An Executive Education Program on
Disaster Risk Finance for Bangladesh

DAY 3: BANGLADESH CONTEXT

Macro-insurance linked to cash transfers

Jamuna River Sustainable Management Project (JRSMP-1)

Disaster Risk Financing & Insurance Program

SUPPORTED BY WORLD BANK GROUP

Global Shield Financing Facility

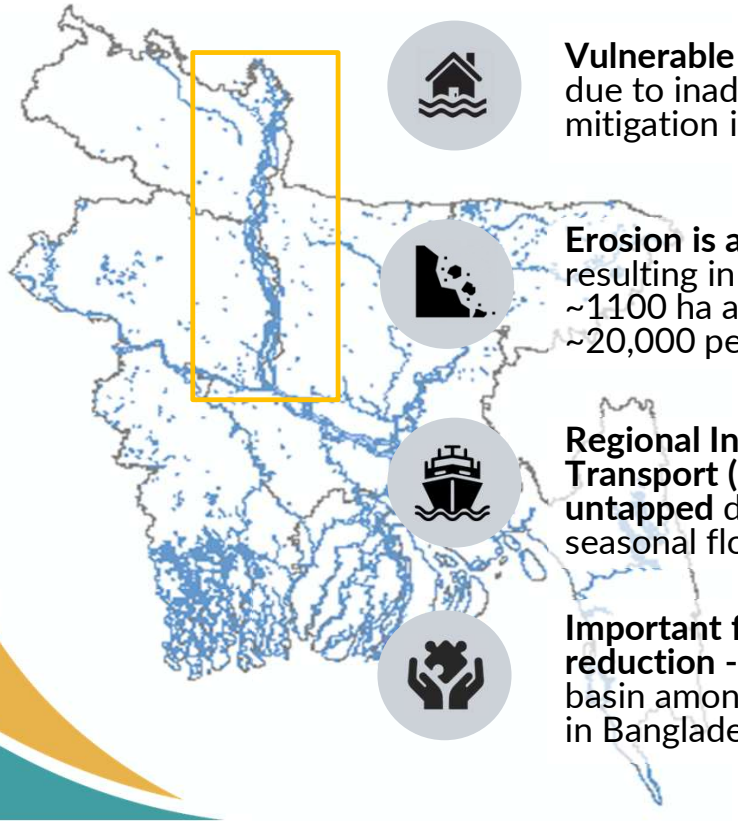
ঢাকা বিশ্ববিদ্যালয়

Agenda

1. Jamuna Project Overview
2. Details of the Bonna Shurokkha Program (BSP)
3. Q&A
4. Open Discussion

Strategic Context of the Jamuna SoP

Physical Context: length of ~220 km & basin area of ~47,000 km² in Bangladesh; 102,000 m³/sec discharge in monsoon vs 3,500 m³/sec in dry season



Vulnerable to flooding due to inadequate risk mitigation infrastructure

Erosion is a "silent killer" resulting in land loss of ~1100 ha and displacing ~20,000 people per year.

Regional Inland Water Transport (IWT) potential untapped due to high seasonal flow variability

Important for poverty reduction - districts in the basin among the poorest in Bangladesh

The Jamuna River has enormous economic potential

The BDP2100 sets out the GoB's key development agenda to stimulate economic growth through a paradigm shift in river management

