Science and Policy for a Sustainable World



Participatory coastal adaptation

A good practice example of Timmendorfer Strand, Germany

Linking Biodiversity to National Economic and Social Priorities in the EU Member States,

Berlin, 19 June 2017

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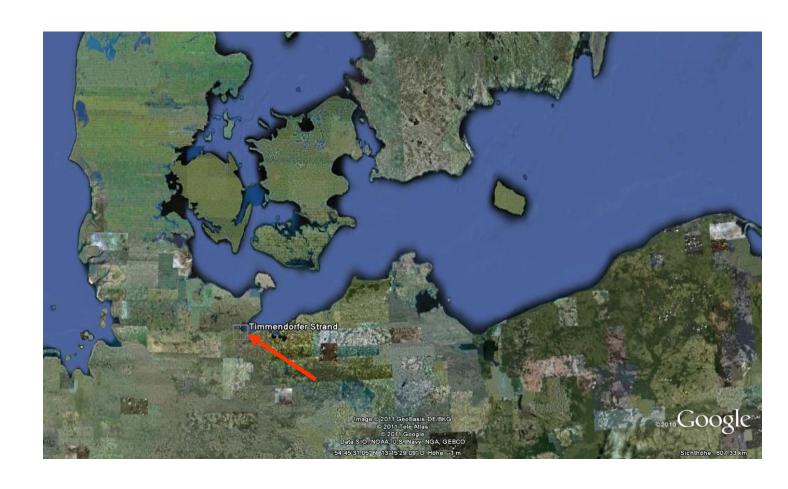
Outline

- Area
- Climate Threats
- Responses

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Area



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Area

- 9.000 inhabitants
- 6 km of coastline
- more than 200.000 tourists per year
- approx. 1.2 Mio overnight stays per year















Climate Threat / Risk

- Sea Level Rise
- Storm Floods
- Erosion



Storm flood



Timmendorfer Strand / Niendorf

Had the highest previously known flood in November 1872 (3.3meters)

Source: Gemeindearchiv Timmendorfer Strand

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Erosion





Responses / Adaptation

- 1. Sensitivity analysis
- 2. Ideas competetion
- 3. Implementation





Sensitivity analysis

Problem: Lack of awareness

Solution:

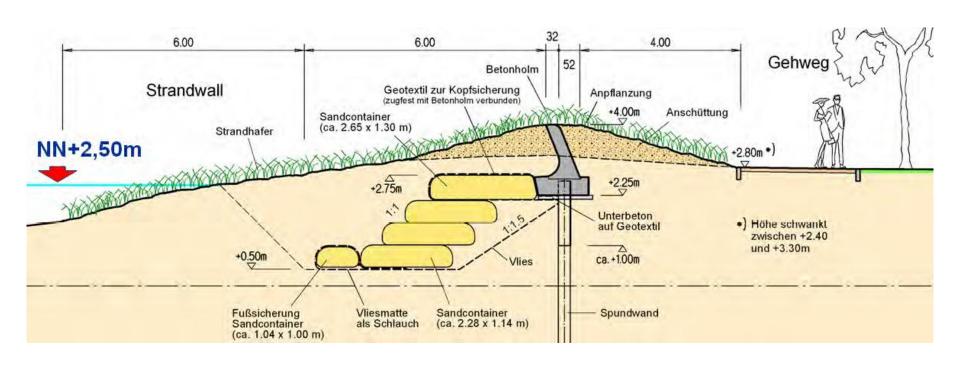
- 1. Building Scenarios
- 2. Discussion with stakeholders
- 3. Defining best options
- 4. Information of local people







Ideas competetion





Implementation

Holmes





mobile shore protection



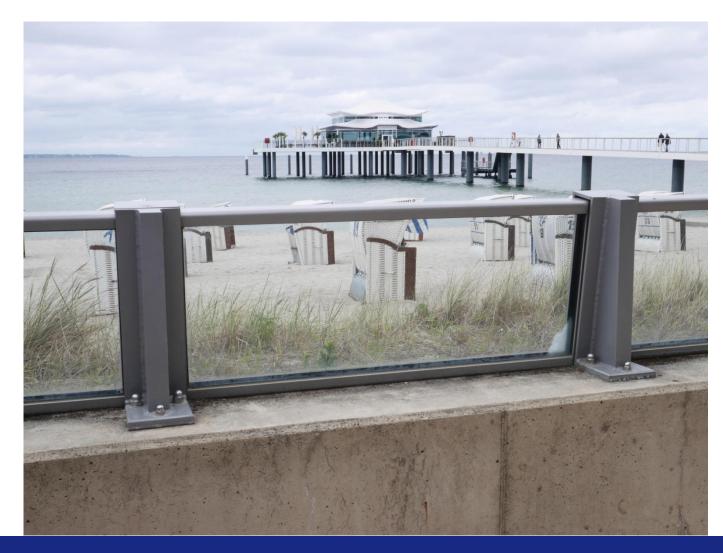
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glazed retention walls









Landscaping







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Information





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Costs

30 mio. Euro overall costs, community 9.5 mio. Euro





Success factors

Involve the key stakeholders from the very beginning

The mayor of the town was a key person. With his support for the project, it was possible to get other stakeholder into the discussion.

Understand the needs of the stakeholders

Important to understand the viewpoint of the different stakeholders and why they might not be willing to cooperate or support the adaptation measure.



Have financial support

To implement 'extra' measures (e.g. glazed retention wall, landscaping project) that ensured the support of the stakeholder, the financial back-up had to be guaranteed.

Use results of damage cost analysis, CBAs as argument

Arguments based on costs and benefits helped to 'convince' the stakeholder. In this case the results of a damage potential analysis showed that the values damaged by coastal floodings could be very high. This helped to raise awareness and was one important part in changing the local stakeholders' attitude towards coastal protection.



Take your time

The whole process took over 10 years from its start to the implementation. It is important to have time for such a process. On the other side, the long time also might become an obstacle when responsibilities change or the stakeholder and/or public lose interest in that topic.

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Thanks! Any more Questions?

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Fotos: Christoph Lehners & Ecologic Institute