

Integrated Rural Fire Management — Persisting Together

The 2025 wildfires in Portugal and other regions of the world once again highlighted that managing fire risk is a major societal challenge. Complex territorial contexts, climate variability and the affected communities require effective operational management and good risk governance. While significant progress has been made in the global management of rural fires in recent years, there are still urgent, chronic local-level challenges to overcome. The year 2026 will therefore be decisive.

The *Global Wildfire Information System* (GWIS) reports that in 2025 more than 386 million hectares (Mha) had burned, corresponding to about 2.9% of the planet's land surface. Between 2012 and 2025, this annual figure ranged from 330 to 440 Mha. Similar to other years, in 2025 63% of the burned area occurred on the African continent (almost two thirds), totaling about 242 Mha. The remaining third was distributed across the American continent with 60 Mha (15%), Oceania with 45 Mha (12%), Asia with 29 Mha (7%), and Europe with 10 Mha (3%), of which 8 Mha were in Russia. The Iberian Peninsula accounted for almost two-thirds of the area burned in the EU-27, with 270,000 hectares in Portugal, and 452,000 hectares in Spain.

These figures include very different fire regimes, from subtropical savannas to Mediterranean scrublands and to temperate and boreal forests, where fires have negative or positive impacts on ecosystems depending on their severity and frequency. They include both the good, controlled fires of Western Australia and the United States of America, traditional fires used by shepherds in the Serengeti and in the Pyrenees, as well as destructive fires in the Amazon or in the wildland-urban interface, such as those in Los Angeles, with costs in the billions of dollars.

In addition to direct fatalities and material damage in urban areas that have expanded into fire-prone territories, there is mounting evidence of the negative impacts of fires on public health, on greenhouse gas emissions, on the loss of forested areas and reduction in the goods and services they generate, and therefore on the economy and the environment. Given the importance and prominence of the issue, the international community has been developing fire governance mechanisms over the last three years, addressing the causes and mitigating their consequences.

In December 2025, at the 7th session of the United Nations Environment Assembly (UNEA-7) held in Nairobi, Member States adopted the resolution on “*Strengthening the Global Management of Wildfires*”. This resolution calls for greater international cooperation on early warning systems, risk assessment, satellite and ground monitoring, and recommends that countries move from a merely reactive response to a system of proactive prevention. It also calls for the adoption of integrated fire management, explicitly recognizing the FAO's *Global Fire Management Hub*

(GFMH) — of which Portugal is a founding member — as an instrument for global action and encouraging countries to draw on its expertise to adjust local strategies. The resolution mandates the Executive Director of the United Nations Environment Programme (UNEP) to submit progress reports at future assemblies. **What progress will be seen in 2026 and beyond?**

At the COP30 held in Brazil in November 2025, Portugal signed the *Call for Action for Integrated Fire Management*, joining 66 other countries in a commitment to integrate the principles of Integrated Rural Fire Management into public policies and operational fire risk management. This commitment is associated with an action plan and monitoring indicators (<https://climateaction.unfccc.int/CopsAndSummits/COP30>), calling for example that: a) by 2028 at least 25 countries adopt these principles (currently eight, including Portugal); b) at least 3 of the 10 global regions have interoperable training and resource-sharing systems; and c) the alignment of public and private funding for prevention at the local level is improved.

This commitment to collective action from COP30 is an important step for the world, but also for the EU-27, which sees enshrined on a global scale the path it took along with the G7 countries when adopting the *Kananaskis Wildfire Charter* in Canada in June 2025.

By signing the three international commitments mentioned above, Portugal acknowledges that prevention and firefighting measures must be more integrated, that training processes must be better coordinated and certified, that operations must comply with procedures and quality standards, and that command-and-control systems must evolve towards interoperability between entities and countries. In the European and national context, this will lead to a greater integration of knowledge by forest managers and to more effective decisions by civil protection agencies. Although wildfires in Europe represent a small fraction of the world's burned area, local impacts are very significant, and the way we coordinate knowledge and capabilities will be vital as the risk of large fires keeps increasing. **Can we expect that, in 2026, the European Commission will adopt a systemic approach, across the Government, with clear policy guidelines for the integrated use of fire, proactive prevention, and enhanced interoperability?**

Portugal has good reasons to celebrate these international advances. The three commitments recognize that the strategy followed since 2018 is the right one and reflect the active role of the country in this “fire diplomacy” through the Agency for Integrated Rural Fire Management (AGIF). The three declarations incorporate contributions from AGIF, both within the GFMH/FAO and through messages taken to the 19th United Nations World Forest Forum in 2024 and the G20 in India in 2023. These developments are a follow-up to the reference framework presented in May 2023 at the *8th International Wildland Fire Conference* in Porto, Portugal, which strengthened the principles of integrated fire management and called for high-level international cooperation.

These commitments, also endorsed by Spain, raise high expectations for 2026 and beyond, as the Iberian nations do not have all the knowledge and capabilities necessary to prevent and minimize the threats of mega-fires. Operating human and material resources from multiple entities and working towards a common goal at the national, Iberian, and European levels requires training and interoperability processes that ensure effective and efficient command.