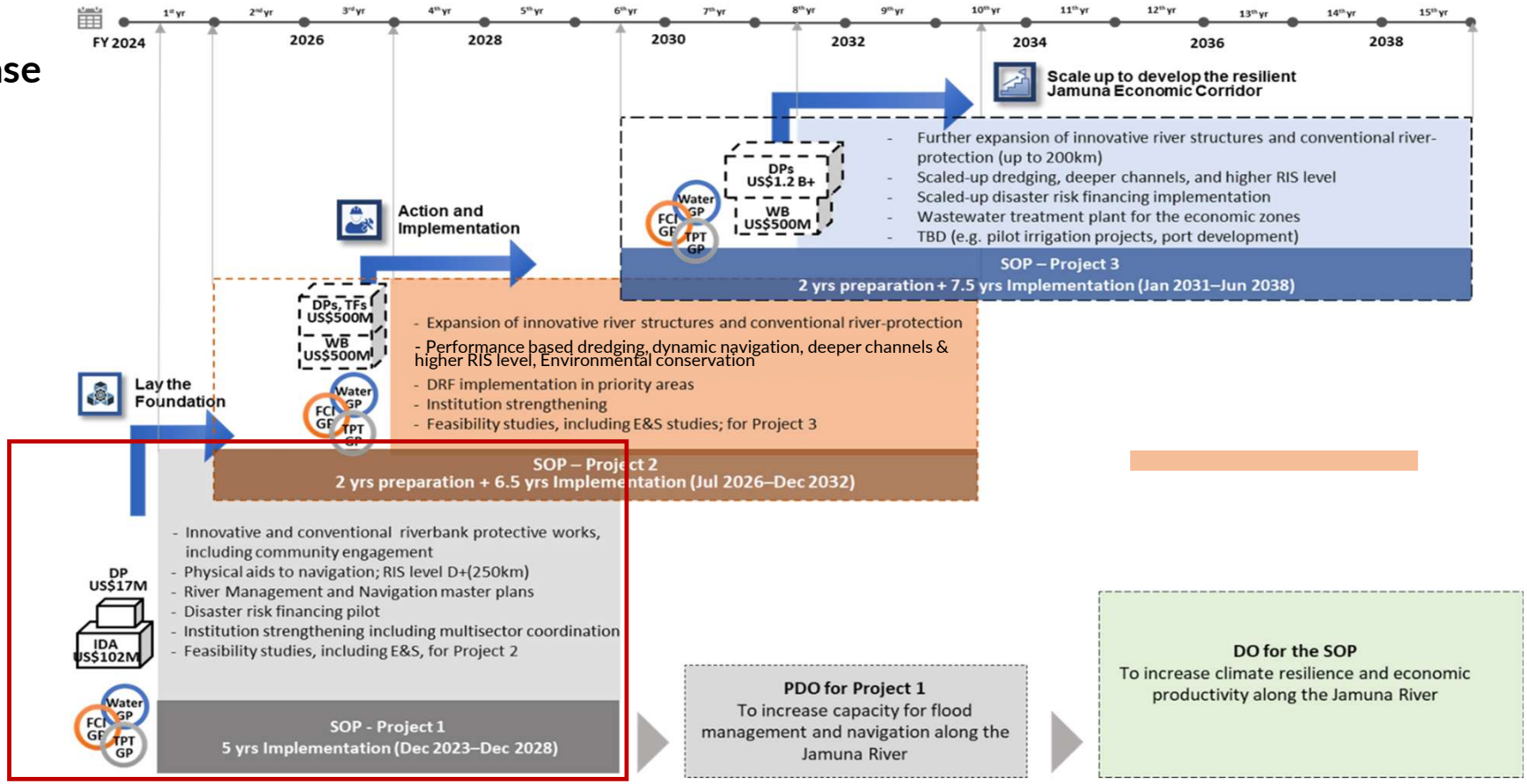
The Jamuna River featuring prominently among its priority projects.

As the river course becomes manageable, the SOP will attract private investments in economic zones, irrigation, aquaculture, & eco-tourism.

A hydro-economic modeling study estimated that, when the SOP is completed, each $1B invested may return $10B.

Sequencing and Design

PrDO of the SoP: to increase climate resilience & economic productivity along Jamuna River



Project 1

Project 1 - Development Objectives and Key Components

PDO of the SoP1: to increase capacity for flood management & navigation along Jamuna River

Key Components and Activities

C1. Flood & Riverbank Erosion Mgmt.

