



Dealing with climate change: how to cope with wildfire threat in a climate transition region

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The recent toll of 115 deaths during the fire season in Portugal, all of them at the Portuguese Centro Region, brought to the forefront of public concern the problem of vulnerability to climate change and the impacts on wildfire regimen, in a Region in the transition between the Atlantic and Mediterranean type of Climates. All the 115 deceased and most of the circa half million hectares burned occurred in the Region, highlighting the need to change the self-awareness, the strategies, and the vision to cope with climate change, in order to implement mitigation strategies, increase adaptation to the new conditions and increase the resilience of local communities to wildfire.

Long perceived as a problematic region in what concerns climate change due to its transitional location, the shape of the events through which such a change could materialize was never fully understood, neither the magnitude they could attain. The 2017 fire season was particularly tragic, combining a long drought with local down busters and the rare association of a tropical cyclone passing by the Atlantic vicinity, producing very strong winds in a very dry context, which lead to the burn of 200000 hectares in just two days. If such an area was burned during an entire fire season, it would have been a very bad year. This may be the shape of the things to come.

There is a conscience that we faced the perfect storm, and that reality exceeded our worst nightmares. However, we are also aware that the territorial structure remains the same, and that despite the experience acquired, if a similar extreme event occurs, the problems will be overwhelming.

A new vision and new strategies are required to reduce the risk and deploy a territory more adapted to climate change and the vagaries of meteorology. This work presents a roadmap based on the voluntary work performed by the authors on the areas burned by the 15th and 16th of October 2017 wildfire, in the Portuguese Centro Region. It claims for a multiple level intervention, from policies and investments, to territorial planning, to changes in the habits, to the demonstration that it is possible to have other productive systems that require a more effective land management, and the reintroduction of native plant species more adapted to fire. A new governance paradigm has to be sought after if the deleterious impacts of climate change are to be dealt with.