# RESILIENT COMMUNITIES ACTING EARLY TO MITIGATE EFFECTS OF 2020-21 MONSOON FLOODS IN BANGLADESH: STORIES FROM THE FRONTLINE

## Supporting Flood Forecast-based Action and Learning (SUFAL) in Bangladesh

March 2022

# Foreword

We are pleased to present "Resilient Communities Acting Early to Mitigate Effects of 2020-21 Monsoon Floods in Bangladesh: Stories from The Frontline", which is published by Supporting Flood Forecast-based Action and Learning (SUFAL) Consortium managed by CARE Deutschland e.V . The first phase of the SUFAL project was between August 2019 to June 2021 and the current second phase takes place between July 2021 and December 2022. The consortium is led by CARE Bangladesh and includes partners Concern Worldwide, Islamic Relief Bangladesh (first phase), Oxford Policy Management (second phase) and the Regional Integrated Multi-Hazard Early Warning System (RIMES); and financially supported by European Civil Protection and Humanitarian Aid Operations (ECHO) and Aktion Deutschland Hilft (ADH).

Being a land of many rivers, Bangladesh is prone to floods in the monsoon seasons. Over the years, the frequency and intensity of floods are increasing, which is devastating to the lives and livelihoods of communities. From a disaster response perspective, Bangladesh now has more options available for preparing in advance through anticipatory actions to lessen the adversity faced by communities as a result of a disaster. SUFAL aims to strengthen the anticipatory capabilities and resilience of communities by implementing Forecast-based Early Action (FbA). In the case of SUFAL, anticipatory actions taken under the FbA approach improved    governments' ability to rapidly respond to monsoon floods and reduce the impact of the

flood on vulnerable communities, improve the effectiveness of emergency preparedness, response, and recovery efforts, and reduce the humanitarian burden.

This publication on "Resilient Communities Acting Early to Mitigate Effects of 2020-21 Monsoon Floods in Bangladesh: Stories from The Frontline" is aptly timed. This publication aims to portray real stories of communities acting early in order to protect their lives, assets, and livelihoods. It also provides insight into how the government's capacity to tackle the impact of the monsoon flood was increased.

We sincerely thank  the Government of Bangladesh, particularly the Ministry of Disaster Management and Relief (MoDMR) for taking this amazing step in reflecting FbA in the strategic guiding document – Standing Orders on Disasters (SOD 2019). We thank them for creating the space for all actors to come together and work in partnership. We thank the local government administration and Disaster Management Committees (DMCs) in Kurigram, Gaibandha and Jamalpur for their leadership in taking early actions even if not yet in guidance and protocols. We thank Department of Disaster Management and Relief (DDM) and Flood Forecasting and Warning Center (FFWC) for working so closely with us in every step of the way in advising, guiding and raising issues on FbA locally and globally. And we thank the communities for welcoming us and working with us, side by side.

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# About SUFAL

In Bangladesh, floods have strongly increased in both frequency and intensity over the past years due to rapid climate change and human intervention. Each year, monsoon floods cause huge damage to lives, assets, and livelihoods, especially to the north-western part of Bangladesh. This seasonal phenomenon threatens community resilience, risks pushing more people into poverty, and puts a greater strain on humanitarian emergency response efforts. Despite these challenges, there are solutions to reduce the impact of these disasters and create long-term resilience of communities and the capacity of local governments to deal with future disasters. When provided with the necessary flood forecasts and early warning systems, communities and governments are empowered to act quickly on flood forecasts and take early actions that can save livelihoods and build long-term community resilience.

This is why Supporting Flood Forecast-based Action and Learning (SUFAL) project in Bangladesh works on community forecast-based early actions (FbA) in the most flood-prone districts of north-west Bangladesh; Kurigram, Gaibandha, and Jamalpur. These districts are susceptible to floods and in some years, these districts are affected by recurring floods in the same year. Similarly, in the second and current phase of the project, the work continues by delving deeper into community-based FbA by working even more closely with vulnerable communities while expanding to key sectors such as agriculture, livestock, water, sanitation and hygiene.

The impact of FbA through SUFAL - as observed in the 2020-21 monsoon - is twofold. First, community resilience has strengthened because improved access to early warning information has allowed the community to take early actions to save their crops, livestock, and household assets. Second, with a lead time of 15 days, the impact-based flood forecasting and early warning system allowed the local government disaster management institutions to better coordinate the resources at the union, upazila and district levels prior to floods occurring, thus strengthening their anticipatory capacity.

The systematic and step-by-step process for allocating resources and taking early actions based on forecasts is not yet in place in Bangladesh. Based on the outputs of the project and learning from the pilot, SUFAL will continue to support the Government of Bangladesh in developing guidelines, harmo-

The project 'Supporting Forecast-based Action and Learning in Bangladesh' (SUFAL) is implemented in a consortium led by CARE with Concern Worldwide, Islamic Relief Bangladesh (first phase only), Oxford Policy Management (second phase only) , technical partner Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) and financially supported by the European Union Civil Protection, Humanitarian Aid Operations (ECHO) and Aktion Deutschland Hilft (ADH). SUFAL has been active since September 2019 and is currently in its second phase of implementation since July 2022. The project focuses on building capacity of government, local disaster management committees (DMCs) and communities; and also generating evidence and learning to strengthen governance systems and increase financing for Anticipatory Action.

In its first phase, SUFAL worked with Government of Bangladesh's Department of Disaster Management (DDM), Disaster Management Committees (DMCs) at district and local levels, and the Flood Forecasting and Warning Center (FFWC) to set triggers and identify appropriate early actions to reduce potential impacts of anticipated monsoon floods on vulnerable communities along the Jamuna River. SUFAL Consortium which also included Islamic Relief Bangladesh and Assistance for Social Organization & Development (ASOD) worked closely with DMCs to implement FbA in the 2020 monsoon season, and shared the learning with the Taskforce on FbF/A which is responsible for development of strategies and protocols for FbA at the national level.

In the current second phase, SUFAL Consortium continues to work with the Government of Bangladesh to develop a process for Impact-based Forecasting, strengthen access to localized flood early warning with extended lead times, explore and test wider range of early actions, examine how anticipatory actions can relate to Shock Responsive Social Protection (SRSP), and support the development of protocols and guidelines for financing with the Taskforce on FbF/A and humanitarian actors.

nized standard operating procedures and financing mechanisms to further strengthen the government's anticipatory and response efforts to monsoon floods.

Throughout the whole process, SUFAL worked closely with local government institutions, Disaster Management Committees and Flood Forecasting and Warning Centre in an effort to strengthen the governance for FbA. At every step, SUFAL ensured community perspectives and needs were strongly considered, for example consultations with communities were organized when updating danger levels for flood forecasting by the Flood Forecasting and Warning Centre (FFWC) and Bangladesh Water Development Board (BWDB). Most importantly, community perspectives were captured and are reflected in identifying early actions piloted in the 2020 and 2021 monsoon seasons.