- Top Blocked Permeable Groynes (TBPG)
- Nature based solution
- Tie-Embankments
- River Management Master Plan

C2. Navigation Channel Development

- RIS and Navigation Aids, testing dynamic navigation with capacity development
- Navigation Master planning
- Pilot Eco-friendly Green Shipping

C3. Financial Protection of Communities

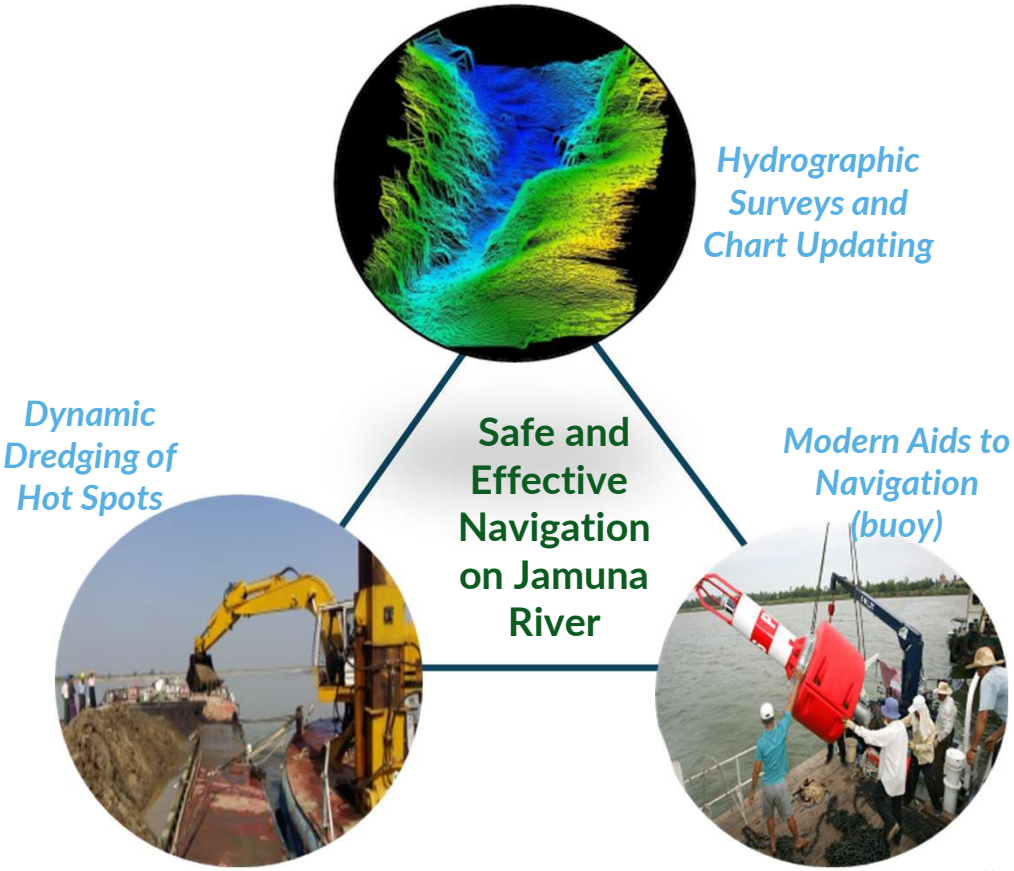
Disaster Risk Finance with Macro-level Insurance (Govt. Policy holder) and contingent funds with compensation during eligible flood events

Snapshots of Project Interventions (C1&2)

Example of innovative river works: Kamarjani Permeable Groyne

A successful example of new riverbank protection technique in north Jamuna; helped to reclaim new land.

A semi-permeable groin would be studied via 3-D modeling, piloted, and scaled up in the following projects.



