



Enabling the Transition in Flood Risk Management

EXPLORING TERRA INCOGNITA: ENABLING THE TRANSITION IN FLOOD RISK MANAGEMENT

Workshop organised by the Water, Climate and Future Deltas of Utrecht University

Date/ Time: Tuesday 12 October 2021 (09:30-13:00)

Countries worldwide, especially urban areas in deltas, face increasing flood risks due to urbanisation and the effects of climate change. This requires a rethinking of their flood risk governance approaches to address these long-term effects. Recent policy initiatives and research projects have substantially advanced our thinking in this respect, but they have also shown that the development of transformative pathways will be challenging. Imagining desired futures under various climate scenarios is challenging for all societal issue areas and domains, but especially in the case of flood risk management. Countries tend to rely on nationally specific policies and approaches that have caused several lock-ins: besides well-known physical lock-ins, such as the safety paradox, there are also strongly socially and culturally embedded institutional lock-ins. All this is not conducive to transformative change. This session aims to explore 'terra incognita'. Five speakers from research, policy and practice will set the scene, after which the audience will be invited to contribute in three parallel sessions.

1. The latest IPCC report (August 2021) underlines the urgency to undertake actions to mitigate and adapt to climate change and, at the same time, stresses the need for planning for the long-term and to build up resilience in the context of uncertainty in future scenarios. The presentation from **Jos van Alphen** (*Advisor Strategy and Knowledge, Delta Commission, the Netherlands*) addresses the implications of the insights on the scenarios of sea-level rise in the future on policies formation and the strategies that the Delta Commission (plans to) adopt to address these challenges. The presentation will also share the opportunities and challenges in developing long-term flood risk management (FRM) policies for the Netherlands and the first steps that need to be taken in the short term to enable a resilient future.
2. Dynamic Adaptation Policy Pathways planning has been increasingly widely applied to support decision making for delta development under high uncertainty to explore possible adaptation pathways in the long term. In this presentation, with cases of adaptation pathways developed for deltas and/or cities, **Marjolijn Haasnoot** (*Senior Researcher Climate and Water/ Associate Professor, Deltares/Utrecht University*) discusses the options for adaptation and the possible impact of accelerating sea-level rise on the feasibility of these measures. With the decreasing solution space due to accelerating sea-level rise and socio-economic and other climate-related changes, transformative change in flood risk management strategies may be needed to ensure sufficient operation space to implement necessary measures in the future.
3. Many countries, including the Netherlands, have traditionally placed a lot of emphasis in their FRM policies on flood defence – building dikes, dams and other defences. Since the beginning of this century, there has been more and more discussion, both in science and practice, about diversifying strategies to deal with flooding. This means that various strategies are being deployed, some aimed at reducing the risk of flooding, some at consequence reduction and others aimed at promoting recovery. Although recent literature confirms the desirability of such diversification,

we see that the implementation of this still lags behind and that the discussion, certainly in practice but also in the literature, often assumes a status quo in which more transformative change (e.g. managed retreat in the highly urbanized West of the Netherlands) is not considered likely or desirable. In his presentation, **Dries Hegger** (*Assistant Professor in Regional Water and Climate Governance, Utrecht University*) introduces three potential paths to transformative change: 1) pro-active spatial planning as a basis for enabling managed retreat; 2) live with the water, and 3) recovery after a flood incident. To generate supported social decision-making about long-term images for flood risk management, an important precondition is that more different actors in society are involved in the discussion about flood risk management. This should explicitly not only raise the question 'what is resilient?' but also 'what is fair?'

4. But how can the transition of flood risk management strategies be realized in practice? What are the factors that can stimulate or limit the process of developing, adopting and implementing new strategies? Sharing the experience in Germany, **Marc Scheibel** (*Head of Water Resources and Flood Risk Management, Wupperverband, Germany*) discusses how flood risk management strategies have been implemented in the Wupper area and the impact of the flooding events in the summer of 2021 for future adaptation and flood risk management strategies. In his presentation, Mr. Scheibel will also share lessons from past experiences on which factors have been found to stimulate or constrain the adoption of flood risk management strategies for long-term resilience.
5. While the topic of adaptation to increasing flood risks has been mostly discussed within the water sector, it must be emphasized that the increased risks associated with accelerating sea-level rise also affect other sectors. In the case of the Netherlands, besides climate change, the country is also facing other urgent challenges relating to for instance housing, energy transition, infrastructures, nature, and agriculture. Future development of these sectors (and in particular, in spatial planning) in turn influences the capacity of the physical system to adapt to sea-level rise and mitigate flood risks. It is therefore important that the flood risks associated with future scenarios of sea-level rise are adequately accounted for in the planning of future developments in other sectors. Building on their work in the Netherlands, **Nikéh Booister** (*Consultant Water Safety, Flood Risk and Climate Adaptation, Sweco*) discusses recommendations and examples on how adaptive planning for uncertainty and sea-level rise can be implemented in practice and taken into account in assessing future investment and identifying no-regret measures.

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Online workshop (via Microsoft Teams)

Time	Content	Speaker/Moderator
09:30-09:40	Opening & Introduction	Marleen van Rijswijk (<i>Utrecht University, the Netherlands</i>)
	Presentations 10 minute presentation/each & 5 minute Q&A/ presentation	
09:40-09:55	Delta development strategy - Dilemmas that deltas are facing in the long term (from a policy perspective)	Jos van Alphen (<i>Delta Commission, the Netherlands</i>)
09:55-10:10	Solution space and pathways for flood risk management	Dr. Marjolijn Haasnoot (<i>Deltares/ Utrecht University, the Netherlands</i>)
10:10-10:25	Governing transformative change in flood risk management – broaden up societal debates	Dr. Dries Hegger (<i>Utrecht University, the Netherlands</i>)
10:25-10:30	<i>Break</i>	
10:30-10:45	Implementation of flood risk management - perspectives from Germany	Marc Scheibel (<i>Wupperverband, Germany</i>)
10:45-11:00	From long-term uncertainty towards decision making	Nikéh Booister (<i>Sweco, the Netherlands</i>)
11:00-11:20	Discussion	
11:20-11:30	<i>Break</i>	
11:30-12:00	Breakout Sessions (3 groups, 30 minutes) The aspects to be discussed in the breakout sessions are: <ul style="list-style-type: none"> • What is our vision for the strategy? • What can we implement in the present situation? • What are the steps that need to be taken to implement the strategy? (e.g. possibilities/ constraints) 	
	Session 1: Proactive spatial planning – “Keeping people away from water”	Dries Hegger (<i>Utrecht University, the Netherlands</i>)
	Session 2: Flood damage mitigation – “Living with water”	Herman Kasper Gilissen (<i>Utrecht University, the Netherlands</i>)
	Session 3: Flood preparation, recovery, and crisis management – “Preparing for water”	Carel Dieperink (<i>Utrecht University, the Netherlands</i>)
12:00-12:05	<i>Break</i>	
12:05-13:00	Closing plenary <ul style="list-style-type: none"> - Feedback from breakout sessions - Discussion & reflection 	Marleen van Rijswijk (<i>Utrecht University, the Netherlands</i>)