



Developing Strategies Against the Risks of Severe Storm Surges: Opportunities for the Integration of Different Stakeholder Perspectives

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In view of assumptions on the effects of global climate change, coastal protection measures and strategies have to take into account the risks of increasingly severe storm surges. Currently, however, engineering and natural science models that assess the impact of global climatic transformations on regional coastal zones and their protection structures remain rather detached from societal perceptions and local stakeholder concerns. Due to this shortfall, the paper argues that innovative coastal protection requires a more integrative research approach that takes into consideration the whole array of actors involved in regional coastal protection strategies.

The results presented in this paper are based on a research project in which both science and practitioners collaborate from the very beginning of the scientific modelling processes. Such cooperation, it is hypothesized, enables modifications and extensions of fundamental steps within scientific research process by integrating advice, objections and interpretations of local stakeholders from the political, economic and civil sector. Most notably, this approach provides a basis for comparing the viability of different adaptation strategies in coastal protection.

The results presented in this paper are based on a complete sampling (collected by stakeholder analysis). Qualitative interviews have been conducted with all key decision-makers and opinion leaders participating in the design and implementation of present and future measures of coastal protection in the project region. Perceptions and orientations towards the significance of climate change and storm surges in the southern North Sea (Ems-Dollart-Estuary) as well as the evaluation of different strategies show an insightful argumentative landscape. It is remarkable that the majority of the respondents perceived difficulties in coping with questions concerning long-term perceptions and future assessments. The collected material clearly shows how close processes of decision-making and the selection of certain strategies depend on political and economic criteria as well as socio-cultural acceptance.