

SWAP – Scenario Workshop with Adaptation Pathways

Creating a common vision for coastal adaptation pathways in Portugal

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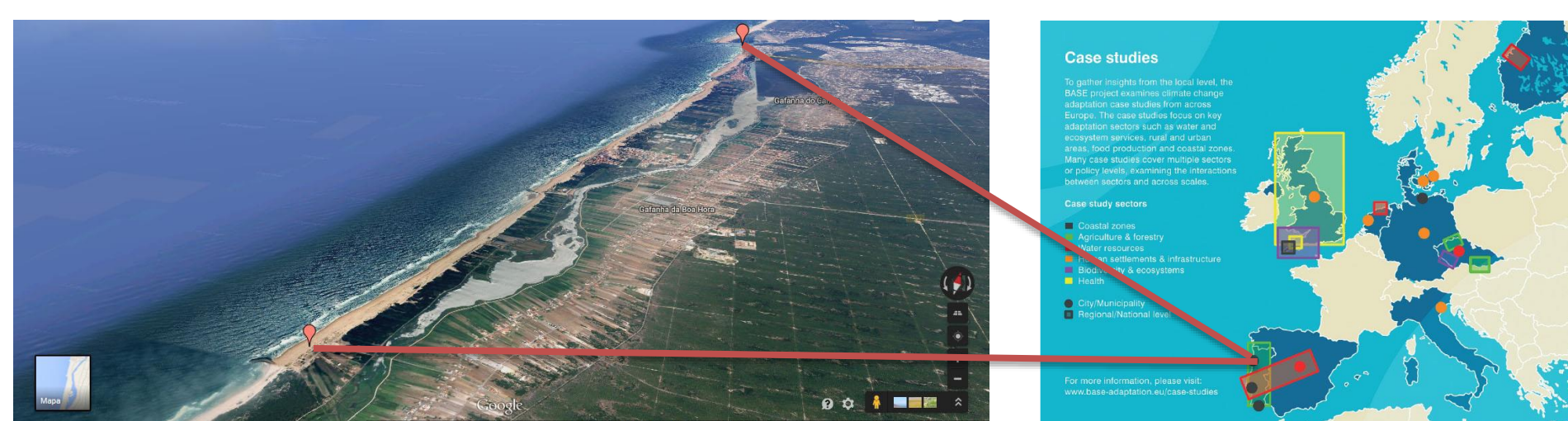
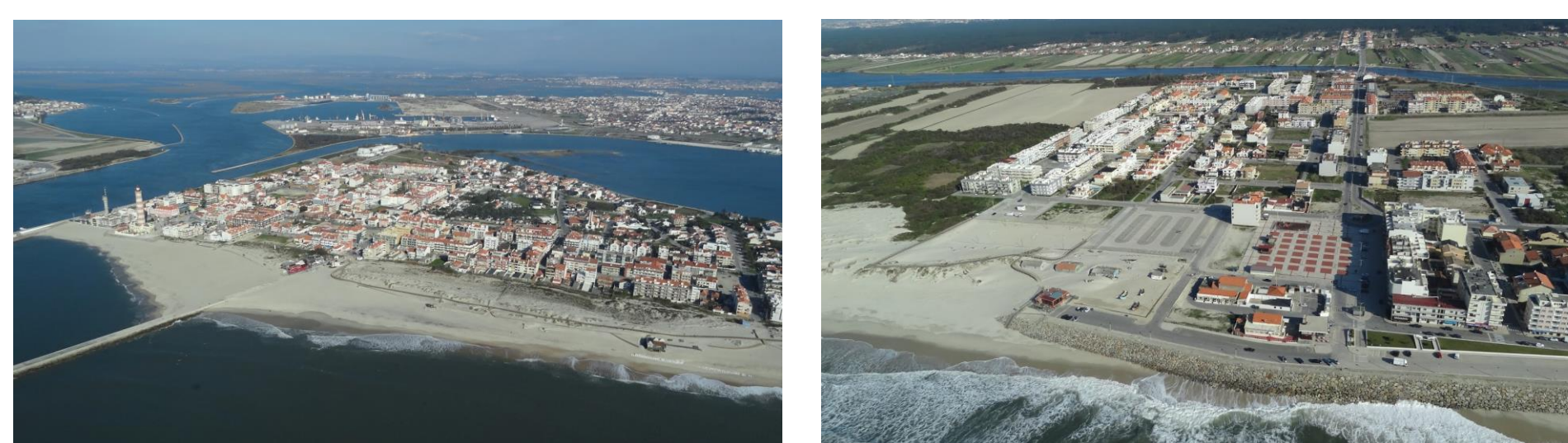
Objective

To create an adaptation plan to a highly vulnerable stretch of coast of 20km in the region of Aveiro, Portugal

Context

- Climate Change will create increased pressure in vulnerable coastal areas;
- Integrating climate change adaptation in coastal protection and planning is needed and requires innovation
- Research developed as case study of FP7 project BASE;
- Previously researched in projects CHANGE and AdaptaRia

Case Study



Coastal stretch from Barra to Areão in the municipalities of Ílhavo and Vagos, in the region of Aveiro, Portugal. Includes Aveiro Delta. Projected high risk of flooding, destruction of houses, dune system and connection of sea and delta.

Methodology

SWAP methodology combines Scenario Workshop with Adaptation Pathways and was developed to create dynamic climate adaptation plans for specific territories.



Top: photo of stakeholders presenting their vision (left) based on the maps of flood risk and overtopping (right) and coastline evolution. Bottom: photo of stakeholders discussing and choosing adaptation pathways for one of five sub-stretches of coast inside the case study (left). Pathway chosen by participants in workshop in May 2014 and multicriteria analysis to support decision making (right).

In the first day of the Scenario Workshop stakeholders get together to create their common vision and describe it on the map.

On the second workshop day, a multicriteria analysis of adaptation measures was presented to stakeholders together with adaptation pathways for five coastal sub-stretches, as well as a pre-identification of the most effective, cheaper and cost-effective pathways.

Stakeholders discuss and choose the best pathway.

Results

Results consist of dynamic plan based on an Adaptation Pathway for a stretch of coast (right image) and a map for any future time until 2100 with the adaptation measures in place (left image: map of year 2025).



Conclusions

- This combination of methodologies created positive synergies between methodologies, stakeholder participation, adaptation process and pathway definitions.
- Pivotal for the success of this research:
 - i) Strong engagement of stakeholders,
 - ii) recognized experts creating multicriteria and pathways,
 - iii) experienced facilitators,
 - iv) intense preparation.

Contacts

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Easy References online

Project CHANGE: <http://www.projectchange.ics.ul.pt/>
Project AdaptaRia: <http://climeta.fis.ua.pt/legacy/adaptaria/>
Scenario Workshop: <http://participedia.net/en/methods/scenario-workshop>
Adaptation Pathways: <http://cesun2012.tudelft.nl/images/7/70/Haasnoot.pdf>

