

Development of Local Flood Early Warning and Dissemination System

PROVATi3 Project-DDM Component

Monthly Report: January 2025

A. Activity Summary

Activities at a Glance:

- Meeting of the Technical Advisory Committee (TAC)
- Training on Flood Early Warning for National Level Stakeholders
- Stakeholder Consultation on KIOSK Dashboard and Evaluation of Flood Early Warning Dissemination
- Annual Progress Sharing Workshop 2024
- Training on Flood Early Warning Dissemination for Local Volunteers
- Completion of topographic survey

B. Activities Brief

I. Meeting of the Technical Advisory Committee (TAC)

A meeting of the Technical Advisory Committee (TAC) has been held on January 6, 2025. The meeting was chaired by Mr. Netai Chandra Dey Sarker, Project Coordinator, PROVATi3 project-DDM component. The members of the committee, Sarder Udoj Raihan, Executive Engineer, Flood Forecasting and Warning Centre (FFWC); Arif Hossain, Meteorologist, Bangladesh Meteorological Department (BMD); Dr. Fatima Akter, Associate Professor & Chairperson, Department of Meteorology, University of Dhaka; and Tanzim Hayat, Assistant Professor, Department of Disaster Science and Climate Resilience, University of Dhaka, and PROVATi3 project-DDM component team attended the meeting.

Meeting objectives:

- Present the KIOSK dashboard application to the TAC members and obtain final rounds of feedback and inputs from them on it.
- Present the draft evaluation tools developed to assess the impact of Flood Early Warning Dissemination through Voice Messages and request for review comments.

Meeting discussions/ proceedings:

The ICT Specialist of PROVATi3-DDM Component demonstrated the KIOSK dashboard application slide by slide and explained its features, contents, functionalities, uses, and

applications. The KIOSK app will be displayed on the digital display boards to be set up in the respective Upazila Parishad (Sub-district Council) premises. The committee members shared their expert opinion and recommendations on the app. Also, field-level instructions regarding the use, installation, and maintenance of the dashboard for the relevant personnel of the Upazila Parishad were discussed.



Besides, a review of the draft assessment tools developed for the evaluation of effectiveness of flood early warning dissemination activity over voice messages was conducted. To note, flood early warnings were disseminated over voice messages during the last flood season. The project has a provision to assess the reach of the forecast as well as their usability, interpretability, and usefulness at community level after the end of monsoon within the project period and identify the gaps and areas of improvement for the implementation of forecast dissemination mechanism. A household survey and some Key Informant Interviews (KII) will be conducted to collect field level data for this evaluation. A household survey questionnaire and a set of guiding questions for the KIIs have been developed as data collection tools. The GIS Specialist presented the draft tools to the committee. Members shared their brief comments on the tools. Further, the Project Coordinator suggested to share the tools with the members over email to be reviewed by them in detail.

Meeting outputs:

- Final round of recommendations and suggestions were received from the TAC on the KIOSK application.
- Field-level instructions for the maintenance of KIOSK dashboard containing information regarding the use, installation, and maintenance of the dashboard for the relevant personnel of the Upazila Parishad were discussed.
- Review comments were obtained from the members on the draft assessment tools developed for the evaluation of effectiveness of flood early warning dissemination activity.
- A meeting minutes have been prepared incorporating all the discussion points, comments, and recommendations.

2. Training on Flood Early Warning for National Level Stakeholders

A National level stakeholders training on Flood Early Warning and Risk Management under PROVATi3 Project-DDM Component was held on January 07, 2025, at the Multipurpose Hall of Department of Disaster Management (DDM). Mr. Razwanur Rahman, Director General, DDM graced the event as the Chief Guest, while the Project Coordinator Mr. Netai Chandra Dey Sarker presided over the program. Joint Secretaries Mr. Anjon Chandra Paul and Dr. Md. Habibullah Bahar from the Ministry of Disaster Management and Relief (MoDMR) attended the training as Special Guests.