*SUFAL working area (August 2019-June 2021)*

**District:** Gaibandha
**Upazilla:** Saghata, Phulchari
**Unions:** Varotkhali, Saghata, Ghuridah, Holdia, Jumarbari, Gazaria

**District:** Kurigram
**Upazilla:** Ulipur, Chilmari
**Unions:** Hatia, Buraburi, Begumgonj, Shaheber Alga, Ranigonj, Thanahat

**District:** Jamalpur
**Upazilla:** Islampur
**Unions:** Kulkandi, Chinaduli, Noarpara, Shapdari
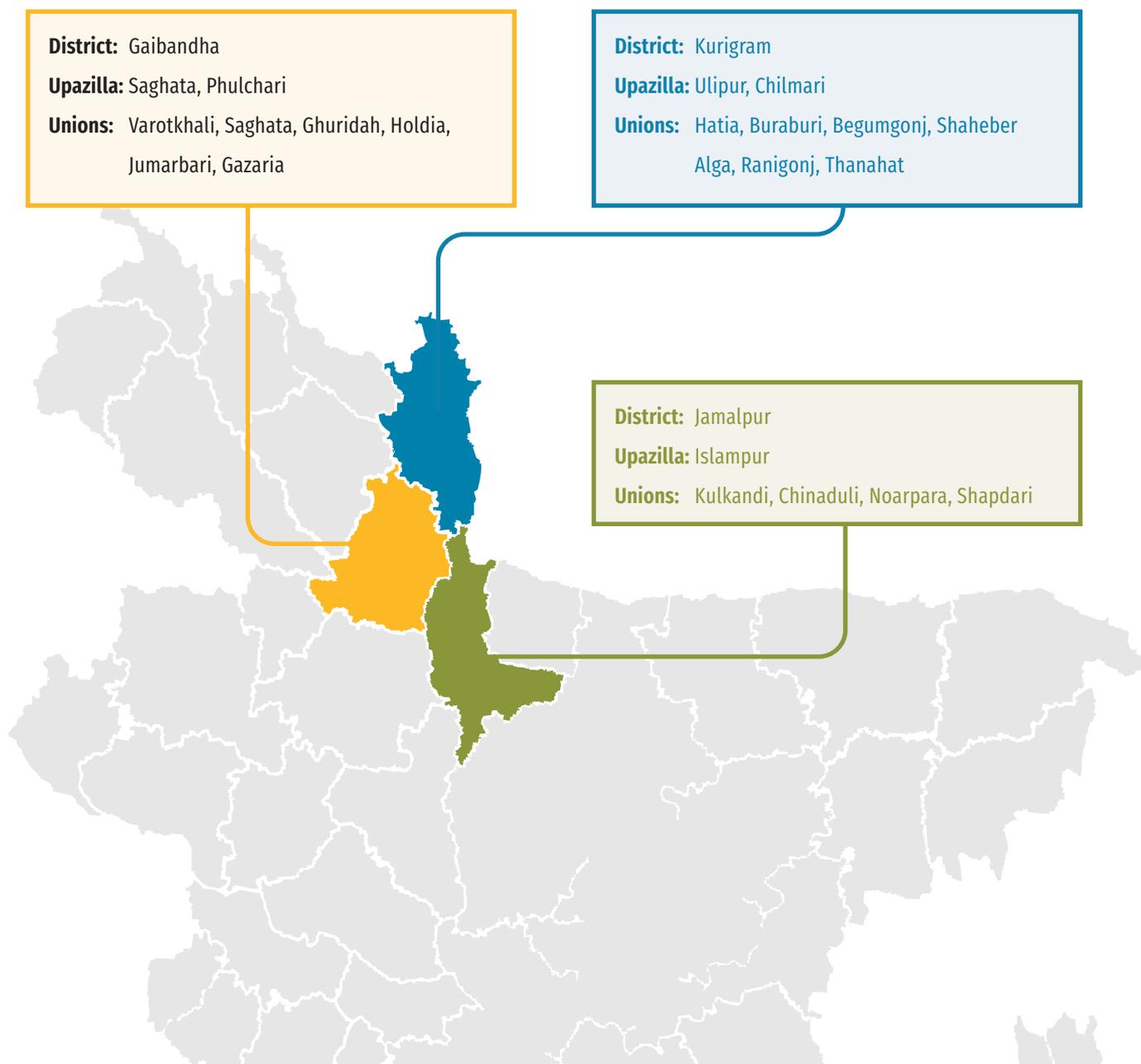
# Forecast- based Early Action (FbA)

Forecast based early action (FbA) entails prioritizing pre-determined actions based on forecasts and triggers and taking action in advance of an anticipated event. It ensures that the community is acting early based on forecasts to reduce loss of life and damage to assets and livelihoods.

With the aim of giving additional lead time, the project piloted a flood forecast based early action mechanism encompassing set of actions with triggers to strengthen the capacity of Disaster Management Committees (DMCs) to act accordingly, like mobilizing resources, to serve a larger community, be it a ward or a village. FbA allows government and humanitarian actors to take systematic step by step anticipatory early actions ahead of a disaster to mitigate disaster impact. In a country like Bangla-desh, where resources are limited and a large number of people live below the poverty line, it is necessary to utilize the limited resources efficiently and effectively to minimize the probable disaster impact. FBA emphasizes on taking early action strategically and carefully by considering resource limitation, whether it is human resource or financial resource.

Going forward, SUFAL will be exploring different sector specific early actions in sectors such as public health, WASH and agriculture. As the 15 days' forecast used in SUFAL was evidently successful in giving communities more time for early action, the project will explore other forecasting products to take preparatory action even before that such as a monthly outlook.

## CORE COMPONENTS OF FORECAST-BASED ACTION (FBA)

### FORECAST AND WARNING

Flood Forecasting and Warning Centre (FFWC) under the Bangladesh Water Development Board (BWDB) is the focal point on flood forecast and warning that produces three types of flood forecasts: 5-day deterministic forecasts; 10-day probabilistic forecasts; and, a 15-day basin forecast developed through USAID-funded project SHOUHARDO with RIMES and CARE and which is not yet widely used. SUFAL used all three types of flood forecast products to determine when and what kind of actions to take and to provide communities with enough time for preparation.
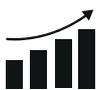
### TRIGGERS

SUFAL uses its own FbA matrix that relates actions with different forecast parameters where different scenarios in the FbA matrix are triggers for different actions. The 2-trigger mechanism ensures sufficient time has been given for community-level early actions. The first level of triggers set off community-focused preparedness actions such as preparation of shelters and evacuation points and maintenance of access roads and embankments etc. The second level of triggers set off early actions which are higher value and focused on support to most vulnerable households, such as distribution of multipurpose cash grants for early action. This mechanism has been tested in the 2020 monsoons by SUFAL for acting prior to the floods.

