

Integrity Watch in Flood 2019 Preparedness and Relief Operations

Executive Summary

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1. Introduction

1.1. Background and Rationales

Bangladesh is a country prone to flood for various reasons. Particularly its location in the basin of three major rivers - Ganges, Brahmaputra and Meghna and 80 percent of its flood-plain landmass has made the country more prone to flood. Due to the lack of control over the management of the trans boundary river water, the flow of water during the monsoon season increases significantly. At the same time, due to encroachment of major rivers and water-bodies and unplanned urbanization, rivers are losing their water carrying capacity. Besides, the adverse effects of climate change are also attributed to the fact for ice melting in the Himalaya and causing irregularity in rainfall pattern to amplify the natural disasters, including flood. According to the Bangladesh Bureau of Statistics, during the period of 2009-2015, floods have caused financial loss of about BDT 30.7 billion. As a result of this loss, Bangladesh is deprived of achieving an additional 0.30% growth in GDP per year. According to data from the Water Development Board, the flood of 2019 is particularly significant in terms of size and magnitude. During this flood, the Jamuna River was flowing 164 centimetres above the danger level, notably, this level was 134 centimetres during the flood of 1988. About 80 percent area of some Upazilas were submerged underwater. Even though there was at least 33% less water flow compared to the 1988 flood, the flood of 2019 is more devastating with a long-term effect. This is due to alluvial deposit as well as illegal land grabber filling up the rivers. In this flood, at least 4 million people were waterlogged for 10 to 15 days. This flood caused at least 108 death (119 according to unofficial source) in 28 districts across the country.

With the target 11.5 of Sustainable Development Goal (SDG), United Nations has called for comprehensive disaster risk management at all levels by adopting effective policies. It emphasizes on reducing the number of deaths, the number of people affected and substantially decrease the direct economic losses by 2030. Sendai Framework for Disaster Risk Reduction-2015 also encouraged UN countries to emphasize strengthening good governance and effective response systems in disaster risk management for the period of 2015 to 2030. Accordingly, Standing Orders on Disaster 2010, Disaster Management Act 2012, National Disaster Management Policy 2015 and Seventh Five Year Plan of the Bangladesh Government has given guidance on how to prepare and respond for floods and other disaster-related emergencies.

Although the government has taken various steps to tackle the flood of 2019, there is a need to examine the effectiveness of the activities. The media already reported about the lack of good governance in flood emergency activities. In view of that, local administration has called for monitoring the emergency relief activities to TIB to create a conducive environment for the establishment of good governance at the national and local level. Apart from that, TIB had previously conducted in-depth research after similar disasters, such as Cyclone Sidr (2007), Aila (2009) and Roanu (2016). Those studies have shown a lack of good governance in dealing with disasters. Although Bangladesh's disaster response and management model are widely commended and followed, there are various governance challenges to handle flood disaster which occurs almost every year. Therefore, the study has been conducted from the point of view of good governance for activities like adequate disaster preparedness, relief activities during and after the flood and subsequent planning for rehabilitation as well as implementation.

1.2 Purpose of this study

The main objective of this study is to observe the challenges in the preparedness of flood 2019, emergency responses, relief operations and rehabilitations. Specific objectives are mentioned below-

- Identifying institutional constraints of government initiatives in preparedness to combat floods, emergency response during and after floods and finally planning for relief and rehabilitation activities;
- Identifying nature, reasons, areas and extent of irregularities and corruption in dealing with floods;
- Proposing recommendations to address the challenges uncovered in the study.

1.3. Scope of the research

The study covers government initiatives and their preparedness for flood prevention, relief disbursement, and emergency response during and after flood, relief and rehabilitation activities etc. However, all rehabilitation related activities were not started during the time of data collection and therefore in some cases, only planning of rehabilitation of some specific actions was observed. Also, inter-institutional coordination among the concerned government institutions, as well as coordination with the private sector for relief work was also observed under this study.

