DELTAS IN PRACTICE SESSIONS: EXTENDED WORKSHOP DESCRIPTIONS

Theme 1: Risk assessment

Deltas in Practice Theme 1. Risk assessment
DP 1.1 Future Weather: A new instrument for policymakers and risk analysts
Wednesday 24 September, 16.15-18.00 **Goudriaan Room I**

Future Weather is a new instrument for policymakers and risk analysts for climate adaptation. Realistic time series of high-impact weather events (often caused by a combination of circumstances!) are generated, which can be used to explore the impacts on e.g. infrastructure and water management.

In the first presentation Future Weather is placed in the international context of climate services, like climate scenarios and probability distributions. This talk will present methods of processing model results into distributions (as used in the UK) and introduce the new concept Future Weather, explaining why this approach is both easier to use and more relevant for adaptation decision makers.

Then two Future Weather applications in the Netherlands and Sweden are presented. For the Dutch case, a strong interaction between local water managers, meteorologists and hydrologists is shown to be important. Also the relevance of Future Weather, being able to include multiple variables (in this case: river discharge and storm surge) in stress tests, is highlighted. The implications of building policy on high impact events are discussed. Pieter Bloemen, practitioner of the Dutch Delta programme, reflects on the use of Future Weather to determine tipping points in future. Hans Waals, of the Dutch Water Authority Hollandse Delta, reflects on the possibilities for use of Future Weather by Water Authorities.

In the Swedish case the adaptation of Stockholm and Lake Mälaren to a changing climate is described, including changing inflow from rivers and rising sea levels. Also the role of conflicting interests and legal processes in the climate adaptation case are being addressed.
With this session we intend to further elaborate on the applicability of Future Weather.

Website: http://www.knmi.nl/samenw/regioklim/FW/

Deltas in Practice Theme 1. Risk assessment
DP 1.2 Extreme weather impacts on critical infrastructures: International lessons to improve analysis
Wednesday 24 September, 14.00-15.45 **Diamond Room I**

Climate change will cause more intense and more frequent weather extremes like windstorms, extreme rainfall, high temperature and high tides. These extremes have already been visible and are more likely to occur in the future. Extreme weather events can cause damage to infrastructure networks like ICT, energy, transport, and water. These networks fulfil an important economic role

and enable our society to keep safe, healthy, and accessible. The interconnectedness and interdependencies between these networks is increasing. ICT does not work without electricity and power, and the breakdown of water sewage systems as a consequence of power outages may cause water on streets and in tunnels. The managers and owners of these infrastructure assets know about the risks of their own assets, and they have emergency and contingency plans in cases of failure. But in most cases they have very limited knowledge about the risks of extreme weather events and their interdependency with other infrastructure networks.

In this workshop three cases (the Netherlands, United Kingdom, and Ireland) will be presented. Each of the cases uses a framework for risk assessment that contributes to both analysing the risks and communicating with various stakeholders. An important part of the workshop is a group discussion with the participants on both the lessons learned for adaptation strategies in practice and steps forward for research and analysis of interconnected risks on critical infrastructures.

Deltas in Practice Theme 1. Risk assessment

DP 1.3 How the world's largest deltas are learning to learn from each other

Thursday 25 September, 15.45-17.30 **Goudriaan Room II**

1. The Delta Alliance developed a methodology for a global assessment of deltas in support of the Transboundary Water Assessment Programme (TWAP). The application of this method to 26 deltas will be presented. For more information see http://www.delta-alliance.org/projects/TWAP.

2. The Delta Alliance performed a methodology update and an extension of the 'Comparative assessment of the vulnerability of 10+5 deltas'. The 5 new deltas are the Tana, Zambezi, Parana, Ayeyarwady, and Ouémé. The refined methodology identifies the most important challenges and the related future adaptation measures. See also http://www.delta-alliance.org/projects/Comparative-assessment-of-the-vulnerability-and-resilience-of-10-deltas.

3. The Adaptive Delta Management approach will be shortly introduced. This approach forms the backbone of the toolbox that is presented later.

4. The initial results of applying Adaptive Delta Management in the Mekong will be presented and discussed with the Delta Alliance Wings from Vietnam, Indonesia and/or Bangladesh. On the basis of recent experiences with the development of delta plans we will discuss the needs, development, and applicability of different tools and approaches for adaptive delta management in the different regions. Some tools can be applied in a similar way in different deltas while other tools might need a lot of local tuning. Also the level of expertise and data demand differs significantly between the tools. What works well across different regions and what else is needed?

5. The new Delta Alliance Toolbox website will be launched. Participants from the Delta Alliance and the audience will discuss the draft Toolbox for Adaptive Delta Management with the aim to improve and enrich it with practical examples from the respective case studies. In addition, the opportunities for the development of new tools will be identified.