### EARLY ACTION

Early actions come in numerous forms. Early action varies based on risk faced by targeted communities, sector, and probable impact of disaster. Some significant early action measures undertaken by SUFAL with the Disaster Management Committees (DMCs), include preparing & renovating shelter, providing temporary shelter, repairing & installing tube wells and toilets, repairing roads and embankments for uninterrupted communication, along with early warning dissemination and evacuation.

### FUNDING MECHANISM

There is not yet dedicated funding in Bangladesh for early actions nor are there specific laws and guidelines regarding early action in place. Even though there are some preparatory activities which are taken by government, actions are still focused on response and relief efforts after a disaster has occurred. During the 2020 monsoon, SUFAL focused on early actions which could be taken by Disaster Management Committees (DMCs) with resources and funds available to local government administrations at district and sub-district levels, and potentially the Department of Disaster Management. Early action may seem very traditional in nature, such as evacuation and shelter support, however the aim was to demonstrate how limited resources can be used to reach a large number of people in remote, hard-to-reach areas with information to enable implementation of early actions in a systematic manner and support to lessen humanitarian needs during and immediately following a disaster.

# Community-based approach to Forecast-based Early Action (FbA)

By keeping a community's needs and priorities at the heart of FbA, early actions are identified, designed and implemented in a manner which is effective and results in stronger ownership in the long run. Community- based early actions acknowledge the existing capacity of a community and local structures, emphasizes how the community can efficiently utilize those in a timely manner to reduce potential effects to an anticipated disaster.

SUFAL is a community-based project that focuses on reducing the impact of probable floods by taking early actions. The actions are derived from the community, based on their yearly experience of floods and the activities they felt were needed to deal with it. Community- based early action creates a notion of ownership among the community to act in advance with their own capacity. The project involved itself with the community, through study and collaborative meetings with community people. SUFAL established a group of potential early actions that can be taken at different scales of floods. Community-based early action provided an opportunity to become self-sufficient with the knowledge of available resources and the way to utilize those. By realizing the importance of taking action prior to a flood, community people prepared themselves accordingly.

## SUFAL IS SUPPORTING COMMUNITIES TO ACT EARLIER

» **Timely and accessible early warning helping to protect and empower communities to take better action.**

» **Cash transfers giving autonomy to recipients, allowing them to decide how to spend the transfer themselves.**

» **People empowered to act earlier by themselves leading to more resilient communities.**

» **Allowing communities to ensure accessibility by repair and maintenance of roads and creating alternative walkways.**

### Using boats and voice messages to increase access to flood forecasts and early warning messages in hard to reach areas.

Generating and disseminating flood early warnings to the grass-root levels, makes people in the hardest to reach areas aware of the anticipated floods in their vicinity. This is important because it allows them enough time to take precautions to protect their livelihoods. Fortunately, Bangladesh has established a functional flood early warning system and is being administered by the Flood Forecasting and Warning Centre (FFWC) under Bangladesh Water Development Board (BWDB). However, as flood forecasts are a technically advanced piece of information, the people who live in the community and who are likely to face the direct consequences, often do not receive and/or cannot understand the advice properly, therefore making it difficult for them to take early actions at the appropriate time. Thus, it remains a challenge for the poorest households to respond in a way that prevents losses of their livelihood and assets, pushing them further into poverty.

With technical support from The Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), SUFAL ensured flood early warning messages were dissemi-

nated in real-time to multiple stakeholder tiers, starting from the district administration right the way through to the households living in the hard-to-reach, riverine char areas. Early warning messages were disseminated using both traditional and new innovative modalities. For instance, announcements were made using loudspeakers from mosques and from hired vehicles that roamed around the key locations of the targeted Unions. Every ward of the Union were reached to ensure maximum coverage, targeting densely populated settlements. In addition to using auto rickshaws, bicycles and vans to carry out announcements, **SUFAL initiated loudspeaker announcements from boats, especially for char areas, as people living away from the mainland have lack of access to other forms of mass communication.** SUFAL also generated early warning voice messages which were sent to enlisted recipients from the community. The voice messages were recorded immediately after the flood forecast was issued, and were broadcasted to more than 8,000 mobile phone numbers, enlisted from union, upazilla and district levels. The messages were short in duration, recorded in Bangla and used simple language that could be easily understood by the community. The messages that were announced included the latest flood early warnings, suggested early actions that could be taken by individuals and COVID-19 advisory.

# Last mile dissemination of flood early warnings via mobile phone voice messages in Jamalpur district

## Fazlur Rahman and Selina Akter

**"The flood did happen as was warned by the voice messages, which is why we are thankful for the service... I was able to share it with my neighbors, especially the women who do not own mobile phones... and discussed flood updates with neighbors and encouraged them to move to the shelters."**

*– Fazlur Rahman*

Fazlur Rahman was one of the recipients of SUFAL voice messages. Before the floods occurred in 2020 monsoon, he was aware of the water levels rising as per the nearest gauge point, and he advised his family and neighbors to start shifting to a highland shelter with their belongings and cattle. He expressed his disbelief: "this was not possible in previous years. How can we possibly know that the flood is coming? But this time we could see that the messages were correct. The flood did happen as was warned by the voice messages, which is why we are thankful for the service." After he received the voice messages, he recorded them for future reference and also shared it with his neighbors, especially the women who do not own mobile phones.

**"Families living with elderly parents, in-laws and children should take notice of flood early warnings, so that they do not suffer during the flood."**

*- Selina Akter*

Selina Akter is a housewife living in Buraburi Union. For the last two years, her husband has been paralyzed and needs her support to run their catering business. Her family is facing financial losses in the business because of reduced social gatherings due to COVID-19 and floods.

Selina received SUFAL voice messages seven days prior to the flood and discussed it with her family, neighbors and relatives. She suggested some early actions to them which she heard from the voice messages. They stored dry food items, such as chira, muri (puffed rice), biscuits, water purifying tablets, oral saline, some vegetables, cooking fuel and children's clothes before the flood. Her neighbors have benefitted from her advice and are grateful to her for that.

In previous floods, many of the utensils and decorative clothes for Selina's family business got ruined in flood water. But this year, she stored these in a loft. She said that, "families living with elderly parents, in-laws and children should take notice of flood early warnings, so that they do not suffer during the flood." She also thinks that more people should be enlisted to receive these voice messages prior to the flood season because local level loudspeaker announcements do not reach every household in these villages.

SUFAL voice message recipients from the community and the local government administration highly appreciated the prompt dissemination of flood early warnings. They want to continue receiving such messages for future disasters. In addition to receiving voice calls, communities and local governments have suggested providing written messages in Bangla and an easy option to listen to the message on request. Recorded messages can also be shared to recipients so that they can listen to it at a time convenient to them.

## Unconditional cash transfers empowering communities to decide for themselves how to spend money to protect their livelihoods and resist financial shocks.

