

## Development of Local Flood Early Warning and Dissemination System

### PROVATi3 Project-DDM Component

August 2023

#### Monthly Report

Regional Integrated Multi-Hazard Early Warning System (RIMES)

#### Section A

##### Progress Summary

- DMC portal training for UDMC and DDM officials
- Workshop on IEC material finalization
- Meeting with FFWC, BWDB representatives for installation of river gauge
- Upazila-level vulnerability map generation
- Flood situation monitoring and field level data collection
- Completion of land gauge consultation
- Draft annual report preparation
- Inundation mapping trial operation

#### Section B

##### Activity 1. Monthly meeting (July) of PROVATi3 Project-DDM Component

##### Progress

Monthly meeting of the month of July was held at DDM on 3 August 2023 with DDM, LGED, and RIMES professionals. The meeting took place to identify and discuss project progress and the issues, emerged as challenges in various activities of “Development of Local Flood Early Warning and Dissemination System”. Netai Chandra Dey Sarker, Director (MIM) and Project Coordinator of PROVATi3 Project-DDM component chaired the meeting. DPC (GIS & RM), Team leader, Program Manager, and other RIMES personnel joined the meeting. In the meeting, Program Manager discussed the activities of previous months, and then different project related issues such installation of river and land gauge, development of voice message portal, training on DMC portal, IEC material finalization etc were discussed in detail. Future activities that need to be accomplished by the next month were also discussed in the meeting.



## Activity 2 (a). Training on DMC portal at Gaibandha

### Progress

DMC database was developed under this project with the technical support of RIMES containing the information (Name, phone no, designation, affiliation and email) of all level DMC members. Now, it contains all the DMC members' information of the project area which will be updated with the 64 district DMC member information. As this DMC committee reforms every year, it is important to update them from the root level or by respective DMC member. For this reason, representatives of each DMC members need to be trained on how to search for DMC members list; update, edit or delete information, upload DMC meeting resolution or additional things of the portal. Three training sessions held at Gaibandha Sadar, Sundarganj and Sadullahpur upazila on 12 and 13 July 2023. Sadullapur and Gaibandha Sadar training session was inaugurated by Honorable DG of DDM and Chief guest of the program, MD Mijanur Rahman via online platform. These programs were chaired by Netai Chandra Dey Sarkar, Director (MIM) and Project Coordinator of the PROVATI<sup>3</sup> project-DDM component. Mobinur Rahman, ICT specialist demonstrated the portal use. Participants of the training were UP secretary of respective unions, their office assistants, PIOs of respective upazilas and their secretaries, and UDC entrepreneur. Additional participants for Gaibandha Sadar was DRRO and the secretary of the DRROs office, Paura Nirbahi Officer (PNO) and secretary of the PNOs office.



## Activity 2 (b). Training on DMC portal at DDM

### Progress

As DDM is the core department of Disaster Management and will handle the portal centrally, a training session was also held at DDM on 22 August 2023 to train DDM personnel. Md. Mijanur Rahman, DG, DDM was the key speaker of the session whereas Netai Chandra Dey Sarker, Director (MIM) and Project Coordinator of PROVATi3 Project-DDM component chaired the training session. DDM officials, office secretary, computer operators were the participants. Probir Kumar Das, Programmer and DPC (ICT) of PROVATi3 project- DDM component gave a brief idea about portal and ICT specialist showed a demonstration of the portal and gave few exercises. Participants commented that the portal is very much user-friendly and will contribute in disaster management.



## Activity 3. Workshop on IEC material update and finalization

### Progress

To raise awareness among the community, Information, Education and Communication (IEC) materials were developed as draft versions. To update and finalize those draft materials, a workshop was held on 24 August 2023 at DDM. The workshop was chaired by the Director General of DDM. Project Coordinator, Deputy Project Coordinators, other DDM officials and RIMES representatives are the participants of this workshop. Participants were divided into groups and gave their comments on IEC materials. Based on their review, those materials will be finalized.