2. Research Method

This study was conducted using both qualitative and quantitative research methods. Data from both primary and secondary sources was collected and analyzed for this study. The duration of the study is from July to September 2019. Key Informant Interviews (KII), Focus Group Discussions (FGD) and household survey were carried out to collect primary data. Concerned government officials who dealt with floods, such as higher officials of Disaster Management Department, Deputy Commissioners, Additional Deputy Commissioners, District Relief and Rehabilitation Officers, Upazila Executive Officers, Upazila Chairmen, Upazila Project Implementation Officers, Education Officer, Upazilla Health and Family Planning Officer, officials of Agriculture Extension Department, Fisheries and Livestock Department, Water Development Board as well as Local Government representative e.g. Chairman and Members of the UP, NGO officials, journalists, representatives of local CSOs were interviewed. Besides, Household surveys and focus group discussions were conducted in flood-affected areas. For secondary sources, policy, laws and regulations, research reports, disaster and damage related reports from concerned offices/Upazilas and other relevant information was reviewed.

Out of the 28 flood-hit districts, five districts were selected to collect data. They are Kurigram, Gaibandha, Jamalpur, Bogra, and Sylhet. This selection was based on the statistics of the Department of Disaster Management that provided number of districts as well as number of people affected by the flood and loss and damages of resources. From the selected five districts, the two most affected Upazilas were then selected and a total of 10 Upazilas were selected. After that, 2 from each Upazila, a total of 20 unions were selected for data collection. Subsequently, surveys have been conducted in a total of 683 flood affected households from the 20 selected unions. These households were selected with a systematic sampling and specific questionnaires were employed to extract information.

Data were analyzed in terms of some specific indicators of governance such as transparency, accountability, coordination, anti-corruption, capacity, participation and fairness/equity. Specific areas of observation have been determined in light of the Standing Orders on Disaster 2010. The factors that have been considered in monitoring the pre-flood situation are risk assessment, identification of vulnerable populations, preparation for shifting them to safe shelter, food supply to shelters, provision of safe water and sanitation services, assessing relief needs and stocking locally, arrangement of drill and dissemination of early warning message, providing services through public and private organizations and volunteers. The issues were considered during monitoring of flood activities are the timely dissemination of accurate information about the disaster, management of emergency relief operations, providing necessary security for women, children and persons with disabilities, listing of affected people and properly distribution of relief, dissemination of information on allocation and distribution of relief, complaints lodge and redress mechanism, coordination between public and

private organizations. And the factors that have been considered in monitoring the post-flood arrangements are assessment of loss and damages, assessing needs and priorities of relief and rehabilitation activities, public and private rehabilitation activities, allocations for repairing of the damaged houses of poor and ultra-poor families, renovation of blemished crop fields and plan to distribute seedlings of local Nabi rice variety to farmers, plans to repair damaged roads, bridges, culverts, dams, educational institutions, hospitals and infrastructure.

3. Results of the study

3.1 Damage to the areas covered in the study

Among the selected five districts for this study, at least 39 people were killed during the 2019 flood. From the 10 Upazilas covered by this study, 18,712 families were victimized and lost everything while 3,26, 258 families suffered partial loss. Besides, 9063 houses were completely destroyed and 1, 38, 845 houses were partially damaged. Also, 33 educational institutions were completely and 1077 were partially damaged. 2863 kilometers of road and highway got demolished. Partially 53.6 kilometers and completely 1,554 kilometers dam was ravaged. In addition, 12,185 hectares of farmland were completely destroyed and another 32,233 hectares were partly damaged. On the other hand, 90% of the households surveyed were affected by floods and the average loss per household was 17,863 BDT. 70% of respondents reported the damages of their households' materials. In case of electric appliances, utensils, furniture average loss per household is BDT 937 and the average loss in respect of stocked paddy and rice is BDT 10,831 and BDT 2,637 respectively. Moreover, 58% of households reported the damage to livestock where the average loss was BDT 8,930. Tube well and latrines of 49% and 74% households respectively, were affected. In the case of tube well the average loss was BDT 3,087 and for latrine BDT 3,761. 5% household's fisheries, 46% household's farmland of any kind was damaged directly and 31% household's farmland was damaged by a layer of sand carried by the flood. Affected farmers are worried that these sand-fills lands will not be able to produce desirable crops for the next 2-3 years.