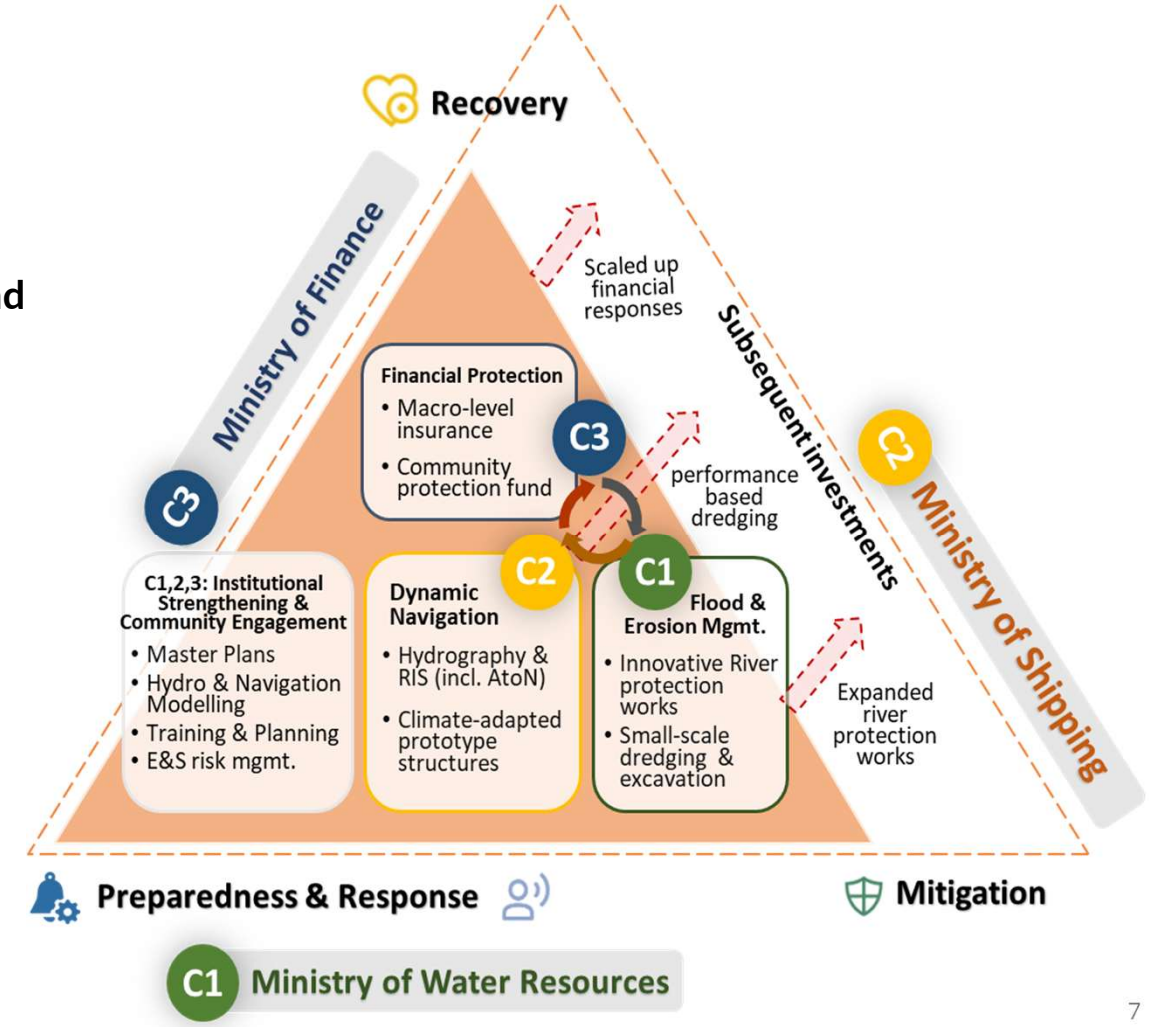
Sectoral Integration

A multi-sector program that:

Supporting all 3 pillars of disaster mgmt.: Mitigation, Preparedness, and Response & Recovery; combining activities including river structures, navigation channel development, disaster risk financing solutions, and community engagement

Including nature-based solutions (NBS) in riverbank protection, combined with cost-effective, innovative River Training structures

Integrating dynamic navigation approach that allows 'room for the river'



