

Increasing coastal resilience to storms and flooding

January 22 2015



EU researchers are developing an online tool kit to help different coastal regions predict – and prepare for – floods and storms.

Coastal storms, sea level rises and flooding present a very real physical and economic threat that must be addressed in the EU. With this in mind, the FP7-funded RISC-KIT project has made accurately forecasting and predicting coastal storms – and optimising measures to prevent disasters from occurring – its key objectives. Now, in order to spread the message as widely as possible, new shorter versions of a RISC-KIT policy brief have been made available in Bulgarian, French, Spanish, Swedish, Dutch and German, in addition to English.

These briefs outline the importance of developing disaster risk reduction

strategies as a means of increasing coastal resilience. They contain information at the national and local scale and provide tangible examples from [coastal areas](#) where project findings are currently implemented. These documents should be of real benefit to forecasting and civil protection agencies, [coastal managers](#), local government, community members, NGOs, the general public and scientists.

One third of the EU population lives within 50 km of the coast, where an estimated 30 % of total EU Gross Domestic Product (GDP) is generated. The economic value of coastal areas within 500 metres of European seas is estimated to be between EUR 500 - 1000 billion alone.

Indeed, the cost of inaction in the face of [coastal storms](#), sea level rises and flooding has been put at EUR 6 billion by 2020, which is significantly higher than the annual cost of taking precautionary and adaptation measures. Conversely, up to EUR 4.2 billion in net benefits could be created if action is taken.

This is where the RISC-KIT project comes in. Due for completion in 2017, the project will deliver an open-source and open-access toolkit that includes methods and management approaches to reducing risk and increasing resilience to high-impact weather events in [coastal regions](#).

The tool kit will consist of a Coastal Risk Assessment Framework (CRAF), which can quickly assess present and future hot spot areas of coastal risk at a region scale due to multi-hazards, along with a coastal risk database of present and historic socio-economic and physical data. Together, these products will help to enhance forecasting, prediction and early warning capabilities, improve the assessment of long-term coastal risk and optimise the mix of prevention, mitigation and preparedness measures.

The project is also focusing on the social component of climate change

in coastal zones by assessing the different ways that communities perceive and react to hazardous events. To this end, RISC-KIT has developed a report that aggregates socio-economic, cultural and physical data from ten European coastal case study sites and one site in Bangladesh. Initial findings underline the influence of socioeconomic, cultural and political diversities on the actions taken to reduce risk and prevent disasters.

Through gaining a better understanding of this diversity, RISC-KIT will be able to enhance the success of hazard management and increase risk resilience in coastal zones by working more closely in collaboration with local end-users and stakeholders.

More information: For further information please visit RISC-KIT: www.risckit.eu/np4/home.html

Provided by CORDIS

Citation: Increasing coastal resilience to storms and flooding (2015, January 22) retrieved 24 April 2024 from <https://phys.org/news/2015-01-coastal-resilience-storms.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.