3.2 Positive measures taken to deal with the 2019 flood

Several positive initiatives have been taken by the government to combat floods and its aftermath. Among the initiatives taken as preparedness for flood the most significant initiatives were publishing updated information on river water level and flood forecast at national level, instructing the district and Upazila administration to disseminate flood warning, organizing disaster management committee meetings at district and Upazila level in preparation of floods and informing concerned stakeholders about the decisions and actions taken. Initiatives taken during the flood includes, allocation and distribution of relief in the respective districts (GR rice, dry food, tents, baby food and cattle food), using funds of the district and Upazila administration distribution of dry food, saline, water purification tablets and cooked food on an emergency basis, establishment of hot-lines at Upazila level, monitoring of flood situation and meeting of disaster management committee at district and Upazila level, inspection of flood areas and relief distribution by the ministers, parliamentarians, senior officials. Post-flood initiatives include, providing limited medical treatment to the affected area through the medical team under the supervision of Civil Surgeon's Office, efforts to collect information about damages using proper forms, limited distribution of corrugated iron sheet and other house repairing items, VGF rice, cattle food and vaccines, seeds and fertilizers for the affected farmers etc. for rehabilitation.

3.3 Challenge of good governance in combating floods

3.3.1 Challenges in terms of security and protection

Not properly identifying flood risks: Regular outbreaks of floods in the Haor and island region is being considered as a normal event by the administration. As a result, the risk of flooding was not given enough importance and proper preparatory measures were not taken. For example, not identifying flood risk areas, endangered populations, risky dams, shelters and despite the hazardous flood control dams/embankments and shelters, there is a lack of efforts in taking steps to reform them.

Inadequacy in conducting drills and dissemination of warnings: Even though Department of Disaster Management claimed to disseminate warning at least 24 hours before the flood, however, 91 percent of respondents in the survey claimed not to receive the warning. Also, lack of electricity in the remote areas has made it strenuous for the authority to alert the people in time. Moreover, there was information that disaster related drill was not arranged at the local level. Also, there was no effort to make the telephone number of control rooms/hotlines available to the flood-affected public.

Lack of action at Union level to protect the wealth of locals: At union level, there was provision to prepare an action plan to reduce risk during an emergency, but this was not ensured during the 2019 flood. Again, there were instructions to create society-based highlands to protect household wealth, which was also neglected. On the other hand, adequate transportation was not available to transfer the valuable resources to people. At the union level Disaster Management Committee, lack of effectiveness was identified. In the committee, the participation of officials from livestock, health, agriculture, land and NGO representatives were not confirmed. Again, no subcommittee was formed to assist those committees as well. No team's inclusion of various organizations and volunteers were formed to conduct emergency rescue work and relief operations.

Lack of Security: There were allegations that adequate security was not ensured for flood victim women. There is also evidence of occurring robbery in some areas due to poor law and order situations. A total of 6 people was died among the surveyed households which could be avoided if proper protective measures were adopted. Absences of timely rescue propelled them to death. There was a noticeable lack of action by the local administration and the public representatives in transferring vulnerable population to a safe place. According to 94 percent of the respondents in the survey, there was no action to move them to a safe shelter. Also, there was no special measures for women, children, the elderly and people with disabilities.

Insufficient effort to prevent river erosion and repair dams: Even though several dams were damaged during flood but quick repair was not ensured by the Water Development Board. Although river erosion after the flood flow was quite strong, no significant measures were taken to prevent erosion and protect the endangered people. There was also a lack of effort in repairing and rebuilding the damaged roads. Local Government and Engineering Division (LGED) had inadequate steps for taking effective measures to repair damaged roads, bridges and culverts. Once the floodwater disappeared the public officials was not prompt enough to transfer people and resources back to their homestead.

3.3.1 Shelter and Housing Related Challenges

Insufficient number of shelter: There are not enough shelters in flood-prone areas. In some cases, peoples have shown less interest to go to flood shelter located in far away from their community.

Lack of preparation in government declared temporary shelters: Upazila administration lacked initiative to inspect the government declared temporary shelters and they did not ensure necessary preparation (shelter capacity, security, safe drinking water, latrine installation etc.) in temporary shelters declared by the government.

Lack of campaign to move vulnerable peoples to safe shelters: In union level, community peoples were not well informed to move to temporary shelters declared by the government. In some case, there were media alerted but community people were less active in securing their food and water in safe location as well transferring their livestock.

Disarray in government declared temporary shelters: During the flood period, only 7 percent of surveyed household members were in government declared temporary shelters. Peoples were less responsive to go those shelters due to inadequate facilities and poor management. Besides, those shelters were not appropriate for senior citizens and peoples with disability and had no special arrangement for them. In some cases, temporary shelters were locked and people failed to get in.