To safeguard vulnerable households from financial shocks, multipurpose cash grants (where the markets are functioning) sent directly to recipients via mobile money transfers provide flexibility and choice to the flood affected communities. It promotes the dignity of those in need and respects their autonomy as they are empowered to decide how to spend their transfer themselves. For instance, in contrast to in-kind assistance, people have a choice to buy food or non-food items. They may decide to use the transfer to make immediate investments in their livelihoods such as in agriculture, livestock and small businesses. Many households in the flood prone areas may decide to use the money to facilitate their early actions. In all cases the transfers have a secondary impact beyond the household level by injecting cash into local markets and thus supporting local businesses which leads to enhanced community resilience.

SUFAL project distributed multipurpose cash grants of BDT 4,500 among 370 of the most vulnerable households in Gaibandha and Jamalpur Districts prior to the second flood wave. The cash support aimed at supporting their immediate needs and to facilitate their preparations for the flood. With the cash grant, 90% of households purchased food, 62% spent it on their healthcare and 49% took early actions for the flood.

# Multipurpose cash grants in Gaibandha district supporting communities to make their own choices to improve their resilience to shocks

## Abdul Kuddus and Mariam Khatun

**"Without the cash support I would have likely had to take more loans on top of my existing debt at a higher interest rate and bear the loan burden"**

*– Abdul Kuddus*

Abdul Kuddus used to work in Dhaka as a day laborer in a construction site, but due to COVID-19 he lost his job and returned to his village in Holdia Union, Saghata upazilla, Gaibandha. He is suffering from chronic pain caused by worksite injury, but cannot afford treatment. Prior to the second wave of flood, he received BDT 4,500 from SUFAL via bKash (a mobile money transfer service) and rented a boat for shifting to a highland. Then he bought temporary shelter materials, such as tarpaulin, ropes, a stove and some dry food. With the remaining money, he wants to receive treatment for his pain. He believes that, without the cash support he would likely have to take more loans on top of his existing debt at a higher interest rate and bear the loan burden.

**"After receiving BDT 4,500 from SUFAL my family could immediately move to a relative's house by hiring a boat"**

*- Mariam Katun*

Mariam Khatun's husband is an auto rickshaw driver and raises a family of six members. Due to COVID-19 his daily income has been irregular for several months. The family received BDT 4,500 from SUFAL, with which the family could immediately move to a relative's house by hiring a boat, bought fodder for the cows and dry food for the children.

# Adapting early action support to meet needs of communities in remote riverine island (char) in Kurigram

## Siddik Ali Mondal

*"The relief support needed for char areas is different from that for the mainland, and do not add much value unless urgently provided. By providing the information on flood early warning and providing prompt cash support, the loss of lives and livelihood can be reduced significantly"*

*– Siddik Akli Mondal*



In Kurigram district, Shaheber Alga Union comprises of 39 different char areas, therefore every year hundreds of households face inundation and displacement due to floods. Floods increase the suffering of the people living in chars manyfold, as they lose their houses and assets repeatedly almost every year.

Shaheber Alga Union Parishad Chairman, Siddik Ali Mondal, shared, "Shaheber Alga is extremely vulnerable to flood, as Brahmaputra river enters from this region, making it the first target for large scale inundation. People assume that we cannot predict when the flood will happen. Therefore, it is a continuous struggle for poor people. Now that it can be predicted by forecasts, the suffering will hopefully reduce." Siddik Ali Mondal continues to explain how "the relief support needed for char areas are different from that for the mainland, and do not add much value unless urgently provided. By providing the information on flood early warning and providing prompt support, the loss of lives and livelihoods can be reduced significantly."

SUFAL supported the people in Shaheber Alga with a novel initiative to address immediate needs of people living in the char areas. Instead of the usual food packages from the government, SUFAL supported dissemination of flood forecast information and cash support which was much more useful to the communities. Flood forecasts allowed communities to take preparations for upcoming floods. Multi-Purpose Cash Grants (MPCG) an Cash for Work (CfW) provided vital income before and during the flood, so that people could buy their basic necessities at a time when it was impossible for farmers and vegetable producers to go to the markets to sell their produce at a reasonable price because of severely damaged roads in the chars. In addition, temporary shelter packages were found to be most useful considering the few buildings and infrastructure nearby which can provide shelter to displaced families.

Such initiatives were appreciated by the local government and they suggested to scale up such efforts in other char areas.

## Access to markets and other essential services against impending monsoon shocks by keeping uninterrupted road travel possible in low-lying areas

Every year the floods damage many of the roads, embankments and walkways in low lying regions of Bangladesh. The villagers living in the flood prone, low lying areas go through a daily struggle to commute for basic needs during the monsoon flood season. Flood water inundates the main roads and walkways that connect the locality to the markets, schools, hospitals and other establishments. Due to the damaged roads and walkways, the villagers have to cross inundated locations by swimming or by boat in order to perform daily activities and trade. For longer distances, they have to spend additional time and resources changing their route on a daily basis. Therefore, households depending on income from selling their harvest, vegetables, fruits and poultry at the local markets often face financial shocks during the floods. Repairing minor damages in roads and walkways prior to floods can prevent or delay any potential major damages and breaches in embankments. Thus, also prevent further inunda-

tion in adjacent households and even villages.

With co-financing from the Union District Management Committees (UDMCs), SUFAL has executed minor repair work of the damage to roads and embankments in targeted Unions. Suitable locations for building temporary walkways and road repair work were also identified immediately after receiving the flood early warning on 21st June 2020 in consultation with the UDMC members and community people. With the cash for work scheme, the community could meet their basic needs and could carry out daily uninterrupted road travel in the local area.

To ensure mobility of the flood-affected people in the most vulnerable locations, SUFAL project has supported repair of minor damages of the embankments, roads and evacuation routes. In "Phase 1", ahead of anticipated floods, the weak points that needed repair were identified through discussions with UDMCs. The project has provided cash for work at the local communities, whereas UDMCs provided building materials, such as sand bags and transportation of sand to reinforce damaged roads and embankments.

# Timely repairs of roads and embankments in Jamalpur through Cash for Work (CfW) schemes after receiving flood forecasts

Ali

**"This year the impact of flood in Kulkandi Union has been less severe compared to previous floods, as a result of timely repair of the embankment…we repaired the road just before the flood water could enter this area. This is a connecting road and the only way to go to Islampur Sadar. If we could have started this repair work 5 or 7 days earlier, we could have stopped flood water entering this area entirely."**



*– Ali*

Kulkandi - Muradabad embankment had some noteworthy vulnerable points which required minor repair to sustain the flood season. In consultation with the disaster management committee, SUFAL identified that unless the embankment was repaired before the flood, the embankment would be further damaged by the flood water and would inundate a large number of households and crop fields in the nearby Unions of Islampur Upazilla.

SUFAL initiated the repair work immediately after receiving the flood forecast and executed the venture by involving local community people through cash for work schemes. It took around 960 man-days and an estimated BDT 290,000 (~3419 USD), which was co-financed by Kulkandi Disaster Management Committee. Community people extended their active support to the repair work and also supervised the work voluntarily. According to the community, the impact of the flood in Kulkandi Union has been less severe compared to floods in previous seasons, as a result of timely repair of the embankment.

