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FLOOLBOX: SUPPORT PLATFORM FOR THE ELABORATION OF A RISK AND DISASTER
MANAGEMENT PLAN FOR LOCAL AND REGIONAL AUTHORITIES

Abstract

Natural disasters are present in our world, and so far, it is challenging to predict their occurrence. From 2005 to 2015, over 700 thousand people have lost their lives, over 1.4 million have been injured, and overall, the total economic loss was more than 1.3 trillion dollars due to disasters. Faced with this situation, the authorities of local, regional, and national governments must be prepared to establish a plan for risk reduction and disaster management to minimize the potential effects of a natural disaster. However, there is a lack of specialized technical staff. On the other hand, the information, tools, and resources required for developing this plan are dispersed in various web pages and sites in the cloud. Our proposal is to establish a platform called FloopBox (from ToolBox for Floods) that includes a Checklist of the actions to be developed to establish a risk prevention and reduction plan. This checklist could be used for non-technical users, and it would contain the steps to follow and the link to the valuable tools necessary to develop each step, with their respective descriptions. Additionally, it is accompanied by an intuitive and easy-to-use image GUI segmentation tool to identify flood-affected areas. This tool is based on data compression techniques. One hopes that this platform will be of great help to decision-makers in the face of disasters.