Inadequate funding for repairing damaged houses: There were 20 to 772 TK were allocated for each fully damaged houses and it was quite insufficient considering the required amount.

3.3.2 Challenges in drinking water and sanitation

No preparation for safe drinking water and sanitation in shelter: inadequate and less effective measures from the department of public health were observed in ensuring safe drinking water and sanitation facilities in shelters.

Deficiency in supplying safe drinking water and sanitation support: Lack of initiatives observed in repairing safe drinking water sources and sanitation facilities by the department of public health and engineering including not installing adequate mobile toilets and tube wells in high places, not distributing sufficient purified water and water purification tablets in remote areas and not ensuring water and sanitation services for families taking shelter in dams and roads.

3.3.3 Challenges in health service

Lack of preparation for ensuring health care support during the flood: At the union level, the Union Health and Family Welfare Center and the community clinics did not stock enough lifesaving medicines for the emergency use.

Lack of emergency health service: There were no enough health care support for pregnant women including availability of doctor/nurses, food, safe drinking water etc. In some area, community clinics were go under water and no alternative health service were available. Lack of adequate medical teams and transportation facilities for emergency medical service during the flood has interrupted expected service delivery. Those factors influenced to increase number of water contaminated diseases. In 60% household, respondents reported that average 2 members from each household have suffered by water contaminated diseases. On the other hand, Upazila health complexes had no boat for providing transport support to patients and no allocation in this regards. On an average, households had to expense 2,077 TK for treatment purpose due to lack of government supported health facilities.

Lack of effective measures to reestablish medical and health care services: There was a shortage of services in the emergency system and restoration of emergency services at the union level. In some areas, community clinics and hospitals were submerged and medical supplies were wasted. But, there were no effective measures to restore them.

3.3.4 Challenges related to education

Lack of planning to protect educational materials: Flood-affected schools had a shortage of furniture and educational equipment.

Lack of initiatives from educational institutes and offices to protect education equipment: In 10 Upazilas, total 33 educational institutes were fully damaged and 1,277 were partially damaged. Besides, furniture and educational materials were damaged due to submergence in water.

Lack of initiatives in repairing and reestablishment of affected educational institutes: Lack of initiatives was reported for repairing affected educational institutions for ensuring regular educational activities. In addition, there was no adequate efforts to bring back poor students to school living in hard to reach areas. Delay in redistribution of damaged educational materials was also observed.

3.3.6 Challenges related to agriculture and livestock

Lack of preparation in protecting crops and livestock: There was no preparation by the government for securing crops and seeds from flood. On the other hand, people did not get proper support and advices to protect their livestock and fishes.

Lack of support in protecting crops and livestock: The fisheries office claimed to provide necessary supports to protect the cultivated fishes but affected stakeholders alleged that they didn't get such support. On the other hand, people's had to keep remain their cattle for two to three days standing into water but local administration and LGI representatives didn't provide any support them to take those in safer shelter. In this circumstance, people had to hire local boats with a higher fair to take their livestock away. Also, many of farmers' livestock died due to no food support from the livestock office and in some case, farmers forced to sell their livestock with an extreme low price because they had no other option.

Lack of initiatives in recovering agriculture and livestock related loss and damages: There was a lacks of providing subsidies from the local agriculture office to compensate the flood-affected farmers. Not only that, they didn't provide any seeds and fertilizer supports to farmers in this current season to recover their losses and damages due to flood and they planned to distribute seeds and fertilizer for the next winter season. Even, no money was allocated for affected farmers for preparing of seed beds of local Nabi type rice. Some offices reported death of only 70-80 hen and duck which is inconsistent with the real scenario of loss and damages. Besides, peoples who involved in aquaculture were not included in the list of affected farmers and were not considered for any compensation. Also, there were no allocation of funds for post flood activities related livestock protection. There was no arrangement of stock food for livestock and a serious deficiency of livestock food was observed in union level.

3.3.7 Challenge in relief allocation and distribution

Lack of preparation in need assessment and distribution of relief: Relief needs of peoples from different age groups were not properly assessed. Besides, livestock feeds were not considered for flood management preparation. Even, there were no rigorous preparation for ensuring relief supply for hard to reach areas. In most of the cases, there were not enough budget and vehicles support for transportation.