SUFAL also coordinated repair of a main road in Noarpara that connects the entire village to the village market prior to the flood. Ali, who participated in the cash for work scheme, said that, "we repaired the road just before the flood water could enter this area. This is a connecting road and the only way to go to Islampur Sadar. If we could have started this repair work 5 or 7 days earlier, we could have stopped flood water entering this area entirely."

# Temporary user-friendly bamboo walkway built in Kurigram to allow easy access across villages

## Villagers

**"The shako (temporary walkway) was necessary for us during the floods. But now we want a permanent bridge over these flood damaged roads so that we do not have to suffer every year."**

*– A Villager*

During the summer 2020 floods, the roads in Buraburi Union were inundated up to knee height, and remained under water for almost two months. Without access to these roads during floods, it is typical for community people to commute by boats and banana rafts. The traditional and most common forms of bamboo walkways, commonly known as shako, are built on a narrow structure, supported by a few bamboos on the base to make connected roads in the inundated areas. These usually pose a risk of injury for children, pregnant women, elderly people, and those who have sickness or any kind of physical disability.

Instead of traditional walkways or shako, SUFAL project built a user-friendly temporary bamboo walkway that was wide enough for two passers-by to easily walk alongside each other. To ensure enough support for women and children, railings were fitted on each side of the walkway at two different heights. Drum rafts were also built at flood inundated areas to provide easy travel access for the flood-affected people.

For over a month, more than a thousand people used the essential walkway to carry goods, heavy bags and drive bicycles, motor cycles and cattle. After the flood water receded, the villagers were able to once again use the roads to get to the other side of the village. Even after the flood, the bamboo walkway served the community to meet their immediate needs. Bamboos were used for building back their damaged households and livelihoods. Loose bamboos were taken and used to make fishing nets, fences for vegetable gardening, cooking fuel, household and kitchen shelves, macha (lofts) and support pillars for the households. Some households even built cattle sheds with the bamboos or constructed bamboo platforms to preserve fodder and keep it dry from flood water. **The bamboo walkway has left a longer term impact on livelihoods by providing an easily accessible source of materials for making hand-made tools for agricultural work and fisheries.**

The villagers have said, "the shako (temporary walkway) was necessary for us during the floods. But now we want a permanent bridge over these flood damaged roads so that we do not have to suffer every year." As a way forward, a Union member suggested instigating a local level committee, that will be responsible for looking after such initiatives, and who will immediately inform the project focal person in case there is any incident related to the walkway. The people living in the nearby households could supervise such structures on a daily basis, ensuring community ownership of the walkway.

## SUFAL provides boat support for voluntary evacuation.

For the households at risk of inundation and who are willing to evacuate upon receiving the flood early warnings, SUFAL has provided boats prior to the floods, in coordination with disaster management committees. As boats are not easily available and are relatively expensive to hire before and during floods, this timely support was highly appreciated by the community and the local administration. Around 80 boats operated during the week before the anticipated flood, evacuating around 10,300 people to the highlands, embankments, shelters or other safe places with their families, valuable assets and livestock.

# Boats helping people to safely find a shelter

## Afroza Begum

**"If we had not received the boat support at that right moment, my family would have had to live in the flood water by setting up a high platform under the ceiling. It was a huge support that we could shift to a dry place."**

*– Afroza Begum*

Afroza Begum is married to a fisherman in Chinaduli Union, Islampur upazilla, Jamalpur. She has a 5-year old son. When her village started to get inundated with flood water, she did not know how to acquire a boat in this crisis. Water quickly rose to 4 feet within her house, leaving them with no other alternative than to move to a shelter. Her husband heard a loudspeaker announcement at the market stating that SUFAL was providing boats free of charge so that people could safely find a shelter.

During community level consultations and meetings with the Disaster Management Committees, it was realized that, although they perform urgent search and rescue activities in hard-to-reach areas within the Union, there was not enough search and rescue equipment at the disposal of the Union Parishad. Resources such as torch lights, whistles, inflatable swim tubes are essential for the rescue teams. Also, patients, pregnant women and elderly people cannot ride the boat on their own, so they need stretchers for carrying them onboard. However, there is a shortage of such equipment at the Union Parishad, thereby search and rescue efforts are hampered, putting many people's lives at risk during flood season. In coordination with UDMC, SUFAL handed over a search and rescue kit to selected Union Parishad authorities.

Afroza's family opted for the evacuation boat support and shifted to an embankment with their utensils, stove and clothes. They received a tarpaulin to construct a temporary tent for the family. If they had not received the boat support at that right moment, the family would have had to live in the flood water by setting up a high platform under the ceiling, or by lifting the bed up above the water. Moreover, boats are not easily available for evacuation, and it is relatively expensive for a poor family. Many families used the boats provided to shift livestock such as cows and goats to safer locations, which for a typical poor family are considered as valuable livelihood assets. Afroza says that, "it was a huge support, we could shift to a dry place. Next time when the flood comes, I want to shift to a safer place a few days before the flood, so that there is no tension or fear of not finding a suitable place to live."

## FORECAST-BASED EARLY ACTION (FBA) SAVING LIVES, PROTECTING ASSETS AND LIVELIHOODS

» **Ensuring better facilities in shelter centre**

» **Providing WASH facilities to meet personal hygiene needs**

» **Protecting assets and livelihoods against the impending shock**

**SUFAL supports preparation of habitable shelters for displaced households following Early Warnings.**

Local disaster management committees (DMCs) are responsible for establishing and supervising flood shelters and other evacuation points in the project areas. There were identified buildings - usually schools - which serve as shelters during floods, however these buildings required renovation and maintenance work to create a habitable accommodation for displaced households prior to 2020 monsoon flood waves. The DMCs deemed the infrastructure of a number of identified shelters, including the roofs, doors, windows, latches, water pipe lines, electricity connections, fans, light bulbs, sanitary latrines and tube wells to be damaged or non-functional.

In coordination with disaster management committees, **SUFAL prepared a total of 13 shelters and 10 cattle sheds in the targeted Unions. This has benefitted around 1,826 people in the first wave and 2,290 people in the second wave of the** flood. A total of 102 latrines and 45 tube wells were installed and repaired for the shelter residents. SUFAL also supported preparation of COVID-19 secure shelter space, ensuring people had designated spaces for praying and keeping their cattle, access to protective masks and availability of isolation rooms for symptomatic patients.

Where there were no earmarked flood shelters for displaced households, for instance in the riverine islands and villages adjacent to the riverbanks, **SUFAL handed over temporary shelter materials to DMCs to support 450 of the poorest and displaced households.** This supported the poorest households who, due to the sudden demand for temporary shelter, could not afford to purchase the materials from local markets themselves. SUFAL enabled those households living in hard to reach riverine locations to access tarpaulins, bamboos and ropes so they could build shelter and avoid being pushed deeper into poverty as a consequence of the floods.

