

# III International Conference on Fire Behavior and Risk

INCLUDING A SPECIAL SESSION ON REMOTE SENSING & FIRES

**Alghero (Italy)  
3-6 May 2022**

**Book of  
abstracts**



**Supported by the MED-Star Project  
(EU Italia-Francia Marittimo 2014-2020 Programme)**



# ICFBR 2022

## International Conference on Fire Behaviour and Risk

Alghero (Italy), 3-6 May 2022

Supported by the MED-Star Project

"Strategies and measures for fire risk mitigation in the Mediterranean area"

(EU Italia-Francia Marittimo 2014-2020 Programme)



National Research Council of Italy, Institute of BioEconomy (CNR-IBE), Sassari, Italy  
University of Sassari, Department of Agricultural Sciences

**Organized by**



Consiglio Nazionale delle Ricerche  
Istituto per la BioEconomia



**In collaboration with**



**Under the patronage of**



**Edited by CNR-IBE**

**(Liliana Del Giudice, Carla Scarpa)**

**Translations by Esse Events**

## **WUI07. Experiences of “Safe Village, Safe People”, a program to enhance wildfire risk reduction and preparedness in Portugal: implications for policy**

Fantina Tedim<sup>1</sup>, Diogo Miguel Pinto<sup>2</sup>, Fernando Correia<sup>3</sup>, Vittorio Leone<sup>4</sup>

<sup>1</sup> Centre for Studies in Geography and Spatial Planning, CEGOT, Geography Department, Faculty of Arts, University of Porto, Porto 4150-564, Portugal;

<sup>2</sup> Faculty of Arts and Humanities, University of Porto, 4150-564 Porto, Portugal;

<sup>3</sup> Geography and Spatial Planning, CEGOT, Geography Department, Faculty of Arts and Humanities, University of Porto, 4150-564 Porto, Portugal;

<sup>4</sup> Department of Crop Systems, Forestry and Environmental Sciences, Faculty of Agriculture, University of Basilicata, Potenza 85100, Italy;

In 2017, Portugal lived its most infamous extreme wildfire season with 117 fatalities, hundreds of injured people, 3588 destroyed structures, an official cost of 1,456 million euros, and 539,920 ha of burned area. Among the legislative and institutional changes prompted by the 2017 events, the “Safe Village, Safe People” program (that really is two programs that are implemented simultaneously) was established in 2018 (Council of Ministers no. 157-A/2017), with the purpose of: i) implementing structural measures to protect people, goods, and buildings in the wildland-urban interface; and ii) developing awareness-raising actions on the prevention of risk behaviour and self-protection measures aimed at specific audiences. There is interest in understanding how this program has been implemented, in identifying the strengths and barriers to its implementation, and in evaluating how this program is changing attitudes and behaviors of homeowners in wildfire risk reduction and preparedness as well as in coping with a wildfire. To understand the involvement of citizens in this program and its efficacy, we surveyed 100 homeowners in 15 villages in the north and centre of Portugal. Our results highlight distinctive local and contrasting dynamics of the “Safe Village, Safe People” program, related with the interest of local authorities on its implementation and maintenance, and in citizens' involvement. Recognizing the importance in reducing wildfire risk and improving the citizens' safety, recommendations on the legal context, the characteristics of the program, and implementation and maintenance procedures are proposed. They are aimed at enhancing the efficacy in different geographical contexts, namely proposing initiatives that are much beyond the scope of the “Safe Village, Safe People” program.

Nel 2017, il Portogallo ha vissuto la più tristemente nota stagione degli incendi boschivi, con 117 vittime, centinaia di feriti, 3588 strutture distrutte, un costo ufficiale di 1 Milione 456 mila euro e 539.920 ettari di superficie bruciata. Tra i cambiamenti legislativi e istituzionali indotti dagli eventi del 2017, nel 2018 è stato istituito il programma "Safe Village, Safe People" (in realtà si tratta di due programmi attuati contemporaneamente) (Consiglio dei Ministri n. 157-A/2017), con lo scopo di: i) implementare misure strutturali per la protezione di persone, beni ed edifici nell'interfaccia urbano-foresta; e ii) sviluppare azioni di sensibilizzazione sulla prevenzione dei comportamenti a rischio e sulle misure di autoprotezione rivolte a pubblici specifici. È interessante capire come questo programma sia stato implementato, identificare i punti di forza e gli ostacoli alla sua implementazione e valutare come questo programma stia cambiando gli atteggiamenti e i comportamenti dei proprietari di casa nella riduzione del rischio di incendi e nella preparazione, nonché nell'affrontare un incendio boschivo. Per capire il coinvolgimento dei cittadini in questo programma e la sua efficacia, abbiamo intervistato 100 proprietari di case in 15 villaggi nel nord e nel centro del Portogallo. I nostri risultati

evidenziano dinamiche locali distintive e contrastanti del programma "Villaggio sicuro, persone sicure", dovute al grado di interesse delle autorità locali verso la sua attuazione e mantenimento e al coinvolgimento dei cittadini. Riconoscendo l'importanza di ridurre il rischio di incendi e di migliorare la sicurezza dei cittadini, vengono proposte raccomandazioni sul contesto legale, sulle caratteristiche del programma e sulle procedure di attuazione e mantenimento. Esse mirano a migliorarne l'efficacia in diversi contesti geografici, proponendo iniziative che vanno ben oltre l'ambito del programma "Safe Village, Safe People".

En 2017, le Portugal a vécu sa saison extrême d'incendies de forêt la plus tristement célèbre, avec 117 décès, des centaines de blessés, 3588 structures détruites, un coût officiel de 1 456 millions d'euros et 539 920 ha de surface brûlée. Parmi les changements législatifs et institutionnels suscités par les événements de 2017, le programme " Safe Village, Safe People " (qui est en réalité deux programmes mis en œuvre simultanément) a été établi en 2018 (Conseil des ministres n° 157-A/2017), dans le but de: i) mettre en œuvre des mesures structurelles pour protéger les personnes, les biens et les bâtiments dans l'interface entre la forêt et la ville; et ii) développer des actions de sensibilisation à la prévention des comportements à risque et aux mesures d'autoprotection destinées à des publics spécifiques. Il est intéressant de comprendre comment ce programme a été mis en œuvre, d'identifier les points forts et les obstacles à sa mise en œuvre, et d'évaluer comment ce programme modifie les attitudes et les comportements des propriétaires en matière de réduction des risques et de préparation aux incendies de forêt, ainsi que pour faire face à un incendie de forêt. Pour comprendre l'implication des citoyens dans ce programme et son efficacité, nous avons interrogé 100 propriétaires dans 15 villages du nord et du centre du Portugal. Nos résultats mettent en évidence des dynamiques locales et contrastées du programme "Safe Village, Safe People", liées à l'intérêt des autorités locales pour sa mise en œuvre et son entretien, et à l'implication des citoyens. Reconnaissant l'importance de la réduction du risque d'incendie de forêt et de l'amélioration de la sécurité des citoyens, des recommandations sur le contexte légal, les caractéristiques du programme et les procédures de mise en œuvre et de maintenance sont proposées. Elles visent à renforcer l'efficacité du programme dans différents contextes géographiques, notamment en proposant des initiatives qui vont bien au-delà de la portée du programme "Safe Village, Safe People".