

Forecast-based Financing in Bangladesh

Scopes and Challenges



Islamic Relief
Bangladesh

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European Union
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SUFAL STUDY FINDINGS

June 2021



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Bangladesh



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The study 'Forecast-based Financing in Bangladesh: Scopes and Challenges' was conducted and completed with all-out supports and cooperation from all parties and persons involved in the assignment from the initiation to the end. The consultant team wishes to express sincere appreciation and gratitude to all of them and, in particular, officials of Supporting flood Forecast-based Action and Learning (SUFAL) partners CARE Bangladesh, Concern Worldwide, Islamic Relief and Regional Integrated Multi-Hazard Early Warning System (RIMES).

EXECUTIVE SUMMARY

Bangladesh is highly vulnerable to natural disasters and climate change impacts. People in the country are often affected by a number of natural disasters, including flood, cyclone, drought, salinity intrusion, cold wave, riverbank erosion and thunderstorm. Community living in the most vulnerable flood and cyclone prone areas, in particular, always confront with the residual impacts due to recurrent nature of hazards occurring almost every year. In this scenario of rising numbers of floods and cyclones, reduction of the loss and damage of community assets is possible if pre-disaster emergency activities are taken up by the communities with support from the government and other actors.

Disaster risk management (DRM) and humanitarian actions focus primarily on ongoing disaster prevention measures and post-disaster responses respectively. However, there is growing interest among DRM and humanitarian professionals in examining the potential for taking action in the window between the release of a forecast and the occurrence of an anticipated disaster event. In this backdrop the Supporting flood Forecast-based Action and Learning (SUFAL) Consortium commissioned the study to identify and assess different funding/financing mechanisms for FbA and propose recommendations on how FbA can be integrated into the “DRM Framework of the Country”.

With the focus on local government’s access to various financing sources, systems and policies (in place which enable access to funds for early action), the main objective of the study was to - (a) map out various sources of financing for early action; and (b) examine the policies and procedures to access these funds. The study used qualitative methods and tools that largely included interviews and discussions with the designated respondents and it spent considerable time for desk-based works for document review. Additional evidence was collected from the SUFAL monitoring and documentation to validate and strengthen findings from the interviews and discussions.

MAJOR FINDINGS:

National DRM Budgets for Early Action - DM Fund is considered as the most relevant financing window within government for Disaster Management in the country. The Disaster Management Act 2012 enables the national and district DM Fund as an independent financial source for ‘disaster management activities at all levels’. Discussion with the local govt officials and representatives revealed that they did not have authority to spend the ‘resources received under gratuitous relief (GR) component of MoDMR for any early or anticipatory actions. They confirmed that there was no fund for taking any early action before flood hit the area. However, Union Parishad (UP)/Union Disaster Management Committees (UDMC) took actions like arranging the coordination meeting, dissemination of forecast (as early warning) to the community, arrangement of transports for evacuation and relocation and other activities like getting shelters ready with necessary facilities with the revenue income or from the personal pocket of UP Chair/Members. Based on their experiences UP estimated that one to two lacs

(BDT 100000 - 200000) might be required for taking and completing the early actions in each union.

With regard to the potential use of safety net resources, the district administration observed that they are not allowed to use for early or anticipatory actions whatsoever, they could do only with the proper government protocol and official circulation. Director General of DDM thought they would only allow once necessary amendments are made in the policies in this regard.

Sectoral Fund/Budget for Early Action – Agriculture, livestock and fisheries sectors provided various supports in the EA Window, like early seedling bed, evacuation of the livestock, mostly with project funds and with Food and Agriculture Organization (FAO), Non-government Organization (NGO) and local government supports. Similarly, Department of Women Affairs (DoWA), Department of Public Health Engineering (DPHE) and others did not have any designated sources for anticipatory activities as such. Some activities were undertaken as part of their regular activities with the annual budget which brought some benefits during the EA period.

International and UN Fund/Supports – In Bangladesh, with technical guidance from the German Red Cross, Red Cross Climate Centre and others, the Bangladesh Red Crescent Society (BDRCS) has developed triggers and early action plans (EAP) in around thirty (30) districts across the country. Start Fund Bangladesh is a national funding programme of Start Network and consists of 47 local, national and international member NGOs with funding support from UK Aid. Start Fund in Bangladesh is a Civil Society managed Funding Mechanism which is utilized in small and under-funded disaster to support the early/anticipatory actions. CERF has piloted an anticipatory action framework in July 2020 through WFP, FAO and UNFPA. Aside from this, World Food Programme (WFP) and FAO have dedicated agency-specific funding for early actions. With Central Emergency Response Fund (CERF), the United Nations (UN) intends to carry out pilots and learn from adopted approaches for early action.

Potential Climate Fund – Palli Karma-Sahayak Foundation (PKSF), in Bangladesh, has started implementing a project aiming to enhance the capacities of the poor to increase their resilience to the adverse impacts of climate change under Bangladesh Climate Change Resilience Fund (BCCRF). The Local Government Initiative on Climate Change (LoGIC) Project of UNDP has established a fund (Community Resilience Fund/CRF) to directly channel micro-grants that yield immediate benefits to household-level absorptive and adaptive capacity. Both initiatives of PKSF and UNDP/LoGIC Project brings a new window of opportunity and also an area to create synergy and cooperation for establishing a local level fund mechanism to support the anticipatory/early actions.

CONCLUSION AND RECOMMENDATIONS:

The study comes up with the following recommendations as way forward for enhancing forecast-based actions and financing with view to reduce loss of assets and peoples' sufferings:

Institutionalization and Localization of the DM Fund: Given the high risks and frequency of disaster events the long-established practices of disaster management and humanitarian assistance make Bangladesh a good ground for FbA. Therefore, based on the directives of the DM Fund Rules 2021 under DM Act 2012, the Local Government Institutions and field administration might be empowered to access and utilize the DM Fund for early actions and an 'EA Window Fund' in the DM Fund might be considered to open up to facilitate the allocation of required budget and utilization of the same for early/anticipatory action during any disaster. Along with the pre-positioning and transfer for emergency spending before disaster, a portion (10%) of DM Fund might be allocated for early action as per the suggestions from the Upazila and Union Parishad.

Utilization of the Current SSNP Supports in FbA/FbF: One of the major aims of the social safety net support is to reduce the disaster risk and enhance resilience of the vulnerable population in the disaster prone areas of Bangladesh. Depending on the forecast and lead time, a number of social safety net programme/s and required amount of resources may be mobilized, for examples a) for more than a month (30 days) the critical infrastructures (shelter, road, embankment, killa, schools etc) may be repaired and b) unconditional cash transfer (GR as Cash) may be done in case of three to seven (3 – 7) days lead time to support evacuation and relocation.

Creation of Innovative/New Funding Mechanism: United Nations Development Programme (UNDP) implementing LoGIC Project's Community Resilience Fund (CRF) and PKSF have long been supporting local level project/initiatives for climate, disaster and livelihood risk management. Similarly, WFP is in operation for long and FAO provides supports to GoB departments (DAE, DLS, DoF). Harnessing all these as opportunity a practicable synergy, cooperation and partnership are sought with or without local level DM fund a 'Local Level New/Innovative Fund' with the contribution from UNDP/LoGIC and PKSF or Else (WFP, FAO, NGO if there is any) may be formed and materialized.

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ABBREVIATION

ADB	Asian Development Bank
BCCSAP	Bangladesh Climate Change Strategic Action Plan
BDRCS	Bangladesh Red Crescent Society
BMD	Bangladesh Meteorological Department
BWDB	Bangladesh Water Development Board
CCA	Climate Change Adaptation
CERF	Central Emergency Response Fund
COVID-19	Corona Virus Disease - 19
CRI	Climate Risk Index
DAE	Department of Agricultural Extension
DC	Deputy Commissioner
DDM	Department of Disaster Management
DDMC	District Disaster Management Committee
DLS	Department of Livestock Services
DoF	Department of Fisheries
DPHE	Department of Public Health Engineering
DRM	Disaster Risk Management
DREF	Disaster Relief Emergency Fund
DWA	Department of Women Affairs
EA	Early Action
ECHO	European Civil Protection and Humanitarian Aid Operations
EW	Early Warning
FAO	Food and Agriculture Organization
FbA	Forecast-based Early Actions
FbF	Forecast-based Financing
FFWC	Flood Forecasting Warning Centre
FGD	Focus Group Discussion
FPOCG	Focal Point Operation Coordination Group of Disaster Management
GED	General Economic Division (of Planning Commission, GoB)
GoB	Government of Bangladesh
GLOFAS	Global Flood Awareness System
GR	Gratuitous Relief
IASC	Inter-Agency Standing Committee
IDE	International Development Enterprise
IFRCS	International Federation of Red Cross and Red Crescent Societies
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
IVR	Interactive Voice Message
KII	Key Informant Interview

LGIs	Local Government Institutions
LoGIC	Local Government Initiative on Climate Change
MoDMR	Ministry of Disaster Management and Relief
NDMAC	National Disaster Management Advisory Committee
NDMC	National Disaster Management Council
NGO	Non-government Organization
NOC	No Objection Certificates
NPDM	National Plan of Disaster Management
NPDRR	National Platform for Disaster Risk Reduction
NRP	National Resilience Programme
PKSF	Palli Karma-Sahayak Foundation
RIMES	Regional Integrated Multi-Hazard Early Warning System
SDG	Sustainable Development Goals
SFA	SAARC Framework for Action
SFDRR	Sendai Framework for Disaster Risk Reduction
SOD	Standing Orders on Disasters
SOP	Standard Operating Procedures
SUFAL	Supporting flood Forecast-based Action and Learning (SUFAL)
UDMC	Union Disaster Management Committee
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UP	Union Parishad
UzDMC	Upazila Disaster Management Committee
WDMC	Ward Disaster Management Committee
WB	World Bank
WFP	World Food Programme

CHAPTER I: INTRODUCTION

1.1 COUNTRY CONTEXT

Bangladesh is highly vulnerable to natural disasters and climate change impacts. People in the country are often affected by number of natural disasters, including flood, cyclone, drought, salinity intrusion, cold wave, riverbank erosion and thunderstorm. Thirteen (13)¹ large scale disasters, cyclones and floods, occurred in this country from 1970 to 2017. The Bhola cyclone of 12 November 1970, the cyclone 29 April of 1991 and cyclone SIDR of 15 November 2007 caused huge damage to lives, properties and livelihoods of the people. Cyclone of 1991 affected 15,438,849 people and caused damage of US \$1.78 billion, cyclone SIDR affected 8,978,541 people and caused economic damage of US \$2.3 billion and cyclone AILA affected 3,935,341 people and caused economic loss of US \$270 million².

Flood is a recurrent hazard in the country, with annual occurrence with more frequency and damage. Within 12 years of the last century (1987, 1988 and 1998) there were three major floods, the last two of which were of the greatest intensity in the century. There were 5 floods in 2002, 2003, 2004, 2007 (twice in 2007, July-August and September), which is a recurrence compared to the previous record. The flood of 2012 caused huge loss to hilly areas of Banderban district. The floods of 2014, 2016, and 2020 were severe in nature in the Brahmaputra basin.

On the other hand growing frequency and intensity of climate-induced disasters, such as flood and cyclone, is attributed to climate change presents a new, challenging dimension to disaster risks faced by communities. The country has been experiencing changes in rainfall pattern and regular annual flooding inundates 20% of the landmass while major floods like that in 1998 inundated two thirds of the country. An estimated USD 4-14 billion in losses can be attributed to climate-induced disasters annually³.

Communities living in the most vulnerable flood and cyclone prone areas in particular are always confronted with the residual impacts due to recurrent nature of hazards occurring almost every year. In this scenario of rising numbers of floods and cyclones, reduction of loss and damage of community assets is possible if pre-disaster emergency activities are taken up by the communities with support from government and other actors. The directives portrayed in the country's Standing Orders on Disaster (SOD) and other policy documents should be utilized along with the timely weather forecast issued by government agencies (BMD and FFWC) to reduce sufferings of the vulnerable community and also save their livelihood means and assets.

¹ Ministry of Disaster Management and Relief, Bangladesh Secretariat.

² Asian Disaster Reduction Centre (ADRC): <https://www.adrc.asia> › nationinformation.

³ Haque, A.K.E., 2009. An assessment of climate change on ADP of Bangladesh.

1.2 SUPPORTING FLOOD FORECAST-BASED ACTION AND LEARNING (SUFAL)

The ECHO-supported ‘Supporting flood Forecast-based Action and Learning (SUFAL)’, a consortium project, is being implemented jointly by CARE Bangladesh, Concern Worldwide, Islamic Relief and Regional Integrated Multi-Hazard Early Warning System (RIMES). The project aims to introduce and familiarize Forecast-based Early Actions (FbA) approach among government decision-makers, disaster management committees (DMC) and community stakeholders. SUFAL is financially supported by European Civil Protection and Humanitarian Aid Operations (ECHO).

SUFAL works closely with national and local governments to implement Forecast-based Early Action (FbA) to address technical, economic and institutional barriers limiting uptake of FbA. The project tries to strengthen flood forecasting and early warning systems through facilitating impact-based forecasting to contextualize forecasts and early actions and developing an institutionalized mechanism to initiate FbA through Standard Operating Procedures (SOP).

SUFAL aims to strengthen the case for early action by implementing an FbA system. It has been working with the vulnerable local communities, other government and non-government stakeholders of three northern flood-prone districts called Kurigram, Gaibandha and Jamalpur. SUFAL supports the development of guidelines and tools and building capacity to enable early actions in anticipation of disasters.

1.3 FbF STUDY RATIONALE AND SCOPE

Disaster management in Bangladesh recognizes that acting early before a crisis hits, can save valuable resources and also limit sufferings of the communities. While using forecasts for cyclones is established in 1970s in Bangladesh, floods still remain a major issue. During a normal monsoon season, around 25-30% of the Bangladesh and 68% of the land mass is vulnerable to flooding. Overall, Bangladesh losses around 1.5% of gross domestic product or \$2.2 billion, per year on average, due to floods (ADB, 2016). As a result, despite the culture of preparing for and responding to emergencies, humanitarian needs continue to outweigh response capacity, especially for floods. Using forecasts to act early could help limit these losses, which is yet to be integrated into humanitarian programming in the country⁴.

