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San Marino, 20-23 November 2023

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**European Forestry Commission matters (Food and
Agriculture Organization): Integrated fire management****Food and Agriculture Organization
European Forestry Commission****Forty-second session**

San Marino, 20-23 November 2023

**Food and Agriculture Organization of the United Nations
European Forestry matters: Integrated Fire Management****Note by the Secretariat***Summary*

This document prepared by Food and Agriculture Organization of the United Nations (FAO) summarizes the global and regional level FAO initiatives and activities towards Integrated Fire Management, including main outcomes of the 8th International Wildland Fire Conference, such as the launch of the Global Fire Management Hub. It also presents possible options for regional cooperation on fire management and provide background information to facilitate the discussions of the Commission.



1. Integrated Fire Management

1.1. Introduction

1. Fire is an essential component of many terrestrial ecosystems, influencing many important attributes including vegetation growth and regeneration patterns, species composition and abundance, and species adaptation. It also helps shape the landscape, thereby affecting multiple ecosystem services. However, it is estimated that fires burn over 350 million hectares of land globally every year, including forests and woodlands, causing enormous destruction. Most of these fires are caused by human actions and result in major environmental and economic damage.

2. The Global Wildfire Information System (GWIS) includes the European, Middle East and North African countries for which the number of wildfires and area burnt is about the average for the period 2012-2022 at ~10.4 million hectares after a period from early April to mid-May that saw a high level of wildfire activity. There has already been a number of significant wildfires in 2023 including fires exceeding 100 hectares in size in Spain, Germany, Belgium, Poland, France, Greece, Croatia, Italy, and Kazakhstan. In the European region, on the average 55 000 fires occur every year, burning ~19 million hectares. Fires in the European region account for ~5 percent of the total global area burned.

3. Global warming increases the frequency and severity of the weather conditions that create wildfires and, with increases in factors such as ignition sources and high fuel levels, wildfires increase in intensity, occur over longer fire seasons and spread in range. Extreme wildfires are occurring in countries that are normally fire-prone, but they have also been experienced in countries that typically observe much less burning including across most of Europe. Damages, losses and costs from wildfires have been increasing and include loss of life, damage to critical infrastructure such as roads, electricity and telecommunication networks, assets and business activities, and increased GHG emissions. The greater intensity in the drivers of wildfires, influenced by climate change, are projected by UNEP GRID-Arendal to lead to increases in the number of extreme wildfires of up to 14 percent by 2030, 30 percent by the end of 2050 and 50 percent by the end of the century.

4. Increasingly, nations and organisations are recognising the need to be more strategic and rebalance the investment towards risk reduction through application of Integrated Fire Management (IFM). IFM incorporates the ecological, socio-economic and technical aspects of fire management in a holistic way to meet the goal of resilient and sustainable landscapes and human livelihoods. The prevention of wildfires is the right track to follow, one that often includes the use of fire as a management tool and the involvement of communities as a key and active component of the entire process.

5. The FAO Fire Management Strategy (2019) sets out an Integrated Fire Management approach and underpins FAO's support and interaction with Members, UN agencies, international and regional organizations. This systematic approach to fire management seeks to understand the context, situation and actors involved, and includes "all activities associated with the management of fire prone land, including the use of fire to meet land management goals and objectives." It is a holistic approach to addressing fire issues takes into consideration biological, environmental, cultural, social, economic and political interactions. FAO champions the integrated approaches to fire management by emphasis on underlying causes and seeking long-term, sustainable solutions using five elements (the 5Rs): (i) Review and analysis; (ii) Risk reduction; (iii) Readiness; (iv) Response; and (v) Recovery. FAO leverages its UN technical mandate on fire management, including with key partners, through its Regional Offices, Regional Forestry Commissions and Country Offices.

6. Based on their long-term experience in integrated fire management and clear demand from the international fire community, FAO and UNEP are co-developing a Global Fire Management Platform (now called Hub). This was announced by FAO deputy director-general at the XV World Forestry Congress.

7. At its twenty-sixth session, the FAO Committee on Forestry (COFO) endorsed FAO efforts and recommendations on IFM, with the Committee noting that forest fire

management, particularly fire risk reduction, is of crucial importance. The Committee urged Member Nations to consider strengthening the focus on IFM through country-level and regional strategies, normative studies and collaboration among countries, and noted the Global Fire Management Hub¹. Subsequently, the FAO officially launched the Hub at the 8th International Wildland Fire Conference in Portugal in May 2023², supported by Portugal and Germany and is under discussion with Canada and the United States.

1.2. Global level works and initiatives

8. The XV World Forestry Congress was hosted by the Republic of Korea on 2-6 May 2022. A special event: Fire Management Forum – Wildfires Beyond Forests was held with collaboration between FAO, the Korea Forest Service and the Asian Forest Cooperation Organisation (AFoCO).

9. During the Fire Management Forum, the presentation of Assuring the Future of Forests with Integrated Risk Management (AFFIRM) Mechanism conceptual framework, roadmap and 1st phase work plan (2023-2027) and the signing ceremony between Korea Forest Service Deputy Minister and the FAO Deputy Director-General was held.

