



DELTA IN TIMES OF CLIMATE CHANGE II INTERNATIONAL CONFERENCE

OPPORTUNITIES FOR PEOPLE, SCIENCE, CITIES AND BUSINESS
ROTTERDAM THE NETHERLANDS, 24-26 SEPTEMBER 2014

Deltas in Depth scientific sessions	
Disaster Reduction and Emergencies	
DD 8.2 Positive, reality based approaches to regional and global resilience	
Chair	Prof.dr. Dorothea Hilhorst, Wageningen UR, the Netherlands
Presentations	<ul style="list-style-type: none">• Swenja Surminski, London School of Economics, United Kingdom• PhD Fabrice Renaud, United Nations University - Institute for Environment and Human Security, Germany• PhD Rezaur Rahman, Bangladesh University of Engineering and Technology, Bangladesh

In this session three presentations were held diverse topics around increasing the resilience of deltaic areas. First, Swenja Surminski explained the importance to show co-benefits of disaster risk management (DRM). Fabrice Renaud talked about his efforts to compare the vulnerability of deltas and Rezaur Rahman shared experiences of a flood rotation project in Bangladesh.

Investments to reduce the risk on disasters are mostly focused on the prevented losses. However, these investments might have co-benefits/externalities like macro-economic growth, social cohesion and improved regional investment climate. Swenja Surminski showed multiple challenges to capture all these benefits. The first important challenge is found to be the method. There are various methods available, such as multi-criteria analysis, but is not clear how to choose the optimal method. Besides the method, the scale is also very important. When looking at a local level, some co-benefits might not be visible, but the national level is more prone to substitution effects. Despite the challenges, DRM is believed to be put higher on national agendas when the co-benefits are clear. Case studies are needed to gain experience and to convince decision makers to focus more on disaster prevention than on disaster recovery. The discussion focused on the linkages between development and DRM.

Mr. Renaud explained his global delta vulnerability indicator project which is part of the Belmont Forum DELTAS Project 2013-2016. He works on developing a unified framework with a broad set of indicators in order to compare deltas and part of deltas around the world.

The vulnerability indicators are based of literature review and consultation with stakeholders. Input from both literature and local stakeholders are needed because stakeholders can provide additional (local) information. Comparison of deltas, based on a set of vulnerability indicators is very challenging. Mr. Renaud is currently working on data gathering and explores the options to substitute indicators that are correlated. In the GIS application which is available next year, users should be able to select indicators and do multiple comparisons between deltas. The point is stressed that this project focusses on the vulnerability of deltas and not on their resilience. However, insights of comparisons can be used as input for adaptation strategies towards more resiliency.

Rezaur Rahman showed a project around the "Restoration of coastal resilience through tidal river management in Bangladesh". In the project area, 123 polders are located. In the past years, two major cyclone events led to severe damages. Challenges in rehabilitation are lack of labour to maintain of the old polder embankments and changing riverbeds. In order to increase the resilience of the system, polders are now used as overflow areas. This reduces the stress on embankments of other polders and leads to sedimentation in the flooded areas. A rotation system is proposed, to





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divide the nuisance of landowners. Besides, landowners should be compensated for losses when it is their turn to open up their polder to reduce the water stress of others. During the discussion, this project was linked with the co-benefits of DRM of Swenja Surminski. When the broader benefits are clear, the chances of success for larger scale rotation projects would increase.

