

The social context of fire-affected areas. A first assessment regarding the extreme fire events in central Portugal (June 2017)

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Mitigating fire impacts entails understanding the social context of affected communities, since the coping capacity of the population can limit the extent of fire impacts even when biophysical and weather conditions favor fire occurrence.

In mid-June 2017, over 60 people were killed due to wildfires in central Portugal, the highest number of casualties ever recorded in the country. A preliminary analysis was carried out to assess the social conditions of the communities where burned area was recorded, which reached 45.000 ha. Within this affected area, less than 6000 people live and nearly 40% are over 65 years old. Based on the fire damage assessment obtained from the Copernicus Emergency Management Service and statistical data for the smallest administrative unit (subsections within civil parishes, Census data 2011), a cluster analysis was applied to investigate potential differences within the affected area. Preliminary results show that 2 major clusters can be defined; in 66% of the affected area, communities have a substantially higher proportion of elderly people, higher proportion of families composed of only 1 or 2 people and a lower proportion of people with higher education.

This demographic and social context frames the type of self-protection mechanisms people are able to use when a fire occurs and the resilience of the communities where they belong. Since extreme weather and fire events are further expected in the future, assessing the characteristics of the population who can be affected by fires is crucial to implement suitable prevention and mitigation strategies.