Disaster risk management (DRM) and humanitarian actions focus primarily on ongoing disaster prevention measures and post-disaster responses respectively. However, there is growing interest among DRM and humanitarian professionals in examining the potential for taking action in the window between the release of a forecast and the occurrence of an anticipated disaster event. There is broad agreement in the international humanitarian sector to move from a responsive approach to an anticipatory approach. Planning in advance for the next disaster, putting the response plans and the funding in place before a disaster, releasing the funds to act to reduce the potential impacts of a disaster and therefore reduce humanitarian needs following a disaster. An anticipatory approach leads to a more effective, efficient and dignified response and also protects hard-won development gains.

⁴ Sara Barr, Forecast Based Early Action in Flood Prone Bangladesh: Triggering Early Action for Better and Effective Disaster Management, 2019, <https://startnetwork.org/news-and-blogs/forecast-based-early-action-flood-prone-bangladesh>

In this backdrop the CARE Bangladesh on behalf of the SUFAL Consortium commissioned the study to identify and assess different funding/financing mechanisms for FbA and propose recommendations on how FbA can be integrated into Bangladesh's disaster risk management (DRM) framework.

The study endeavoured to examine all sources of funding for early action from domestic, international and private sector sources. The lessons learned are expected to help understand funding sources for forecast based early actions, inform the second phase of the SUFAL project and feed into the possible initiatives by the national FbF task force led knowledge and support technical assistance project that aims to improve capacities of governments to design and implement forecast based early action investments targeted for building resilience for the flood prone areas of the country.

Objectives

With the focus on local government's access to various financing sources, systems and policies (in place which enable access to funds for early action), the main objective of the study was to –

(a) map out various sources of financing for early action; and

(b) examine the policies and procedures to access these funds.

The study aimed to look at present and potential sources (i.e. humanitarian, risk reduction and adaptation funding) and examined how applicable and accessible they were for financing early action for flood/disaster.

Specifically, the study intended to:

- Identify and map out various funding sources, which should include government funding from domestic budgets (DRM, climate change, sectoral and social protection), international funding sources (development and humanitarian), NGOs, Red Cross and private sector;
- Assess each of these funding sources against certain criteria;
- Make recommendations on funding sources that can be accessed for early actions, and recommendations for increasing access to these sources/mechanisms by local government;
- Make suggestions on key considerations for the setting up, operationalization, focus and scope of a funding mechanism linked to SOPs on FbF/FbA; and
- Examine the policy framework for financing anticipatory actions and make recommendations for further advocacy.

CHAPTER II: STUDY METHODS AND TOOLS

The study used qualitative methods and tools as per the objectives and expectation of the study. The method largely included interviews and discussions with the designated respondents and it spent considerable time for desk-based works for document review and analysis to draw important lessons and insights from similar works in the country and around. Additional evidence was collected from the SUFAL monitoring and documentation to validate and strengthen findings from the interviews and discussions. Sharing of draft findings and results was completed through workshop with partners and stakeholders to learn from them and also gather their inputs. The interviews and discussions were mostly conducted by using digital/virtual media.

2.1 STUDY APPROACH

The approach undertaken to carry out this study was two-fold:

Firstly, a desk-review was conducted of

- the recent policy context of forecast based financing in Bangladesh as well as recent initiatives by other donors/international finance institutions and organisations in the field, and
- the relevant project documents provided by CARE Bangladesh including project preparation reports, quarterly progress reports, case studies etc. A full list of references is included in the later part of the report.

Secondly, in order to develop a more detailed understanding of the initiatives on forecast based financing (FbF) in the districts (*Jamalpur, Gaibandha and Kurigram*), a number of interviews⁵ with the local project office, local government administration, elected representatives of the Local Government Institutions (LGIs) involved in the implementation process were conducted. A number of beneficiaries of SUFAL projects were also interviewed to develop cases. The list of study respondents is attached in the annexure (Annex-2).

The study methodology was primarily conceived from the generic definition of forecast based early action and forecast based financing. The study method and process also encompassed various elements those constitute trigger for early action and financing in the flood/disaster, based on the SUFAL project document⁶. The list of actions at different levels of early actions or phases of triggers was taken as entry/agenda for discussion session and interview. Detailed tools, guides with interview questionnaires are provided at the annexure (Annex-3).

⁵Through Key Informant Interview (KII) and Focus Group Discussion (FGD) using semi-structured questionnaires. Please see Appendix-B for the detailed questionnaire.

⁶ SUFAL: Supporting Forecast-based Action and Learning in Bangladesh, 11 January 2021.

2.2 STUDY INSTRUMENTS

Desk/literature Review: The study initiated with the review of the secondary/available literature that included the followings:

Relevant national level acts, policies	DM Act 2012, DM Policy 2015, SOD 2019, BCCSAP 2009, GoB/ Sectoral Fiscal Allocation in DM in particular, GoB Climate Fiscal Framework etc
Study Reports	GoB, others like Trends of GED/Disaster Related Public Fund Allocation in Bangladesh, BRACED/Resilience Solutions – Exploring Social Protection Linkages to Forecast-based Financing, other/UN/WFP/INGO reports, disaster risk financing etc
Policy document/reports of the Multinational Donor/Funding/Development Partners	UN, World Bank, DFID/UK Aid, European Union and others
Web/online sources	Web/online sources were also considered to be searched to find out necessary and updated information from the country and global levels on ‘Financing Early Action’. A list of documents, reports, papers and sources are attached at the annexure (Annex-4).

Key Informant Interview (KII)/Semi-structured Interview (SSI): With a view to find out and document views and suggestions KII/SSIs were carried out with a range of people from the local govt representative/officials to the national level policy makers, govt officials, donors, UN representatives, private sector and other relevant sectoral/ministry high officials.

Focus Group Discussion (FGD): As advised in the ToR, a number of FGDs were conducted at the local level to capture the findings, challenges, experiences of community/vulnerable people. Participant/respondents for FGD were selected as indicated in the methodology framework and others as advised by/agreed with the client.

Case Study: Few case studies were conducted with the most vulnerable project beneficiaries and/or community representatives to capture and document their sufferings and experiences and also recommendations for reduction of their sufferings and enhancing resilience against flood/disaster.

Suggested criteria for evaluation of the financing options: Few suggested criteria were used for assessment of financing option/mechanisms of various stakeholders and respondents at national and local levels:

- Purpose and volume of fund: Give examples/case study (ies) of any actions funded in the past.
- Who can access the funding, e.g. Red Cross, NGOs, local government? How is it delivered to community?
- How much time to receive funding (from submission of proposal to receipt of funds)?
- Procedure for funding application (complexity of information required, data requirements, who submits funding application)?
- Are there any requirements on poverty, gender, social and environmental responsiveness and inclusion, i.e. is there any gender lens used for assessing funding applications, minimum budget or targets set?
- Decision-making / governance: who is deciding, when and how?
- Any review of fund use (report, evaluation)?

2.3 STUDY LOCATION

The study was conducted in the districts under the SUFAL project in northern flood prone areas of Bangladesh (Jamalpur, Kurigram and Gaibandha) as shown in the map (Figure-01).

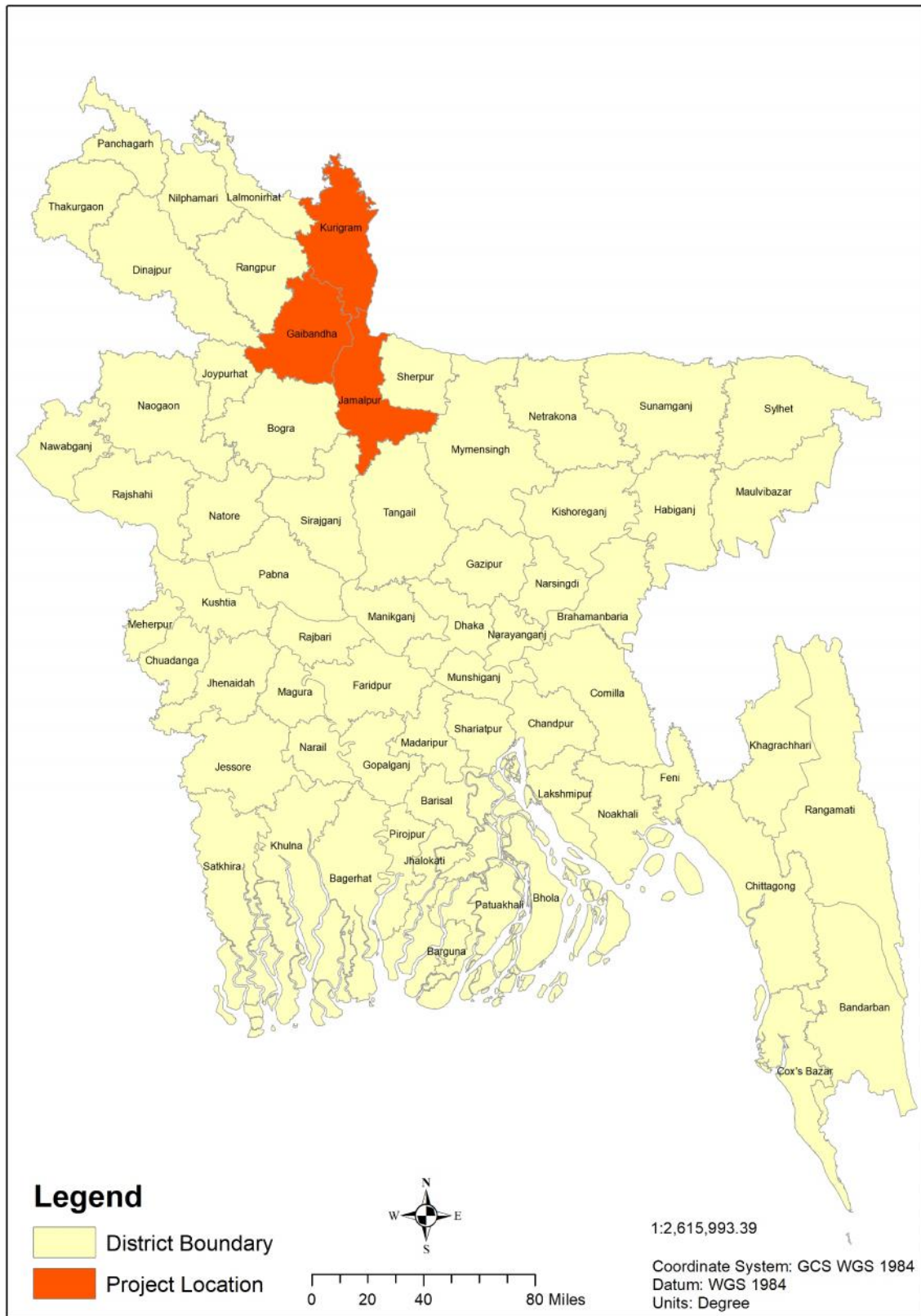


Figure 1 : Study Location Map

2.4 STUDY PLAN AND SCHEDULE

The study took almost eight (8) weeks to complete since the inception to the submission of the report. The plan was adjusted and updated with the changing situation due to Covid-19 pandemic and as per the advice from CARE/SUFAL management.

2.5 STUDY LIMITATIONS

The study activities were greatly limited by the Covid-19 global pandemic. Physical movement was restricted due to the imposition of countrywide lockdown by the Government. The interviews and discussion were forced to do by using virtual/digital platform.

The short timescale for the study and availability of stakeholders limited the extent of engagement possible. The findings and recommendations presented in this report are based predominantly on literature reviews, complemented by interview, discussion and consultation etc.

CHAPTER III: OVERVIEW OF FORECAST BASED FINANCING AND EARLY ACTIONS

The section gives an overview of Forecast Based Financing (FbF) and Early Actions with regard to hydrometeorological hazards like flood and cyclone specific to flood prone and coastal areas of Bangladesh. It section also highlights similar initiatives and lessons across the region and around the globe.

3.1 CONCEPTUALIZING FORECAST BASED ACTION AND FINANCING (FbA/F)

Early action falls in the space within the continuum overlapped by usual Disaster Risk Reduction (DRR) and Emergency Response. Regarded as the ‘warning phase’ in the Standing Orders on Disaster (SOD), the period between a forecast being issued and disaster striking is also a critical time to take early actions to reduce impact from disaster.

Early Actions are any actions that are taken ahead of an anticipated disaster to reduce potential impacts. Early Actions can be targeting a community or household, but falls in the period between when a forecast is issued to when a disaster occurs. Some examples are: evacuation of households in high risk zones, stockpiling food and medicines, distribution of cash grants to most at-risk households⁷.

While there is no single definition of FbA, it generally entails the release of funding for taking (often pre-determined) actions in advance of a shock before acute impacts are felt. The actions and forecast-based triggers for action can be agreed in advance and on the basis of an analysis of the risk, setting some kind of threshold for the forecast and the likely impact of the actions. These triggers and thresholds can be a fixed point in the forecast data, or actions can be sanctioned on the basis of an expert-led consultation. A trigger should help determine when and where to act before the disaster. It should to determine when a hazard becomes an out-of-the-ordinary (or severe) shock and impact crosses a certain threshold for the exposed vulnerable community.

Forecast-based early action (FbA)⁸ is emerging among humanitarian and disaster risk management practitioners as an approach that can reduce the impact of shocks on vulnerable people and their livelihoods, improve the effectiveness of emergency preparedness, response and recovery efforts, and reduce the disaster losses. The field of forecast-based early action is rapidly expanding, and consolidating the evidence, experience and lessons from early efforts to develop forecast-based action and finance tools can help improve the impacts and effectiveness of future investments. This approach requires availability of timely and reliable forecasts and development of early action plans which target most vulnerable communities and households. FbA is dependent on funds which are released ahead of disasters when pre-defined triggers are set off.

