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Abstract

Limitations and Opportunities of Spatial Planning to Enhance Wildfire Risk Reduction: Evidence from Portugal [†]

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- † Presented at the Third International Conference on Fire Behavior and Risk, Sardinia, Italy, 3-6 May 2022.

Keywords: wildfire management; extreme wildfires; spatial planning; adaptive regulation; public policies



Citation: Tedim, F.; Coimbra, C.; Samora-Arvela, A.; Leone, V.; Aranha, J.; Correia, F.; Pinto, D. Limitations and Opportunities of Spatial Planning to Enhance Wildfire Risk Reduction: Evidence from Portugal. *Environ. Sci. Proc.* 2022, 17, 31. https://doi.org/10.3390/ environsciproc2022017031

Academic Editors: Pierpaolo Duce, Donatella Spano, Michele Salis, Bachisio Arca, Valentina Bacciu, Grazia Pellizzaro and Costantino Sirca

Published: 9 August 2022

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The potential of spatial planning for reducing natural risks including wildfires is widely recognized. However, there are often limited connections between spatial planning and wildfire management policies. The findings regarding spatial planning's ability to improve wildfire risk reduction come mainly from North American countries and Australia, which have different geographical and cultural characteristics from Southern European countries. This research is focused on Portugal, the most wildfire-prone country in Southern Europe, where the competencies for spatial planning lie on four geographical levels: (i) the national and regional levels, have strategic purpose and set the general goals or the agenda of principles for spatial planning; and (ii) the intermunicipal and municipal levels use regulative land-use planning instruments.

There is a trend to bring together spatial planning and wildfire management policies. In this context, this research aimed to survey techniciens of the municipalities with responsibilities on wildfire management about their experience in applying the legislation of both policies.

An online survey was sent, between April and June of 2022, to 275 out of 278 municipalities (the municipalities of Lisbon, Porto and São João da Madeira were excluded, because they are urban areas). The response rate was 64% (175 municipalities). Data were analysed using qualitative content and cross-case analysis. The inconsistencies, constraints, and difficulties regarding the alignment between spatial planning and wildfire management were identified. This paper argues that the current existing static regulation system presents growing mismatches and contributes to economic, environmental, and social losses. The advantages of a shift towards an adaptive regulation system were identified.

Author Contributions: Conceptualization, F.T., C.C. and A.S.-A.; methodology, F.T. and A.S.-A.; writing—original draft preparation, F.T. and A.S.-A.; writing—review and editing, F.T., A.S.-A., C.C., V.L., J.A., F.C., D.P.; project administration, F.T.; funding acquisition, F.T. All authors have read and agreed to the published version of the manuscript.

Funding: This research was done within the project 'AVODIS—Understanding and building on the social context of rural Portugal to prevent wildfire disasters' (FCT Ref: PCIF/AGT/0054/2017), financed by national funds through FCT-Foundation for Science and Technology, Portugal.

Conflicts of Interest: The authors declare no conflict of interest.