# Renovating shelters in Kurigram for safe and secure accommodation

## Rina Begum



"In other shelters, more than 10 families live in the same room… but thankfully this year we are in a much better condition, I am sharing the room with another small family. Although we have lost everything, we can at least stay here for now, we have a roof over our head."

– Rina Begum

Rina Begum is married to a farmer and has five children. At the start of the 2020 monsoon season, she lost her household due to riverbank erosion and took refuge with her family in a shelter at Fokirer Char, Begumgonj Union, Ulipur Upazilla in Kurigram. Before they arrived at the shelter, there was no tin roof on the building, and the toilets and water supply were not functional. It was not habitable for the people who had gathered there for shelter. Residents living around the shelter informed the Union administration about the urgent needs and requested assistance for repairs. In coordination with the Union Disaster Management Committee (UDMC), SUFAL project inspected the infrastructure and WASH facilities at the flood shelters in the targeted Unions and confirmed the need for renovations before the anticipated floods.

After receiving the flood forecasts which triggered early actions on 21st June 2020, SUFAL team in Kurigram initiated the procurement of local vendors for the repair work and immediately started to renovate the flood shelter at Fokirer Char. Within two days the roofs were repaired with new tins, doors and latches were replaced; and a cattle shed was built with bamboo and tin shed, so that people could keep their cattle at a safe and designated place. If the sheds were not available the cattle would have been at increased risk of being carried away by the floods, stolen or owners would have been forced to sell them at a lower price. Saving this productive asset contributed greatly to retaining the community. As the shelter was now safe and secure for the people living there, more families started to shift to the shelter just before the flood situation worsened towards the end of June 2020. Personal Protective Equipment (PPE) kits were also distributed among the residents, including masks, gloves, hand sanitizers and soaps to minimize the risk of COVID-19 transmission.

Rina shared, "in other shelters, more than 10 families live in the same room. And as there are not enough toilets and tube wells, there is chaos about using the toilets or tube wells. But thankfully we are in a much better condition, I am sharing the room with another small family. Although we have lost everything, we can at least stay here for now, we have a roof over our head. Nobody has to openly defecate here, which was very common in other shelters last year."

# Providing safe WASH facilities and meeting women's personal hygiene needs at a highland shelter in Kurigram

## Mosammat Sakina Begum

**"The tube wells provided safe water for drinking, cooking, washing and personal hygiene… we collected water from the tube wells and stored in buckets and drums for daily chores."**

*– Mosammat Sakina Begum*

Mosammat Sakina Begum is a widow, her adolescent son is studying in Madrasa. She works as an agricultural day laborer and used to live in Bepari Para. But due to river erosion, she was displaced during the summer 2020 monsoon flood and took shelter at a highland in Miaji Para, Begumgonj.

Around 200 households from nearby villages also took refuge at this shelter point. Around four households could be accommodated with one temporary shelter kit, along with their belongings and cattle. But there was not enough toilets and water supply facilities for the temporary residents. Sakina and other women at the shelter used to wait for sunset before they could go for open defecation. During floods, the lack of access to water and sanitation makes it extremely challenging and embarrassing for women to maintain proper hygiene. Sakina also shared how women couldn't find enough clean menstruation cloths and added that, it gets really difficult to wash and dry the used cloths during the flood and heavy rain.

**SUFAL project responded by providing additional sanitary toilets, menstruation cloths and tube wells at this highland shelter point to cater to the basic needs of the shelter residents.** Separate toilets were marked for men and women.

The toilets had functioning doors, latches and bulbs so that they could be used safely. Women and children could comfortably use the toilet at any hour without hesitation or safety concerns. Soaps were also provided so that handwashing was practiced among the shelter residents amidst COVID-19. Torch lights, candles and match boxes were distributed to ensure safety in the dark. Clean menstruation cloths were provided to women staying at the shelter prior to floods so they could maintain menstrual hygiene properly.

The tube wells provided safe water for drinking, cooking, washing and personal hygiene. Mosammat Sakina Begum along with another resident at the shelter called Mosammat Kobijan Begum, shared how they collected water from the tube wells and stored in buckets and drums for daily chores. They used the sedimentation technique to filter out iron from the water through clean sandbags. This was important to prevent the iron invested water from damaging clothes, irritating skin and spoiling the taste of cooked food.

# Protecting livestock by providing cattle sheds at a highland shelter in Gaibandha

## Shahjahan Mondol

**"Cows are the main source of income for many of us, but during the flood it becomes very difficult to keep the cows safe from illness. Last year, I faced a huge loss due to the death of my cows. This time, we really benefitted from the cattle shed, we are really grateful to SUFAL project."**

*– Shahjahan Mondol*



During the summer 2020 floods, Shahjahan Mondol and others from more than 200 households came to take temporary shelter in the highland area Char Kanalpara, Holdia Union, Saghata Upazila in Gaibandha. The government  prepared the highland by building a new *asroyon prokolpo* (shelter project), but there were no current facilities available for the shelter residents. Most households had brought with them their cattle, an estimated 400 cows, to the shelter. Shahjahan described their situation saying that, "we had come here, right before the flood and we brought along with us everything that we could carry. Within a few days we had managed to build houses and temporary tents for ourselves, and were keeping our cows under the same roof."

SUFAL project was implemented in Gaibandha by Concern Worldwide and local partner ASOD (Assistance for Social Organization and Development). Before the monsoon, they visited potential shelters and identified needs to make the spaces more habitable for displaced households. Establishing a cattle shed at the shelter was needed to ensure accommodation and protection for their cattle. In coordination with the Union Disaster Management Committee (UDMC), SUFAL provided the tarpaulins, bamboos, ropes and other materials for the cattle shed. In addition, patrols were arranged by the local administration, police and volunteers to ensure security of cattle at night. The administration of Saghata Upazila reported that no cattle were stolen during the 2020 flood.

In the heavy rain and sun, people were relieved that their cattle could stay at a designated place under the shed. There was enough safety and security for the cattle, and everyone was assured their cattle would not be stolen or displaced. As Shahjahan and his family mentioned, "Cows are the main source of income for many of us, but during the flood it becomes very difficult to keep the cows safe from illness. Last year, I faced a huge loss due to the death of my cows. This time, we really benefitted from the cattle shed, we are really grateful to SUFAL project and ASOD."

Providing the cattle shed was appreciated as a timely initiative. It ensured dignity for the people staying at the shelters as they did not have to stay beside their cattle, while ensuring safety for their livestock at a designated place.