Implementation Arrangements

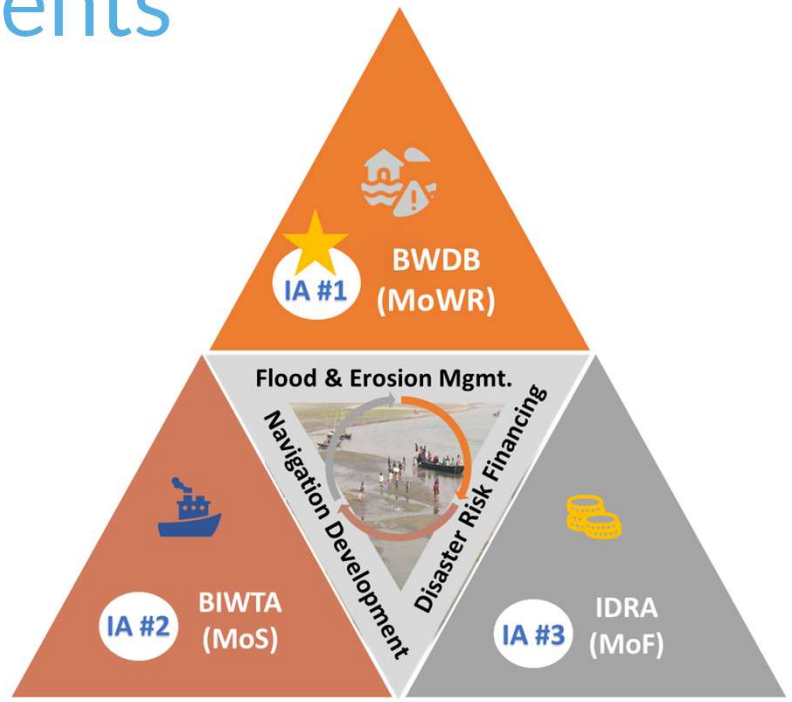
1. Three main Implementing Agencies (IAs) :

- BWDB - C1 (river works and O&M)
- BIWTA – C2 (navigation improvement)
- IDRA – C3 (Financial Protection of Communities)

2. A PSC for each IA will be established:

- **led by a Senior Secretary/Secretary of the ministry;** the PSC under MOWR acting as the coordinator of all PSCs; consist of representatives from all corresponding ministries.
- review operation manuals, implementation plans, and monitor progress; and make course corrections, as needed.
- all PSC and IAs to meet regularly to collaborate and make decisions

3. An independent Panel of Experts (PoE) to provide advisory support



A PSC for each IA to provide overall **guidance & policy direction** at a higher level, and ensure sou**nd coordination between the IAs** and other government

An independent Panel of Experts (PoE) to provide advices on:

- River engineering & morphology
- livelihood restoration
- Inland navigation
- Aquatic biodiversity
- DRF

Design of Component 3 (C3)

Objective of the component:

Enabling financial protection of communities against floods along the Jamuna River.

What does this include?

Design of a financial protection program that will include:

Design and development of macro-level risk transfer product (for communities)

Design and development of a community protection fund

Capacity building of key stakeholders

Alignment with Bangladesh National Disaster Risk Finance Strategy (NDRF)

This program supports several strategic priorities identified in the NDRF:

Financial protection against flood

Scalable cash delivery mechanisms

Transfer of risks using parametric insurance

Component 3 Key Financial Instruments

GoB's Flood Protection Program: named **Bonna Shurokkha Program (BSP)**, delivers targeted cash assistance to households impacted by flooding in the Jamuna River basin.