10. FAO and UNEP are co-developing a Global Fire Management Hub, which will become operational through the creation of a small secretariat, hosted at FAO, and fire experts located in regional offices, where feasible. It will bring together key partners working on the issue, including UNEP, UNDRR, the Global Fire Monitoring Center (GFMC), the Joint Research Centre (JRC) of the European Union, and leading regional intergovernmental and national organizations, among others. It will be implemented at scale through regional projects on IFM (e.g. the existing AFFIRM Mechanism).

11. The 8th International Wildland Fire Conference (8th IWFC) was held in Porto, Portugal, on 16-19 May 2023. The host country, Portugal, worked with countries and organisations to present the Landscape Fire Governance Framework - Guiding Principles for Adjusting Strategies, Policies, and Management, to Global Change. FAO has been involved in the development of this framework. The Global Fire Management Hub (Fire Hub), launched during the conference's high-level closing session, intends to support the implementation of the Landscape Fire Governance Framework.

12. A series of three technical workshops, scheduled to happen from October 2023 to May 2024, with key partner organizations and global fire management experts will discuss how to build upon ongoing initiatives for the development of the Fire Hub. In particular, the workshops will provide guidance on: the integration of the 30-year work experience of the Global Fire Monitoring Centre (GFMC) in Freiburg and the related networks and partners into the Fire Hub; how the Fire Hub can support implementation of the Landscape Fire Governance Framework; and options for advocating and inclusion of integrated fire management in international forest-related dialogues.

13. FAO continues to engage globally and has been contributing by:

- Coordinating the implementation of the Fire Hub to strengthen countries' capacities to implement IFM.
- Boosting the international discussion of the Landscape Fire Governance Framework that intends to better prepare societies to achieve sustainable development goals and ensure lower losses to fire, that brings governments, businesses, academia, and members of civil society together in balanced and technically supported solutions.
- Participating in the CEOS Wildfire Pilot led by Canada.
- Assisting JRC in the Expert Group on Forest Fires (EGFF) in Europe and Latin America and the Caribbean.

¹ paragraph 20; <https://www.fao.org/3/nk728en/nk728en.pdf>

² <https://www.fao.org/forestry/news/100706/en/>

- Collaborating with UNEP and GRID-Arendal on a 2022 report that outlines the impacts of wildfires across Earth's ecosystems.
- Implementing the AFFIRM mechanism in the Mekong region in collaboration with AFoCo and feed directly into the Global Fire Management Hub.

1.3. Regional level initiatives and activities

14. FAO is engaged in supporting member nations, in fire management related projects in Kosovo³, North Macedonia, and Montenegro and Türkiye.

15. FAO continues to participate and engage with the Joint Research Centre of the European Commission in the Expert Group on Forest Fires for Europe, through providing input to the Global Wildfire Information System (GWIS) and collaborating on the Global Fire Management Hub. Input to the PyroLife Project for fire management training of 15 PhD researchers and the Horizon 2020 funded research project "FirEURisk Developing a Holistic, Risk-Wise Strategy for European Wildfire Management" along with other European research projects and partners.

16. FAO supports national institutions in North Macedonia in the development of the methodology and related programme for data collection on forest damages, with special emphasis on forest fires as well as issues related to forest restoration of fire-devastated areas. FAO is supporting Integrated Fire Management in Kosovo through capacity building, training and institutional strengthening under a Sweden/EU funded project.

17. FAO initiated the subregional project "Enhancing of the Capacity of the International Forestry Training Centre" funded by FAO Türkiye Forestry Program, of which an important part consists of upgrading the current fire management training programme based in Türkiye including delivery of this programme to the countries of the sub-region and beyond.

18. FAO initiated the project "Post-Fire Restoration Activities of Forest and Maquis Ecosystems in Mugla Province" funded by TCPf, which aims at developing of guidelines on species restoration, mainly for selected rare flora and fauna elements in ecosystems affected by forest fires in Türkiye.

19. FAO organized a 5-days training on fire management for the countries of the subregion, which has been successfully carried out in 2021 in Antalya, Türkiye, and included trainings on: monitoring network for early forest fire detection, forest fire prevention included prescribed burning methods, forest fire fighting including use of state of the equipment and technologies, computer simulations and inter-agencies emergency communication, and post-fire rehabilitation activities.

2. Points for consideration

20. The Commission may wish to invite Members to:

(a) continue to participate in the Expert Group on Forest Fires for Europe and use it as a platform to strengthen the regional exchange of experiences and lessons learned, and mutual support;

(b) promote and adopt the Integrated Fire Management approach;

(c) invest more in the revision and analysis of fires to be able to focus fire risk reduction efforts strategically;

(d) champion and adopt the Landscape Fire Governance Framework - Guiding Principles for Adjusting Strategies, Policies, and Management, to Global Change and bring it to the discussion at the next session of COFO;

³ References to Kosovo shall be understood to be in the context of Security Council resolution 1244 (1999).

(e) promote the coordination and dialogue of all initiatives being carried out on fire management in the region to create synergies among them.

21. The Commission may wish to invite FAO to:

(a) continue promoting and leading a common approach by all Member Nations in the region regarding Integrated Fire Management;

(b) strengthen its efforts on developing the Global Fire Management Hub to provide stronger support on the development of regional and national capacities, including through partnership with those in the European Region, and, in particular, take advantage of the experience, skills and systems that already exist.