Lack of information disclosure in local level: At union level, total quantity of relief and beneficiary list were not publicly disclosed. Also in the website of the Upazila Parishad, local administration didn't disclose updated information about relief allocation and distribution. Even, the Ministry of Disaster Management and Relief didn't disclose list of relief purchased against the cash allocated by them.

Lack of transparency in locally purchased relief: Upazila administration has the provision to purchase dry food and other relief items from its own fund through the purchase committee. It has the potential to create corruption risk if there was no proper transparency mechanism. In some cases, local syndication was reported and they increased prices of relief goods abruptly creating manipulation in supply of goods and they forced Upazila administration to buy goods from them at exaggerated prices.

Failed to consider people's food habits in selecting relief goods: In some areas, as relief food item was selected and distributed without considering local food habit of affected peoples and finally that went as wastage of resources. On the other hand, baby food was missed out primarily in relief package. Though that item was included later in the relief package but the quantity was inadequate and inappropriate for the babies.

Inadequate relief allocation: The relief allocation was insufficient compared to the requirement considering duration of flood for 7 to 8 days. Upazila wise 50 thousand to 13 lakh 21 thousand TK was allocated which was inadequate for affected families and can allocate 4 to maximum 76 TK for each affected family. Besides, Upazila wise allocations for the baby food was 8,500 to 1 lakh 40 thousand TK and livestock feeds related allocation was 30 thousand to 1 lakh 40 thousand TK.

Irregularities in beneficiary selection and relief distribution: In some Unions, without considering many affected peoples, UP Chairman prepared the list of beneficiaries by their relatives and distributed relief. Also, there were allegation of nepotism and political consideration in selection of beneficiaries and sometimes they have violated relief distribution procedure guided by local administration. As an example, they have provided 3 to 8 kilogram of GR rice instead of 10 kilogram. Also, in some cases, they have provided reliefs to the same families for several times where real affected peoples were deprived of.

Lack of Equity in relief and rehabilitation activities: There was lack in giving priority to the most vulnerable families in relief and rehabilitation program. Moreover, there was inadequate efforts to regain the incomes of the fully damaged families, creating income generating activities and build their capacity.

3.3.8 Lack of allocation and chance of corruption

There was no allocation for transport costs for relief supply, including truck and trailer fares/costs, labor costs, related other costs for distribution. And that has created scope for irregularities and corruption and that led to poor service delivery. In Upazila level, transportation cost was provided from GR cash allocation. For example, per sack cost of transporting rice from Upazila to the union level was at least 15 TK, but there was no allocation in this regard. Concerned costs was adjusted by giving less amount of rice to beneficiaries against the allocation. Besides, an allegation was raised that the cost of the visit of a minister to flood affected area was provided from the relief allocation. Besides, there was no allocation for boat services for Upazila health complex to provide services during the flood. Research team found that an emergency medical team used to pay 1000 to 2500 TK for traveling to a remote island but there was no allocation.

3.3.9 Lack of coordination among agencies

There were lack of coordination among duty bearers in specifying and repairing of dams/embankments, potential affected areas and shelters, relief distribution, deploying emergency medical teams and other activities. Lack of coordination was also observed in NGO level relief distribution and consequently, multiplicity in relief distribution was reported. Moreover, many of

them distributed relief among their program beneficiaries. In some cases, several micro credit providers forced their beneficiaries to repay their loans during the emergency. There was also lack of cooperation from the NGOs in coordination. For example, NGO's didn't coordinate with government institutions and disaster management committees in relief distribution and rehabilitation activities lead by those. Even proper information about the non-government led rehabilitation program was not available in district and Upazila authorities.

3.3.10 Lack of capacity

There was not enough money and transportation facilities to move the resources of the flood affected people to a safer place. The poor people had to suffer in transporting their goods due to not providing boat support from the local administration and public representatives. Due to lack of transport facilities, relief was not reached in time and it was delayed in some most affected remote areas. Due to shortage of manpower, loss and damage was calculated based on arbitrary. For instance, there is no specific information of loss and damage in agriculture and fisheries sector though both sectors were impacted severely. On the other hand, due to inadequate health care supports caused by less number of physicians affected communities couldn't receive emergency treatment supports. Besides, the BWDB was struggling to repair embankments and dams due to their manpower shortage.