Will there be more information sharing, cooperative planning and training in 2026?

Portugal has been leading this paradigm shift in Europe since 2017, strengthening investment in prevention (55% of the total), improving information and knowledge, and promoting greater integration in firefighting, in line with the 2017 recommendations of the Independent Technical Commission (CTI) unanimously approved by the Portuguese Parliament.

The transition to an Integrated Rural Fire Management System (SGIFR) is not simple, swift, or enforceable. It involves mobilizing the entities in charge of land management, leveraging the role of good fire in pasture management, forestry, and nature conservation, and, therefore, aligning policy incentives at European (agriculture, energy, and environment) and national (fiscal) levels. These strongly influence the behavior of economic agents, especially in a country like Portugal where property is mostly privately owned. The protection of life and property also involves the year-round mobilization and engagement of entities for a change from reactive response to proactive prevention around built-up areas and fostering resilient communities.

In recent years, Portugal has been closely watched by other countries and organizations as an example of transformation and preparedness for a new wildfire reality. The adopted strategy—the Integrated Rural Fire Management System and the 2020–2030 National Plan for Integrated Rural Fire Management—under ongoing implementation with annual reporting to the Parliament and Government (<https://www.sgifr.gov.pt/relatorios-anuais>), has produced significant results. Monitoring indicators show the success of communication and deterrence measures in reducing the number of fires, a significant increase in vegetation management along highways and railways, the development of the “*Safe Villages, Safe People*” program, improvements in communication and public warnings, and, overall, a greater preparedness and resilience of communities, with the resulting reduction in damage to life and property.

However, structural weaknesses persist in both fire prevention and suppression. Regarding prevention, progress has been achieved in many areas, such as the construction of firebreaks, and the engagement of landowners to establish the land registry, integrated forest management zones, and community lands. But active land management remains insufficient, with subregional and municipal programs only partially implemented, and very few economic or fiscal incentives available for the adoption of good forestry and pastoral practices. The wildland-urban interface remains one of the main risk factors, requiring more local intervention and effective incentives

for risk reduction. These changes require a profound transformation of institutions, their capacities, and their organizational cultures.

Regarding fire suppression, the most complex fires continue to expose chronic weaknesses: insufficient anticipation and operational planning, poor incorporation of available knowledge into decision-making, difficulties in inter-institutional coordination, and limitations in operational command and control. Although financing and material resources are available, some measures of the National Action Program or identified in recent years through the lessons learned capacity were not implemented as planned. As a result, in several cases suppression opportunities arising from prevention work, periods of favorable weather or the availability of specialized resources were not fully exploited, delaying fire containment and leading to reactivation and/or rekindle, thus more burning in forests and agricultural lands, more villages and people exposed, longer fire duration, and increased costs and losses.

Scaling up prevention and improving suppression require a constant effort of coordination at various territorial levels and operational cooperation between private associations and public institutions, with different cultures, working processes and, at times, asymmetrical power stakeholders' relations.

Acknowledging these fragilities, which materialized over a few days and contributed to the extensive burned areas of 2024 and 2025, is an essential step to ensure three fundamental priorities in the coming years:

1. Strengthen the National Action Program (PNA) and **mobilize public entities to accelerate its implementation, improve the coordination of public policies**, ensure consistent funding, and strengthen international cooperation, particularly at the Iberian and European levels;
2. **Encourage landowners, associations, and local authorities through economic and fiscal incentives** to actively manage the territory with good forestry and pastoral practices, reducing fire risk for homes, industrial areas, and rural spaces;
3. **Organize the most specialized resources in a public and private rural workforce** dedicated to the protection of forests, pastures, agricultural and natural areas, capable of **effectively supporting a General Staff that coordinates, commands, and controls firefighting operations in complex events**.

The essential ingredients to move forward have been established. The course set out in the National Plan for Integrated Rural Fire Management (PNGIFR 2020–2030) and the National Action

Program (PNA 2020-2030), also rolled out at the regional and sub-regional levels, are underway. The strategy exists and international commitments reinforce it.

Perseverance is now key. Political perseverance, ensuring stability, institutional alignment and transversal coordination across the entire government, promoting the integration of multiple contributions as well as decentralized governance and planning, involving regions and communities. Operational perseverance, turning strategic guidelines into consistent practices on the ground, inspired by international best practices. Collective perseverance, mobilizing the central government, regional coordination committees, local authorities, landowners, private associations and communities in a continuous cooperation endeavor.

We have managed to prevent and mitigate the worst consequences with the transformation undertaken since 2017 and everyone's efforts. Imagine, for example, what would have happened in recent years, which have been drier and hotter, if the number of fires had not been reduced by more than half? **However, the fires of 2024 and 2025 show that much must still be done to overcome the environmental, economic, and social challenges** posed by land management.

Protecting Portugal from severe wildfires in 2030 (the vision of the PNGIFR 2020-2030) entails strategic temperance, a strong political commitment to the established path forward, and the collective capacity to transform the existing risk into an opportunity for territorial development, reinforcing integrated fire governance in cooperation with the international community and national and local actors. **These are our wishes for 2026.**

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