START NETWORK CYCLONE REMAL INTERVENTION:

EXAMINING RISK LAYERING AND COST EFFECTIVENESS THROUGH START READY, START FUND ANTICIPATION, AND START FUND RESPONSE

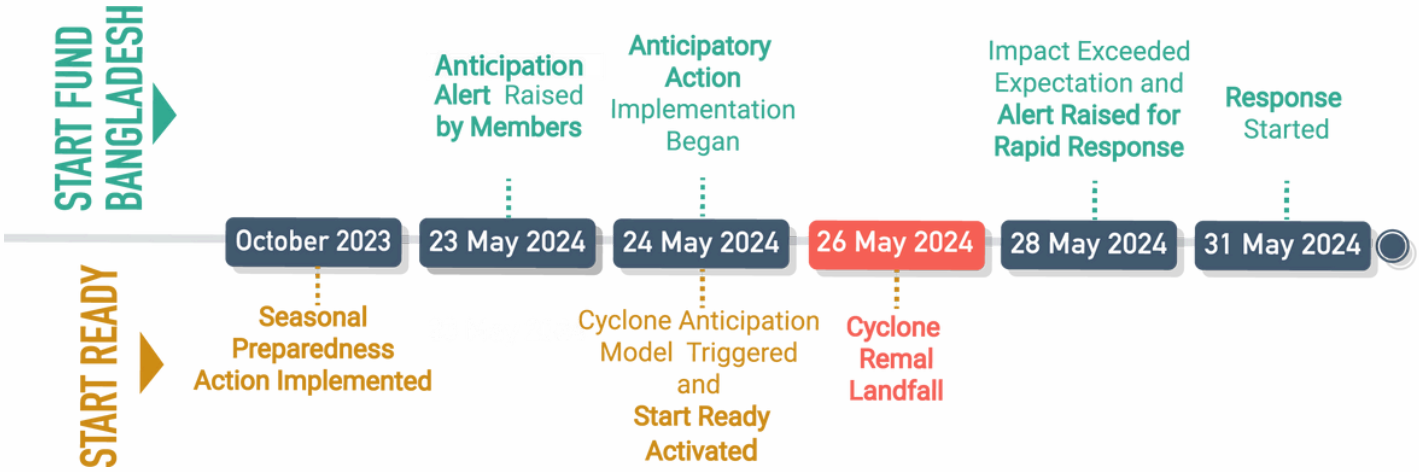
Bangladesh is a country that is highly vulnerable to a wide range of natural hazards due to its geographical location and topography. In 2024, Cyclone Remal (severe cyclonic storm) made landfall on May 26, 2024, and devastated the western coastal areas of Bangladesh, with flooding and high wind speeds destroying homes and infrastructure, farmland and fisheries, increasing food insecurity and health challenges, altogether placing vulnerable communities at further risk.

Start Bangladesh is a country-specific initiative under the Start Network.

Aligning closely with the goals of promoting proactive and locally led humanitarian action, Start Bangladesh works closely with national and local organisations to deliver critical humanitarian action through three funding pathways: Start Ready, Start Fund Anticipation, and Start Fund Rapid Response, altogether covering three windows of opportunity.

Learn More: startnetwork.org/funds/national-start-funds/start-fund-bangladesh

RISK LAYERING THROUGH THREE WINDOWS OF OPPORTUNITY:



1 Start Ready

Facilitated through a national disaster risk financing system, which includes 1) scientific modelling and pre-determining thresholds to release funding, 2) a collective contingency plan, 3) Pre-positioned financing to enable rapid disbursement when thresholds are breached. National Reserves are also provided to agencies to conduct preparedness activities before the cyclone season.

2 Start Fund Anticipation

Delivering rapid financing for anticipatory and early action for small to medium scale, under the radar crises, based on scientific analysis of expected impact on vulnerable communities.

3 Start Fund Rapid Response

Delivering rapid and efficient financing for crises that are small to medium scale and under the radar crises to provide immediate support to communities that are affected.

WHAT WAS DELIVERED FOR CYCLONE REMAL?

1

Start Ready for Seasonal Preparedness (£180,000):

The Readiness Activities included beneficiary data collection and selection, risk assessment, embankment monitoring, and community-based intervention design, preparation of cyclone shelters, as well as preparedness actions with local government authorities.

Start Ready Activation (£180,000):

2

Four districts (Satkhira, Khulna, Patuakhali, Barguna) were identified as high-risk prone areas under Start Ready in the contingency planning process, of which 36 unions were triggered for action 48 hours before cyclone Remal made landfall. The programme reached 30,000 people with provision of multi-purpose cash, early warning messages, food assistance, tie-down kits for shelter strengthening, WASH items, charger lights and generators, animal feed, and evacuation support.

3

Start Fund Anticipation (£17,000):

Reached around 6,600 people with early warning messages, advisory in coordination with the Disaster Management Committee (DMC), shelter readiness by providing water, non-food items, and alternative lighting, and evacuation, especially for elderly and persons with disability.