3.3.11 Not to ensure people's participation

Union Parishad prepared the list of loss and damages without visiting affected households or consultation with affected communities. Besides that, affected people's participation was not ensured during preparation of the beneficiary list. Moreover, due to failure to prepare participatory beneficiary list to assess the actual loss and damage for rehabilitation there was gap in real need assessment.

3.3.12 Non effective grievance redress mechanism

There was no arrangement in the Union Council to formally lodge complaints regarding relief distribution and people complained that the Upazila administration didn't receive any grievance related to relief distribution. In some cases, the complainants have reported of being harassed. On the other hand, complainants hide their identity when they lodged any complain against local government representatives being scared to be deprived from relief and those allegations were not addressed properly. Besides, there are examples of being harassed after making a complaint against public representatives in public media.

4. Conclusion

The loss and damages due to flood was increased due to not assess the flood vulnerability properly, lack of initiatives to shift the vulnerable people to safer shelters, non-availability of adequate shelters and damaging the embankments due to lack of proper maintenance and also having gaps in preparedness in flood management. On the other hand, non-compliances with disaster management related law/guidelines, plans and standing orders are significant in several areas. Especially the major non compliances issues are- not ensuring the coordination in relief distribution by NGOs at the union level; not to form the disaster related sub-committees and voluntary groups; not to disseminate the early warning at remote areas; and not to give priority to the more vulnerable families as well as areas in disaster management. Besides, government allocation was inadequate against the loss and damage incurred and for that reason many vulnerable people were excluded from the relief supports.

Moreover, there was lack of capacity and coordination among local government agencies. Consequently, gaps in proper assessment of loss and damages and needs and integrated actions plan was observed. Moreover, there have been allegations of corruption and irregularities in relief operations. Specific grievances were reported about the political consideration in relief distribution, nepotism, embezzlement in allocated rice as relief, multiple allocations for same families and also depriving to the families who reported about corrupt means. Moreover, during flood due to lack of required budget, human resources and plan required services in flood shelters as well as other affected areas were not ensured. Overall, besides lack of transparency, accountability, equity and public participation overall weak monitoring of the administration in relief operation was observed.

5. Recommendations

For improving flood management capacity and ensuring integrity in relief distribution, the following recommendations are proposed below:

Pre-flood interventions

1. Need to build required numbers of the flood shelters considering location wise population density and geographic characteristics and to ensure the necessary preparedness in all government declared flood shelters before the flood occurs.
2. To build community based livestock protection centers as well as participatory training to protect the lives and assets.
3. Need to strengthen the early warning system and improving the broadcasting mechanism at least 24 hours before the flood and also adopting more effective and strong flood preparedness mechanism
4. Need to have a comprehensive plan and prior preparation to relocate the vulnerable communities to a safe shelter during the emergency giving women, children, senior citizens and physically challenged people's in more priority
5. Need to complete repair of embankment, dykes and road infrastructure before the rainy season starts.

Post flood interventions

6. To control corruption in procuring relief materials and irregularities in distribution of those need to disclose information on allocation of funds at local level, amounts of procured relief and their lists and distributed relief; and also to ensure justifiable punishment where applicable
7. To prepare the list of relief materials considering options of both baby food and livestock feeds, the food habits of local community and number of the household members
8. To estimate the loss and damages through effective participation of affected communities and selection of beneficiary lists and giving priority to flood affected people of remote areas
8. To ensure effective inter-agency coordination in providing emergency supports, relief distribution and its monitoring and supervision
9. To execute strong and effective grievance redress mechanism for ensuring accountability of duty bearers

10. To allocate necessary funds for transportation of relief materials for ensuring transparency and integrity in relief operation

Post flood interventions

12. To conduct a rapid assessment of the impacts of loss and damages of flood as well as needs with the prior engagement of flood affected community
13. To ensure rapid employments for the unemployed affected people under the social safety net programme
14. To distribute necessary seeds, fertilizers and other agricultural equipment to affected farmers; and also to provide financial assistance to develop the community-based seed bank and floating seedlings. Government can introduce agriculture insurance mechanism for securing agro, fisheries and livestock.
15. To provide support to repair affected water sources and sanitation system, houses and also to provide financial supports to rebuild the damaged houses
16. To allocate adequate funds for repairing affected educational institutes, roads, flood control dams and dykes
17. To ensure special fiscal allocation in each fiscal year for flood-prone areas.
