less rainfall, drought and excessive temperature are also found in this area due to adverse effects of climate changes. Child marriage is still in alarming rate in these areas because of illiteracy and social prejudices. They urging from all the related government authorities and NGOs for a sustainable solution for their miserable livelihood. She suggested that government should prepare a large dams for controlling destructive river erosion and should conduct regular dredging for increasing river navigation.

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