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Post flood damage data collection and assessment in Albania based on DesInventar methodology

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In 2013 in Albania was implemented a collection of disaster losses based on Desinventar. The DesInventar system consists in a methodology and software tool that lead to the systematic collection, documentation and analysis of loss data on disasters. The main sources of information about disasters used for the Albanian database were the Albanian Ministry of Internal Affairs, the National Library and the State archive. Specifically for floods the database created contains nearly 900 datasets, for a period of 148 years (from 1865 to 2013). The data are georeferenced on the administrative units of Albania: Region, Provinces and Municipalities.

The datasets describe the events by reporting the date of occurrence, the duration, the localization in administrative units and the cause. Additional information regards the effects and damage that the event caused on people (deaths, injured, missing, affected, relocated, evacuated, victims) and on houses (houses damaged or destroyed). Other quantitative indicators are the losses in local currency or US dollars, the damage on roads, the crops affected, the lost cattle and the involvement of social elements over the territory such as education and health centers. Qualitative indicators simply register the sectors (e.g. transportations, communications, relief, agriculture, water supply, sewerage, power and energy, industries, education, health sector, other sectors) that were affected.

Through the queries and analysis of the data collected it was possible to identify the most affected areas, the economic loss, the damage in agriculture, the houses and people affected and many other variables. The most vulnerable Regions for the past floods in Albania were studied and individuated, as well as the rivers that cause more damage in the country. Other analysis help to estimate the damage and losses during the main flood events of the recent years, occurred in 2010 and 2011, and to recognize the most affected sectors.

The database was used to find the most frequent drivers that cause floods and to identify the areas with a higher priority for intervention and the areas with a higher economic loss. In future the loss and damage database could address interventions for risk mitigation and decision making processes. Using the database is also possible to build Empirical Loss Exceedance Curves, that permit to find the average number of times for year that a certain level of loss happened.

The users of the database information can be researchers, students, citizens and policy makers. The operators of the National Operative Center for Civil Emergencies (Albanian Ministry of Internal Affairs) use the database daily to insert new data

Nowadays in Albania there isn't an entity in charge for the registration of damage and consequences of floods in a systematic and organized way. In this sense, the database DesInventar provides a basis for the future and helps to identify priorities to create a national database.