



2nd Stakeholder Workshop on Risk Management 20 - 21 November 2014, Heide Summary Report

In cooperation with the Helmholtz-Zentrum Geesthacht (HZG), the WSF is part in the European research project ENHANCE that is focusing on "enhancing risk management partnerships for catastrophic natural hazards in Europe". Cooperative activities are concentrated in a case study on risk management in the Wadden Sea Region (WSR). The common goal of this cooperation within ENHANCE is to assist the WSF to foster a common discussion and cross-sectoral sensitization of stakeholders towards different risks in the WSR and to enhance the transnational exchange of knowledge and experiences. Not the least there is broad agreement on the necessity to increase the awareness of stakeholders and the society at large towards cascading effects between different risks and to sensitize for direct and indirect impacts as well as uncertainties related to these risks.



The second workshop on risk management focused on an assessment of the perceived risks and uncertainties, which were carried out and discussed in the first workshop. Risk assessment includes the identification and investigation of the hazard situation, differentiating between the causes and consequences of the perceived risks and identifying the scales at which risks will be addressed and where respective responsibilities lie. The identified threats for the WSR, its causes, consequences and responsibilities were further elaborated with bow-tie diagrams. The bow-tie analysis is a method which can facilitate greater understanding of the complexity and interrelationships of causes and consequences. In addition, the bow-tie analysis offers the possibility to analyze interlinkages between different risks; as such it meets the requirements of comprehensive risk assessment in the WSR which was emphasized in the first workshop with the WSF as a multi-risk area.



The Bow-tie analysis was used to structure the comments, inputs, and discussions of the first workshop to emphasize the major challenges in risk management in the Wadden Sea Region. Based on these attribution different clusters were developed and transformed into three different Bow-ties, targeting at three major risk complexes:

a) demographic change, b) environmental change and c) imbalanced development.

The Bow-tie analysis also emphasized the interconnectedness of the different risks. Feedback as well as cascading effects between the thematic clusters can influence the performance of the others.

The diagram below illustrates the perceived threat regarding demographic change (example a) and its related causes (blue boxes) and consequences (red boxes) in the WSR.

