

PARTICIPATORY APPROACH TO ASSESS COASTAL EROSION MITIGATION AND CLIMATE CHANGE ADAPTATION MEASURES

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INTRODUCTION

The economic and social importance of coastal areas, combined with their growing **erosion problems** and **climate change impacts**, allows anticipating an increase in investments in these areas.

PURPOSE OF THIS STUDY:

Contribute to a complete characterization of coastal erosion mitigation and Climate Change Adaptation **strategies** and their **implementation measures** by considering a **participatory approach** that integrates medium to long-term perspectives

INCCA PROJECT

Work developed in the scope of the **INCCA** research project, which aims to reduce the vulnerability of coastal areas and increase the resilience of local communities, considering as a pilot study the Ovar's municipality (Portugal).

Total budget: 240 000 €



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Website

CASE STUDY – Ovar's Municipality

Ovar municipality represents one of the most serious coastal erosion areas in Portugal. So, the participatory and economic model-based framework is being co-developed and applied in this pilot case study (Figure 1).



Figure 1: Study area location and an overtopping event in Ovar.

PARTICIPATORY MOMENTS

The developed databases were discussed in 3 different participatory workshops (online, due to Covid, and presential), held in Ovar (Figure 3).

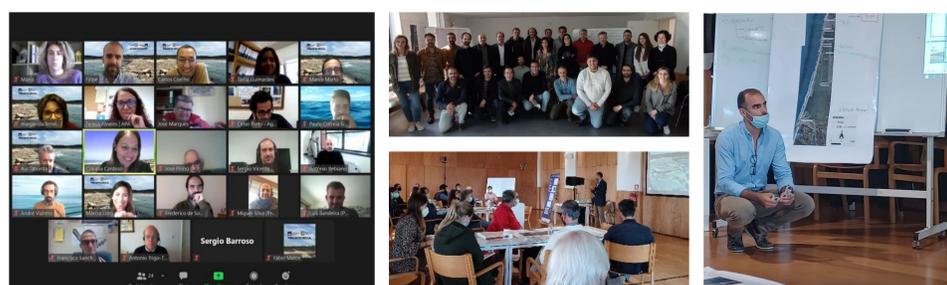


Figure 3: Participatory moments (the stakeholders' group included central administration, local authorities, academia, national institutes and individuals of several economic activities, like surf and camping, etc.).

RESULTS

- ✓ New integrated methodology to assess strategies to mitigate coastal erosion and climate change adaptation, which results in a **Manual** with **3 related databases** (Figure 2).
- ✓ Although the methodology is applied to a specific case study in Portugal (Ovar), it is replicable to any other **sedimentary coastal zones** elsewhere.

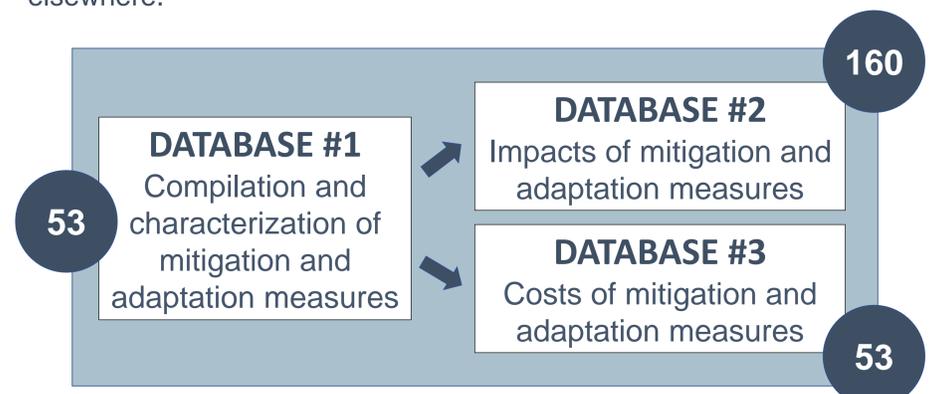


Figure 2: Manual of Mitigation and Adaptation Measures.

CONCLUSIONS

- ✓ The proposed approach is useful to help **coastal management entities**, leading to consensus, commitment and optimized solutions to mitigate **coastal erosion** and adapt to **future climate change effects**.
- ✓ INCCA's **participatory methodology** allowed generating processes and results that otherwise, would not be possible, aiming a **more appropriated** coastal management in the future.