



## **Web Application for Coastal Area Planning through Analysis of Landslide and Soil Consumption**

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Global warming and rapid climatic changes are producing dramatic effects on coastal area of Mediterranean countries. Italian coastal areas are one of the most urbanized zones of the south western Europe and the extensive use of soil is causing a consistent impact on the hydrogeological context. Moreover, soil consumption combined with extreme meteorological events, facilitates the occurrence of hazardous landslide events. Environmental policy makers and data managers in territorial planning need to face such emergency situation with appropriate tools. We present an application service with the aim of advising user through environmental analysis of Landslide and Soil Consumption impact. This service wants also to improve the sharing of environmental harmonized datasets/metadata across different organizations and the creation of a collaborative environment where the stakeholders and environmental experts can share their data and work cooperatively. We developed a set of processing services providing functionalities to assess impact of landslide on territory and impact of land take and soil sealing. Among others, the service is able to evaluate environmental impacts of landslide events on Cultural Heritage sites. We have also designed a 3D WebGL client customized to execute the processing services and visualize their outputs. It provides high usability in terms of navigation and data visualization. In this way the service provides not only a Spatial Data Infrastructure to access and visualize data but a complete Decision Support Systems for a more effective environmental planning of coastal area.