

Project manager	dr. Jeroen Aerts		
Institute	VU University Amsterdam, Faculty of Earth and Life Sciences, Institute of Environmental Studies		
Email	jeroen.aerts@falw.vu.nl		
Consortium	Ministry of Housing, Spatial Planning and the Environment VU University Amsterdam, Faculty of Earth and Life Sciences, Institute of Environmental Studies VU University Amsterdam, FEWEB Delft Hydraulics Netherlands Environmental Assessment Agency (MNP) Road and Hydraulic Engineering Institute (DWW) National Institute for Coastal and Marine Management (RIKZ) Institute for Inland Water Management and Waste Water Treatment (RIZA) Royal Netherlands Meteorological Institute (KNMI) Wageningen UR		
Project website			
Starting date	1 November 2006	Completion date	31 December 2007

Context / Social problem

The Coastal Zone project (in Dutch: Aandacht voor Veiligheid, AVV) is about the effects of long-term changes in climate, land use, governance and socio-economic trends on flood safety in the Netherlands. The project will deliver a decision support system (DSS) that will show, using maps and images, how spatial adaptation responses can make the Netherlands climate-proof in the long term, which is why water management expertise and spatial planning are central to the study.

What is already known, and what is not?

The following questions are being explored during the definition phase:

1. Which changes in climate and land use are expected in the Netherlands over the long term (50–100 years) and how will they influence flood risks?
2. What administrative, social and economic conditions are necessary for protection against flooding and water damage?
3. What safety strategies can we devise to deal with these changes?

What is being studied?

The definition phase first examined the currently available methods. The advantages and disadvantages of these methods are being discussed in a series of workshops and their application will be demonstrated in a prototype DSS (November 2007). The core activities are:

1. *Scenario analysis*: Besides the existing WLO scenarios, we are examining more extreme developments and radical shifts
2. *Safety strategies*: We are reviewing existing and new safety strategies that may be effective in the long term
3. *Vulnerability*: To evaluate the safety strategies we are investigating the degree to which each strategy reduces the vulnerability of the Netherlands to flooding
4. *Appraisal*: Thought will be given to evaluation methods, such as SCBA and MCA, and how they can be used in evaluations of long-term investments (adaptation) in the safety system
5. *DSS*: The DSS is a spatial planning tool for supporting policymakers when designing and evaluating alternative land use planning options at the national scale. The tool will be based on existing models such as Blokkendoos, WV21 and the Land Use Planner (Ruimtescanner)

What are the results, and who are they for?

The final goal of the Coastal Zone project is to develop a methodology for use in regional pilot studies (hotspots). The analysis of pilot areas will clarify what adapting to climate change will mean for these areas in concrete terms. Any missing information and knowledge that is required to develop adaptation strategies ('safety options') will be revealed. The project attempts to support national government and decision-makers at regional level and to identify cross-connections between scales by conducting pilot projects.