#### Activity 4. Meeting with FFWC, BWDB representatives on river gauge installation

##### Progress

To forecast flood situation, river gauge is an important instrument. But the number of gauges are insufficient to make local level forecast. There are provisions of new river gauge installation under this project. Three consultations have been held at Gaibandha and Kurigram to find appropriate location to install gauge. To finalize the proposed location a meeting was held on 28 August 2023 with Flood Forecasting and Warning Centre (FFWC) representatives at DDM and, other 2 representatives of BWDB via online. The meeting was chaired by Netai Chandra Dey Sarker, Director (MIM) and Project Coordinator of PROVATi<sup>3</sup> -DDM component. Program manager displayed the proposed location on maps. Participants share their opinion and suggested how to proceed to implement this. Participants agreed that installation of suggested gauges will improve the flood early warning system of the project area.



#### Activity 5. Flood situation monitoring and field level data collection

##### Progress

Due to heavy rainfall in India and continuous rainfall in Bangladesh, water level of many stations in the project area have crossed the danger level and flooded many areas in the last monsoon. Field facilitator have visited each area with gauge and collected everyday water level data of river gauge and land gauge. These data are documented in common google sheet.

S	Date	Saghatta				Halda				Bharkhali				Ghuridaha			
		Gauge Locations				Gauge Locations				Gauge Locations				Gauge Locations			
		Char Gobind Ashrayon Kendro (Ward-1) 25.161684, 89.58721	Munshir Hat Govt. Primary School (Ward-2) 25.136667, 89.593275	Dokkhin Sathalia Govt. Primary School (Ward-4) (Unavailable)	Halda Union Parishad Gobindpur (Ward-4) (Unavailable)	Char Janakpara Govt. Primary School (Ward-2) (Ward-2) (Unavailable)	CP Gamari Dighikandi and Charpur Qurian Madrasa (Ward-5) (Unavailable)	Dokkhin Govt. Primary School (Ward-2) (Ward-5) (Unavailable)	Nalchi Govt. Primary School (Ward-8) (Unavailable)	Dokkhin Ula Govt. Primary School (Ward-2) (Ward-8) (Unavailable)	Bhargamore Govt. Primary School (Ward-4) (Unavailable)	Bhargamore Govt. Primary School (Ward-4) (Unavailable)	Chari Patol Community Cnic (Ward-8) 25.100185, 89.583679	Purba Chirir Govt. Primary School (Ward-5) 25.080185, 89.584325	Khamar Pobitola Govt. Primary School (Ward-5) 25.095185, 89.574763		
7	7/15/2023	23 cm	Below the gauge	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	12 cm
7	7/16/2023	23 cm	Below the gauge	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	29 cm
8	7/17/2023	Below the gauge	N/A (Damaged)	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
9	7/18/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
10	7/19/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
11	7/20/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
12	7/21/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
13	7/22/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
14	7/23/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
15	7/24/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
16	7/25/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
17	7/26/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
18	7/27/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
19	7/28/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
20	7/29/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
21	7/30/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge
22	7/31/2023	Below the gauge	N/A	N/A	Below the gauge	N/A	N/A	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge	Below the gauge

This continuous monitoring and data archiving will help to validate inundation mapping data which will result in higher accuracy inundation map. At the same time, they monitor and stored the water level data of respective char areas to identify the danger level for those areas.

