

The Second Plenary Session for the Platform on Water Resilience and Disasters (Concept Note)

1. Background

In late May 2017, severe floods and landslides occurred in the Kalu and other river basins of Sri Lanka, resulting in devastating damage to lives and properties. To assist in flood recovery, the government of Japan dispatched the Japan Disaster Relief Expert Team. As it anticipates more flood events in the future, effective flood management is needed to prevent damage by using the latest information based on advanced science and technology.

In addition, under the global scheme of the International Flood Initiative (IFI), the platform on water resilience and disasters needs to establish as a significant framework in collaboration with the organizations relevant to flood management of the countries. As part of this effort, the “Plenary Session for the Platform on Water and Disasters” was held on August 24, 2017, in which all organizations relevant to flood management in Sri Lanka participated.

At this Session, a basic consensus was reached on the concept of the Platform in Sri Lanka. It was also agreed that four target actions (Early warning, Adaptation planning for global change, Economic effect of disasters, and Contingency planning and mainstreaming) would be implemented in three river basins of Kalu, Kelani and Malvathu.

Since the flood season starts in May this year, the preparation for flood disasters is urgently needed. For this reason, the Second Plenary Session will be an opportunity:

- To reflect and recognize the outcomes of the First Plenary Session
- To share the knowledge on the recent progress of the four target actions both by Sri Lanka and Japan.
- To discuss and develop the planning about future collaborative work to be well prepared for the coming flood disasters

2. Discussion points

(1) Economy

To analyze and promote investment and financing for water-related disasters, Prof. Naoyuki Yoshino, Dean of the Asian Development Bank Institute, will deliver a presentation on estimation of disaster effect by use of regional GDP data.

(2) Climate change

To build an end to end cooperative framework for climate change adaptation, we need to develop relevant data archive and integrated assessment tools that accelerate holistic understanding of changing risks, and quantify and reduce the related uncertainty.

(3) Ensemble rainfall prediction

To provide information of coming heavy rainfall in advance, numerical weather prediction (NWP) for 72 hours has been operated once a day using a regional NWP model. The ensemble prediction system (EPS), which is composed of multiple forecasts, has started operation by considering forecast uncertainty. ICHARM will provide the forecast data and NWP technology to responsible organizations.

(4) Flood forecasting

To provide the real-time as well as forecast river discharge and inundation information, Water-Energy Budget-Rainfall Runoff Inundation (WEB-RRI) Model has been set-up for Kalu river basin. 9 real-time rain gauges were installed since 2015 in and around the basin for better utilizing real-time satellite rainfall products from JAXA. Outputs from WRF model have also been utilized for extending the lead time of heavy rain and flood early warnings (~ 72 hrs in advance). Recently, an operational flood forecasting system is implemented at the irrigation department by the support from ICHARM and JAXA. Discussion will be on improving the present system by the support from ICHARM, utilizing the outputs for real-time operations, and expected future collaborations.

(5) Sediment disaster

An occurrence of landslides will be predicted by using critical rainfall conditions for the landslide occurrence, and real-time rainfall or predicted rainfall. Key of the prediction is how to determine the critical rainfall condition based on the local data. It is required to share both data and technology. ICHARM will provide the technology of the landslide prediction.

(6) Contingency planning

To discuss about the identification of pilot area for implementing demonstration project on Contingency Planning in Sri Lanka and how to implement including identification of key organizations to be involved in. Also to discuss on current situation of implementing contingency planning such as availability of national act/law for supporting contingency planning in local level, guidelines, available contingency planning, responsible organizations etc.

(7) Platform on Water Resilience and Disasters

To formulate and promote the framework of “Platform on Water Resilience and Disasters” for implementing all components i.e. Data archiving, Rainfall prediction, Flood forecasting, Climate change, Economic assessment, Sediment disaster, and Contingency planning. As the first step of interdisciplinary and transdisciplinary efforts for contributing to policy-making and local communities, institutional structure of the Platform and focal point of each participating organization will be discussed.

(8) Data management and archiving

To discuss about the data sharing policy among the Sri Lankan organizations and ICHARM, and creation of dataset list which organization has which dataset in Sri Lanka

3. Second Plenary Session for the Platform on Water Resilience and Disasters

(1) Time: Wednesday, March 28, 2018 (13:00 ~ 17:00)

(2) Venue: Auditorium at Irrigation Department (Colombo, Sri Lanka)

(3) Participant organizations:

Sri Lanka: Irrigation Department

Disaster Management Center (DMC)

National Building Research Organization (NBRO)

Meteorological Department

Survey Department

Ministry of Megapolis and Western Development

Ministry of Mahaweli Development & Environment

Sri Lanka Land Reclamation and Development Corporation (SLLRDC)