⁷ CARE Bangladesh, 2021

⁸ Forecast Based Early Action Triggered in Bangladesh for Floods, IFRC, 2020, <https://www.forecast-based-financing.org/2020/07/02/protecting-families-in-bangladesh-against-floods-early-action-protocol-activated/>

Forecast-based Financing (FbF) is the initiative that enables access to funding for early action based on forecast information and risk assessment. Climate change over the decades is considered as one of the prime factors influencing extreme weather events like sudden and prolonged flood, unprecedented surge heights etc in Bangladesh. It is therefore important to understand whether early financing and actions based on anticipation of hazards can reduce possible human sufferings and losses.

SOD (2019) defines FbF as the financing for early action, that can be accessed based on meteorological forecast information, combined with risk analysis, to prepare for extreme weather events. Whereas WFP defines it as an innovative mechanism whereby early actions at community and government level are pre-planned based on credible forecasts, and are funded and implemented before a climate shock.

According to BDRCS Forecast-based Financing (FbF) is a programme that enables access to humanitarian funding for early action based on in-depth forecast information and risk analysis⁹. Their purposes of FbF are to anticipate disasters, prevent their impact, and reduce human sufferings and losses. This means that early actions need to be implemented before a disaster happens in order to reduce the impact on the lives and livelihoods of affected population.

IFRC defined it as humanitarian funding based on forecasts for pre-agreed activities which reduce suffering, enhance preparedness and response, and contribute to strengthened community resilience¹⁰. FbF consists of three key elements that enable early action: (1) a set of pre-agreed triggers (or danger levels); (2) pre-defined actions to be taken when those triggers are met; and (3) a financing mechanism to automatically fund those actions (RCCC and GRC 2017).

In this context Inter-Agency Standing Committee (IASC) termed it as worldwide early humanitarian actions. Now it can say that FbF refers to a set of action plan which helps to make proper mechanism to reduce disaster losses by formulating early action plan and funding.

From the above explanations FbF stand with some key issues, including, but not limited to a) early humanitarian actions, b) risk analysis and c) financing mechanism.

3.2 MECHANISM OF FUND RELEASE FOR EARLY ACTIONS

Conventional disaster risk management practice and humanitarian activities concentrated on post disaster response and recovery activates, many governmental, non-governmental and humanitarian organizations are now moving to a new approach of taking action before the disaster through forecast-based financing. Bangladesh is one of the very first country to adopt this new concept in its policy and many organizations practiced this concept before real time

⁹<https://bdracs.org/forecast-based-financing-fbf-project/>

¹⁰https://media.ifrc.org/ifrc/wp-content/uploads/2018/06/CaseStudy5_Bangladesh-FbF-Final.pdf

disaster scenario. The mechanism of funding in forecast-based financing follows three major steps:

Trigger: It is the first stage of FbF in which the experts analyze the historical data of natural disaster and associated risk, vulnerabilities and resources of every region. Based on the analysis, region-specific “impact levels” or ‘forecast threshold’ are defined. A trigger model is subsequently developed according to an impact-based forecasting approach. It determines priority areas where the impact of an extreme weather event is anticipated to be most severe. For example, based on the analyzing five-day forecast data of Bangladesh’s Flood Forecast and Warning Centre (FFWC) and Global Flood Awareness System (GLOFAS), Bangladesh Red Crescent Society identified some districts was going to face severe flood which would exceed the predefined ‘forecast threefold’. Thus, BDRCS implemented early actions with forecast-based funds from the International Federation of Red Cross and Red Crescent Societies (IFRC) in three northern districts of Bangladesh¹¹ (Jamalpur, Kurigram and Gaibandha). In similar way, BDRCS also defined threshold cyclone level for thirteen coastal districts¹² based on the historical data analysis from Regional Specialized Meteorological Centre (RSMC) in New Delhi and Bangladesh Metrological Department (BMD) forecasting.

The FbF trigger and Early action during cyclone were developed in Bangladesh by a FbF team chaired by the Deputy Secretary General of the Bangladesh Red Crescent and also includes experts from the Cyclone Preparedness Programme, the Climate Centre, German Red Cross, and IFRC (Table-01).

Table 1: Trigger Governance during Flood in Northern Region of Bangladesh¹³

Who	What	How	When
The BDRCS-led forecast monitoring team	Monitors flood forecasts (GLOFAS and FFWC)	Populates (twice a day) the forecast and observation in the log sheet	From June 2020
The BDRCS-led forecast monitoring team	Confirms that 10-day pre-activation trigger is reached or 5-day activation trigger is reached →Related agreed interventions by agencies can commence immediately	Communicates status of 10-day pre-activation (readiness) or 5-day activation trigger to the RC/RCO as well as concerned UN Agencies, OCHA, and other partners (See annex 1) through email and a WhatsApp Group. The communication includes an intervention map.	As triggers are reached
Central Emergency Response Fund (CERF)	When a 10-day warning is issued (or a 5-day trigger without a previous 10-day warning), CERF will immediately send the approval letters to the agencies	Endorsed pilot and CERF application by RC and Emergency Relief Coordinator (ERC) Pre-approved CERF approval letter	
Resident	The Resident Coordinator may	This meeting is to discuss the situation,	As

¹¹ <https://media.ifrc.org/ifrc/press-release/early-action-save-lives-bangladesh-amid-severe-flood-forecast/>

¹² Thirteen Districts: Satkhira, Khulna, Bagerhat, Pirojpur, Borguna, Patuakhali, Jhalokati, Barishal, Bhola ,Lakhmipur, Noakhali, Feni, Chattagram

Who	What	How	When
Coordinator	call for a meeting. Invitees include the BDRCS-led working group on forecast-based action, Red Cross Red Crescent, BDRCS, WFP, FAO, UNFPA, OCHA, and government (e.g. MoDMR) immediately after the 10-day pre-activation or 5-day activation trigger is reached.	including coordination of actions with government efforts.	applicable

Early actions: Based on the forecasting of natural disaster, a pre-agreed set of early actions will be implemented at the time of a triggering forecast, with the aim of reducing the impact of the predicted event on human lives. Such early actions provide assistance to people at risk and help them take action to protect their families and livelihoods. This can include, for instance, providing veterinary kits, tying down house roofs, providing food and clean water, as well as transferring cash¹³. For example, before flood of 2017 in Bangladesh, BDRCS conducted survey in the vulnerable areas and identified beneficiaries for the FbF based on a vulnerability score for each household using six criteria including- the quality of the housing structure; level of inundation during previous floods; monthly expenditure; number of household members who are children, elderly, or disabled; being a female-headed household, widowed or divorced; and livelihood strategies (Gros et al.,2019). Similarly, based on the cyclone data analysis, BDRCS sets up some pre-agreed activities for the coastal districts of Bangladesh which are mentioned in the followings:

- Distribution of food (flattened rice, sugar, high-energy biscuits) and drinking water.
- Provision of basic first aid at the cyclone shelters.
- Evacuation transportation with local tractors of people with their movable assets and livestock to the cyclone shelters.
- Installation of artificial light facilities at community cyclone shelter at night.

For example, during cyclone Fani, based on the forecast information, the local branches in the coastal districts activated their control rooms, mobilized their resources, volunteers and officials for early warning and preparation of evacuation shelters. Eight members of the National Disaster Response Team were deployed in four districts (Satkhira, Khulna, Bagerhat and Barguna) to support the activities being conducted. In two districts, local branches with German Red Cross support also undertook a rapid stock-taking of local markets to ascertain if they were able to supply the food and relief items that would be required in case of an activation¹⁴.

Funding Mechanism: A dedicated financing mechanism is the key for taking fast and effective action before disaster strikes. The Forecast-based Action Fund is an ex-ante financing mechanism that automatically allocates funding once a forecast reaches a pre-agreed danger level; this enables the effective implementation of Early Actions. The

¹³<https://www.forecast-based-financing.org/methodology/>

¹⁴<https://reliefweb.int/report/bangladesh/bangladesh-how-forecast-based-financing-helped-communities-prepare-cyclone-fani>

organizations with provision for FbF has a predefined set of early actions and for which a fixed amount of budget is preserved. Once the forecast threshold exceeds in some region, the fund automatically released to conduct the predefined sets of activities. Before the Flood of 2017, BDRCS decided to provide unconditional monetary support to the beneficiaries based on the discussion with relevant experts and beneficiaries. So, when the flood forecasting shows potential risk, an unconditional cash of BDT 5000 (around 60 USD, 1 USD = 84.08 BDT) transferred to the beneficiaries account immediately.

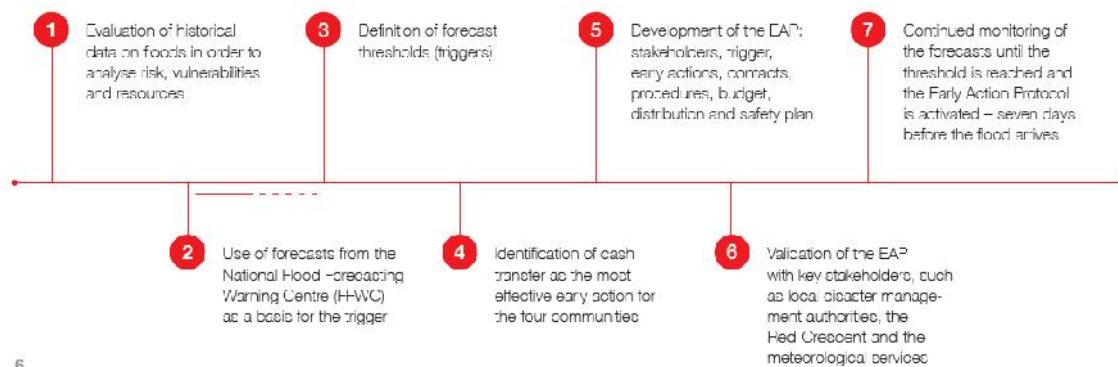


Figure 2: Forecast based financing mechanism, Flood 2017 in Bangladesh, BDRCS¹⁶

3.3 POLICY RELEVANCE OF FORECAST-BASED FINANCING/ACTION (FbF/A)

Government of Bangladesh (GoB) has devised number of acts, policies and procedures for the management of natural and man-made disasters, including Disaster Management (DM) Act, Standing Orders on Disaster (SOD), and Disaster Management (DM) Policy among others. The entire disaster management business is governed by an institutional mechanism and legal framework from national to local levels through Local Government Institutions (LGIs) and disaster management committees. The country has aligned its DM strategies and plans with SFDRR, and other global protocols and directives like SDG, Paris Agreement and other regional instruments. Managing disasters has been a major focus for the GoB, with significant increase in the investments in DM for reducing disaster losses in recent years.

GoB SOD uses the Early Recovery term to approach a set of goals or actions to help people move from dependence on humanitarian relief towards development. This indicates Forecast-based Financing (FbF) as meteorological forecast information, combined risk analysis to prepare for an extreme weather event. The SOD has included a section (3.1.16) on Forecast-based Financing (FbF) and Forecast-based Early Action (FbA) in its latest revision in 2019. It has included a Forecast-Based Financing/Action (FbF/A) Taskforce in the Section 3.1.16 of who are responsible to provide capacity and knowledge supports to the GoB and to implement early actions to reduce peoples' sufferings and loss of assets and properties.

In April 2021, GoB has accepted and enacted the Disaster Management Fund Rules 2021 that clearly articulates that the fund shall be utilized before, during and immediately after disaster for specified and general works (Section 10/1). Therefore, GoB commitments to reduce peoples' sufferings and loss of assets and properties are taken care of and getting into actual

implementation. Given the need for investment in the local level disaster management, the DM Fund Rules are the timely introduction in the DM in Bangladesh.

National Plan for Disaster Management (NPDM) examined the need for addressing emerging risks. As part of the Improvement of Early Warning System NPDM for the year 2021 to 2025 proposes various activities/programmes on Forecast-Based Early Action for the flood, cyclone, landslide prone areas of Bangladesh in Appendix-3 (Key Targets of NPDM 2021-2025 section).

3.4 INITIATIVES ON Fb/A IN BANGLADESH

In Bangladesh, other efforts are ongoing for anticipatory humanitarian action. The BDRCS-led FbA Working Group is working on many of these initiatives together across multiple shocks. For example, a FbA project – Supporting Flood Forecast-based Action and Learning in Bangladesh’ (SUFAL) – funded by ECHO and implemented by a consortium of CARE Bangladesh, Concern Worldwide, Islamic Relief Bangladesh, and Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) aims to strengthen local governments and communities’ ability to implement anticipatory action for monsoon flooding. Wherever possible, opportunities for cross-learning between this pilot and other entities engaged in ready activity should be explored, including through the BDRCS-led working group. It will enhance learning for anticipatory actions through process learning, agency specific monitoring and evaluation, and an independent evaluation of the pilot once activated¹⁵.

In February 2020, the Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator (USG/ERC) decided to invest a significant amount from the Central Emergency Response Fund (CERF) – up to US\$80 million - to pilot collective anticipatory action at scale in 2020-2021, with a focus on drought in Somalia, Ethiopia, Malawi and Chad; on cholera outbreaks in sub-Saharan Africa; and floods in Bangladesh. There have been two recent CERF allocations for rapid response to monsoon flooding in Bangladesh. In 2017 there were 6.9 million people affected, 300,000 people targeted with a total requirement for response of \$12 million. CERF provided \$3.4 million. In 2019, there were 7.6 million affected, 736,000 targeted, and \$27 million required. CERF provided \$5.3 million. Since 2007, CERF allocated more than \$95 million to all types of operations in Bangladesh. This allocation provided for rapid response to monsoon flooding. The humanitarian funding is used for early action based on meteorological forecast information, combined with risk analysis, to prepare for extreme weather events. Following agencies/organizations have been engaged in the initiatives:

- World Food Programme (WFP)
- United Nations Fund for Population Activity (UNFPA)
- UN Food and Agricultural Organization (FAO)
- Inter-Agency Standing Committee (IASC)
- Bangladesh Red Crescent Society (BDRCS)
- European Civil Protection and Humanitarian Aid Operations (ECHO)SUFAL

¹⁵ <https://reliefweb.int/sites/reliefweb.int/files/resources/20200626%20-%20Anticipatory%20Action%20Framework%20-%20Bangladesh%20Flood.pdf>

3.5 GLOBAL GOOD PRACTICES AND LESSONS ON FbF

Though implementation of FbF, many countries successfully managed the funding gap in humanitarian sector and reduced the vulnerability of people, land and properties. Many challenges and failure are also experience during the implementation of FbF in the root level to reduce the impact of disaster. A glimpse of the success and failure of FbF activities in many countries are summarized in the table below (Table-2).