## SUFAL improves access to safe accommodation by distributing temporary shelters to families and communities.

In the flood prone areas, permanent shelters and establishments do not sustain for a long time due to repeated floods and riverbank erosions. In such areas, it takes several months for the displaced people to find a new place to live after losing all they had. SUFAL distributed two types of temporary shelters – family shelters and community shelters. Community shelters can accommodate four households. Materials for building temporary shelters, including bamboo, tarpaulins, ropes were handed over to the Disaster Management Committees for distributing according to the community need. **190 temporary family shelters and 65 community shelters were distributed by SUFAL, benefitting around 450 households.**

# Providing shelter from the flood to communities in Kurigram

## Okil Uddin and Shaheba Khatun

*"I hope you will continue to support us, the needy people; that is what we expect in the future."*

*– Md. Oki Uddin*

*"It is God's blessing that we received this tent in our crisis moment, otherwise what would have happened to us in this flood and heavy rain?"*

*- Shaheba Kurigram*



Md. Okil Uddin is an elderly farmer from Matther Dag village in Shaheber Alga Union, Ulipur, Kurigram. During the first flood wave, his ancestral house was washed away due to riverbank erosion. He came to a highland shelter in Jahajer Alga village with his family of seven members and stayed there for more than a month. He had no other place to go.

Shaheba Khatun also lost her house and in the heavy rainfall, her family was struggling to find a place to stay overnight. She came to the same shelter with her family, assets and cows. It was a daunting experience as she did not know anybody in this new village.

SUFAL distributed temporary community shelters in Jahajer Alga village of Shaheber Alga Union. The temporary community shelters were big enough to accommodate four households with their belongings and cattle. SUFAL also provided them with torch lights, candles, match boxes and oral saline packets for their health and safety. The households prepared portable stoves for cooking, put up curtains to ensure their privacy, and fences around the tent to safeguard children. Around 20 people lived safely and comfortably under the tent during the flood.

Shaheba expressed her gratitude saying, "it is God's blessing that we received this tent in our crisis moment, otherwise what would have happened to us in this flood and heavy rain?" Md. Okil also added that, "I hope you will continue to support us, the needy people; that is what we expect in the future."

The temporary shelters can be shifted to anywhere according to the current flood situation, which will continue to support these households until they manage to build their own accommodation.

## INCREASING ANTICIPATORY CAPACITY OF GOVERNMENTS

» **Offsetting disaster impacts**

» **Prepositioning to ensure timely humanitarian assistance to those most in need**

» **Saving money and cost effective for communities as well as humanitarian response and resources**

» **Less people relying on emergency assistance**

### SUFAL planning and coordinating early actions with Disaster Management Committees and providing support for better search and rescue operations.

During consultative meetings with the Disaster Management Committees (DMCs), it was realized that, although their volunteers perform urgent search and rescue activities in hard-to-reach areas, there is a shortage of search and rescue equipment at the disposal of the Union Parishad.  Therefore, search and rescue efforts are hampered, putting many people's lives at risk during flood season. Boats are not easily available for the households at risk of inundation or for those who are willing to evacuate upon receiving the flood early warnings.  These boats are also relatively expensive to hire before and during

floods. As a result, families (especially those in poorer households) struggle to find a shelter and face loss of household assets every year.

SUFAL has handed over search and rescue kits to the Union Disaster Management Committees (UDMCs) of Holdia, Varotkhali, Saghata and Ghuridah of Saghata Upazila in Gaibandha district and has arranged 80 boats for voluntary evacuation in the targeted Unions before the anticipated flood. Approximately 10,300 people were safely evacuated to the highlands, embankments, shelters or other safer places with their families, valuable assets and livestock.

# Improved planning and coordination of early actions in Gaibandha district

## Chairmen of Union Disaster Management Committees (UDMCs) of Holdia, Varotkhali, Saghata and Ghuridah

"With the help from SUFAL project we identified some early actions which may reduce the suffering of people during flood… These early actions reduced the losses and damages compared to last year."

*– Md. Abul Kalam Azad, Chairman of Ghuridah UP*

"This year we saw a different picture; we took some early actions before the upcoming flood with the help of SUFAL project. Working together with SUFAL project, we could reduce the losses of lives, assets and crop damage."

*– Md. Shamsul Azad Shitol, Chairman of Varotkhali UP*



Prior to SUFAL, Saghata upazilla Disaster Management Committee (UzDMC) in Gaibandha district primarily focused on rescue and relief efforts during floods, as they did not have enough information about the upcoming floods. Planning was done before floods and the resource mobilization took place as part of the flood response. On 21st June 2020, SUFAL project disseminated flood early warning voice messages and announcements in targeted Unions of Saghata Upazilla (Holdia, Varotkhali, Saghata and Ghuridah). The flood forecast mentioned that water levels would exceed its danger level on the 29th June, 2020 at Saghata Upazila. This instigated a series of Union Disaster Management Committee coordination meetings in Gaibandha district. After receiving this forecast, the Union Disaster Management Committees (UDMC) of Holdia, Varotkhali, Saghata and Ghuridah unions summoned their first emergency meeting on 22nd June 2020. Previously identified early actions were reviewed and plans for implementation agreed by the DMCs which would minimize impacts of the flood on vulnerable people. Based on the nature and timing of the anticipated flood, the Chairman of each Union prioritized the early actions for their respective union.

On 24th June, 2020, Saghata Upazilla DMC called for their second emergency meeting for the upcoming flood. In that meeting, the Chairmen of Saghata, Holdia, Ghuridah and Varotkhali Unions discussed their plan for early action. Mohiuddin Jahangir, Upazila Nirbahi Officer (UNO), of Saghata Upazila highly praised these early action plans prepared by UDMCs. The UNO or administrative officer endorsed the plans and requested SUFAL to work together with UDMCs in its implementation. Saghata Upazila Disaster Management Committee (UzDMC) also requested SUFAL project to support implementation of specific early actions such as preparation of flood shelters in targeted unions. SUFAL project attended the District Disaster Management Committee's third coordination meeting on 25th June 2020, where responsibilities for preparing flood shelters, building temporary walkways and installing WASH support were discussed with SUFAL.

**SUFAL strengthened the government-led search and rescue effort by providing hand-held megaphones to UDMCs, for disseminating flood updates to the communities and to save assets by timely evacuation. From 25th to 29th June 2020, SUFAL along with UDMCs of Holdia, Saghata, Ghuridah and Varotkhali Union prepared flood shelters, ensured clean toilets, installed tube wells, repaired evacuation routes, provided tents for temporary cattle sheds, built temporary bamboo walkways, repaired wooden bridges and provided boats for moving people to flood shelters. Through these early actions and rescue efforts, a significant number of people were able to save their household assets during the flood.** The Disaster Management Committees highly appreciated SUFAL for the joint efforts made to strengthen their capacity.

# Understanding flood forecasts and the necessity of taking timely early action

## Bhavesh Chandra Pal

**"SUFAL Project flood fore-casting voice messages are very important for the people of flood prone areas. People in this area will benefit greatly if this message continues. Even if the project does not continue, government should take action to continue activities of this project."**

*– Bhabesh Chandra Pal*

Damages from anticipated floods can be minimized by improving access to timely forecasts and warning. SUFAL is helping to reduce the massive damage caused by floods, especially in the char areas through voice message warnings.