A total of 25 govt. officials from LGED, Flood Forecasting and Warning Centre (FFWC), Bangladesh Water Development Board (BWDB), Department of Agricultural Extension (DAE), Department of Livestock Service (DLS), DPHE, Bangladesh Meteorological Department (BMD), DGHS, Institute of Epidemiology Disease Control And Research (IEDCR), Department of Fisheries, DDM (Directors and Deputy Directors), and University of Dhaka, including District Relief and Rehabilitation Officers (DRRO) of Jamalpur and Gaibandha Districts were present in the training.

Mr. Razwanur Rahnman, Director General, DDM, welcomed all the participants and inaugurated the workshop. In his opening remarks, he extended a warm greeting to everyone in attendance and expressed his gratitude for their involvement in this training program.

Mr. Netai Chandra Dey Sarker, Project Coordinator, PROVATi3-DDM component delivered a presentation on Basic Concepts in relation to Flood Early Warning and Overview of Flood Early Warning Generation and Dissemination Systems and enlightened the trainees on the regulatory framework behind disaster management.

Mr. Partho Protim Barua, Sub-Divisional Engineer, FFWC, BWDB delivered a detailed presentation on Infrastructure and Operational Procedure of Flood Forecasting System in Bangladesh rendered by FFWC of BWDB. During the session, the participants informed that people from all the professional sectors are eager to receive all sorts of early warning and weather forecasts along with flood early warnings. Following his presentation, a session was led by the Team Leader of PROVATi3-DDM component on Flood Forecasting and Early Warning Systems.



3. Stakeholder Consultation on KIOSK Dashboard and Evaluation of Flood Early Warning Dissemination

A stakeholder consultation was held on January 13, 2025 on the features and services of KIOSK Dashboard application and Evaluation of Flood Early Warning Dissemination to be conducted under the project. KIOSK application will be deployed to display flood early warning at the communities and to the officers of the local administration. An evaluation of flood early warning disseminated during the last monsoon through voice messages will be conducted to assess the effectiveness of such dissemination.

Representatives from LGED, FFWC of BWDB, DAE, DPHE, DDM (Directors and Deputy Directors), MoDMR, Cyclone Preparedness Program (CPP), BMD, IWFM, DGHS, University of Dhaka, IFRC, BDRCS, FAO, WFP, and Care Bangladesh attended the meeting.

Meeting objectives:

- Present the KIOSK dashboard application to the relevant stakeholders after the adjustments made to the app based on the recommendations received from the TAC members and obtain final round of comments from the stakeholders on the app.
- Present the draft evaluation tools to assess the impact of Flood Early Warning Dissemination through Voice Messages, as updated based on the comments from the TAC members, and request for review comments to finalize the tools.

Meeting discussions/ proceedings:

ICT specialist Md. Mominur Rahman presented the tools and features of KIOSK dashboard and explained the system. Participants shared their opinion and relevant recommendations to make it more sustainable and effective for the respective users. The comments and suggestions received have been documented in the meeting minutes.

The draft assessment tools developed for the post-monsoon evaluation of flood early warning dissemination were shared with the attendees. Further, the tools were sent to them via email for their detail review and feedback. All the review comments will be documented and incorporated to finalize the evaluation tools.



Meeting outputs:

- Final round of recommendations and suggestions were received from the stakeholders on the KIOSK application.
- Field-level instructions for the maintenance of KIOSK dashboard containing information regarding the use, installation, and maintenance of the dashboard for the relevant personnel of the Upazila Parishad were discussed.
- An initial round of review comments were obtained from the stakeholders on the draft assessment tools developed for the evaluation of effectiveness of flood early warning dissemination activity.
- A meeting minutes have been prepared incorporating all the discussion points, comments, and recommendations.

4. Annual Progress Sharing Workshop 2024

The Annual Progress Sharing Workshop with Stakeholders for the year 2024 was held on January 29, 2025 at the Crystal Ballrom of InterContinental Dhaka. The progress made across all activities under this project through January 2023 to December 2024 was presented to the stakeholders including the donors, technical partners, government counterparts and relevant institutions, development partners, national and international non-governmental organizations, research institutes, and academia.