Table 2: Lessons Learnt from FbF by Countries

Country	Problem	Organization	Key FbA Activities	Success	Challenges
Bangladesh	Riverine Flood and Cyclone	Funding: FAO, IFRC Implemented by Bangladesh Red Crescent Society (BDRCS) with the technical support from German Red Cross (GRC).	<ul style="list-style-type: none"> Working with government and local partners to develop thresholds and triggers for river flooding based on context analysis. Disseminating flood early warning information to remote villages. Developing and testing community-level SOPs for anticipatory cash-based transfers through financial service providers Building evidence to capture the added value of integrating FbF with social protection and national emergency preparedness and response systems. 	<ul style="list-style-type: none"> The FbF beneficiaries performed better than others in all aspects. Cash grants contributed to improving households' access to food, a reduction in high-interest debt accrual of vulnerable households, and reduced psychosocial stress during and after the flood period. 	<ul style="list-style-type: none"> Despite progress with DRR, incentive structures at national and local level are still skewed towards post disaster relief activities Flood forecasting models are limited in scope and do not cover southern Bangladesh because of the difficulties in modelling Tidal influences. Cyclone tracts often changes which causes 'act in vain' during cyclone Fani
Nepal	Flood	Fund: Danish Red Cross Implementing agencies: World Food Programme, Practical Action Consulting, IFRC (working group hosts), the Nepal Red Cross Society and Danish Red Cross.	<ul style="list-style-type: none"> Dissemination of warning via radio, loudspeaker, in person by volunteers, and/or SMS with clear guidance on the steps affected persons should take to reduce their risk. Distributions to households (items to be determined, but could include food, tarps, WASH items, cash). Distribution of search and rescue 	<ul style="list-style-type: none"> FbF modality offer a process to limit damages caused by a natural hazard on vulnerable people (75 percent damage reduction). Assets (50 percent of damage reduction on crops and cattle). Save a significant amount of money in the immediate response (US\$34 per dollar invested) 	<ul style="list-style-type: none"> For every 100 alarms, 30 are false and unnecessary preparation is done.

Country	Problem	Organization	Key FbA Activities	Success	Challenges
			essential items to volunteers in the area identified as having the highest risk.		
Mongolia	Drought	Funding: FAO Implementing agency: Mongolian Red Cross, British Red Cross, Red Cross Red Crescent Climate Centre, International Federation of Red Cross and Red Crescent Societies	<ul style="list-style-type: none"> Analyze the Dzud risk map and coordinate with Red Cross mid-level branches to select the beneficiaries. Transfer the unconditional cash assistance to the beneficiary's bank account. Procure, transport and distribute animal care kits to the targeted provinces. 	<ul style="list-style-type: none"> Almost 2,000 vulnerable herder households are provided with unconditional cash and animal care kits to prevent the herders from losing their livestock and livelihoods. Cooperation between the government sectors (local government, NEMA) and other entities is strengthened. 	<ul style="list-style-type: none"> Although the country is vast and that creates logistic challenges, the target population sizes are limited. There are issues in coordination. Very narrow scope for actions and lacking transition impact. Not taking advantage of the potential from long lead time.
Ethiopia, Niger, Zimbabwe	Drought	Funding Agency: WFP Implementing agencies: Danish Red Cross and Finnish Red Cross	<ul style="list-style-type: none"> Working with government, humanitarian and academic partners to develop thresholds and triggers for agricultural drought. Creating seasonal climate forecasts and decision making tools for agricultural sector institutions to be better able to implement anticipatory actions. Developing Standard Operating Procedures (SOPs) for anticipatory action to drought and validating them through simulation exercises. 	<ul style="list-style-type: none"> Reduced the impacts of a predicted drought on food security of most vulnerable communities 	<ul style="list-style-type: none"> Forecasting is not precise due to limited data. Vertical solutions to predicting and safeguarding from extreme weather is not enough to transform target populations out of vulnerability. Lack of co-ordination causes different challenges in implementation. Lack of coherence in risk modelling and interpretation.

Country	Problem	Organization	Key FbA Activities	Success	Challenges
Malawi	Flood	Funding Agency: European Union Humanitarian Aid Implementing agency: Malwai RCS, Danish RCS, Netherlands RCS, Belgian RCS	<ul style="list-style-type: none"> • Consider WASH activities, NFI/water purification distribution and sensitization • Consider shelter activities (PASSA). • Pre-position grain and seed protection bags. • Provide materials and support communities to protect their livelihoods assets (e.g. through elevated platforms/safe spaces to keep food, livestock, seeds and tools). • Activate crisis modifiers in existing projects. • Activate existing contingency plans and coordination structures. • Scale-up safety nets. 	<ul style="list-style-type: none"> • Reduced disaster impact. • Increased food security and nutrition status are found among the beneficiaries. 	<ul style="list-style-type: none"> • Different insecurity events such as the October 2017 bloodsucker event reoccurs. • Cash distributions are hindered operations because of insecurity. • Act in vain due to false forecasting. • Roads and remote communities are inaccessible during rains.
The Philippines	Typhoon ;Flood	Funding: WFP Implementing Partner: Philippine Red Cross, German Red Cross and Finnish Red Cross;US development agencies, the UN country team, the IFRC and Partners for Resilience (the Climate Centre, Cordaid, and Wetlands International), and local NGOs and scientific institutions.	<ul style="list-style-type: none"> • Two weeks before Typhon Tisoy, knowing the region was entering its peak flood season, WFP Philippinesdispatch ed cash to 1,000 vulnerable households. Pay-outs of PHP2,300 (US\$45) — 10 days' worth of the minimum daily wage in the target area — were provided to at-risk households. • houses in two communities were strengthened • early harvesting of Abaca trees in five communities was supported, employing more than 100 community members. 	<ul style="list-style-type: none"> • People buys food, strengthen their house and early harvesting • Zero casualties are achieved during extreme typhoons. • vulnerable farmers & fisher folk have sufficient resources to bounce back after typhoon • Institutionalization of Fbf • Loss and damages to vulnerable shelters due to typhoons are reduced 	<ul style="list-style-type: none"> • Emergency Response Procedures (SOPs) – partially exists • Finance and admin policy and emergency procedures – needs improvement • Logistics, procurement and supply chain – needs improvement

CHAPTER IV: EARLY ACTION FUNDING/FINANCING IN BANGLADESH: PRESENT STATUS AND POTENTIAL OPPORTUNITIES

The section hereunder presents the findings of the FbF study with analysis and explanation, possible relevance is made with the policy, framework and other considerations. The chapter focuses on the forecast-based actions and financing status and opportunities which are currently being practiced in Bangladesh, both national and international sources. A brief about the private sector is also presented. Summary Findings from the KII, FGDs and Case Studies are attached in the Annexure (Annex-4).

4.1 LOCAL LEVEL FORECAST, WARNING AND TRIGGER

Flood Forecasting and Warning Centre (FFWC) generated a local level flood forecast for the SUFAL project areas. There was more than 75% probability of flooding i.e. exceedance of danger level. Based on the forecast, SUFAL project triggered early actions. The overall objective of taking early actions was to reduce loss of lives and livelihood was acknowledged and was highly appreciated by the community people, union and upazila disaster management committees, government officials and the mass media.

District administration (DC office) who is mainly responsible for coordination among government departments, NGOs, others for flood/disaster management. Once the district administration declared the disaster emergency, District Relief and Rehabilitation Officer (DRRO) arranged coordination meeting of District Disaster Management Committee (DDMC) at the district level.

As per the advice from the district administration both Upazila Management Committee (UzDMC) and Union Disaster Management Committee (UDMC) arranged coordination meeting and distributed responsibilities and task among the sectoral departments, NGOs and others. Union Disaster Management Committee (UDMC) arranged dissemination of the early warning (EW) messages by using various local media, channel and instruments like miking in the bazar, community place, villages to create awareness about the likely impact of the disaster and preparedness and early action/measures.

4.2 FORECAST-BASED EARLY ACTIONS IN FLOOD 2020

Identifying appropriate early actions for a particular hazard/disaster and context is essential to successful anticipatory/early actions. A list of early actions were generated from the focus group discussion (FGD), key informant interview (KII) and review of documents. The list includes a diverse range of activities and interventions starting from the coordination meeting of the disaster management committees, to evacuation and relocation of people from the most vulnerable and risk prone areas, providing dry food, WASH and other facilities to the people in need (Table-3).

Table 3: List of Early Actions Taken at the SUFAL Project Area, Flood 2020

Sl #	Name of Early Action Taken	Agency/Organizations Involved
1	Meeting and Coordination	Government Officials at Local Level and Chair and Members of UP/UDMC and all other stakeholders
2	Awareness Raising, Warning and Message Dissemination By Voice Message & Miking	UP/UDMC and SUFAL
3	Get Shelter Ready with Necessary Facilities	UP/UDMC and SUFAL
4	Arrange Transport and Evacuation	UP/UDMC and SUFAL, bdrcc
5	Arrange and Distribute Dry Food	UP/UDMC and SUFAL
6	Provide Drinking Water, water purified tablet and WASH Facilities	DPHE and SUFAL
7	Repair and Improve Road and Embankment	UP/UDMC, BWDB and SUFAL
8	Construct Bamboo Bridge for Local Communication	UP/UDMC, BWDB and SUFAL
9	Early Crop Harvest and Provide Incentives	DAE and SUFAL
10	Support Farmers for Floating Seedbed	DAE and SUFAL
11	Livestock Relocation, Construction of Cattle Shade, Vaccination, Fodder etc.	DLS, FAO and SUFAL
12	Netting of Pond and Fisheries Resource Management	DoF and SUFAL
13	Distribution of Hygiene Kits to Affected Families	SUFAL
14	Repair & Installation Sanitary Latrine	DPHE and SUFAL
15	Provision of Solar Light for Security	DPHE and SUFAL
16	Distribution of Cooking Facility (Portable Stove)	SUFAL
17	Un ifrc Unconditional Cash Support	Bdrc, SUFAL, un, bdrcc,
18	Implement COV-19 Health Safety Protocol in Shelter	UP/UDMC and SUFAL

The local government representatives took the actions according to DMC meeting decision of UP, Upazila and district. Concerned government agencies/departments took their preparedness and early action measures as per the directives from their head quarter and availability of resources and supports. It was found that almost all department/agencies took supports either from SUFAL or other NGOs and humanitarian agencies in the areas of technical, financial and others while undertaking the early actions in close coordination with the local government institutions (LGI) and local administration.

As per the observation from the field level interview and discussion, the early actions were largely possible due to the supports from the SUFAL Programme who provided training, supports for evacuation/relocation, early warning (Voice) messages, supports for evacuation and relocation, food, drinking water, WASH, volunteer supports and many others in the flood shelters.

4.3 STATUS AND POTENTIAL FOR FBA FUNDING/FINANCING

Various early actions were taken during the flood 2020 in the northern flood prone districts to reduce the sufferings and also to save livelihood means and assets of the vulnerable communities. They were provided with unconditional cash supports and also various technical, materials, communication and moral supports through the early action period.

4.3.1 Public Sector

4.3.1.1 National DRM Budgets/Financial Supports

DM Fund is considered as most relevant financing window within government for Disaster Management in the country. At the district level, the DM Fund is administered by the district DRM officials - District Relief and Rehabilitation Officers and the Deputy Commissioners. The Disaster Management Policy (2015) enables the national and district DM Fund as a financial source for 'disaster management activities at all levels'.

According to current practice the ministry (MoDMR) allocates Gratuitous Relief (GR- Cash and Rice) to the deputy Commissioners as prepositioning of relief items. Usually each district receives 100 MT of rice and BDT 1 Lac. DC Office redistributed the cash and food among the Upazilas for flood fighting, particularly for post-flood relief operation. The resources are then trickled down to the unions (UP) under the upazila with the govt circular to ensure the rice and other materials distribute to the affected people.

"With SUFAL Lessons, We Can Save 20 Taka by Investing Only 1 Taka Early"

-DRRO, Gaibandha.

Discussion with the local govt officials and representatives revealed that they did not have authority to spend the resources for any early or anticipatory actions. They confirmed that there was no fund for taking any early action before flood hit the area. However, UP/UDMCs took actions like arranging the coordination meeting, dissemination of forecast (as early warning) to the community, arrangement of transports for evacuation and relocation and other activities like getting shelter ready with necessary facilities with the revenue budget or from the personal pocket. There were boats and they used for rescue and relocation of the affected families and their belongings but, according to them, which were not enough and they had to take supports from SUFAL/NGOs. According to the DG, DDM 60 rescue boats were already distributed to the flood prone districts and another 120 boats were getting prepared. According to the local representatives, they sought supports (like shelter preparation, drinking water, WASH facilities, volunteers etc) from the SUFAL/NGOs working in their areas for most of the early actions taken.

Based on their experiences UP estimated that one to two lac (BDT 100000 - 200000) might be required for taking and completing the early actions. The amount could be provided as contingency fund or block fund before each flood/disaster season. Upazila Nirbahi Officer (UNO) might administer the grant/fund and distribute to UPs according to the necessity and

urgency. Since the DM Fund Rules are in operation, a circular from the MoDMR/DDM might be issued to the local government administration indicating the provision to allow the local authorities to spend the amount for forecast-based early actions in flood prone districts.

Due to recurring nature of the flood and resulting loss and damage the local government institutions felt that they would raise the issue in next coordination meeting and make a point for resources for early actions to support the vulnerable communities.