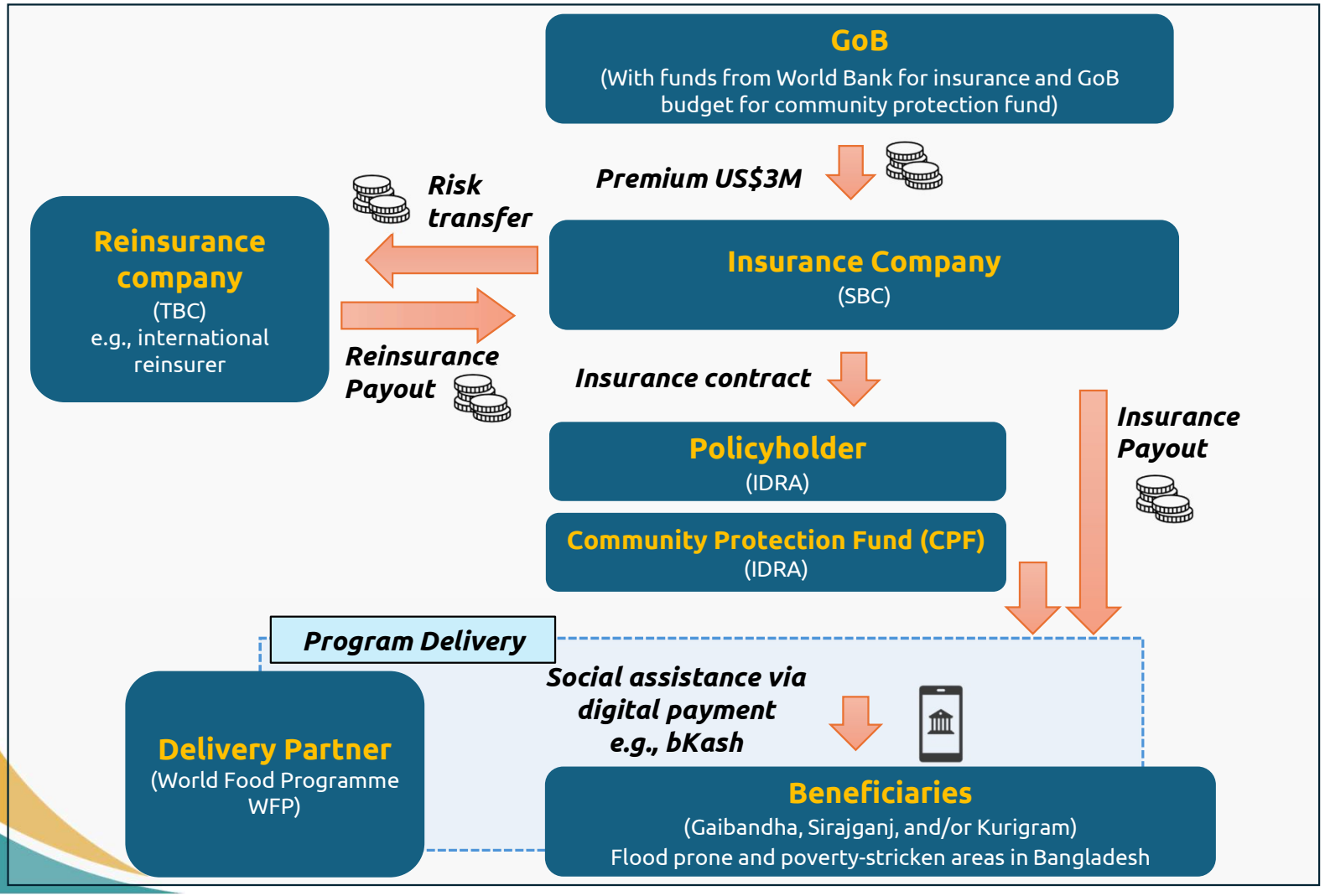
Finance is arranged ahead of flood events using two instruments:

Macro-level parametric/Index-based flood risk insurance
Objective: Trigger finance in **severe flood** events

Community Protection Fund (CPF)
Objective: Cover **basis risk** events and **frequent and smaller-scale floods**

Capacity building to support implementation of both instruments and create greater understanding on disaster risk finance among GoB stakeholders

Schematic of BSP Program Structure



Design Partner
(WRMS - Design firm for developing trigger design)

Other Partners
(Placement Partner, Calculation Agent (IWM), Monitoring, Evaluation, and Learning)

I. When will BSP provide protection and who will receive it?

Anticipatory Action

i.e., Action taken ahead of predicted hazardous events to prevent or reduce their impacts on lives, livelihoods and humanitarian needs, before they fully unfold[2].

Early Response

i.e., Immediately after the shock with the aim of reducing the use of negative coping mechanisms.

Traditional Response

i.e., When peak humanitarian needs are manifest and traditional ex-post humanitarian resources usually arrive.

