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NAture Insurance value: Assessment and Demonstration: NAIAD project (European H2020)

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NAIAD project aims to operationalise the insurance value of ecosystems to reduce the human and economic cost of water-related natural hazards and water related risks like floods and droughts. For this general aim, NAIAD is developing an evaluation framework of Nature Based Solutions (NBS), considering the physical, environmental, economic and social constituencies along its life cycle. NAIAD is working in nine Demos at different spatial scales from an urban perspective (the smallest Demo covers 4 ha) to small river catchments and to entire river basins (16000 km2). Within this range, there is also a social and technical gradient of Demos, from those where NBS have been already implemented to those where the stakeholders are even not aware of the NBS options.

The project is assessing through different techniques, the water-related natural hazards in each Demo, developing a new tool (Eco:actuary) that will be able to analyse global risk portfolios with consistent multi-hazard analysis and data, focused on process-based and spatially specific information to evaluate the role of NBS. The project is also analysing the social acceptance of NBS in the Demos, what social barriers exists towards NBS acceptance and implementation, and the institutional settings that will hamper or accelerate the adoption of NBS. NAIAD is evaluating the economic costs and benefits of green (NBS) and grey solutions, along their life cycle, considering implementation costs, opportunity costs, insurance value (diminished risks costs or avoided damages) and co-benefits (productive market values and environmental values).

The project is integrating these different elements in the Demos, with the aim of developing decision support tools for stakeholders and a common integrated and holistic evaluation framework of Nature Based Solutions. Furthermore, the project is mapping and analysing a set of business models of NBS, and analysing how these could be funded and financed in the future, to identify the most relevant sectors and actors. This will produce a toolkit of plausible business cases that will facilitate the implementation of NBS for increasing the resilience towards natural hazards.

The project has a fundamental orientation towards co-design participatory research, developing a continuous stakeholder and end user engagement process in each Demo site, with interviews and workshops. The project aims to also facilitate policy dialogues in the political arena on key topics through a set of policy roundtables and workshops.