

Public perception of climate change scenarios in the Costa Brava

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THE PaiRisClima PROJECT

The Coastal Risk Landscape in the Catalan Littoral. The influence of the Climate Change

The PaiRisClima Project aims to evaluate the coastal risk landscape along the Catalan littoral under different climate change scenarios and propose adaptation measures. In particular, its specific objective are:

- To identify the components of the risk landscape that could be affected by climate change and assess their variations under different climate scenarios and their impacts.
- To analyse the level of awareness of stakeholders of the climate change and its impacts within the assessment of coastal risks.
- To analyse the current risk governance system.
- To propose management strategies under a participatory fashion for the Catalan littoral.



OBJETIVE

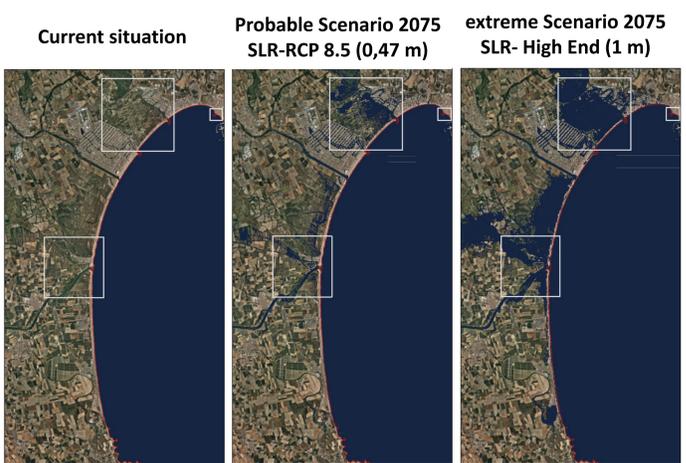
To analyse level of awareness and the importance that coastal communities and beach users have regarding climate change in relation to the overall coastal risk. In particular, **public perception on the impacts** produced by climate change **on tourist activities, dune-beach landscape and uses** are assessed, as well as the **expectations towards adaptation projects** based on environmental restoration.

CASE STUDIES: COASTAL RESTORATION AS ADAPTATION STRATEGY

RESTORATION OF DUNE SYSTEM PROJECT IN CAN MARTINET-ST. PERE PESCADOR, an investment of Plan to Promote Environment for Adaptation to Climate Change in Spain (PIMA Adapta 2015, 39.195,67€ to execute in 3 months)



DE-URBANIZATION AND RESTORATION OF COASTAL SYSTEMS PROJECT OF LA PLETERA, TORROELLA DE MONTGRÍ (LIFE PLETERA-L'ESTARTIT PROJECT), 2014-20 EU Life program (€ 2,528,148 and 48 months of intervention) for the comprehensive restoration of lagoons coastal system altered by desert urbanization.



Source: Caridad Ballesteros from Maritime Engineering Laboratory (UPC)

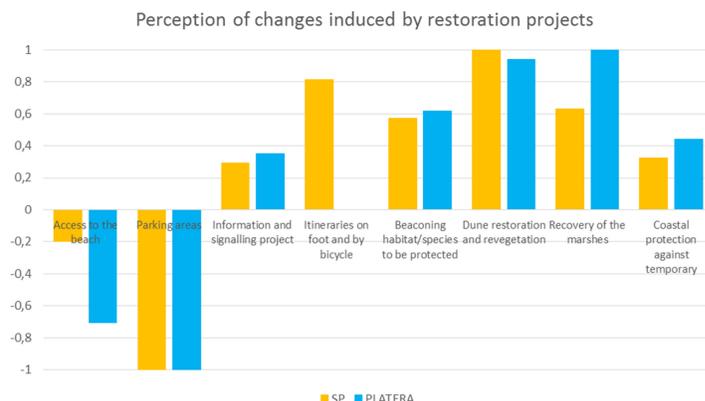
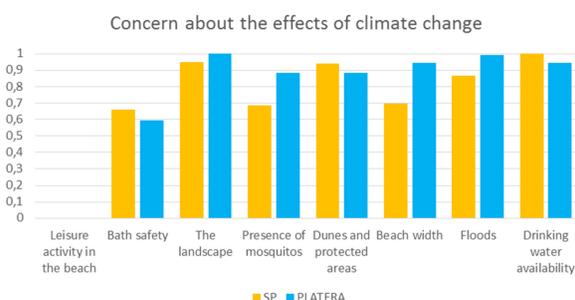
METHODOLOGY

EXPLORATORY PHASE: Based on semi-structured interviews applied to local stakeholders (mayors, port, tourism entrepreneurs, environmentalists ...). They have been asked to assess hazards, vulnerability and impacts under two climatic scenarios: the RCP8.5 that is moderately optimistic and the extreme high-end SLR scenario). Surveyed stakeholders have offered their perspective on the impact of SLR on the socioeconomic activities, land-uses, infrastructures, ecosystem services and their potential management options. These results are mainly qualitative.

QUANTITATIVE PHASE: Based on a closed questionnaire applied to beach users (locals and tourists) of beaches affected by adaptation projects. In total 150 questionnaires have been collected where information on climate change impact in the area and the changes produced by the restoration projects was demanded.

RESULTS

Stakeholders found difficult to foresee socioeconomic impacts based on future scenarios specially differentiate the intensity of these impacts depending on each scenarios. Tourist sector is mainly worried for the immediate near future of their businesses and not for the long term forecast. This is evident in the figure about the concern of climate change where leisure activity is considered the least affected by climate change. Adaptation projects are more perceived as dune system restoration and land use plan than a coastal protection initiative. The conflictive issues are parking and access areas.



CONCLUSIONS

Although the risk level along the studied coast could be significantly intensified under the influence of climate change, local stakeholders' awareness is still low. The climate change is widely recognised and accepted as a hazard however its local impacts seem to be underestimated specially by those managing tourism activities. In order to promote a more adaptive coastal risk management, the gaps identified between concerns and expert estimations should be translated into a set of recommendation practices such as: promoting communication events and launching more adaptive initiative as dunes and wetlands restoration.

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