Ward Level Flood Situation in Kurigram District <span style="float: right;">Share</span>																		
Regional Integrated Multi-Hazard Early Warning System (RIMES)																		
Reporting Date	Present Water Level of Char		Present Water Level of Nalchi		Present Water Level of Dhorai		Present Water Level of Char		Present Water Level of Nalchi		Present Water Level of Dhorai		Present Water Level of Char		Present Water Level of Nalchi		Present Water Level of Dhorai	
	Level of Char	R.G Point (in PWD)	Level of Nalchi	R.G Point (in PWD)	Level of Dhorai	R.G Point (in PWD)	Level of Char	R.G Point (in PWD)	Level of Nalchi	R.G Point (in PWD)	Level of Dhorai	R.G Point (in PWD)	Level of Char	R.G Point (in PWD)	Level of Nalchi	R.G Point (in PWD)	Level of Dhorai	R.G Point (in PWD)
7	24.08/2023	30.05 mPWD	26.50 mPWD	24.40 mPWD	22.50 mPWD	40	10	25	50	10	50	10	20	10	5	0	20	10
8	25.08/2023	30.05 mPWD	26.50 mPWD	24.40 mPWD	22.50 mPWD	60	20	30	60	20	60	10	30	40	20	10	80	20
9	26.08/2023	30.05 mPWD	29.35 mPWD	28.50 mPWD	25.9 mPWD	70	20	30	60	20	60	15	10	20	5	10	70	10
10	27.08/2023	30.05 mPWD	29.35 mPWD	28.50 mPWD	25.9 mPWD	10	0	0	0	0	0	0	0	0	0	0	0	0
11	28.08/2023	30.05 mPWD	29.35 mPWD	28.50 mPWD	25.9 mPWD	0	0	0	0	0	0	0	0	0	0	0	0	0
12	29.08/2023	30.05 mPWD	29.35 mPWD	28.50 mPWD	25.9 mPWD	0	0	0	0	0	0	0	0	0	0	0	0	0
13	30.08/2023	30.05 mPWD	29.35 mPWD	28.50 mPWD	25.9 mPWD	0	0	0	0	0	0	0	0	0	0	0	0	0
14	31.08/2023	30.05 mPWD	29.76 mPWD	28.10 mPWD	26.13 mPWD	28.50 mPWD	12	22	26	40	12	22	26	40	0	0	0	0
15	01.09/2023	30.05 mPWD	29.8 mPWD	28.10 mPWD	26.13 mPWD	28.50 mPWD	14	24	28	32	14	24	28	32	0	0	0	0
16	02.09/2023	30.05 mPWD	29.8 mPWD	28.10 mPWD	26.13 mPWD	28.50 mPWD	16	24	28	32	16	24	28	32	0	0	0	0
17	03.09/2023	30.05 mPWD	29.8 mPWD	28.10 mPWD	26.13 mPWD	28.50 mPWD	18	24	28	32	18	24	28	32	0	0	0	0
18	04.09/2023	30.05 mPWD	29.8 mPWD	28.10 mPWD	26.13 mPWD	28.50 mPWD	20	24	28	32	20	24	28	32	0	0	0	0

## Activity 6. Completion of land gauge consultation

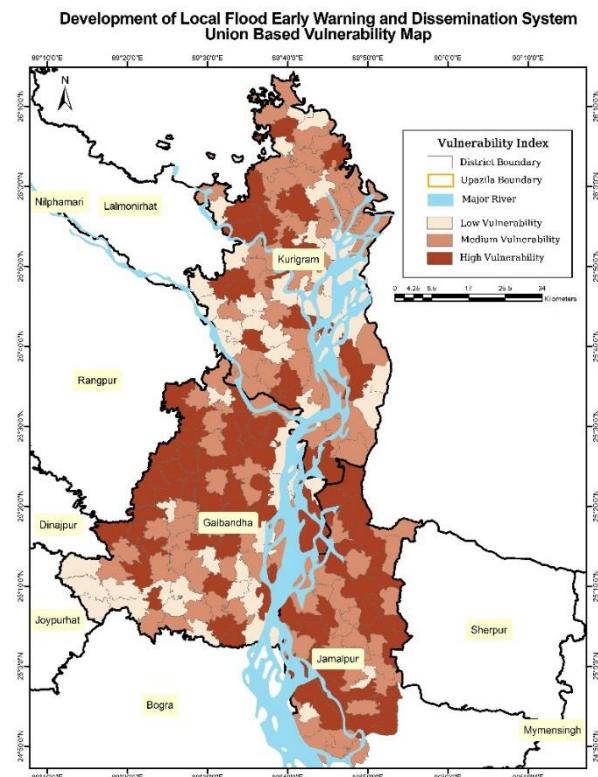
### Progress

To validate the accuracy of inundation mapping, land gauge reading of the water level is a must. Field facilitators have been visiting each vulnerable union parishad office for the last few months and identifying potentially suitable spots for installing land gauges. Last consultation was done at Kodalkathi union of Char-Rajibpur upazila under Kurigram district in August 2023. After collecting all the data of all proposed location, only 60 appropriate location will be selected to install land gauges.

