

## **How to Strengthen the Capabilities of Portuguese Civil Protection. Preliminary results of the RECIPE project study.**

Iryna Skulska and Conceição Colaço

*Centre for Applied Ecology "Prof. Baeta Neves" (CEABN/InBIO), School of Agriculture, University of Lisbon, Tapada da Ajuda 1349-017 Lisbon, Portugal*

### **Abstract**

Under the influence of climate change, risk management becomes more complex, and risk management decision-makers must deal with a higher level of uncertainty. Properly integrating emergency response requirements into risk assessment and planning processes strengthens disaster risk reduction strategies. Based on the above, the reinforcing civil protection capabilities into multi-hazard risk assessment under climate change (RECIPE) project, funded by the Civil Protection Mechanism of the European Commission, seeks to promote operational tools and recommendations to reinforce Civil Protection in emergency management and risk planning for different natural hazards across Europe. One of the RECIPE tasks was to carry an interview with various civil protection professionals and emergency managers about their experience in fire risk management. The objectives of these interviews in Portugal were: (i) to identify gaps and operational requirements that need to be considered in the modern risk assessment and planning process to improve civil protection capacity in Portugal, and (ii) to understand how experiences from recent extreme wildfires have helped to improve the system. The main weaknesses detected in the civil protection system were the following: a weak efficiency of the current Civil Protection Emergency Plans; little collaboration between civil protection agents at the regional and national scales; lack of collaboration and exchange of information between different agencies; inexistence of post-emergency reports and subsequent discussion in internal municipal meetings and/or with stakeholders; insufficient fuel management in forest areas and poor population capacity for self-defense and preparedness knowledge. In addition, in the Portuguese Civil Protection little attention is paid to the cascade effects of wildfires (e.g. soil erosion, flooding, flash floods, occupation of burnt areas by invaders alien woody species). The experience with the recent extreme wildfires from 2017 helped to improve a series of points, such as: devoting more attention to preventive work; include the Forestry Offices and local actors in decision-making during fire suppression; in some places, there was an increase in the population's awareness of the importance of controlling the vegetation around the houses. The results of this analysis were included in the Report on data attributes for integrated risk assessment and planning of wildfires both in Portugal and in

other European countries as a whole (Hörl, et al 2020). A more detailed results analysis will be presented during the congress.

**Keywords:** climate change, multi-hazard risk assessment, operational requirements, planning process

### **References**

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