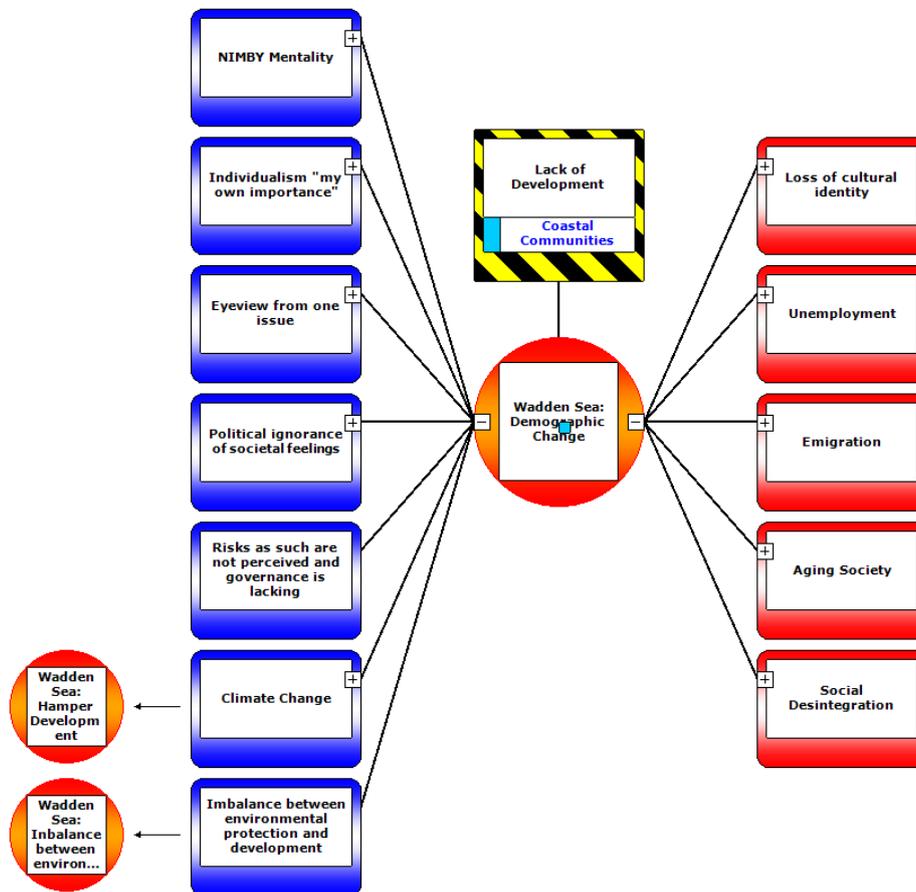


Figure 1: Example Bow-tie diagram dealing with the stakeholders concerns about demographic changes in the WSR

The aim of the second workshop was to complement the different bow-ties and to discuss and validate the presented perspectives and concerns of the WSF members.



To summarize, the bow-tie analysis offered a structured and plausible concept on the risks that threaten the Wadden Sea communities. The (perceived) causes for these risks and the related consequences and impacts that result from these threats could be distinguished accordingly and the spread over a multitude of different scales including different sectors and different spatial resolutions were identified. Impacts and damages affect social, physical and economic structures in comparable ways.



With regard to risks from climate change, including the risks of storm surges, the bow-tie analysis highlights the fact, that measures dealing with the causes are limited. Major challenges arise from the right side of the bow-tie diagram on climate change – asking how to deal with the range of consequences and impacts resulting from the risks of climate change. It becomes obvious, that action and improvement is needed with regard to the question how to manage the consequences and it was highlighted where improvement in risk management could be fostered by the MSP.

The bow-tie "demographic change" highlighted the fact, that especially with regard to changes in the societal structure and composition, causes for these situations lie in social processes. The analysis presented here underlines the need to include social processes in an integrative risk management approach.

Besides the detailed views, the bow-tie analysis illustrates the interlinkages between different risks as well as the interdependencies and feedbacks that exist between the risks. In participatory processes the bow-tie diagram facilitates the sensitization of the stakeholders towards the perspective of risks and their management as complex, multifaceted tasks, including a wide range of actors and sectors to efficiently handle the risks. The question how to deal with these issues is closely linked to the question about responsibilities and collaboration of different actors on different levels. The discussion, supported by the bow-tie diagram, highlighted the issue of multi-scale and multi-level responsibilities, that are performed on a multi-scale with regard to different sectors and institutions that are included.



In a second step, the major focus of the group discussions was on determining current responsibilities and evaluating the level at which current management is performed or should be performed. In general, responsibilities were differentiated into local, district/municipality, national and trilateral / international responsibilities.

It became clear that in many cases risks are dealt with on different levels of responsibility. In addition, different administrative structures in the three Wadden Sea countries lead to slightly different allocation of responsibilities for each country. But these differences in administrative structures are not seen as a major problem. Mainly lack of communication between different actors on different level and from different sectors hampers the development of a successful risk management. The question was raised which part the trilateral level could play in any future risk management. In general, there are clear signs that multi-stakeholder involvement could be beneficial for dealing with risks and uncertainties in the WSR.

The plenary of the WSF agreed that multi-sector involvement is favoured and that the WSF could provide a platform to raise awareness in the WSR. The discussion showed there is support for strengthening the trilateral level in risk management in the WSR.

The results of the second workshop highlighted that communication and commitment on the trilateral level could trigger an exchange of experience and get people together to discuss common problems, risks and uncertainties that arise in all three countries. The main benefits of a trilateral approach to risk management were seen in improved communication and exchange of experiences, as well as improved cross-sectoral sensitization of stakeholders towards different coastal risks. Concrete tasks and procedures to implement its aims will be developed in the ongoing cooperation with the ENHANCE project in the third collaborative workshop on 22 May 2015 on Ameland.