Existing Beneficiary registry (WFP) Validated by DMCs

Bonna Shurokkha Program (BSP) Utilizes same registry

Beneficiary Selection Criteria:
Household have probability of being affected by the flood
Household affected by flood in previous years
Socio economically vulnerable

II. Where do the beneficiaries live?

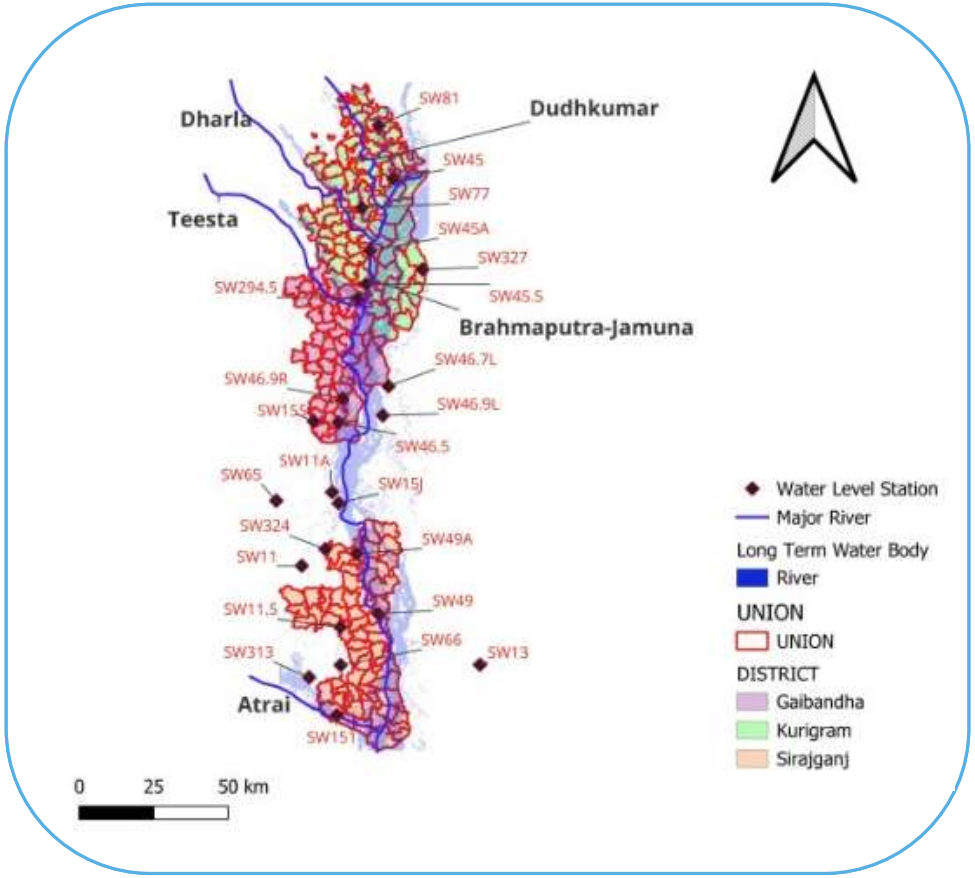
District level: 3 districts highly vulnerable to flood risks

i. Gaibandha, 4 Upazilas, 47 Unions
ii. Kurigram, 9 Upazilas, 75 Unions
iii. Sirajganj, 7 Upazilas, 59 Unions

Upazilas and Unions: selected based on historic incidents of flood events (collected by WFP)

100,000 Households: identified from the most vulnerable unions and pre-registered to receive assistance

i. Gaibandha, 30,000 beneficiaries HH
ii. Kurigram, 40,000 beneficiaries HH
iii. Sirajganj, 30,000 beneficiaries HH



IV. What are the principles for the trigger design?

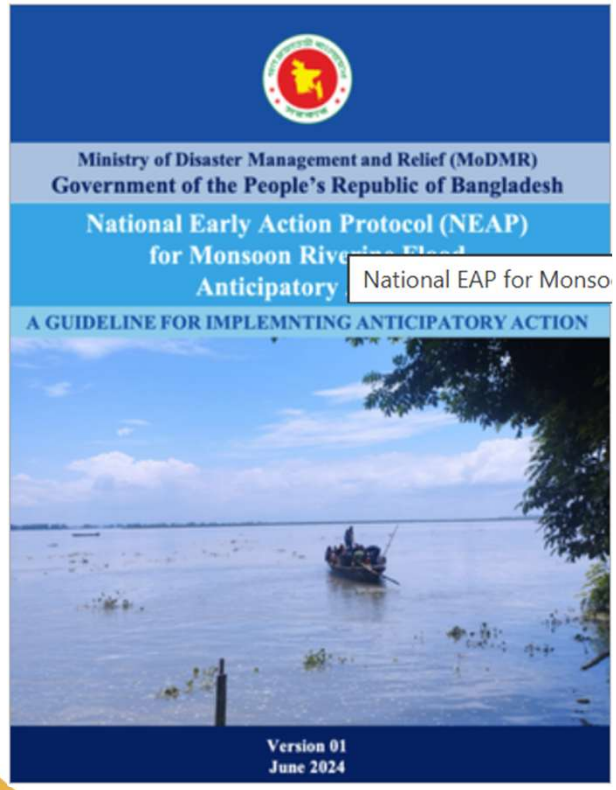
Use of Government Data: Where possible, rely on GoB data sources (e.g., FFWC) to ensure transparency and alignment with national systems.

