

## DELTAS 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			
Deltas in Depth Theme 2: Flood risk management			
DD 2.6 Flood risk management challenges in national policies			
Chair	D	Dr. Frans Klijn, Deltares, the Netherlands	
Presentations	•	Dr. Cees Veerman, Ministry of Foreign Affairs, the Netherlands	
	•	Dr. Frans Klijn, Deltares, the Netherlands	
	•	Dr. Sebastiaan van Herk, Bax & Willems, Spain	
	•	Dr. Dries Hegger, Utrecht University, the Netherlands	
	•	Derek Hoeferlin, Washington University in St. Louis, USA	

Cees Veerman opens this session with his keynote presentation on "Developing long-term views on water-related issues in Myanmar, the Netherlands and Vietnam". In the Netherlands, there is a long history in flood risk management. How can the lessons we have learned in the Netherlands be translated to ideas abroad? The Mekong river delta (Vietnam) and the Ayeyarwady (Myanmar) are two deltas which are similar in size and population compared to the Rhine delta in the Netherlands. However, in contrast with the Netherlands, these deltas have a high probability of flooding, but with relative low consequences. Moreover, while the Netherlands is mainly a service based industries, the two Asian deltas are much more agricultural based. Cees Veerman noted that each socioeconomic stage of a country requires different approaches and gives different opportunities for adaptation and prevention. An important lesson we can learn from the presentation is that we should apply ideas but not solutions. We should not try to directly translate our approaches in the Netherlands to other deltas. First, we should analyze the situation and formulate the exact aims. Should we focus on flood safety, fresh water supply, facilitate shipping or maybe more towards nature conservancy? As such, the goal of the Dutch delegations to Vietnam and Myanmar was to deliver building blocks, focusing on data collection, expertise building and the generation of ideas. The most important thing is capacity building among the local population.

The second presentation was by Frans Klijn, who focused on reconciling different flood risk concepts in behalf of adaptive flood risk management planning. Planning for long-term management is important, albeit that the uncertainty is high. The key issue in developing flood risk management is which measures to choose and what strategies to adapt. However, before talking about management, everyone involved in the process should have the same idea of what constitutes flood risk. This resulted in the, now commonly adapted, constitution of hazard, exposure and vulnerability. The most important conclusion of the presentation is that a comprehensive adaptation strategy for the future is most favorable.

The third presentation was by Sebastiaan van Herk, who delivered a talk on the evaluation of large-scale risk reduction projects in the Netherlands and how we can learn from previous projects for new projects. Similar to Cees Veerman, Sebastiaan van Herk also stated that previous learning experiences should help generate ideas, and should not go directly to solutions. As such, he suggests to get a specific team within the project for learning lessons and to improve current and future approaches. For instance, one important lesson learned from the Room for the River project is that the future maintenance and operation costs were sometimes forgotten and should be taken more into account in future projects. He ends with an important remark that thinking ahead is important. Know what to expect and know what the boundaries are. Be flexible and learn.







The fourth speaker was Dries Hegger, who gave a presentation on improving flood risk governance. He presented the results of an extensive project which searched for appropriate and resilient flood risk governance to deal with flood risks in vulnerable urban regions. This is done in the context of the current debate regarding the need to diversify Flood Risk Management Strategies and considering prominent policy initiatives (e.g. EU Floods Directive). He stated that we need to link together and align strategies. Again, it was stated that good practices cannot uncritically be transferred from one context to another (provide ideas, not solutions). He states that successful diversification seems to require at least: bridging mechanisms, relevant decision making frameworks/tools, recovery mechanisms and country-specific implementation of the floods directive.

The final presentation was by Derek Hoeferlin, who talked about climate adaptation strategies in the Midwest River Basins, USA, specifically focusing on the city of St. Louis. In history, the region around St. Louis has suffered multiple extreme weather events, including the most destructive and most costly flood in US history. As such, to anticipate on potential increasing exposure due to climate change in the future, Derek Hoeferlin and his team have started to develop possible adaptation strategies to reduce the risk in and around St. Louis. They are doing this in Dutch-American collaboration by organizing multi-stakeholders workshops. Again, important to note is that the lessons from the Netherlands can be used as ideas, not for solutions. In the future, they will continue to develop improved flood risk management strategies and increase participation among local stakeholders. Finally, Derek Hoeferlin suggests building a multi-disciplinary international "think tank" dedicated to the research and practice of long-term integrative water-based planning.



