



LATIN AMERICAN AND CARIBBEAN FORESTRY COMMISSION

THIRTY-THIRD SESSION

26 - 30 June 2023

OUR FORESTS KEEP BURNING

Executive Summary

Many important activities have taken place around the world since the last LACRFC. FAO facilitated and led the Fire Management Forum – *Wildfires Beyond Forests* at the World Forestry Congress in Korea in collaboration with partners, where the *Assuring the Future of Forests through Integrated Risk Management (AFFIRM) Mechanism* was launched. FAO also provided input and guidance on *Spreading Like Fire: The Rising Threat of Extraordinary Landscape Fires*, a UNEP GRID-Arendal report, as well as key EC and World Bank publications. COFO endorsed FAO fire management efforts and recommendations at its 26th session in October 2022, including the development of the Global Fire Management Hub that will be launched at the International Wildland Fire Conference in Portugal in May 2023.

There has already been a large number of damaging wildfires across the region in 2023, notably in Chile. Owing to support by the Joint Research Centre and in partnership with FAO, the region has established the regional Expert Group on Forest Fires, where countries are able to share their experiences and lessons learned concerning fire management. Moreover, UN organizations in the region are now working on a common approach to fire management based on the Sendai Framework, whilst FAO is leading the preparation of a review of the LAC UN Issue-Based Coalition on Climate Change and Resilience. With these efforts FAO is working towards Integrated Fire Management under the 5Rs approach, emphasising the importance of putting more effort into fire review and analysis to understand what causes and drives fires while identifying opportunities to reduce the risk of wildfires.

Suggested Actions by the Commission

The Commission might wish to:

- Encourage member countries to participate in the Expert Group on Forest Fires and use it as a platform to strengthen regional exchange of experiences and lessons learned, and mutual support.
- Encourage member countries to invest more in the review and analysis of fires to be able to adopt a more strategic approach to mitigating the risk of fire.

The Commission might wish to request FAO to:

- Continue promoting and leading a common approach to fire management among all UN agencies in the region.
- Strengthen its efforts to develop the Global Fire Management Hub to provide more support for regional and national capacity building.
- Promote common Integrated Fire Management terminology.

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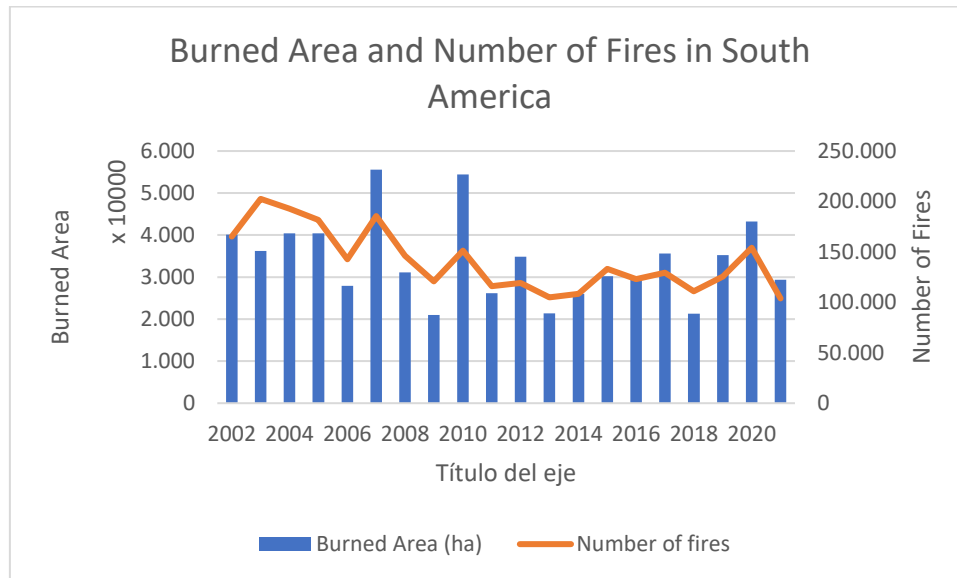
I. INTRODUCTION

1. Fire has been part of the Earth system for hundreds of millions of years (Bowman et. al. 2009¹), and it occurs in every terrestrial vegetation biome and on every continent, except Antarctica. Global vegetation patterns are driven to a large degree by long-term climate conditions, as well as by fire (Bond et. al. 2005², Bowman et. al. 2009). Fire is an essential component of many terrestrial ecosystems, and it influences many important attributes, such as vegetation growth and regeneration patterns, species composition and abundance, and species adaptations. It also shapes the landscape, affecting multiple ecosystem services and can be beneficial or adverse. However, it is estimated that fires burn over 400 Mha every year, with most caused by human actions, and resulting in large environmental and economic damages worldwide. Specifically, in the Latin America and the Caribbean region, it is estimated that some 60 Mha have been burned, on average, every year³, rising to nearly 80 Mha in 2020. Thus far, from January to April this year, close to 8 Mha have already burned, with extreme fires in some countries such as Chile, where nearly 600,000 ha have already burned even though the fire season has not yet started in most of the LAC countries.