Mr. K.M. Abdul Wadud, Additional Secretary, Ministry of Disaster Management and Relief, graced the event as the Chief Guest. The workshop was presided over by Md. Razwanur Rahman, Director General, DDM. Mr. Gopal Krishna Debnath, Chief Engineer, LGED; Mr. Md. Zohirul Islam, Additional Director, BWDB; and Mr. Valentine Achancho, Country Director, IFAD Bangladesh Country Office were present as Special Guests.

Mr. Netai Chandra Dey Sarker, Project Coordinator, Provati3 Project-DDM Component, shared valuable insights on the project's goals, objectives, and achievements. The project implementation team presented the progress, accomplishments, and future activities.



Representatives from various government ministries, departments, and institutions, development partners, and non-governmental organizations participated in the event. They shared their suggestions and feedback during the open discussion, which will guide future

activities of the project. The open discussions session was moderated by the Chairperson Md. Razwanur Rahman, Director General, DDM.



5. Training on Flood Early Warning Dissemination for Local Volunteers

The local volunteers registered under the project are being trained up with an aim to increase their capacity to receive, interpret, understand, and disseminate early warnings for flood incidents. Volunteers of all 19 most vulnerable upazilas of the 3 districts will be trained up gradually. The first rounds of trainings were held in Kurigram District during January 30-31, 2025.

Three batches of capacity building trainings have been conducted covering three upazilas of the District. The training sessions focused on the basics of disaster risk management and flood early warning dissemination for the local volunteers. Mr. Netai Chandra Dey Sarker, Project Coordinator, PROVATi3 project-DDM component presided over the trainings. The Program Manager and GIS Specialist of PROVATi3 project-DDM component facilitated the sessions. The Project Implementation Officer (PIO) and District Relief and Rehabilitation Officer (DRRO) of Kurigram were present during the training sessions.



Table 1: Number of local volunteers trained up in Kurigram by Upazila

District	Upazila	Training Date	Venue	# Participants
Kurigram	Phulbari	Jan 30, 2025	Upazila Auditorium	48
	Kurigram Sadar	Jan 31, 2025	Training room, Terre Des Homes	51
	Rajarhat	Jan 31, 2025	Training room, Terre Des Homes	44
Total				143



6. Completion of Topographic Survey

A topographic survey is being conducted under the project to generate the digital elevation model (DEM) data for the vulnerable areas along the banks of Brahmaputra-Jamuna river system of the project area. The initial round of data collection has been completed in all three districts. Data for some of the survey grids (e.g., at Nageshwari upazila) which could not be captured in the initial survey were recollected in January. A total of 1,340 sqkm area has been surveyed through LiDAR drones. Data processing of these area is going on so that DEM data can be used to generate flood inundation mapping from the next monsoon.

Table 2: Area covered under topographic survey by Districts (in sq km)

District	Upazila	Survey Area (sq km)	Status
Gaibandha		5	525.0
Jamalpur		4	392.5
Kurigram		8	422.5
Total survey area (sq km)		1340.0	

C. Challenges & Strategies to overcome them

Challenges	Strategies to overcome
Local volunteers reside dispersedly in the char areas, which takes a long time for them to travel to and from the training venue.	Selecting training venues as close as possible to the respective unions, such that it becomes convenient for most of the volunteers to travel.
Completing volunteers training before the next monsoon, given the upcoming month of Ramadan and Eid vacation.	Adjusting the timing of the training sessions for the month of Ramadan, so as to complete the sessions well before breaking the fast (e.g. by 3:30 PM).

D. Work plan for the Upcoming Month

Activities planned for the Month of February

- Conducting the remaining training on flood early warning and risk management for DMC members
- Conducting DMC portal training at remaining upazilas
- Data processing of Topographic Survey
- Continuation of Volunteer Training
- Installation of KIOSK Dashboard
- Conducting Post-monsoon survey