Japan: ICHARM

ADB I (remote)

University of Tokyo

JAXA

JICA

(4) Agenda:

(Group Photo)

13:00 – 13:10 Opening

13:10 – 13:15 Review of the First Plenary Session

13:15 – 13:45 Special lecture on economy

13:45 – 14:20 Report of progress from Japan side

14:20 – 15:00 Presentation from Sri Lanka side

15:00 – 15:20 Coffee Break

15:20 – 16:50 Discussion

16:50 – 17:00 Closing

**Proposed Platform on Water Resilience and Disasters
as part of the National Platform for Disaster Risk Reduction**

(draft)

Vision

Platform envisions a future wherein decisions and actions for reducing water-related disaster risk are well supported by coordinated, comprehensive and sustained risk communication.

Mission

To realize its Vision, Platform works to connect the demand for sound and timely decisions and actions taken by policy-makers and local communities with the supply of disaster risk information that is generated from integrated risk assessment and risk change identification based on well archived data and statistics. In doing so, Platform strengthens data integration and analysis functions by facilitating data and information accessibility and application to decisions and actions within and across many different stakeholders.

Scope

Decisions and actions for reducing risk on water-related disasters, including floods, landslides and droughts, rely, and will continue to rely, on the ability of expert communities to collect and archive data from various sources and combine these with social and economic analyses. Platform strengthens experts' capability of data collection and archiving, integrated assessment and risk change identification and stakeholders' capacity for making maximum use of these data and information provided from the experts. Platform contributes to institutional and infrastructural design and investment including land use management and climate change adaptation (static approach) and to effective response and recovery (dynamic approach).

Implementation Strategy and Schedule

Platform follows the IFI spiral-up implementation strategy and works in tandem with International Decade for Action, "Water for Sustainable Development", 2018-2028. In its demonstration phase, Platform focuses on 3 river basins, Kalu, Kelani, Malvathu; develops data integration and analysis functions by which the stakeholders work together with science communities at local and national levels; creates actionable

information supporting in policy-making and community of practice; reflects integrated data and information to institutional and infrastructure designs and community actions; and shares innovative benefits created by interdisciplinary and transdisciplinary efforts. Then, Platform will make a design of a prototyping phase and implement the plan through multi-stakeholder collaboration. Responding to requests from Platform, international development agencies and donors should prepare for technical and financial supports to Platform. These efforts should be expanded up to a national scale and should be strengthened for operational use.

(Draft)

Platform on Water Resilience and Disasters Data Sharing Guidelines

Platform on Water Resilience and Disasters (PLATFORM) recognizes that the societal benefits arising from its cooperative activities can be fully achieved through the sharing of data, information, knowledge, products and services among the participants in PLATFORM at least. PLATFORM also associates itself with the trend towards open data worldwide while agency policies or legislation preclude the sharing of data as Open Data. In order to set up data sharing guidelines which balance the interests of both data users and providers in the light of the above mentioned constraints, it is considered useful to divide PLATFORM data into the following three categories as a first step:

Category 1: Data sets are shared as Open Data by default.

Category 2: Data sets are fully shared only among the PLATFORM Participants

Category 3: Data sets are shared with those who get a permission from the data provider.

All PLATFORM data users are requested to follow the guidelines as below:

1. If there is any data policy indicated by the data provider, that policy always has priority over this Guidelines.
2. PLATFORM data are to be used only for the public interest, scientific research or education. Commercial use and exploitation of PLATFORM data sets are prohibited
3. Any modification or change of the original PLATFORM data sets is prohibited.
4. Any re-export or transfer of the original data sets to a third party is prohibited.
5. Whenever PLATFORM data sets are used for publication of scientific results, the author(s) shall send a copy of the respective publication, preferably in an electronic form or in a separate printed version, to the PLATFORM CONTACTS as indicated below.

ACKNOWLEDGEMENT

Whenever PLATFORM data sets are used for any academic presentations, and any publication of scientific results, the author(s) shall specify the following acknowledgement and if the data provider has their own acknowledgement quotation, the author(s) shall use

both acknowledgements.

“The PLATFORM data set is archived and provided under the framework of the Platform on Water Resilience and Disasters in Sri Lanka (PLATFORM).”

DISCLAIMER

1. PLATFORM data provider is not liable for any losses or any damage when PLATFORM data sets are used.
2. PLATFORM data sets and related information are subject to change without any prior notice.
3. PLATFORM will not support for any additional processing or analysis of the PLATFORM data sets.

CONTACTS

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National Building Research Organization:

Meteorological Department:

Survey Department:

Ministry of Megapolis and Western Development:

Ministry of Mahaweli Development & Environment:

Sri Lanka Land Reclamation and Development Corporation:

ICHARM: