



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	
Deltas in Depth Theme 2. Flood risk management	
DD 2.4 Novel flood damage mitigation and precautionary measures	
Chair	Dr. Heidi Kreibich, German Research Centre for Geosciences, Germany
Presentations	<ul style="list-style-type: none">• PhD Swenja Surminski, Grantham Research Institute on Climate Change and the Environment, United Kingdom• Dr. Philip Ward, VU University Amsterdam, Institute for Environmental Studies, the Netherlands• MSc Jantsje van Loon-Steensma, Wageningen UR, The Netherlands

PhD Swenja Surminski, Flood Insurance in England- assessment of the current and proposed insurance schemes in context of rising flood risk

The number one natural disaster in the United Kingdom are flooding's. Therefore it is important to reduce the impact and the damages caused by flooding's. A lot of inhabitants of the UK do not have a good insurance, some have none and others have half insurance. Before we go further we have to define the word "insurance", because there are a lot of different interpretations.

Insurance is mechanisms where risk or parts of a risk are transferred from the insured to the insurer in return for a premium payment.

Fifty percent of all households are insured, a lot of households are insured because they have a mortgage and that means that you are obligated to take insurance. But all the households without a mortgage have to decide for themselves if they want insurance. A lot of people don't see the need, that's why a lot of people are not insured. We are entering a new phase, we have to challenge with a lot more rain. That is why insurers are more often surprised than before. Increasingly areas with previously a low change of flooding are now flooded. A lot of insurers are surprised by the increase of the damage. Therefore they want the system to change. A lot of people are afraid that the prices of insurances will rise after a flooding occurs. Customers are concerned that the insurances will become unaffordable.

The big question is, "how do you design a new flood insurance while keeping it affordable". The Netherlands is a good example of such a sample. There everybody is obligated to pay, even though they don't live in a risky area. The problem is that a lot of people are not willing to pay for other people. Only the people in the risky area are willing to pay the insurance companies. But the problem is that it's not clear which areas are at risk and which are not.

Dr. Philip Ward, Jakarta climate adaptation tools

In the four years that the project is running, there already have been two major flooding's in Jakarta. This kind of proves that adaptation is needed. They wanted to improve methods and tools for assisting in decision making of flood risk adaptation. That's why JCAT was invented (Jakarta climate adaptation tools). With this tool it is possible to create maps that show the risk and the possible damage of a certain area. After the adaptive measures, it's possible to see the difference before the measures and after. This makes it clear what the difference is, and how effective the adaptive





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measures were. This makes it possible to choose the most effective method and prevent a lot of floods and damages.

Jantsje van Loon-Steensma, The potential of wide green dikes along the Dollard

The land along the Dollard is protected by dikes, this happens in a different way on the Dutch and the German side. In the Netherlands they use steep dikes, covered with concrete and big stones. In Germany the dikes are very rolling and covered with grass. The dikes on the Dutch side along the Dollard do not all meet the current standards. And have to be replaced. The key question was, if the Dutch dikes couldn't be built like the German ones. So instead of steep dikes they would be rolling and covered with grass. But between the dikes and the Dollard there are protected Salt Marshes, this is one of the main reasons why the idea of rolling dikes covered with grass is not feasible.