¹ Bowman DMJS, Balch JK, Artaxo P, Bond WJ, Carlson JM, Cochrane MA, D'Antonio CM, DeFries RS, Doyle JC, Harrison SP, Johnston FH, Keeley JE, Krawchuk MA, Kull CA, Marston JB, Moritz MA, Prentice IC, Roos CI, Scott AC, Swetnam TW, van der Werf GR, Pyne SJ. 2009. Fire in the Earth system. *Science* 324: 481–484.

² Bond, WJ, Woodward FI, Midgley GF. 2005. The global distribution of ecosystems in a world without fire. *New Phytol.* 165: 525-538.

³ Global Wildfire Information System (GWIS).



<https://gwis.jrc.ec.europa.eu/apps/gwis.statistics/estimates>

2. Global warming increases the frequency and severity of the weather conditions that create wildfires⁴ and, with increases in factors such as ignition sources and high fuel levels, wildfires increase in intensity, occur over longer fire seasons and are spreading in range.⁵ Extreme wildfires are occurring in countries that are normally fire-prone,⁶ but they are also occurring in countries that typically experience much less burning including across most of Europe.⁷ Damages, losses and costs from wildfires have been increasing and include loss of life, damage to critical infrastructure such as roads and electricity networks, assets and business activities, and increased GHG emissions. Climate change-related drivers of wildfires are expected to lead to up to a 14%, 30% and 50% increase in the number of extreme wildfires by 2030, the end of 2050 and the end of the century, respectively.⁸ Nations and organisations are progressively recognising the need to be more strategic and rebalance investments towards risk reduction through application of Integrated Fire Management (IFM).

3. Integrated Fire Management (IFM) involves holistically addressing the ecological, socio-economic and technical aspects of fire management to attain resilient and sustainable landscapes and human livelihoods. A radical change on how humanity deals with fire is needed. Focusing on wildfire prevention is the right approach to follow, and often involves using fire as a management tool and community engagement as a key and active feature of the entire process.

4. FAO supports integrated fire management through a five-pronged approach (also known as the 5Rs): Review and Analysis, Risk Reduction, Readiness, Response and Recovery.

INTEGRATED FIRE MANAGEMENT

Globally

⁴ IPCC, 2021. Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

⁵ UNEP, 2022. Spreading like Wildfire – The Rising Threat of Extraordinary Landscape Fires. A UNEP Rapid Response Assessment. Nairobi.

⁶ World Bank, 2020. Managing Wildfires in a Changing Climate. Washington, DC.

⁷ San-Miguel-Ayanz et al., 2022. Forest Fires in Europe, Middle East and North Africa 2021. Joint Research Centre of the European Commission.

⁸ UNEP, 2022. Spreading like Wildfire – The Rising Threat of Extraordinary Landscape Fires. A UNEP Rapid Response Assessment. Nairobi.

5. The 2019 FAO Fire Management Strategy ⁹ sets out the approach to Integrated Fire Management in support of Members and continues to underpin FAO's support and interaction with Members, fellow UN agencies, and international and regional organizations. FAO leverages its UN technical mandate through its six Regional Offices, six Regional Forestry Commissions and 130 Country Offices with partners such as the Committee on Mediterranean Forestry Questions - Silva Mediterranea, European Commission's Joint Research Centre (JRC), UNEP, UN Office for Disaster Risk Reduction (UNDRR), the Global Fire Monitoring Center (GFMC), International Union of Forest Research Organizations (IUFRO), the Center for People and Forests (RECOFTC), and the World Bank.

6. 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." This holistic approach to addressing fire issues takes into consideration biological, environmental, cultural, social, economic and political interactions. FAO champions integrated approaches to fire management by rebalancing emphasis on underlying causes and seeking long-term, sustainable solutions using five elements (the 5Rs).

7. FAO collaborated with the Korea Forest Service and the Asian Forest Cooperation Organisation to convene a Fire Management Forum – *Wildfires Beyond Forests* at the XV World Forestry Congress in Korea in May 2022. During the Fire Management Forum, which was widely attended and supported by international speakers and partners, FAO and the Korea Forest Service launched the Assuring the Future of Forests through Integrated Risk Management (AFFIRM) Mechanism.¹⁰ With funding from the Korea Forest Service, FAO is implementing AFFIRM in collaboration with the Asian Forest Cooperation Organization (AFoCo). It is being piloted in the Mekong region with the initial planning meeting held in conjunction with AFoCo in February 2023 and will feed directly into the Global Fire Management Hub (Fire Hub), co-led by FAO and UNEP.

8. FAO Senior Management announced the Global Fire Management Hub at the XV World Forestry Congress (2022) that was welcomed by FAO Members during the 26th session of the Committee on Forestry.¹¹ It aims to strengthen countries' capacities to implement Integrated Fire Management (IFM) in order to reduce the many negative impacts of wildfires on people (human life, health, livelihoods), landscapes (communities, critical infrastructure, ecosystems) and global climate. The Hub will bring together key partners working on integrated fire management, including UNEP, the JRC, the Global Fire Monitoring Center (GFMC), UNDRR, and leading national organizations.