Start Fund Rapid Response (£778,000):

4

Reached around 55,000 people with multi-purpose cash, and provision of hygiene and dignity kits, shelter materials or grants for households who have been displaced, lost their livelihood, or whose houses were severely damaged.

The experience from implementing anticipatory, early action, and rapid response highlights initial insights into how different windows of opportunity could complement each other and best minimize losses and damages, increase community resilience and preparedness, and enable faster recovery.

FINDINGS FROM ANALYSIS

Cyclone Remal was the very first event where the three funding pathways were activated for the same crisis event in Bangladesh. To understand the implications of this, an evaluation was conducted to explore the outcomes for affected communities, operational good practices and challenges, cost saving and cost effectiveness, as well as to provide learnings on risk layering and the complementarity of the three projects. The evaluation used both quantitative (survey) and qualitative (FGDs and KIIs) methods, and primary data collection (with affected communities, implementing agencies and government stakeholders) and secondary document review, to produce the following findings.

STRENGTHS AND GAPS OF THE THREE INTERVENTION POINTS

Strength | Gap

	Start Ready (SR)	Start Fund Anticipation (SFA)	Start Fund Rapid Response (SFRR)
PREPAREDNESS	• Early warning messages with targeted guidance that increased household (HH) preparedness. General trend is that the earlier the messages were received, the better it was for HH preparedness		
EFFICIENCY	• Higher rates of evacuation (12 hours before impact) SFA: 85.29%, SR: 68% • Overall, more effective in minimizing prolonged livelihood disruptions • Effective in mitigating HH's need to take out a new loan, although some people may still have needed to exchange assets or food • Most effective in reducing psychological strain		• Less effective in warning messages, leading to low evacuation rates. • Additionally, less effective in minimizing work disruptions, and reducing psychological strain
	• Timely multi-purpose cash, and in-kind provision, enabled comprehensive preparedness and recovery actions (e.g. food, shelter materials, WASH and preventive health measures)	• Lack of in-kind support meant that HH were limited in their preparedness activities (may not have been be able to purchase the items they needed due to short lead time)	• Most effective in supporting post disaster impact with timely multi-purpose cash, and in-kind provision, enabled comprehensive recovery (e.g. food, shelter materials, WASH and health expenses)
EFFECTIVENESS	• Most effective in preventing major structural damage of homes, minimizing damages to household assets	• Less effective in reducing long-term economic hardship, protecting assets and livelihoods	
	• Most effective in reducing food insecurity (less meal skipping and reduction of meal size)		• Least effective in reducing food insecurity
TIMELINESS	• Timely interventions and high satisfaction rate, with 11% receiving interventions 36 hours before landfall, and 89% within the final 24 hours	• Operational delays in multi-purpose cash transfer meant that HH could not use the cash when they needed it for preparedness or recovery	• Timely implementation led to HH being reached within 5 days of cyclone impact
RELEVANCE	• Livelihood support could be improved, as protection of livestock and reduced work disruptions were not as strong as SFA	• Most effective in protecting livestock (perhaps due to high evacuation rates)	• Support for livelihood was not prioritized and could be improved

MITIGATING THE UNAVOIDABLE LOSS AND DAMAGE TO HOUSEHOLDS

In the context of continued increasing frequency and complexity of climate change - the efforts for mitigation and adaptation to climate change fall short in addressing the immediate and unavoidable losses and damages. Consequently, understanding the effectiveness of different response windows in reducing financial burdens, mitigating economic losses, and protecting household assets, is important for safeguarding the resilience of communities. Comparative analyses with Cyclone Amphan (which occurred in 2020) further emphasise the cost-effectiveness and resilience-building benefits of proactive interventions over traditional ways of disaster response.

COST SAVING AND ECONOMIC BENEFIT AT HOUSEHOLD LEVEL

Start Ready	1 USD invested in Start Ready could save 14.88 USD worth of livelihood income
SF Anticipation	1 USD invested in SFA could save 2.6 USD worth of livelihood income
SF Rapid Response	1 USD invested in SFRR could save 2.8 USD worth of livelihood income

COST SAVING OF HOUSEHOLD ASSETS PROTECTED

Start Ready	1 USD invested in Start Ready could reduce 7.5 USD worth of asset damaged
SF Anticipation	1 USD invested in SFA could reduce 2.7 USD worth of asset damaged
SF Rapid Response	1 USD invested in SFRR could reduce 5.3 USD worth of asset damaged

**The economic benefit of livelihood has been calculated based on the response amount and livelihood income savings reported by the community. The cost saving of the asset has been calculated based on the household's reported value of the assets protected through the support from the different programmes.*

Disasters cause financial setbacks for households and communities, but the the SR mechanism during Cyclone Remal has demonstrated its effectiveness in reducing economic losses. The combined efforts from AA and readiness activities has led to the lowest average damage to homes and household assets, the highest reported value of assets protected, and overall lower financial loss. As climate change risks are becoming more complex and difficult to manage, where mitigation and adaptation efforts are not enough to address its impacts, it is important to adopt proactive and broader support measures through readiness activities and anticipatory action to minimise unavoidable losses and damages.

