

FOREST INTERVENTION ZONES FOR FIRE PROTECTION AND SUSTAINABLE MANAGEMENT

Portugal has introduced a joint forest management model for small-scale forest owners to **promote sustainable forest management and protection against extreme fire events.**



Most forests in Portugal are owned by small-scale private owners.

LOCATION

Portugal



ACTORS

Associations of Agro-Forestry Producers, Public Administration, Environmental NGOs, Local Entities, Industry, Academy



CHALLENGE

Rural abandonment and the resulting fuel accumulation, caused by lack of forest management together with climate change, are increasing the risk of extreme wildfire events in Portugal.

Forest fuel management in the country is challenging, as most forests are owned by small-scale private owners.

BACKGROUND

Extreme wildfires in Portugal in 2003 burned a total of 425,839 ha of land, representing the worst wildfire season ever on record; only to follow fires of similar or worse magnitude in 2005, and again in 2017.

Wildfires are a frequent phenomenon in Portugal, a growing threat to people, property, and natural resources. What made the 2017 fires exceptional was that they occurred outside of the official fire-prone summer season. Similar to other Mediterranean countries, extreme fire events in Portugal are driven by climatic changes and socio-demographic developments in rural areas, such as changes in farming, land use and fuel management practices leading to fuel accumulation.

In Portugal, rural depopulation and ageing have greatly increased the area occupied by forests (from 7% to 35%) since the 19th century.

This has caused fuel accumulation which, with proper management, could potentially be controlled. However, there are over 500,000 forest owners in Portugal, with more than 75% of forests owned by small-scale private owners. This small-scale ownership, coupled with landowner absenteeism, causes constraints to forest management.



Forest Intervention Zones are a tool to manage the challenging situation of fragmented forest ownership and resulting difficulty for controlled management of forests at larger spatial scales.

INNOVATIVE APPROACH

Legal and institutional framework

Forest Intervention Zones first emerged in 2003 as a promising tool to manage the challenging situation of fragmented forest ownership and resulting difficulty for controlled management of forests at larger spatial scales. The approach, defined by law in 2005, brings together small-scale forest owners to identify and implement a joint forest management and protection system. **ZIF** is integrated in the Portuguese legal and institutional framework for forest management and forest fire protection.

What makes a ZIF?

ZIF requirements:



The ZIF approach

ZIF are bounded areas with forestry as the main land use, and may include both private, common, and public lands. In private forests, ZIF need to cover a minimum of 750 ha of land, include at least 50 forest owners or producers and a minimum of 100 properties. The objective of the ZIF approach is to increase sustainable management of forests, overcome intervention constraints caused by land structure and size, protect forests against fires through structural measures and help integrate local and central management efforts. Land is managed by a single entity, the ZIF management entity. The ZIF founding process has three stages: legal procedures; planning; and implementation. The founding group needs to own at least 5% of the area inside the ZIF.

About ZIF

Zona de Intervenção Florestal

Forest Intervention Zones

Between 2005 – 2012, a total of 162 ZIF were constituted representing 845.000 ha of land. Up until 2021 the number of ZIF has risen to 263, with largest areas in central and southern parts of Portugal.

PROS +

- Encourages small-scale private forest owners for collective action
- Responds to the need for mitigating fire risk
- Could potentially increase profitability of managed areas

CONS -

- Insufficient public funding
- Complexity in assembling many actors together
- Absence of effective results

