

# **WATER QUALITY GROUP REPORT**

**Co Chairs:**

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# Activities ongoing

- Demonstration project on sustainable water management in the Huong river basin in Vietnam; led by Prof Furumai
- A multi-disciplinary research on quality of water in water related hazards and local responses; led by Dr. Bilqis A. Hoque
- Attempts to explore ways to connect water quality related activities to other AWCI and GEOSS activities

# Flood & Water Quality research project in the Huong River (Hue City)

by Prof: Furumai

*Multi-scale modeling*

- 1) Evaluation of effects of river flow/floods in the Hue city using the distributed hydrological model.
- 2) Evaluation of inundation in the urban area of the Hue city using the output of 1) and the urban sewerage system model, considering water pollution phenomena.
- 3) Estimation of possible risk of spreading of pathogens due to the polluted water flooding in the city based on the output of 2) and using the risk assessment model

*Water quality evaluation during flood/inundation situations*

*Health risk evaluation after flood events*

A multi-disciplinary research on quality of water in water related hazards and local responses (Bilqis Hoque: WQ Group)

## Goal

- Contribute to the effective incorporation of WQ/environmental and societal issues into flood, droughts, climate change adaptation and other activities by AWCI-GEOSS

# Contd.

## Objectives

- In medium to long-term: to conduct research on WQ/environmental/societal issues in floods, droughts and in other events related to climate change in different countries under AWCI and report to the groups
- In immediate term: to do longitudinal study on those issues in Bangladesh (today I shall share some results)

# Proposed activities/ideas by the WQ Group

- Identification/development of hydrological models that can be coupled with water quality issues
- Exploring possibilities to use satellite data for water quality monitoring and sustainable water management
- Utilization of the ongoing capacity building initiatives to help build capacity and interactions for incorporation of WQ/environmental/societal issues into flood, drought, climate change impact assessment and adaptation, and other activities by AWCI.

# During the group work

- Discuss those and new ideas with identified ways forward
- Revisit the capacity building matrix and request JAXA accordingly

Thank you very much