## Activity 7. Union level vulnerability map generation

### Progress

Though the project area located near the major rivers, the vulnerability of each upazilas and unions are not the same. They depend on various physical, social, environmental and economic indicators. To understand the localized risk level vulnerability score has been calculated for all upazilas of three districts considering the sensitivity and adaptive capacity of each upazila. And based on those scores, upazila level vulnerability map have been produced.



## Activity 8. Draft annual report preparation

### Progress

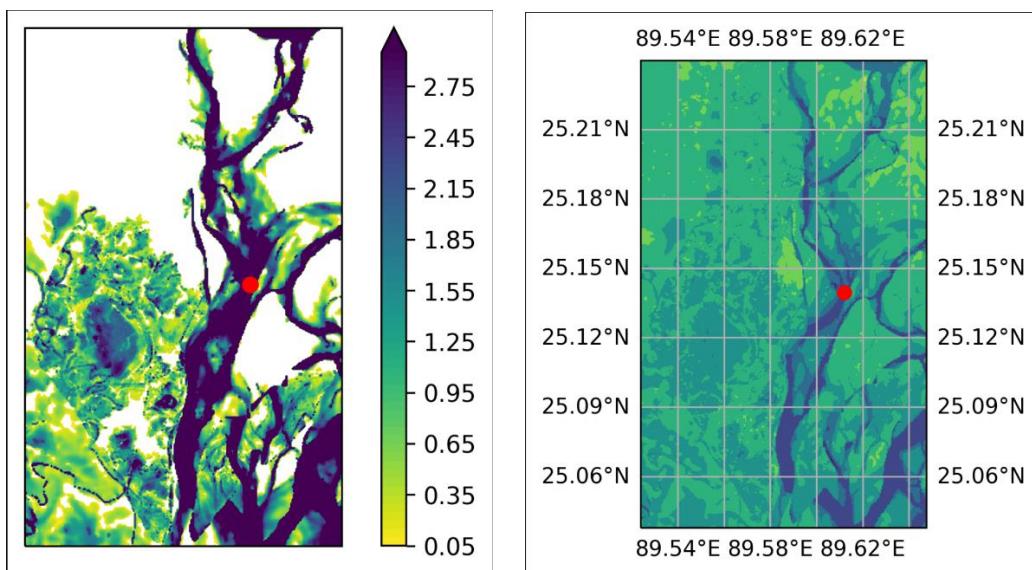
As PROVATi3 project-DDM component has been successfully completed 2<sup>nd</sup> fiscal year after its commencement, 2nd annual report is generated based on the activities took place throughout the last fiscal year 2022-23. This report basically contains the major activities from July 2022 to June 2023. Major activities of this year is baseline report preparation, DMC database development, vulnerable union selection, commencement of topographic survey, field level awareness raising training, IEC material development, vulnerability map generation and land gauge consultation. Final report will be submitted to DDM and LGED



## Activity 9. Inundation mapping trial

### Progress

Topographic data collection of Gaibandha district's vulnerable area and one upazila (Madarganj) of Jamalpur district have been completed. Based on those processed data, few trials are done to develop inundation map. After completion of topographic survey and after one or two trial , it will be possible to generate localized inundation map for the project area. Small trial version of inundation map shown in the following



### Section C

#### Challenges & Overcome Strategy

- Topographic survey remained paused from July as monsoon has started and the water level are changing which will cause error in DEM data.

### Section D

#### Work plan for September Month 2023

- Conducting of training on flood early waring and risk management for DMCs in project area
- DMC portal training continuation
- Finalized IEC materials update and action for printable version
- Annual report submission

### Section E

#### Budgetary Reflection

N/A

