

## Deltas in times of climate change

### Speech by Tineke Huizinga, Minister of the Environment and Spatial Planning, Delta Alliance, Rotterdam, 30 September 2010

Distinguished colleagues, ladies and gentlemen,

Each year images of floods dominate the news. More and more often we see these images several times a year. Sometimes we even find ourselves wading through water.

By now the images are familiar to us all. Large numbers of victims. Long lines of refugees who lack the most basic necessities. People whose lives are in danger or at least made terribly difficult. Enormous damage. And when the floods recede, people cleaning the mud out of their shops and houses.

Many coastal areas are under threat from seasonal storms at sea. Heavy rainfall or melting snow in the mountains makes rivers overflow their banks. In August this year the swollen River Indus made 20 million Pakistanis homeless.

Last year, the global risk consultants Maplecroft published a Climate Change Vulnerability Index. The index rates 166 countries on their capacity to manage the risks to society and business posed by droughts, floods, storms, rising sea levels and other natural disasters linked to climate. It also takes account of the impact of these disasters on ecosystems.

The index ranks Somalia, Haiti and Afghanistan as most at risk. Most of Southeast Asia, except for Malaysia and Singapore, is rated as high-risk. Europe, Australia, Japan and North America are all rated low-risk.

Shortages of drinking water in some continents could lead to armed conflict. This is a tragic paradox: water is essential to life, yet it could lead to deadly violence. We have to prevent this from happening.

We have to keep adapting as well as possible to the effects of climate change. In doing so, we need to link water safety and water management to spatial planning.

Knowledge has been gained on these issues all over the world. It will be very useful to share and discuss it with each other here today. Climate change is highly unpredictable and knowledge development is a continual process. It is the scientists' job to inform world leaders as clearly as possible about the effects of climate change on our physical environment, within the margins of uncertainty about the future.

As you know, in this European delta called the Netherlands we have already gained quite a lot of experience with coastal defences and water management. We have a national water plan called the Delta Programme, with its own Government Commissioner. This plan looks further ahead than the four-year cycle of governments, far into the future. A fund has been created so that the plans will not only exist on paper but also be carried out in practice – no matter what government may be in office. After all, our safety is at stake. As you know, this country is very much at risk from rising sea levels.

As I mentioned earlier, we need to include safety and the adaptations that will be required in an integrated approach to spatial planning. We set great store by the quality of our environment. We have to do a great deal in the Netherlands with relatively little space. And much of the land we have is either low-lying or near major rivers. In the urbanised western Netherlands – the area around our four largest cities, which we call the *Randstad* – we are now looking at integrated approaches to land use.

Can housing be built in areas that are vulnerable to flooding? Can flowers and vegetables be grown in floating greenhouses? Can we combine buffer zones for water with nature conservation? These are key questions for the development of effective land-use policy. And the answer to all three of them is yes. In the Netherlands we are building houses that can float. And in the province of South Holland we are combining greenhouse culture with water storage and creating natural climatic buffer zones, where high water levels can be catered for in combination with nature conservation.

South Holland is an interesting region. It is both the most densely populated and lowest-lying province of the Netherlands. The Port of Rotterdam takes up a lot of its land area. At the same time, the people of South Holland want room for housing and recreation. So if we can manage all these challenges here, it has to be possible in other regions too.

We are transforming part of Rotterdam's immense port area – an area of 1600 hectares close to the city – into a residential and business district. This is a fine example of reusing land that was already built-up.

We are renewing and revitalising urban port areas located outside the dikes, strengthening the city's position as a mainport, and building high-quality homes and offices. And we are making the whole development climate-proof by taking climate adaptation measures as we design the public space in buildings.

We have no intention of keeping our expertise to ourselves; we are glad to share our knowledge with others. For example, the Netherlands is helping Indonesia respond to the collapse of a dam. With our help, the Indonesian authorities are drawing up and implementing a plan to inspect around 200 reservoirs in the Jakarta area.

At the same time, a dredging project has recently been completed in Jakarta. The project's aim was to demonstrate small-scale dredging techniques with extensive community participation. The project started on 1 August 2008; the dredgers have now been turned over to Indonesia, and the training has been completed successfully. Dutch companies and research institutes are also helping Indonesia protect coastal peat areas and low-lying farmland. The aim is to strike a balance between environmental conservation and more efficient agriculture. Here adaptation and mitigation go hand in hand.

In New Orleans, Dutch know-how is helping to build stronger coast defences, using what they call 'the Delta Dike concept'.

We recently concluded a far-reaching partnership with Vietnam. Our two countries have a great deal in common geographically, so we have much to learn from one another. We are trading lessons learned in the Mekong delta for expertise from the European delta, and vice versa.

With all these national and international projects under way, you can understand why I'm so delighted about extending the knowledge network of delta countries and regions. International cooperation, sharing knowledge, and exchanging ideas about water management and spatial policy are vital for peace, security and prosperity in the world's delta areas. It is our responsibility to see that all this happens. By founding the Delta Alliance, we are proving that we take this task seriously. And we are putting the adaptation agenda into effect.

This global partnership should lead to excellent projects, and to international agreements on climate, trade and biodiversity. Only when the agreements are signed and sealed will we be able to persuade companies and funds to earmark money for our work.

I wish the Delta Alliance every success with its joint projects, and hope that more countries will join us. In view of the ambitions that have been expressed in the past few days, I am confident that the Alliance will grow to be a lasting international partnership, which will carry on as programmes and governments come and go.

Thank you.