> **Without the embankment repairs, the fish farms in the area would have been completely wiped out. This action saved my livelihood. I am a day labourer, and my family is very poor. If the repairs hadn't been done, I wouldn't have been able to work for at least three months. My family, having no alternative source of income, would have starved. Thanks to the timely repair, my livelihood remains intact. Through the Cash for Work program, we not only saved our village, but we also earned money to support our families during the cyclone.**
>
> *— Ziaur Rahman, 45, Dakshin Puijala, Day Laborer*

CASE STUDY:

READINESS AND ANTICIPATORY ACTION FOR COMMUNITY RESILIENCE

Cyclone Remal posed a significant threat to the coastal communities of Assasuni Upazila, located in the southwestern region of Bangladesh. The cyclone, predicted to bring tidal surges of 8-12 feet, threatened to breach the embankments protecting villages. These communities, heavily reliant on fish culture (gher farming) and agriculture for their livelihoods, could lose their homes and critical assets if the embankments failed. Not only does this pose risks to fish farms, agricultural fields, homes and infrastructure, but it also renders the soil unfit for further use for months, as saltwater can inundate both the ghers and agricultural lands.

Prior to the cyclone's landfall, warnings indicated that the embankments were insufficient to handle the predicted surge, and a breach would have resulted in severe flooding, potentially submerging 8,813 sq km of fish enclosures and 4,500 houses. Start Ready played a key role in disaster preparedness through the repair of embankments ahead of Cyclone Remal.

Readiness activities through the National Reserves, enabled community decision-making to raise awareness of the embankment condition, identify areas of prioritisation, and engaging the local Union Disaster Management Committee (UDMC). Once the SR programme was activated, the local community quickly mobilised with the UDMC to monitor and validate weak points of the embankment during the tidal surge before landfall, and used Cash for Work to employ 75 local labourers to quickly strengthen the four weak points of the embankment almost ten hours before cyclone impact. Altogether, an investment of 902 USD for embankment repair led to significant cost saving to households and the wider community.

The approximate cost savings, based on the community's estimations, amounts to up to 5.86 million USD in assets and livelihoods protected in direct economic benefit, which is summarised below:

Community Level Embankment Repair in Numbers

Embankment Repair

25 to 26 May 2024
(24 hours cyclone landfall)

4 Locations of the Embankment Repaired
(20–30 Metres on Each point)

$902 – Cost of Repair

Direct Economic Outcomes for Communities

2,177 Acres Fish Farm
Protected
(Fisheries Assets Saved = $5.4 Million)

1,052 Houses
Protected
(House Repair Amount Saved = $0.18 Million)

942 Families
Protected
(Livelihoods Saved = $0.28 Million)

3 Months of Livelihood
Protected for Each Family
(Families Depend on Fish Farming)

Indirect Outcomes for Communities

- Livelihood
- Trade and Market

1,400 Households

- Water, Sanitation, and Hygiene
- Child Protection
- Livestock
- Health
- Protection
- Nutrition
- Food Security
- Education
- Permanent Displacement Prevention

CONCLUSION

The experience of Start Bangladesh's Cyclone Remal interventions demonstrate the value of multi-layered interventions, and the critical role of preparedness and anticipatory actions for reducing loss and damage to households and communities as well as the role of post-disaster rapid response to fill gap in humanitarian responses.

The embankment repair case study, as well as the calculation of cost effectiveness of the three interventions, indicate the significant strength of **Start Ready** in reducing damages to homes, protecting household and community assets, and safeguarding livelihoods. Affected communities indicated that receiving financial assistance and early warnings before the cyclone allowed them to prepare better and secure necessary provisions. Early financial support also helped people to be better equipped to face the cyclone and provided psychological relief knowing that they had some provisions to utilise.

While early interventions enabled communities to better prepare, affected communities nevertheless pointed out the limitations of receiving financial support just before or after the cyclone, as shops and markets were often closed and there was insufficient time to utilise the cash support to purchase required items. The anticipatory actions in Cyclone Remal through **Start Fund Anticipation** has been effective in early warning messaging and evacuations, but there are limitations for fast onset crises with shorter lead time to act. Nevertheless, it has positive influence on addressing secondary impacts of fast-onset hazards (e.g. health risks, internal displacement, migration).

Post-disaster support through **Start Fund Rapid Response** greatly contributed to recovery efforts, especially in covering areas not covered through anticipatory action as well as overcoming economic challenges and rebuilding efforts. Multi-purpose cash and in-kind support proved highly effective during this critical phase, ensuring that essential items were available even in the immediate aftermath of the cyclone. Beneficiaries appreciated the assistance and expressed a strong preference for proactive pre-disaster measures, recognizing that such support would enable them to minimize losses and focus more effectively on long-term resilience.

The learnings from Cyclone Remal experience provides a pathway for strengthening humanitarian response systems in Bangladesh with a greater understanding of the complementarity, potential and limitations of each intervention window. There is an opportunity for leveraging strengths of each window to address the complex and holistic needs of vulnerable communities.

For more information,
Please communicate with, Shofiul Alam, Program Coordinator, Start Fund Bangladesh.
Email: shofiul.alam@startnetwork.org

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