SUFAL project disseminated flood forecasts and warning directly to mobile phones of individuals in the community and Union Disaster Management Committees (UDMCs). Voice message recipients then further spread the information to the wider community and the last mile. Information disseminated by UDMCs are highly recognized and trusted by communities. Bhavesh Chandra Pal, a 58 year old businessman from Anantapur village of Hatia union in Ulipur upazila of Kurigram district, is a member of the UDMC of Hatia Union. He received training from the SUFAL project on how to access and understand flood forecasts, and relate that to necessary early actions.As a member of the UDMC, he was briefed on his role and responsibilities on disseminating flood early warning and implementing early actions. Though it was not feasible to train interpreters in 2020 due to Covid-19 pandemic, they were fully trained in 2021 with necessary safety measures. Bhavesh Chandra Pal found the training very helpful and felt more confident in disseminating flood messages. He shared voice message information in places such as tea-stalls and bazars as well as on social media to reach as many people as possible. He also paid particular attention to inform females of the community and neighborhoods.

Although the 2020 monsoon floods were devastating, Kurigram had not experienced floods at the same level the following year. During his time as a UDMC member, Bhavesh Chandra Pal was keeping up-to-date with the flood forecasts, and also assessing the situation on the ground by regularly checking water level readings at the nearby river gauge in Hatia Union.

Towards the end of August 2021, voice messages mentioned a likely flood whereas this was not foreseeable with the steady water levels, which created some confusion among residents in surrounding areas. In consultation with SUFAL project, Bhavesh Chandra Pal reassured community members that water levels may appear to remain steady or even decrease, but there may be a chance of increase later. Over the next few days, the waters increased and caused a short duration flooding in the low lying and char areas. Forecasts coupled with regular monitoring and assessments can support more informed decision-making.

# Takeaway notes

All the stories echo one note. Timely and accessible forecasting and early warnings are essential for making communities well prepared and able to take anticipatory action. Furthermore, support should be extended and provisions made to facilitate early actions, and ensure safety and dignity of people while doing so, particularly women and the most vulnerable individuals within the community.

The impact of floods can be reduced when communities are more resilient. This comes with better forecasting and early warning so that communities are empowered to take necessary early actions to prepare. Identifying appropriate early actions to work within the often-limited lead time given can be crucial. But, readiness, joint support and coordination can help in combating the adverse impacts and be a pathway to a sustainable community.

THEREFORE, AS WE MOVE FORWARD, WE WILL TAKE THE LESSONS FROM SUFAL PROJECT TO INFORM, REFINE AND IMPROVE EARLY ACTION APPROACHES SO THAT WE CAN WORK TOWARDS BETTER EARLY ACTION FOR DISASTER RESILIENCE IN FUTURE.

## CARE

CARE is one of the world's largest international humanitarian organizations committed to helping families in poor communities improve their lives and alleviate poverty. Founded in 1945, CARE is working across 93 countries to fight global poverty and marginalization. CARE has been active in Bangladesh since 1949. CARE places women and girls at the center of our work in order to tackle the root causes of poverty and inequity amongst Bangladesh's rural and urban populations. CARE aims to build their resilience to shocks and amplify their voices to influence governance, public policy, and development practices. CARE partners with government to implement projects and establish disaster management systems in emergency response. The humanitarian actions include saving lives & livelihoods, providing food security, shelter, water, sanitation & hygiene as well as building communities' resilience to shock & capacity to adapt any emergency situation.

## Concern Worldwide

Concern Worldwide (CWW) was founded in 1968 in response to the famine in the breakaway province of Biafra in Nigeria. Over time, it was not just aid base, but responding quickly with pragmatic and effective solutions – to take the organization in a new direction. CWW has been working in Bangladesh since 1972 through a portfolio of DRR, emergency response, recovery and rehabilitation initiatives as well as long term development and advocacy programing aimed at strengthening livelihoods and reducing climate change impacts. Now, CWW is working hard to combat suffering and build resilience in Bangladesh by establishing programs which will reduce poverty, respond to emergencies and improve health and nutrition.

## Islamic Relief Bangladesh

Islamic Relief Worldwide (IRW) is an independent humanitarian and development organization, founded in 1984, based in Birmingham, UK, to support the world's most vulnerable people in the fight against poverty and suffering. The journey of IRW in Bangladesh starts in 1991 through DRM and early recovery, climate resilience, and food security and livelihoods. IRW works in an integrated and inclusive manner directly at the household, community, district and national levels targeting the most disaster-affected and impoverished communities. IRW is present in 35 districts in Bangladesh to develop capacity and optimize its reach and impact. IRW Bangladesh was an implementing partner in the first phase of SUFAL project.

## RIMES

Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) is an international and intergovernmental institution that evolved from the efforts of countries in Africa and Asia, in the aftermath of the 2004 Indian Ocean tsunami, to establish a regional early warning system within a multi-hazard framework for the generation and communication of early warning information, and capacity building for preparedness and response to trans-boundary hazards. Since 2006, RIMES supports national and local level institutions in the research and development of forecasting and warning services in Bangladesh. RIMES operates in Bangladesh through its Joint Research Centre at Flood Forecasting and Warning Centre (FFWC) and an office in Bangladesh Meteorological Department (BMD). RIMES has implemented various projects in monsoon flood-affected north-west region, flash flood affected north-east and south-east region and cyclone affected coastal areas of Bangladesh.

## Oxford Policy Management (OPM)

Oxford Policy Management (OPM) specializes in working across the policy cycle, including health, finance, education, climate change and public sector management. OPM aims to help low- and middle-income countries achieve growth and reduce poverty and disadvantage through public policy reform. OPM has worked in Bangladesh since 2000. Over the years, OPM has implemented over 80 projects in Bangladesh, gathered experience of Bangladesh's policy issues, socio-economic challenges and political dynamics; as well as establishing a large network of partners, and external experts to complement their permanent technical and operational staff. OPM are currently implementing a set of studies on Shock Responsive Social Protection (SRSP) in Bangladesh, including a case study on SRSP in Bangladesh during COVID-19, as part of a multicounty research program. OPM is now a partner in the second phase of SUFAL.

## ECHO

The Humanitarian Aid department of the European Commission (ECHO) was established in 1992 and works in the area of emergency assistance and relief to the victims of natural disasters or armed conflict outside the European Union. ECHO concentrates its efforts on the funding of humanitarian aid. ECHO activities are focused on the accomplishment of feasibility studies for its humanitarian operations, the monitoring of humanitarian projects and the establishment of coordination arrangements, the promotion of disaster prevention, technical assistance and training.

## ADH

In 2001, Aktion Deutschland Hilft was founded by ten renowned relief aid organizations in order to provide fast and effective help in severe disasters. Today, our alliance of 23 aid organizations is active in over 130 countries worldwide.

**RESILIENT COMMUNITIES ACTING EARLY TO MITIGATE EFFECTS OF 2020-21 MONSOON FLOODS IN BANGLADESH: STORIES FROM THE FRONTLINE**

Supporting Flood Forecast-based Action and Learning (SUFAL) in Bangladesh

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