

Abstract

MED-Star Project—Analysis of Participatory Pathways for Assessing the Citizens' Perception of Fire Risk in Pilot Municipalities [†]

Silvia Calvani ^{*}, Cristiano Foderi , Fabio Salbitano  and Enrico Marchi 

DAGRI—Dipartimento di Scienze e Tecnologie Agrarie, Alimentari, Ambientali e Forestali Università Degli Studi di Firenze, 50145 Firenze, Italy

^{*} Correspondence: silvia.calvani@unifi.it

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

Keywords: risk perception; wildfire; social factor; prevention; awareness



Citation: Calvani, S.; Foderi, C.; Salbitano, F.; Marchi, E. MED-Star Project—Analysis of Participatory Pathways for Assessing the Citizens' Perception of Fire Risk in Pilot Municipalities. *Environ. Sci. Proc.* **2022**, *17*, 65. <https://doi.org/10.3390/environsciproc2022017065>

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

Published: 11 August 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Wildfires are mainly a man-induced phenomenon, and only 2% are caused by lightning, as seen in the CUFAA (Comando Unità per la tutela Forestale, Ambientale e Agroalimentare) report 2020. In the last few decades, wildfire behavior has been strongly affected by climate change effects. The Interreg IT-FR Maritime MED-STAR project aims to strengthen capacities in fire forecasting, prevention, and suppression. The specific objective of this participatory research is to increase local actors' awareness and management ability of the territory, in order to make it less fire-prone. Moreover, the development of a new approach to the public land use, based on care and sharing, by locals and tourists, is intended.

The analysis of the social factor, in addition to the physical ones, represents a key issue aiming at developing a comparative study of the two groups of factors.

The results have been weighed by overlapping the maps of fire risk perception with those of static risk and wildfire history. Any mismatch between real risk and individual/community perception will be identified in order to set up specific actions (workshops, focus groups, etc.) to increase awareness and capacity. The process consists of: (i) big data analysis on the contents and trends of discourses on wildfires in social networks and media (national and regional scale); (ii) identification of pilots (key municipalities); (iii) historical analysis of wildfires and comparison with trends of discussion; (iv) stakeholders identification and mapping; (v) first participatory survey for the evaluations of gaps and needs by the communities; (vi) sample extraction for further qualitative research; (vii) construction of questionnaires and semi-structured group interviews; (viii) administration of questionnaires in the pilots; (ix) estimation of fire perception; (x) comparison between risk perception maps and dynamics/static risk maps, determining mismatches; (xi) processing, co-testing, and co-designing targeted corrective actions (as information/communication campaigns, capacity building actions, workshops, etc.).

Author Contributions: Conceptualization, C.F. and F.S.; methodology, S.C., C.F., F.S. and E.M.; formal analysis, S.C.; investigation, S.C.; data curation, S.C.; writing—original draft preparation, S.C. and C.F.; writing—review and editing, F.S. and E.M.; Project Administration, E.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the cross-border Interreg Italy-France Maritime 2014–2020 programme.

Data Availability Statement: Complete report and data will be available by the end of September 2022.

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