4.3.1.2 Social Protection¹⁶ or Social Safety Nets

In this particularly emerging concepts of shock-responsive social protection systems or adaptive social protection systems are most relevant. Social protection and FbF/FbA can go hand-in-hand in a few different ways. The first being that the persons targeted by social protection, i.e. the poorest and most marginalized households, tend to be the most affected by external shocks. Therefore, social protection is topped up to either cover more beneficiaries or packages are increased to minimize effect of shocks. Secondly, social protection systems can benefit from the links to forecasts to build its anticipatory capacity.

Overlapping with CCA and DRR, the concept of adaptive social protection also covers the system's ability to respond and its scalability especially in light of increased frequency and duration of shocks. A review of social protection programmes undertaken by UNDP identified several entry points for adaptive social protection in the National Social Security Strategy 2015 which addresses poverty, vulnerability and marginalization.

As per the observation from the WFP official, the concept of Adaptive Social Protection might be tested in the anticipatory or early action while the VGD beneficiaries could be targeted for early action supports during the EA Window in flood or cyclone as applicable. In Bangladesh, there are several ministries engaged in social protection, with the Ministry of Disaster Management and Relief (MoDMR) being one of the biggest. There were different safety net programmes being operated in the districts and in a query about the scope of use in the early action, the district administration confirmed that they could only with proper government protocol and official circulation.

We are not allowed to use the safety net resources for early action, as such. However, we could raise and discuss it in next coordination meeting.

-ADC (General) Jamalpur

4.3.1.3 Sector Specific Funds

Almost all sectors have their own plan to respond to disaster, support their clients and save their assets and products. The sectoral departments and agencies allocate fund/budget in the annual plan which includes revenue/regular activities and development/project activities. In most of the cases their allocation takes care of their activities during peace time and some of

¹⁶ For further information, read IDS article ' Scalable and Sustainable: How to build anticipatory capacity into social protection systems' and BRA C E D P o licy Brief ' Resilience solutions: exploring social protection linkages to forecast- based financing'

their projects may be disaster response focus. A study carried out by the Planning Commission and NARRI Consortium¹⁷ identified a large number of DRR sensitive projects viz. agriculture; public administration; water resources; rural development/institutions; physical planning, water supply and housing. However, none of the projects took early action in any ensuing flood/disaster.

Agriculture Sector Support in Early Action

Rice and other crops are submerged by annual flood almost every year, mainly in the northern districts, affecting both farmers and consumers. Farmers of the northern districts incurred heavy loss due to the damage of their field crops in the floods 2020, repeated 4 to 5 times in the different parts of the region. Ministry of Agriculture (MoA) estimated the loss of rice from 83,000 hectares and altogether crops from 125,549 hectares of total land and USD 42 million worth were damaged in repeated flood of 2020 (IFRC, 2020).

Local farmers could save their rice crop after receiving forecast and early warning (Voice Message) from the SUFAL during flood 2020. Department of Agricultural Extension (DAE) provided combined harvester as part of the project support to the farmers. Similarly, farmers of Saghata, Gaibandha, who left home (at Char) and resided in the temporary shelter, were able to raise rice seedlings in the floating banana raft and transplanted the same in the field once flood water receded.

Raised rice seedlings in floating seed bed while lived in temporary shelter, flood 2020 with the help of SUFAL and supports from SAAO/DAE.

Saidur Rahman
FGD Participant
Saghata, Gaibandha

As per present practice, Department of Agricultural Extension (DAE) extends technical supports with training, inputs and machineries (Combined Harvester, for example) to support the local farmers cultivate and harvest crop in any emergency, mostly with project fund/resource supports. *The department and the Ministry of Agriculture (MoA) might be approached and advocated so that necessary resource and funds are allocated, particularly, for emergency crop saving/harvesting, inputs for early seeding raising and other activities with necessary official formalities, rules through the circulation of letter/memorandum.*

Saving Livestock and Fishery Resources

Floods 2020 caused moderate to severe damage on livestock and fisheries. According to the report from the Department of Livestock Service (DLS), the sector lost USD 74.5 million worth of livestock including 16,537 hectares of grass land (IFRC 2020). Farmers of the northern districts like Jamalpur, Kurigram and Gaibandha, who lived in the char area in particular, suffered a lot as many of them incurred huge loss due to death/loss of livestock and damage of fishery resources.

¹⁷ Government of Bangladesh (Programming Division, Planning Commission) & NARRI Consortium, 2016. Trends of Disaster Related Public Fund Allocation in Bangladesh: An analysis of ADPs during 6th Five Year Plan period (FY 2011- FY 2015).

Farmers who received Voice Messages from SUFAL could evacuate and shift their animals to the shelter or higher ground (Embankment, Killa etc). Both UP and SUFAL assisted the vulnerable families to evacuate and transport their animals and also saved those by constructing space/shelter for cattle and other animals near human flood shelter or Killa and embankment. These centers were built through cash for work programme with the supports from SUFAL. Animals were also provided with fodder and drinking water and necessary vaccination, de-worming and anti-diarrheal drug were arranged with the supports from FAO (for example, 2700 families in Islampur, Jamalpur). The DLS officials did not have fund or budget to take any action early, however though, the department has a provision of keeping 10% of their annual vaccine and medicines to use in the disaster situation (Director, Extension, DLS).

“Once we received ten (10) days forecast from FFWC and voice message from SUFAL we started taking preparation and action for ensuring drinking water and related facilities during flood”.

*DPHE Upazila Sub-
Assistant Engineer.*

Upon receipt of the Voice Message from SUFAL the Department of Fisheries (DoF) disseminated early warning message to the fishermen through their extension agents with necessary technical information and tips written in leaflets. As a result the fishers could save their fishes by adopting early action like protecting the fishes by netting the fish ponds and also selling up 75% fishes early (before flood came). Fishermen in Chilmari (85), who practice ‘Case Culture’ were able to save their fish once they received ‘Voice Message’ from SUFAL and also managed to earn handsome amounts by selling the fish early.

Many villagers relocate their livestock and poultry because of early warning message (Voice Message) and transport/boat support from SUFAL, thus saved assets and money.

*Asiron Begum
FGD Participant
Islampur, Jamalpur*

Since loss/death of livestock is very common in each flood/disaster in the northern districts, DLS could not play their roles as expected. They did not have any fund/budget and had to depend on the local government institutions, NGOs and others for supports in evacuation, shelter fodder, vaccination and other facilities. The Senior Officials at the Head Quarters indicated that the department and their ministry required to open a budget code in close coordination with the Ministry of Finance and thus allocate fund accordingly for the purpose to save the livestock and poultry resources from flood/disaster. Similarly, DoF might require and include the budget/fund in the annual budget and spend for the early actions in the flood/disaster situation.

WASH and Health Supports

The Department of Public Health and Engineering (DPHE) indicated in its report that 928,60 tube-wells and 100,223 latrines were damaged during the flood 2020. The department did not have any budget for taking early actions in flood as such. They only followed annual plan and budget to ensure drinking water for the particular area which is implemented throughout the months of the year.

Once they received forecast and receive advice and guidance from the local level DMC meeting, DPHE office undertook assessment and found out the water points (Tube Well) those required repair and maintenance. Most of the time DPHE took supports either from the district or upazila administration to provide supports for early actions, for ensuring drinking water and other sanitation, hygiene facilities for the affected population. DPHE officials claimed that they supplied water purification tablets, wash kits, drinking water in jerry cane to the families lived in shelter in flood 2020, however, was not supported by the local public representatives.

Inclusive Support for Women, Girls and others

The world has gathered enough evidence to support that women and girls who are often disproportionately vulnerable to natural disasters and climate change impacts where their endowments, agency and opportunities are not equal to those of men rather the context of vulnerability is furthermore exacerbated by gender relations. Similarly, just as natural disasters affect women disproportionately, response and recovery efforts can also increase or reinforce existing inequalities¹⁸.

Women, pregnant and lactating mothers, children, adolescent girls, person with disabilities (PWD), elderly need some special supports during the emergency and including the early action period. Department of Women Affairs (DoWA) looks after the welfare of the groups at the local levels. According to SOD they DoWA is responsible to ensure timely and secured evacuation of women, children, elderly, PWD to a safe shelter after receiving the warning message and undertake appropriate safety and protection measures in the alert and warning stage.

Interviews with the Women Development Officers of Jamalpur and Kurigram revealed that the implementation at the local levels was mostly concentrated in raising awareness of the women groups about the management of disastrous situation. They provided emergency ambulance service for pregnant women for hospitalization and treatment during the flood (WDO, Jamalpur) and also ‘Sanitary Napkin’ from the ‘Joyeeta’ Project to the women and adolescent girls in the flood shelters, flood 2020 (WDO, Kurigram). The initiative of ‘Sanitary Kit’ could potentially be taken up by any Private Sector Company/ies who, as part of the corporate social responsibility (CSR), could distribute the kits to the women and girls in need during the flood.

The flood shelter we lived in flood 2020 was arranged and equipped well with proper space and separate wash room for women. There were food, drinking water, light, security for us arranged by SUFAL.

Fatema Akhter
Case Study Participant
Ulipur, Kurigram

Recognizing that the women, girls, children, elderly and persons with disabilities suffer most in any disaster, Department of Women Affairs (DoWA) has to play a big role in this situation. While they were found to undertake awareness raising programmes prior to disaster season, supply of sanitary kits during normal and disaster period

¹⁸ Arnold, Margaret and Cynthia Burton (2011). “Protecting and Empowering Vulnerable Groups in Disaster Recovery.” *World Reconstruction Conference: Proceedings*. Washington, DC: The World Bank: 210–240.

(from project support) and provision of ambulance support for pregnant women during emergency, they could do more in providing direct supports in flood shelters and also in most affected areas. In this case the DoWA could use their safety net supports for undertaking early actions in flood with some amendment in the provision of the safety nets.

4.3.1.4 Climate Change Funds and Projects

Bangladesh has long recognized the overlap between Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) and this is evident in its Climate Change Strategy and Action Plan (BCCSAP); as well as various programmes and projects implemented across the country, for example Comprehensive Disaster Management Programme (CDMP). The two most commonly recognized funds are the Bangladesh Climate Change Trust Fund (BCCTF) and the Bangladesh Climate Change Resilience Fund (BCCRF) which have been supported many projects to reduce risks from climate-related disasters.

PKSF has adopted disaster management and micro insurance programme under the fold of its social protection programmes. PKSF has also started implementing a project aiming to enhance the capacities of the poor to increase their resilience to the adverse impacts of climate change under Bangladesh Climate Change Resilience Fund (BCCRF). The Local Government Initiative of Climate Change (LoGIC) Project of UNDP has established a fund (Community Resilience Fund/CRF) to directly channel micro-grants (not more than USD 400 per household) to vulnerable households for low-regret resilience actions that are not otherwise funded, and that yield immediate benefits to household-level absorptive and adaptive capacity. The grants is provided directly to selected households using an electronic cash transfer mechanism based on the unique personal and mobile phone identity of the head of household.

Both initiatives of PKSF and UNDP/LoGIC Project brings new window of opportunity and also an area to create synergy and cooperation for establishing a local level fund mechanism to support the anticipatory/early actions in any flood or disaster for resilience building at the end.

4.3.2 International Sources

4.3.2.1 Red Cross's Forecast-based action Fund under DREF

International Federation of Red Cross and Red Crescent Societies (IFRC) has a Forecast-based Action fund embedded in its Disaster Relief Emergency Fund (DREF) which supports early actions to crisis. The Fund uses a combination of weather predictions and historical data to fix triggers for the automatic release of money for pre-agreed early action plans. The Red Cross has long been backing FbF globally.

In Bangladesh, with technical guidance from the German Red Cross, Red Cross Climate Centre and others, the Bangladesh Red Crescent Society (BDRCS) has developed triggers and early action plans (EAP) in around thirty (30) districts across the country. They take supports from

Glofas Model and also collect information and data from BMD and FFWC, as the case may be, and finally triangulate to come up to decision for fixing triggers.

Presence of local chapters and the vast network of volunteers enable the BDRCS to take up FbF widely during the disaster and crisis. BDRCS can access the DREF, which they use as cash packages for flood and in the cyclone they spend the DREF for the preparation of shelters, food packages, evaluation support. BDRCS and GRC have signed MoU with Govt to cover 10,000 beneficiaries for early action supports. They maintain close coordination with the platform, consortium, CARE, others. BDRCS works as auxiliary to Govt and RC/RC movement and maintain close coordination at the district/local level i.e. DC/district administration where all members take part and engage themselves during implementation, monitoring and follow-up.

4.3.2.2 Start Fund's Crisis Anticipation Window

Start Network a global network of development/humanitarian organizations has been in working since 2016. Popularly known as Start Fund it has initiated a Crisis Anticipation Window which enables the member NGOs (local, national and international) to access funds when there is any disaster/crisis and always prompt to respond early to mitigate predicted impacts. Globally, Start Fund has raised about 30 anticipatory alerts in 14 countries to date including Bangladesh. They have disbursed over GBP 3.7 million to the member organizations to be spent for the most vulnerable communities in different parts of the world. Start Fund takes only seven days, on average, between alert and operations to release fund.

Using a collaborative decision-making process, members make decisions about how and where to anticipate and respond to crises. Start Fund Bangladesh is a national funding programme of Start Network and consists of 47 local, national and international member NGOs with funding support from UK Aid. Start Fund in Bangladesh is a Civil Society managed Funding Mechanism which could potentially be utilized in small and under-funded disaster to support the early/anticipatory actions.

The fund management follows certain process from the forecast to delivery of fund. It initiates with the member NGO/organization raise an alert and allocation committee makes a decision to activate or de-activate the alert. Afterwards it follows through with submission proposal, project selection and decision within 72 hours.

4.3.2.3 UN CERF/WFP, FAO and others

In 2020, under the current leadership of OCHA, steps are being taken to assess the potential of the UN's Central Emergency Response Fund (CERF) to be expanded to cover FbF/FBA¹⁹. CERF has piloted an anticipatory action framework in July 2020 through WFP, FAO and UNFPA. Aside from this, WFP and FAO have dedicated agency-specific funding for early actions. With CERF, the UN intends to carry out pilots and learn from adopted approaches for early action.