Prompt Payout: The trigger must allow for timely payouts—shortly after the disaster occurs.

Coverage: In the case of an extreme event, the mechanism should be able to support up to 100k households.

Frequency of trigger: The mechanism should have a realistic chance of triggering during the policy period.

V. Aim is to align with GoB existing early action protocol where possible



Under the National Early Action Protocol (NEAP) protocol the MoDMR has adopted a definition of what constitutes a forecasted riverine flood that requires relief assistance.

Although designed for anticipatory action, elements can be adapted for early response as these definitions are already well understood by both authorities and communities.

Parameter	Threshold (based on FFWC forecast)
Water Depth	≥ +0.85 meters above danger level of Bahadurabad station
Duration	≥ 3 consecutive days
Inundation extent	≥ 40% of the union affected

V. Aim is to align with GoB existing early action protocol where possible

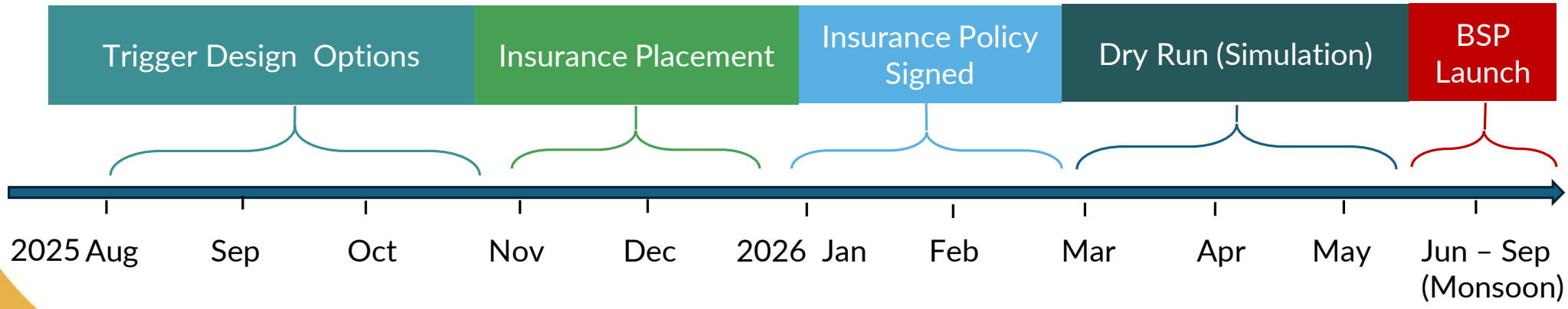
Fund flow: Funds from community protection fund (hosted by Janata Bank) and from insurance payouts (SBC) transferred via Mobile Money Transfer provider

At point of trigger: Beneficiaries receive SMS to alert them to incoming transfer. Beneficiaries travel to cash-out points to cash out if needed

Distribution monitoring conducted and Community Feedback Mechanisms are available that are safe, confidential and easily accessible through multiple channels e.g. dedicated Hotline or Help desks

Looking forward: Key steps

- Trigger design is in progress (balancing of tradeoffs; when, where, how much and how often the mechanism will trigger)
- Final product design will be done in negotiation with the market (insurance placement)
- Community protection fund activation criteria also to be finalised
- Development of Standard Operating Procedures (SOPs) ahead of the flood season



Thank You

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Community of Practice

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