9. The JRC through the Global Wildfire Information System (GWIS) is collaborating with FAO to make available burned area estimates derived from GWIS on the Forest Resources Assessment (FRA) to countries. In addition, online geospatial tools available on the FRA website allow countries to derive their own burned area estimates dynamically, using different combinations of global land cover and fire products. These tools will soon allow countries to use national forest area products in combination with global fire products to calculate more nationally relevant burned area estimates and report these to the FRA.

10. FAO also provided input and guidance whilst working with the UN Environment Programme (UNEP) and GRID-Arendal on a 2022 report that outlines the impacts of wildfires across Earth's ecosystems.¹²

11. FAO and partner efforts were warmly received at COFO26 (2022) with the Committee noting that forest fire management, particularly fire risk reduction, is of crucial importance and urged member nations to consider strengthening the focus on Integrated Fire Management through country-level and regional strategies, normative studies and collaboration among countries. FAO was recommended:

⁹ <https://www.fao.org/forestry/firemanagement/strategy/en/>

¹⁰ <https://www.fao.org/forestry/news/99890/en/>

¹¹ <https://www.fao.org/3/nk728en/nk728en.pdf> - (paragraph 20)

¹² <https://www.unep.org/resources/report/spreading-wildfire-rising-threat-extraordinary-landscape-fires>

- to continue adopting a systematic approach to integrated fire management, particularly concerning the review and analysis of fires.
- to support Members – upon their request – in identifying relevant and effective risk reduction measures and strategies.
- to support the development of fire management networks and continue strengthening or engagement in existing fire management related networks.
- and, in particular, to implement the Global Fire Management Hub with UNEP and in partnership with countries and relevant stakeholders to promote integrated fire management more broadly.

12. Every four years the International Wildland Fire Conference (IWFC) takes place. It is the most important fire management event and aims to facilitate sharing of knowledge and expertise in landscape fire policies, research, management and capacity building in an international forum. The series started in Boston, United States, in 1989, and established the bases for global and transboundary cooperation on fire management, which were gradually improved in the following editions, the last one in Campo Grande, Mato Grosso do Sul, Brazil (2019). The next IWFC conference (8th IWFC) will be held in Porto, Portugal, on 16-19 May 2023. The host country, Portugal, is working with countries and organizations to present the Landscape Fire Governance Framework - Guiding Principles for Adjusting Strategies, Policies, and Management, to Global Change. FAO has participated in the development of this framework. The Global Fire Management Hub will be launched during the conference's high-level closing session as a way to support implementation of the Landscape Fire Governance Framework.

13. Also, the LAC Regional Expert Group on Forest Fires will meet in Porto the day before the IWFC, in addition to a joint session with the European expert group to exchange experiences.

Regional – and country - level activities

14. The EU Joint Research Centre in Ispra has supported the establishment of an LAC Regional Expert Group on Forest Fires since 2021. With EC project funds, expert fire managers from the countries' relevant Ministries and Agencies in charge of fire management throughout the different phases of the fire cycle have met with OTCA, UNEP and FAO representatives at least twice a year since 2021. So far, agency and ministry representatives from 10 of the 12 countries participating in the group (South American countries and Mexico) took part in meetings held in Santiago de Chile, Brasilia and Punta del Este in Uruguay. The next meeting will take place at the IWFC in Oporto. FAO will continue to support the JRC in convening and strengthening the Latin American Expert Group on Forest Fires.

15. FAO led the culmination of a joint UN Agency brief on wildfires in Latin America and the Caribbean in the context of the UN Issue-Based Coalition on Climate Change and Resilience that was presented to the United Nations resident coordinators and national UN agency offices in the Southern Cone in order to promote a common approach. The brief provides an overview of fire history, UN capacities and promotes the integrated 5Rs approach. It was also presented at the UNDRR regional platform in Uruguay (March 2023) during a panel on Integrated Fire Management at the global, regional, national and local level.

16. FAO completed a regional inventory of projects (2016 – 2021) and found that 20 projects with at least one fire management component were/are executed in 10 countries, where Preparation (45%), Risk Reduction (28%) and Restoration (15%) activities are the most common. Moreover, the most common activities are related to early warning systems (16%) and restoration (15%), followed by capacity building (11%) and equipment provision (8%). While these activities are selected in response to country requests, it is suggested that more attention be paid to Review and Analysis in order to build better prevention programs.

17. At present, FAO is implementing projects with different fire management phase components in Argentina, Bolivia, Chile, Dominican Republic, Honduras, Paraguay, Trinidad and one in the pipeline for Venezuela.

18. This year FAO also participated in two joint UN missions led by the UNCT for rapid impact assessment and eventual UN contributions to mitigating wildfire impacts in Chile this year.