









Webinar series: Challenges, lessons, and innovations for IFRM

Session 5: Outlook for IFRM and ways forward.

Reflections on state of the flood risk management sector in Asia and development outlook

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TA 9634-REG: Strengthening Integrated Flood Risk Management

Webinar Agenda

- 1. Webinar opening and remarks from Ms. Yasmin Siddiqi, ADB
- 2. Overview of the KSTA project and introduction to the panel of experts
- **3**. Brief presentation: Reflections on some key issues for IFRM by Ian Wood (Team leader)
- 4. Panel discussion on IFRM, question and answer
- Remarks from Virinder Sharma, Principal Urban Development Specialist – ADB and Program Manager UCCRTF
- 6. Panel discussion (continued)
- 7. Closing remarks from Mr Lance Gore, ADB





TA 9634 REG 'Strengthening Integrated Flood Risk Management'

Overall objective: *Strengthen the design and implementation of IFRM solutions, enhancing knowledge and application of IFRM strategies*



Commenced in February 2019, concludes in June 2022

8 Countries: Indonesia, Philippines, Viet Nam, Myanmar*, Bangladesh, India, Nepal and Pakistan

Webinar series

Date	Title
March 9	A country-scale view on IFRM and applications of global datasets
March 15	Application of an IFRM Approach at a River Basin Level
March 22	Coastal Flood Risk Assessment
March 30	Economic and Finance for IFRM
April 5	Outlook for IFRM and Ways Forward

Objective: To share our experiences from *implementing the* KSTA project and reflect on issues and lessons learned for applying IFRM in practical applications

Discussion on *Reflections and ways forward* **CHALLENGES, LESSONS, AND**

INNOVATIONS FOR IFRM

Introduction to the expert panel



Ms Dolores Mayor Hipolito Project Manager III. Flood Control and SABO Engineering Center, UPMO-FCMC. Department of Public Works and Highways. Philippines.

Chairman Federal Flood Commission.





Dr. Sultan Ahmed Retired Secretary, Power Division. and former Director General. Department of Environment. Bangladesh

Mr. Ahmed Kamal

Pakistan

Mr. Abdul Malik Sadat Idris Director of Water Resources and Irrigation. Ministry of National Development Planning (BAPPENAS). Indonesia



Dr. Le Thi Chau Ha Disaster Risk Management Specialist Viet Nam









Mr. Geoff Wilson Senior Water Resources Specialist. Sustainable

Development and Climate Change Department. ADB

Ms. Irina Novikova

Principal Social Development Specialist. Sustainable Development and Climate Change Department. ADB

Mr. Eric Quincieu Principal Water Resources Specialist. Environment, Natural Resources and Agriculture Division. Southeast Asia Department ADB Indonesia

Mr. Ian Wood KSTA Team Leader and Climate Change Specialist. Landell Mills

Major flood and storm disasters



Source: EM-DAT, CRED / UCLouvain, Brussels, Belgium. www.emdat.be (Accessed 02/05/2020)

Exposure to flooding

58,800 sq. km Bangladesh 45% 51,100 sq. km Philippines 17% 160,300 sq. km Pakistan 21% 265,900 sq. km Indonesia 15% 65,500 sq. km Viet Nam 21% 9,500 sq. km Area of floodplain (sq. km) 8% of country Nepal 7%

Area of "natural" floodplain (to 1% event)



Source: JBA Global Fluvial Flood and Defences Mapping 2021

Lives vs costs

Global trends for climate related disasters

- Number of deaths per year decreasing
- Economic losses are increasing
- Floods and storms
 losses dominate
 economic losses from
 disasters



Source: WMO Atlas of Mortality and economic losses from Weather, Climate and Water Extremes (1970-2019) WMO Publication 1267

Impact of climate change on infrastructure investment



The World Bank estimates a global need for urban infrastructure investments that amounts over US\$4.5 trillion per year, of which an estimated premium of 9% to 27% is required to make infrastructure low carbon and climate-resilient

How is investment prioritized within a country?

How is Government investment for flood management prioritized within the country?

Funding goes to the location of the last big flood, based on publicity

Funding is assigned based on a top-down process according to a detailed risk assessment

Funding allocation is a bottom-up process based on grass-roots needs identified at the local level

Funding allocation is a political process that is not always transparent



Poll question webinar #1

Key issues for prioritization:

- Organization and institutions
- Information on risks and impacts
- Tools and technology



Flood Risk Management Measures



Can we manage urban development

- Urbanization is increasing More people & things at risk of flooding
- Cities are spreading Change to runoff characteristics and natural drainage capacity
- Secondary cities are growing Limited capacity & resources. How do we prioritize which ones?
- Exposure is rising Informal settlements at risk. Can we prevent development in high-risk areas, or relocate vulnerable populations?
- Assets are soaring 90%+ of capital is in urban land and buildings: forget everything else – should we concentrate resources on protecting urban areas from flooding?
- Markets are shaping Can the private sector be persuaded to champion flood resilient urban development?

Is urban planning the solution?

- Land use planning is fundamental for efficient urban development and must be risk-based
- Solutions need to be practical (reality is complex)
- Implementation and enforcement capability is essential
- Urban planning is more than plans:
 - Pathway to recast how we see cities and towns
 - Promote nature-based solutions, green infrastructure and sponge cities
 - Harmonious with greener, more resilient, and livable

Coastal flooding – the unsolvable problem?

Sea levels projected by 2050 (moderate scenario) are high enough to threaten land currently home to a total of 150 million people to a future permanently below the high tide line, or a marginal increase (2019) of 40 million.



Is Nature-based the solution?





WEBINAR SERIES

CHALLENGES, LESSONS, AND INNOVATIONS FOR **STRENGTHENING INTEGRATED FLOOD RISK MANAGEMENT (IFRM)**



DOLORES MAYOR HIPOLITO Department of Public Works and Highways **Philippines**



AHMED KAMAL **Federal Flood** Commission Pakistan





DR. SULTAN AHMED ABDUL MALIK SADAT **Department of IDRIS** Environment Bangladesh **Ministry of National Development Planning** Indonesia



DR. LE THI CHAU HA **IRINA NOVIKOVA Asian Development Bank** Vietnam Disaster **Management Authority**



GEOFF WILSON Asian Development Bank





Landell Mills



SESSION 5 OUTLOOK FOR IFRM AND WAYS FORWARD



5 April 2022, Tuesday 4 p.m. (Manila)

Thank you

Is the solution more investment?

If so, how much investment is enough?



- Considerable variation between countries
- Investment in flood infrastructure is small compared with other sectors such as power, transport, and telecommunications.
- UK: AAL = \$450m-\$1.3b, Flood expenditure: \$3b/y. Expend/AAL = 6.7 to 2.3,
 0.1% of GDP