¹⁹ Read [CERF for the future: Anticipatory Humanitarian Action](#).

The IASC20, already active on monitoring risks and alerts for early action, has produced many guidelines for early action and intends to integrate early action into its contingency planning guidelines which can strengthen the case for CERF support in the future.

Active in Bangladesh, WFP initiated FbF back in 2015 through the capacity development and simulation programmes for the concerned department/agencies and ministries. The piloted Cash Support programmes in most vulnerable 160 – 170 Unions under 24 Upazilas of Kurigram, Gaibandha, Bogura, Sirajganj and Jamalpur distributed unconditional cash the money based on 5 days FFWC forecast. WFP utilized agency funds for early response to the July 2019 floods with cash packages to vulnerable households for food security and livelihoods, minimizing negative coping strategies and risk faced by the floods.

4.3.2.4 Private Sector

Growth of private sector in Bangladesh has created interest among the general community and potential at the same time, for service towards the people in need. So thus the private sector may come forward to protect its people from natural and man-made shocks and disasters. Involvement of private sector in the DM of Bangladesh is limited in post disaster response and concentrated to the distribution of life saving items. Their roles in the disaster early actions were not visible, neither could ascertain from the study.

However, discussion with few agencies like International Development Enterprise (IDE), ACI Agro and Pragati Life Insurance came up with the followings. RFL/PRAN Group distributed some tube wells in the Char Areas of Kurigram Sadar Upazila in flood 2020. According to the information from the SUFAL staff the company distributed 50 tube wells once the flood water receded from the area as part of their corporate social responsibility. Similarly, few Banks (Rupali Bank and Dutch Bangla Bank) distributed dry food in some upazilas of Jamalpur in flood 2020. The volume of their supports and the number of population covered were not possible to understand.

Multinational companies like Unilever, British-American Tobacco and national companies like Square, Pran/RFL, Akiz Group are seen as promising venue which may be approached for Early Action supports. The idea was that the companies could come up as part of the CSR activities. A drive from the concerned government authorities might be required to bring them on board for early action thus financial supports.

Micro insurance and micro finance, on the other hand, have been operating for many years in Bangladesh, mostly focusing in agricultural sector and for fostering small scale entrepreneurships. This can also be explored for enabling early actions, as taking a small loan prior to a disaster can also be seen as an investment in protecting livelihood from drastic financial loss.

²⁰ Work on Early Warning, Early Action and Readiness falls under the scope of the [IASC reference group on Risk, Early Warning and Preparedness](#).

4.3.3 SUFAL Activities and Achievements

Based on the forecast from FFWC, SUFAL project triggered early actions for “Phase 1” and “Phase 2” floods in the northern districts in June and July 2020 respectively²¹. Despite the urgency to meet needs of the impact of COVID-19, and the restrictions on field movement and face-to-face meetings, the project was able to trigger the early actions ahead of the time before the anticipated first and second waves of flood. Based on the forecast, SUFAL project coordinated with the disaster management committees and the community people, prepared plan and executed forecast based early actions.

The FbA model was implemented in coordination with and active participation of the local government administration, local government institutions and the community people. There were more than fifteen (15) types of early actions implemented during the period and in total the actions implemented 1405 times that reached about 419348 number of people under three project districts. The total value of the early actions and supports provided to the vulnerable people was BDT 5917221.

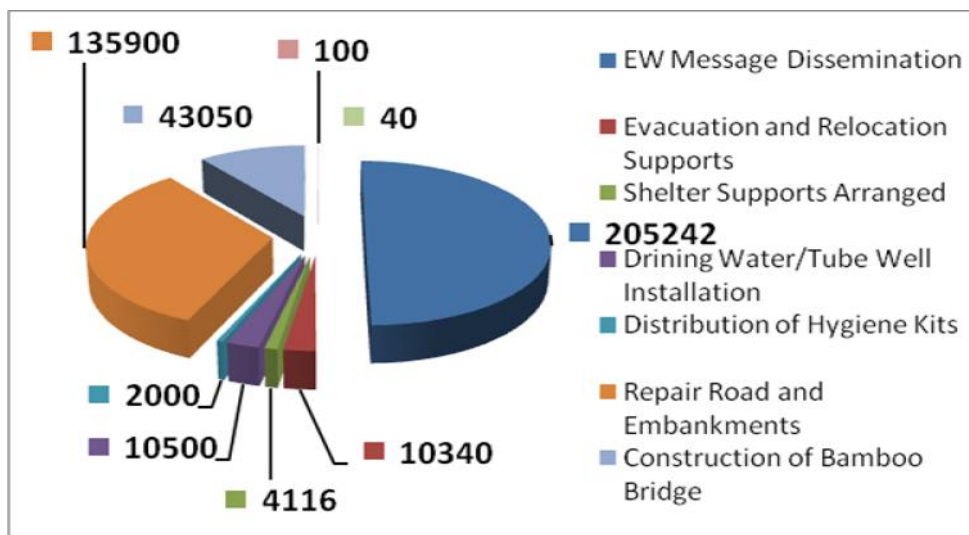


Figure 3: Name of Early Actions Supports and Number of Recipients, Flood 2020

Above figure (Figure-3) shows that more than two (2) hundred thousand community people received early warning message and a huge number of flood affected people received benefits from the repair of local roads and embankments. Similarly, evacuation and relocation was ensure for more than one (1) thousand community people shelter supports were arranged for more than four (4) hundred families. Hygiene kits were distributed to two thousand families living in the shelters and elsewhere during flood period.

²¹ Narrative Report on Early Actions for the First and Second Flood Wave, SUFAL, 2020

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

The study made an attempt to understand, explore and delineate the present and potential funding sources for supporting the forecast-based early actions in the northern flood prone districts of Bangladesh. The study was able to draw a background picture of the forecast-based early action initiatives and funding architecture in Bangladesh.

With the SUFAL programme as the study canvas, which piloted only for 12 months or so, the observations and findings may well be concluded with the followings:

- a) **Lack of Dedicated GoB Fund Source for FbA:** With the local government administration and institutions uncertain about the spending during the period of emergency and early action, there is no clear instruction from the concerned authorities (DDM/MoDMR) about the release and distribution of cash/kind among the vulnerable community people likely to be affected by a disaster event according to the weather forecast/early warning. Because, culturally for a long time the DM practice in the country is still reactive in nature and the supports are predominantly relief oriented.
- b) **Inclusion of FbF/A in SOD 2019 is Not Assimilated Yet:** The inclusion of the FbF/A as a new section in SOD during the revision in 2019, other policy references (DM Fund Rules, NPDM 2021-2015) are not well disseminated, nor mainstreamed within the institutional structure. The officials (from the top to bottom) and the public representatives are not well aware about the change and they appeared to lack motivation as part of their roles for use or adoption.
- c) **International Sources are not Accessible to All:** While there are some international and UN initiatives with regard to the early and anticipatory actions along with necessary finance and technical supports during the emergency, the fund is not accessible to all. Yet, some of the agencies/organizations work in close collaboration with the local government administration and institutions early and anticipatory actions but funds are not accessible to all.

The study comes up with the following recommendations as way forward for enhancing forecast-based actions and financing with view to reduce loss of assets and peoples' sufferings:

1. **Institutionalization and Localization of the DM Fund**

It is wise to say that the Disaster Management Funds (DM Fund) Rules 2021 under Disaster management Act 2012, which has been formulated and published recently, is the most relevant framework for financing for early actions. At the district level, the DM Fund is administered by the district DRM officials - District Relief and Rehabilitation Officers and the Deputy Commissioners. The Disaster Management Policy (2015) enables the national and district DM Fund as a good source of spending for 'disaster management activities at all levels'.

Given the high risks and frequency of disaster events the long-established practices of disaster management and humanitarian relief make Bangladesh a good ground for FbA. Therefore, based on the

directives of the DM Fund Rules, the Local Government Institutions might be empowered to access and utilize the DM Fund for early actions. With this it may be concluded that –

- An ‘EA Window Fund’ in the DM Fund might be considered to open up to facilitate the allocation of required budget and utilization of the same for early/anticipatory action during any disaster.
- Along with the pre-positioning and transfer for emergency spending before disaster, a portion (10%) of DM Fund might be allocated for early action.
- Union wise allocation is critically important for evacuation and relocation of risk community, livestock, assets, shelter preparation, procure/supply dry food, drinking water, sanitary kits etc.
- Not only decentralization is important, the devolution of power to utilize Disaster Management Fund at the field level is essentially required to undertake forecast-based actions to reduce the sufferings of the affected people.
- Standard Operating Procedure (SOP) may a good tool for the local level Early Action Initiative which could potentially be prepared in accordance with the ‘Local Level Contingency Plan’ while linking threshold, trigger and other considerations for financing.
- Political commitment to reduce the risk of disaster events as well as reducing the poverty of the poor communities often vulnerable to disaster should be translated into action. Considering that the forecast normally works 70 percent, in most cases and there is chance of ‘Disaster does not hit’ the area. Government should not be worried for spending in actions and take it as ‘No Regret Step’ and the resources ultimately used for livelihood enhancement that ultimately reduce risk and improve resilience of the vulnerable communities.

2. Utilization of the Current SSNP Supports in FbA/FbF

One of the major aims of the social safety net support is to reduce the disaster risk and enhance resilience of the vulnerable population in the disaster prone areas of Bangladesh. Given the urgency of food and cash supports during the imminent flood portion of GR, TR could possibly be used in case the needs for anticipatory/early action are high. The change in practice requires the change of timing of distribution of the resources/cash to the expected recipients, who fall in the most vulnerable yet potential disaster hit area in particular.

Depending on the forecast and lead time, number of social safety net programme/s and required amount of resources may be mobilized, for example –

- For more than a month (30 days) the critical infrastructures (shelter, road, embankment, killa, schools etc) may be

repaired.

- Unconditional cash transfer (GR as Cash) may be done in case of three to seven (3 – 7) days lead time to support evacuation and relocation of people so that they could avoid negative coping strategies such as taking high-interest loans.

3. Creation of Innovative/New Funding Mechanism

Number of public, UN, NGO and other agencies are active in endeavor to enhance capacity of local government initiations (LGI) in enhancing institutional capacity and programme management. For examples UNDP implementing LoGIC Project's Community Resilience Fund (CRF) and PKSf have long been supporting local level project/initiatives for climate, disaster and livelihood risk management in many parts of the country. Similarly, WFP is in operation for long and FAO provides supports to GoB departments (DAE, DLS, DoF).

Harnessing all these as opportunity to a practicable synergy, cooperation and partnership are sought -

- With or without local level DM fund a 'Local Level New/Innovative Fund' with the contribution from UNDP/LoGIC and PKSf or Else (WFP, FAO, NGO if there is any) may be formed and materialized.
- A joint programming for FbA/FbF for three to four (3 – 4) weeks as an 'Early Action Window' has a potential for future operation.

4. Capacity Enhancement is Urgent

Right trigger at right time meaning right ones are triggered at right time is crucial for appropriate early actions with necessary funding which entirely depends on forecast generation and warning. Two aspects are critical in this area – one is the appropriateness of the forecast (level of confidence) and other thing is the understanding, translation and dissemination to the communities/areas in consideration.

So, development of capacity of the agencies involved in forecast generation and also local govt institution/representatives is a precondition for timely initiation and implementation of the FbA and FbF.

On the other hand capacity building of LGIs and community stakeholders to develop early action plans and set triggers is required before being able to secure finance to implement FbA. Without having robust FbA plans and triggers, financing should not be committed.

5. Policy Advocacy to Financing FbA

Government of Bangladesh needs to translate its DM Act 2012, DM Policy 2015, the Standing Orders on Disaster (revised in 2019) and DM Fund Rules formulated in April 2021 into actions. The DM Fund Rules have created an embargo upon District Committee to utilize the District Fund by asking the District Committee to send proposal to the National Committee for approval. Whereas the Rules make it clear that the DM Fund will be used to implement activities before, during and post disaster period.

The concept of FbA is still emerging and just been practiced in some area/pockets of the country by some UN agencies and international development agencies. The advantage of FbF/FbA inclusion in SOD 2019 and activities in the NPDM 2021-2025 could potentially be taken as an entry to initiate dialogue with the concerned authorities of the ministries and government.

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ANNEXURE

Annex-1

Study Respondents

FGD Participant List

District: Gaibandha							
Sl.	Name	Age	Occupation	Gender	Union	Upazila	Contact
1	Saidur Rahman	68	Farmer	Male	Holdia	Saghata	01723146082
2	Shirina Begum	40	House Wife	Female	Holdia	Saghata	01301125306
3	Mominur Islam	28	Volunteer	Male	Holdia	Saghata	01755144867
4	Rikta Begum	25	House Wife	Female	Holdia	Saghata	01755318175
5	Kolpona Begum	44	House Wife	Female	Ghuridaha	Saghata	01971304671
6	Mojida Begum	30	House Wife	Female	Ghuridaha	Saghata	01984523258

District: Jamalpur							
Sl.	Name	Age	Occupation	Gender	Union	Upazila	Contact
1	Mst. Asiron Begum	40	Housewife	Female	Chinadui	Islampur	0179447320
2	Mst. Johura Begum	55	Housewife	Female	Chinaduli	Islampur	01885543095
3	Mst. Munura Begum	57	Housewife	Female	Chinaduli	Islampur	01771021179
4	Md. Samiul	25	Day Labour	Male	Chinaduli	Islampur	01703769224
5	Mst. Salma Begum	38	Housewife	Female	Chinaduli	Islampur	01794473270
6	AbdurRoshid	22	Volunteer	Male	Chinaduli	Islampur	01760290230
7	Mst. Golapful	32	Housewife	Female	Chinaduli	Islampur	01784349933

District: Kurigram							
Sl.	Name	Age	Occupation	Gender	Union	Upazila	Contact
1	Jinnah Khan	40	Business	Male	Begumganj	Ulipur	01763199146
2	Abu Sayed	41	Business	Male	Begumganj	Ulipur	01724411029
3	Anjuara Begum	30	House wife	Female	Begumganj	Ulipur	01774835332
4	Rina Begum	32	House wife	Female	Begumganj	Ulipur	01747806455
5	Arzuana Begum	28	House wife	Female	Begumganj	Ulipur	01749815172
6	Jewel Hossain	27	Farmer	Male	Begumganj	Ulipur	01725089935

Case Study Participant List

Sl.	Name	Age	Occupation	Village	Union	Upazila	District	Contact
1	Shirina Begum	40	Housewife	Dakbangla	Ghuridah	Saghata	Gaibandha	01301125306
2	Fatema Khatun	27	Housewife	Kolatipara	Hatia	Ulipur	Kurigram	01730198165
3	Md. Akbbar	66	Day labor	Atiamari	Kulkandi	Islampur	Jamalpur	

KII Participant List - Districts

Sl.	Name	Designation	Organization	District	Contact
1	Ms. Kamrunnahar	In charge	District Women Affairs Office	Jamalpur	01843936619
2	Md. Rakibur Rahman	Upazilla Sub assistant engineer	Department of Public Health & Engineering	Islampur, Jamalpur	01822380097
3	Md. Ferdous	Upazila Education Officer	Upazila Primary Education Office	Islampur, Jamalpur	01716045488
4	Md. Farid Khan	UP Secretary	Union Parishad	Chinaduli, Islampur, Jamalpur	01721086393
5	Md. Omar Faruk,	UP Secretary	Union Parishad	Noarpara, Islampur, Jamalpur	01764149555
6	Md. Obaidul Haque Babu	UP Chairman	Union Parishad	Kulkandi, Islampur, Jamalpur	01711190442
7	Md. Abu Sayed	Executive Engineer	Water Development Board	Jamalpur	01318236144
8	Md. Mehedi Hasan Titu	Project Implementation Officer (PIO)	PIO Office (DDM)	Islampur, Jamalpur	01700717227
9	Jaman Abdun Naser	Upazila Chiarmen	Upazilla Parishad	Islampur, Jamalpur	01711386445
10	Md. NayebAli	Disaster Relief & Rehabilitation Officer (DRRO)	DC Office (DDM)	Jamalpur	01711961217
11	ANM Rezoan	Upazila Agricultural Officer (UAO)	Upazila Agricultural Extension Office	Islampur, Jamalpur	01723608366
12	Md. Sanowar Hossain	Upazila Livestock Officer (ULO)	Upazila Livestock Services Office	Islampur, Jamalpur	01712106574
13	A.K.M. Idrish Ali	Disaster Relief & Rehabilitation Officer (DRRO)	DC Office (DDM)	Gaibandha	01746499342
14	Md. Moklesur Rahman	ADC (General)	DC Office	Jamalpur	01716170656
15	Mr. Kalipada Roy	District Fisheries Officer	District Fisheries Office	Kurigram	01769459754
16	Md. Sadekuzzaman	Upazila Agricultural Officer (UAO)	Upazila Agricultural Extension Office	Saghata, Gaibandha	01710539609
17	Md. Nazmul Haque	Upazila Livestock Officer (ULO)	Upazila Livestock Services Office	Saghata, Gaibandha	01720002707
18	Mr. Shyhan Ali	Executive Engineer	Department of Public Health & Engineering	Kurigram	01715606446
19	Md. Ariful Islam	Executive Engineer	Water Development Board	Kurigram	01318235504
20	Md. Mohiuddin Jahangir	Upazila Nirbahi Officer (UNO)	UNO Office	Saghata, Gaibandha	01762695076
21	ShahanaAktar	Deputy Director	District Women Affairs Office	Kurigram	01716274971

KII Participant List - Dhaka

Sl.	Name	Designation	Organization	Email
1	Md. Atiqul Haque	Director General	DDM	dg@ddm.gov.bd
2	Kazi Shahidur Rahman	Humanitarian Affairs Specialist	UN-RCO	shahidur.rahman@one.un.org
3	Sheikh Khairul	Project Manager	German Red Cross	khairul.sheikh@germanredcross.de
4	A M Nasir Uddin	Manager, Disaster Risk Reduction	ActionAid	Nasir.Uddin@actionaid.org
5	Sajid Raihan	Country Manager	Start Fund Bangladesh	cmgr@startfundbangladesh.org
6	S I Khan	Programme officer	WFP	siddiqui-islam.khan@wfp.or
7	Dr. Malay Kumar Sur	Deputy Director	Department of Livestock	
8	Dr. Debashis Das	Director (Ext.)	Department of Livestock	das_debashis1963@yahoo.com
9	Dr. Mazharul Aziz	Chief Instructor	Agriculture Training Institute, Department of Agricultural Extension (DAE)	azizdae@gmail.com
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11	Md. Nurul Amim	Deputy Country Director	International Development Enterprise (IDE)	namin@ideglobal.org
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Study Tools and Guides

Focus Group Discussion (FGD) Session Questionnaires and Guidance

Purpose of the FGD: Identify and map out various funding sources and support services operating, as part of the 'Early Actions' at the local level to reduce sufferings of the vulnerable communities and also reduce loss and damage of their assets, infrastructures etc.

Specific objectives of FGD: To explore, identify and find out

- i) Identify Early Actions undertaken during the last flood/cyclone; or early actions which are relevant to reducing potential impacts
- ii) List of funding sources i.e. name of office/organization/agencies (govt or other)
- iii) List of supports/services received and name of office/organization/agencies (govt or other)
- iv) Explanation on the quantity, timeliness, utilization/effectiveness of the fund/support/services
- v) Take note of the limitation/challenges to access and utilize the fund/support/services

Potential/suggested respondents: Most vulnerable people due to disaster, which may comprise -

- A. Project participant/beneficiaries
- B. Community people

Focus group composition: 8-12 individuals of homogeneous group (may be male or female group).

Timeline: Suggested time to complete the focus group discussion is 1 – 1.5 hour.

Materials required: Pen, note book and voice recorder and other logistics (as suggested/required)

FGD session facilitation steps:

Step 1: Introduction/ice breaking, greetings and explanation of purpose of FGD

Step 2: Soft-ball questions that are low-risk, easy for everyone to understand and answer, warm the group up, and prepare them for the topic of discussion

Step 3: Exploration questions i.e. major areas of discussion and probing questions, follow-up question, as required

Step 4: Exit questions, if anything that might have been missed, review/sum-up the discussion

Step 5: Wrap-up, greetings and close down the session

Major discussion agenda/questions:

1. What is your idea about disaster and forecast based early action?
2. What sort/s of activities/actions are undertaken as part of early actions? What sort/s of activities/actions can be undertaken as part of early actions, but not done yet?
 - a. Who are the most vulnerable from a specific disaster (flood/cyclone)? Or, who are the people that require support in the period before a disaster? What early actions can benefit them?
 - b. Are there any specific support required by women? What about other groups, such as: men, elderly, children, PWD, minorities?

3. Who or which office/organization/agencies are doing/acting?
4. Who provide support/service/fund to undertake the early action?
5. How much, when, how it is handed over/transferred?
6. Who receive support/fund under which criteria?
7. When should the fund/support be received to reduce the loss and damage from potential flood/disaster?
8. What should you do/ suggest if flood/disaster does not come and the fund is not spent?
9. What are the challenges to access the fund/finance?
10. What are the potential ways out?

Key Informant Interview (KII) Questionnaires and Guidance (Local/field Level)

Purpose of the KII: Identify and map out various funding sources and support services operating, as part of the 'Early Actions' at the local level to reduce sufferings of the vulnerable communities and also reduce loss and damage of their assets, infrastructures etc and also to understand their ideas about the policy/regulatory linkage with the forecast based financing.

Specific objectives of KII: To explore, identify and find out

- i) List of 'Early Actions' undertaken during the last flood/disaster
- ii) List of funding sources i.e. name of office/organization/agencies (govt or other)
- iii) List of supports/services received and name of office/organization/agencies (govt or other)
- iv) Explanation on the quantity, timeliness, utilization/effectiveness of the fund/support/services
- v) Take note of the limitation/challenges to access and utilize the fund/support/services

Potential/suggested respondents: Person/representative who is involved in disaster management activities -

- A. UP Chair/UDMC Chair/Elected Representative
- B. Project Implementation Officer (PIO)/Upazila Nirbahi Officer (UNO)
- C. NGO/CSO Representative (at district/upazila)
- D. District Disaster and Relief Officer (DRRO)
- E. Sectors: agriculture, livestock, public health, health, education, water development board, etc.

Timeline: Suggested time to complete the interview/discussion is 1 hour (Max).

Materials required: Pen, note book and voice recorder and other logistics (as suggested/required)

KII session facilitation steps:

Step 1: Introduction/ice breaking, greetings and explanation of purpose of interview/discussion

Step 2: Soft-ball questions that are low-risk, easy to understand and answer, warm up, and prepare for the topic of discussion

Step 3: Exploration questions i.e. major areas of discussion and probing questions, follow-up question, as required

Step 4: Exit questions, if anything that might have been missed, review/sum-up the discussion

Step 5: Wrap-up and close

Major discussion agenda/questions:

1. What is your idea about disaster, forecast, early warning and forecast based early action?
2. What are the major disasters faced by your administration in the last five years, which have affected large numbers of people or caused large-scale economic damages? Was it possible to take early actions, provided you had forecast information, or risk information?
3. What sort/s of activities/actions are undertaken as part of early actions? Or what can be done by your department ahead of a disaster to reduce potential impacts? [Here, focus on a specific disaster- can be flood or cyclone or others]
4. Who or which office/organization/agencies are doing/acting?
5. Who provide support/service/fund to undertake the early action?

6. What are the funding/financing option/opportunities are there at the local level? Whether the UP/Uz/district receives enough govt fund for the preparedness/anticipatory action/ early actions?
7. What about Contingency/emergency/development fund at the local level? How do those work and whether it could be used for the AA or EA, policy decision/adjustment?
8. How to use 'Social Safety Net' as a means to take up EA like repairing and getting internal road/communication ready, preparing flood/cyclone shelter and community centers for disaster, procurement of food and non-food and life saving items?
9. Why can't you receive/release fund (from govt sources) in time or before disaster hit the community/area?
10. What sort/s trigger/s determine/influence your decision to access/release fund?
11. Who decide about the threshold/trigger/point of release fund/finance?
12. What is the process for decision-making? When and on what basis the action will be triggered for a specific event?
13. If you receive fund/financial supports, how much?
14. How it is handed over/transferred to the expected recipients?
15. Who receive support/fund under which criteria?
16. How long does the process take between realizing that there is a need to take action, submitting a proposal and delivery of funds so communities can benefit? Are there any special procedures followed for emergency situations?
17. Bottleneck, limitation and challenges to access the fund – institutional, policy/regulatory or others?
18. Potential areas for improvement for financing early actions?

Key Informant Interview (KII)/Semi-structured Interview (SSI) Questionnaires and Guidance (National/Policy Level Govt)

Specific objectives of KII/SSI:

- Identify and map out various funding sources and support services operating, as part of the 'Early Actions' during the disaster/flood.
- Examine the policy framework for financing anticipatory actions and make recommendations for further advocacy

Potential/suggested respondents: Person/official who is involved in disaster management activities, management, operation and policy, decision making -

- A. Official/representative from govt/ministries – MoDMR, ERD/MoF, others
- B. Official/representative from govt/department/agencies – DDM, BWDB/FFWC, BMD, DAE, DLS, DoF, Climate Change Trust, Women and Child affair others

Timeline: Suggested time to complete the interview/discussion is 1 hour (Max).

Materials required: Pen, note book and voice recorder and other logistics (as suggested/required)

KII/SSI session facilitation steps:

Step 1: Introduction/ice breaking, greetings and explanation of purpose of interview/discussion

Step 2: Soft-ball questions that are low-risk, easy to answer, warm up, and prepare for the topic of discussion

Step 3: Exploration questions i.e. major areas of discussion and probing questions, follow-up question, as required

Step 4: Exit questions, if anything that might have been missed, review/sum-up the discussion

Step 5: Wrap-up and close

Major discussion agenda/questions:

1. What do you think about the loss and damage cause due to flood/disaster each year?
2. How could we reduce the loss and damage and peoples' sufferings due to flood/disaster?
3. What about the preparedness activities at the local level and how much it is able to reduce the loss and damage and peoples' sufferings due to flood/disaster?
4. What is your idea about disaster forecast based early action (FbA) and forecast based financing (FbF)? What sort/s of activities/actions are undertaken as part of FbA and FbF? Who or which office/organization/agencies/ministries are undertaking FbA and FbF?
5. What difference and overlapping you find between/among the disaster preparedness, response and early action?
6. What do you think, what sort/s of advantage/benefits we may get if the 'Early Actions' are undertaken/ensured in between preparedness and response?
7. What are the funding/financing option/opportunities are there at the local level? Whether the UP/Uz/district receives enough govt fund for the preparedness/anticipatory action/ early actions?
8. What about Contingency/emergency/development fund at the local level? How do those work and whether it could be used for the AA or EA, policy decision/adjustment?

9. How to use 'Social Safety Net' as a means to take up EA like repairing and getting internal road/communication ready, preparing flood/cyclone shelter and community centers for disaster, procurement of food and non-food and life saving items?
10. Why can't you release fund (from govt sources) in time or before disaster hit the community/area?
11. What sort/s trigger/s determine/influence your decision to release fund?
12. Who decide about the threshold/trigger/point of release fund/finance?
13. When and on what basis the action will be triggered for a specific event?
14. What are the bottleneck, limitation and challenges to release (from the govt/DDM/MoDMR) and access (by the DC/DRRO/UNO/PIO/UP) the fund – institutional, policy/regulatory or others?
15. What do you suggest about the potential areas for consideration for financing early actions?
16. In your opinion how much government is responsible and liable for financing early actions as response to uphold the basic rights of the disaster vulnerable people?
17. What inclusion/adaptation/improvements are required in the present policy/regulatory framework/s, particularly in the SOD, DM Policy and DM Act with regard to financing early actions?

Key Informant Interview (KII)/Semi-structured Interview (SSI) Questionnaires and Guidance (UN/Donor/NGO/others)

Specific objectives of KII:

- Identify and map out various funding sources and support services operating, as part of the 'Early Actions' during the disaster/flood.
- Examine the policy framework for financing anticipatory actions and make recommendations for further advocacy

Potential/suggested respondents: Person/official who is involved in disaster management activities, project implementation, funding/financing, advocacy etc -

- A. Official/representative from UN – UN RC's Office, UNDP, WFP, FAO, UNFPA, others
- B. Official/representative from intergovernmental organization – IFRC, BDRC, others
- C. Donor agencies/development partners – DFID, EU, others
- D. Official/representative from INGO/CSOs – Start Fund Bangladesh, AAB, ACF, ICCO, BDPC, others
- E. Other national research/consultancy institute/organizations – IWM, CEGIS, others

Major discussion agenda/questions:

1. What is your idea about disaster forecast based early action (FbA) and forecast based financing (FbF)? What sort/s of activities/actions are undertaken as part of FbA and FbF? Who or which office/organization/agencies/ministries are undertaking FbA and FbF?
2. What difference and overlapping you find between/among the disaster preparedness, response and early action? What do you think, what sort/s of advantage/benefits we may get if the 'Early Actions' are undertaken/ensured in between preparedness and response? Could you share your/your organisation's global experience in this regard?
3. Whether the UP/Uz/district receives enough govt fund and other funds for the preparedness/anticipatory action/ early actions?
4. What you think, from your organization/agency perspective about the potential scope for financing or providing supports for 'Early Actions' to reduce loss and damage and peoples' sufferings due to flood/disaster?
5. What sort/s of criteria do you have to finance the 'Early Actions' by the local govt agencies?
6. What are the bottleneck, limitation and challenges to release (from the govt/DDM/MoDMR) and access (by the DC/DRRO/UNO/PIO/UP) the fund – institutional, policy/regulatory or others?
7. What do you suggest about the potential areas for improvement for financing early actions?
8. What inclusion/adaptation/improvements are required in the Bangladesh policy/regulatory framework/s, particularly in the SOD, DM Policy and DM Act?

Guiding Principles and Tips for the Group Discussion and Interview

A. Introduction:

Considering that the forecast based early action (FbA) and forecast based financing (FbF) are relatively new concept and practice, person/s who are expected to be selected as the respondents may want some overall understanding about the topic and other relevant areas. Hence, for all cases, an introduction about the disaster/flood forecast, early warning, FbA and FbF is important to provide at the outset of discussion.

B. Time/duration for the session:

Suggested time to complete the interview/discussion is 1 hour (Max) for interview and 1 – 1.5 hours for FGD. However, it should be set and settled prior to the actual meeting/discussion.

C. Materials required:

Pen, note book and voice recorder and other logistics (as suggested/required). Necessary logistics in-terms of meeting place, seating materials and food/snacks have to be arranged well ahead.

D. KII/SSI/FGD discussion facilitation steps:

Step 1: Introduction/ice breaking, greetings and explanation of purpose of FGD

Step 2: Opening questions that are easy to answer, warm up, and prepare for the topic of discussion

Step 3: Exploration questions i.e. major areas of discussion and probing/follow-up question, as required

Step 4: Exit questions, if anything that might have been missed, review/sum-up the discussion

Step 5: Wrap-up and close

E. General rules for arrangement/conduction of FGD:

- It is always recommended to create homogenous groups, where people feel comfortable and free to talk, exchange ideas. Selection criteria may include Age, Gender, Race/Ethnicity, Religious beliefs, Social and economic status, Educational attainment etc. Inclusion and exclusion criteria (of respondents) should always be determined well in advance.
- Ensure/arrange a neutral and convenient location/place where all participants will feel comfortable meeting. Clearly communicate the starting time (it is recommended to tell people to show up 15 minutes prior to the actual planned time) and ensure that participants expect 1 - 1.5 hours of discussion.
- One moderator/facilitator and one note take are ideal to run the FGD session, while moderator hold the discussion/session, note taker assist him/her and take note of all questions and discussion, without dropping any single word like verbatim.
- Ground rules should be explained after introduction, like everyone has a right to speak, no one has the right answer, no interrupting each other, the moderator/facilitator makes sure everyone has a chance to speak and that the discussion does not go off onto another subject.
- It is advisable to respect local culture, norms and beliefs during the FGD session. If using a voice recorder, camera for group/session picture, ask permission from the participants.

- When appropriate, provide snacks/food as agreed with the participants, organizer of the FGD.

NOTE: FGD questionnaire may be adapted/adopted for Case Studies at the local level.

F. Management of potential limitation/risk:

Since the country is facing the global pandemic and almost every areas of the country is more or less contaminated or potentially affected, there are some risks factors involved in the study work. Hence, as a contingency plan may be agreed with the client/CARE while some meeting/s, sessions may be arranged/conducted through 'Virtual Platform' as the situation demands or as required. And also the work plan, which will be shared and agreed between the consultancy team and the client, may be required to change/adapt as per the changed pandemic situation, govt's decision and enforcement of new rules what so ever (of the concerned study area).

G. Logistic arrangement and ethical standard

As described in the ToR, arrangement of local level logistics and facilities for smooth execution of the study work is managed with the support from the client/CARE. The study team is obliged to follow and maintain the ethical standard, code of conduct and principles as applicable and as advised by the client/CARE and others as appropriate.

Summary of FGD Findings

DISCUSSION AGENDA AND RESPONSES
<i>Activities/actions undertaken as part of Early Actions</i>
<ul style="list-style-type: none"> ▪ EW/Voice Messages through Mobile Phones, people get prepared for evacuation, house repair ▪ Evacuation community people, livestock and valuable assets ▪ Arrange separate bath room for female and male, persons with disability ▪ Arrange/distribute drinking water, dry food packages ▪ Cash support (BDT4500/family) from SUFAL ▪ Fodder and medicine/vaccination, shelter for livestock with tarpaulin ▪ Utensils and cooking instruments like bucket, pot, stove etc ▪ Seed supports, rice seedling beds ▪ Package from Govt and SUFAL (Jointly in coordination UDMC)/ UP chair provided 10 Kg rice, soybean oil, pulse, soap once
<i>Organization/agencies working on Early Actions and Support/finance Provided</i>
<ul style="list-style-type: none"> ▪ Union Parishad, Govt offices arrange relief (after flood affect) ▪ Sometime local UP member visits and advice for necessary preparation ▪ SUFAL i.e. Islamic Relief, CARE, Save the Children, local NGOs
<i>Potential Future Requirements and Opportunities</i>
<ul style="list-style-type: none"> ▪ Separate toilet, tube well, bathing place for male and female ▪ Sanitary kits for the women and adolescent girls (can not dry the cloth during rain, flood) ▪ Female volunteer would be good, especially to take care issues of women, girls ▪ Raise house plinth – the community might not need to go to shelter, can live at home during flood ▪ Should arrange birth attendant/<i>Dhatiri</i> and boat for emergency purpose, for pregnant woman who are expecting (in short time) ▪ Iron and Calcium Tablet may be distributed to lactating and pregnant women ▪ Wish to get nutritious food for pregnant and lactating mother
<i>Challenges to Access the Fund/supports and Suggestions</i>
<ul style="list-style-type: none"> ▪ Forecast and EW are critical for the local vulnerable people to be aware and make decision about evacuation and relocation ▪ Lack of or hard to make communication with UP, Govt offices in the difficult/emergency period ▪ UP should provide cash or kind supports prior to the flood/disaster ▪ Shelter may be extended from 11 to 40/50 during flood ▪ More boats for evacuation is essential ▪ Not only the UP, other govt departments may come up during the emergency to support the vulnerable community people ▪ SUFAL or similar approach may be extended to other areas; for example VOICE CALL (done only for 23000 people) may be transferred to others

Summary of KII Findings (District)

DISCUSSION AGENDA AND RESPONSES
<i>Activities/actions undertaken as part of Early Actions</i>
<ul style="list-style-type: none"> ▪ Coordination meeting arranged at the district, upazila and UP once receive forecast according to the directives of SOD and distribute responsibilities to the concerned departments, NGOs and others ▪ Disseminate EW/Voice Message to the distant areas/chars (22-23000 HHs by SUFAL), with almost 1 week before so that the families could make decision and take preparation to face/tackle flood ▪ Clean and get schools and shelters ready, with light, security, other facilities to accommodate community people ▪ Distribute necessary supports like drinking water, toilet, WASH kits at shelters ▪ Hire boats/transport and arranged evacuation of the likely affected community/families, cattle and assets; SUFAL supported at a lot ▪ Distribute mobile Chula/cooking stove, other amenities to the families ▪ Arrange combined harvester and support the farmers for harvesting the rice crops before the flood 2020 hit the area ▪ Arrange fodder, shed and vaccination for cattle with supports from FAO, SUFAL and UP ▪ Receive the message of big flood, send message to the CASE fishers living along the rivers could save the CASE/Fish and other fishermen could arrange net around the fish ponds and could save their fish valuable fish resources ▪ Repair and maintain road with the help of WDB, UP so that people could move in the area; SUFAL provided support to construct Bamboo bridge ▪ Arrange medical camp per union, mobile Medical Team and people may take help from Community Clinic
<i>Organization/agencies working on Early Actions and Support/finance Provided</i>
<ul style="list-style-type: none"> ▪ DC/DRRO Office, Upazila Office and UP/UDMC at the local level ▪ NGOs like CARE, Islamic Relief through SUFAL, Save the Children, others
<i>Potential Future Requirements and Opportunities</i>
<ul style="list-style-type: none"> ▪ Need more shelters and schools should get ready ▪ There are few boats, but need more for easy transportation ▪ Should approach more NGOs, Private Sector Companies for food, drinking water, other supports ▪ Could use GR/Cash or Kind with the necessary permission or order from concerned office
<i>Challenges to Access the Fund/supports and Suggestions</i>
<ul style="list-style-type: none"> ▪ No dedicated fund/budget for the particular 'Early Action' that limits all efforts ▪ COVID-19 was an additional problem to manage the evacuation, relocation and shelter management activities during flood 2020 ▪ Should raise the fund/financial problem with the higher authorizes in the coordination meetings so that proper decision and directives could be achieved

Summary of KII Findings (Dhaka)

DISCUSSION AGENDA AND RESPONSES
<i>Department of Disaster Management (DDM) (DG)</i>
<ul style="list-style-type: none"> ▪ MoDMR/DDM is arranging 60 Rescue Boats (100 capacities) in the flood prone districts which are equipped with all facilities and can accommodate families, cattle, their assets ▪ Issue of Early financing may be raised in future meetings, could be provided for Shelter Preparation and food supply during emergency ▪ Need policy decision with regard to allow the local government to use GR, TR for EAs during flood
<i>UN RC Office</i>
<ul style="list-style-type: none"> ▪ As local coordinator of Risk Informed Early Action Partnership (REAP), they work with the concerned govt agencies to provide technical and coordination supports with the global initiatives.
<i>World Food Programme (WFP)</i>
<ul style="list-style-type: none"> ▪ WFP piloted Cash Support programmes in most vulnerable 160 – 170 Unions under 24 Upazilas of Kurigram, Gaibandha, Bogura, Sirajganj and Jamalpur on 5 days FFWC forecast. ▪ Utilized agency funds for early response to the July 2019 floods with cash packages to vulnerable households for food security and livelihoods
<i>German Red Cross (GRC)</i>
<ul style="list-style-type: none"> ▪ Supports and work with BDRCS as part of providing supports and coordination ▪ Use the FFWC, BMD forecast and other regional and international sources for data and information like Glofas and IMD and triangulate to come up with Trigger and EW ▪ Approve EAP needed for DREF and may used for early action and immediate response
<i>Start Fund</i>
<ul style="list-style-type: none"> ▪ Start Fund Bangladesh is a national funding programme of Start Network and consists of 47 local, national and international member NGOs with funding support from UK Aid. ▪ It is a Civil Society managed Funding Mechanism which could potentially be utilized in small and under-funded disaster to support the early/anticipatory actions.
<i>Department of Agricultural Extension (DAE)</i>
<ul style="list-style-type: none"> ▪ Arrange incentive in case of serious damage to the standing crops. Other facilities like harvester for early harvest from project fund/budget only during any disaster/emergency.
<i>Department of Livestock Services (DLS)</i>
<ul style="list-style-type: none"> ▪ No fund for EA, they get some supports from district, upazila, UP committees. FAO supported with fodder, vaccination etc in flood 2020. Keep 10% of the total medicine and vaccine to use in disaster.
<i>ACI Agro Limited</i>
<ul style="list-style-type: none"> ▪ No such fund/allocation as such, could think of as part of their CSR activities
<i>International Development Enterprise (IDE)</i>
<ul style="list-style-type: none"> ▪ Working with local NGOs for accessing resource to improve the resilience of the vulnerable communities in the most vulnerable areas of the country
<i>Pragati Life Insurance</i>
<ul style="list-style-type: none"> ▪ Working with UNDP to come up with some insurance arrangement for the crops in flood prone areas

Summary of Case Study Findings

SUMMARY OF RESPONSES

- Could save lives and properties because of Cash Supports (BDT4500/Family) received from SUFAL. They did not have clue about the forecast and EA before SUFAL started working in the area.
- During the flood 2020 they were able to evacuate in time and relocate to the shelter with all their family members, with their elder and disable members since SUFAL arranged required facilities.
- Most important, for them, was the supports they received for their livestock – relocation, shelter, fodder and vaccination.
- While they lived in the shelters they felt better because they had better facilities in regard to space for the family, toilet, bathroom facilities, light and security arrangement.
- Some NGOs, UP arranged dry food, drinking water, water purification tablets for the families.
- Supply of sanitary napkins was really new for them and they found it extremely helpful.
- The participants suggested for specific space for children and pregnant, lactating mother in particular.
- They also requested for making strong communication with UP and their regular supports in any disaster so that they could live as their own.

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