



LATIN AMERICAN AND CARIBBEAN FORESTRY COMMISSION

THIRTY-SECOND SESSION

6 - 10 September 2021

INTEGRATED FIRE MANAGEMENT

Executive Summary

Latin America and the Caribbean (LAC) continues to be impacted by wildfires with an average of 33 million hectares of land estimated to have been affected each year for the period 2009-2019. Overwhelmingly fires are human caused with only 10 percent of all fires globally due to natural causes, mainly lightning. At its last meeting, the Commission stressed the importance of promoting the integrated management of fires and recommended the revitalization of previous initiatives and regional strategies associated with forest fires. FAO developed a Fire Management Strategy in 2019 that sets out a systematic approach to fire management. It is based on understanding the context, situation and actors involved to analyse options to reduce risk and identify capacity requirements. FAO champions integrated approaches to fire management by rebalancing emphasis on underlying causes and seeking long-term, sustainable solutions using five elements (also known as the 5Rs).

FAO undertook a review of past efforts on fire management networks in Latin America and the Caribbean to identify impediments to active, functioning fire management networks, noting that collaboration through a fire management network faces significant challenges. Current activities by FAO and where FAO is engaged include supporting the design and implementation of projects with a fire management component for the Green Climate Fund Results Based Payment projects in Chile and in Argentina. Other projects with fire management components are in Bolivia, Honduras, Paraguay, Trinidad and in the Dominican Republic. FAO is undertaking an inventory of past FAO fire management project activities to inform future project planning. The Global Wildfire Information System (GWIS) country profiles developed in collaboration with FAO provide information on geographic distribution of wildfires, burnt areas and emissions. FAO in the region is working with partners on the EU-LAC Policy Dialogue Project - Support to wildfire management in the Amazon and LAC region, the Issue Based Coalition-Climate Change and Resilience (ICB) of the UN Agencies in Latin America and the Caribbean through a Task Team on Fires, led by FAO, and also with the Amazon Cooperation Treaty Organization (ACTO).

Suggested action by the Commission

The Commission may wish to:

- Encourage member countries to participate in the Expert Group on Forest Fires and recognise its potential to become the initial step in a fire management network.
- Encourage the Regional Conference for Latin America to discuss the issue of forest fires.

Request FAO to:

- support the Expert Group on Forest Fires being initiated by the EU in collaboration with FAO through its technical capacity, projects and network of country offices, promoting the inclusion of the existing formal and informal networks in the activities of the Expert Group;
- support and strengthen coordination between the different regional fire management initiatives, including the regional Expert Group;
- promote fire management as an integral part of the restoration activities during the UN Decade on Ecosystem Restoration in order to prevent restoration efforts to be negatively affected by wildfires.

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I. INTRODUCTION

1. Forests in Latin America and the Caribbean (LAC) continue to be impacted by wildfires. Globally, the problems of forest fires persist with a number of countries having experienced large and damaging fires in recent times. The years 2019 and 2020 have seen large wildfires spread around the world. Australia faced its largest series of bushfires on record, while parts of the Arctic, the Amazon and Central Asia also experienced unusual severe wildfires.

2. For the period 2009-2019, an average 33 million hectares (Mha) of land are estimated to have been affected each year by wildfires in Latin America. 2010 was the year with the highest value - over 56 Mha - while 2009 and 2018 recorded the lowest annual values, with estimates lower than 24 Mha (Global Wildfire Information System).

3. Approximately 10 percent of all fires in the global landscape are ignited by natural causes, mainly lightning. The remaining 90 percent of fires are human caused. A human-ignited fire can become a wildfire. Climate change does not cause fire per se, but can increase the frequency and/or severity of fire weather: periods with a high fire risk due to a combination of winds, low humidity, high temperatures and low rainfall. The weather, drier and longer fire seasons are likely to result in more fires becoming wildfires.

4. Following the significant fire season in 2019 in the Amazon Region, countries in the area have been working to generate information to understand the extent of the issue and make better, evidence-based decisions, define policies and strategies, develop prevention and risk management plans and programmes and implement emergency measures to combat and control events and disasters that are affecting the region's forests. At the COFLAC in 2019, the Commission stressed the importance of incorporating fire prevention, management, control, firefighting and restoration actions into forest policies in the region with the aim of promoting the integrated management of fires. The Commission recommended the revitalization of previous initiatives and regional strategies associated with forest fires and forest health, their updating and implementation in the new context of climate change, land tenure issues and conflicts relating to land-use change.

II. INTEGRATED FIRE MANAGEMENT

5. FAO developed a Fire Management Strategy in 2019 that sets out its approach to fire management in support of Member Nations. This systematic approach to fire management seeks to understand the context, situation and actors involved (given that 90 percent of fires are started by people for a reason), then aims to analyse options so as to reduce risk and identify capacity requirements. Importantly, past fire management activities and related efforts already undertaken by countries offer a good starting point and potential access to stakeholders. Through ongoing efforts, requirements for effective fire management can be identified, planned, strengthened and implemented for the medium to long term. Integrated Fire Management (IFM) includes "all activities associated with the management of fire prone land, including the use of fire to meet land management goals and objectives." This implies a holistic approach to addressing fire issues that 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 (also known as the 5Rs):

1. **Review:** analysis of the fire issue and identification of options for positive change
2. **Risk reduction:** prevention - focusing resources on the underlying causes of fires
3. **Readiness:** preparing to fight fires
4. **Response:** ensuring appropriate responses to unwanted damaging fires
5. **Recovery:** community welfare, repairing infrastructure and restoration of fire-damaged landscapes

6. Local people are the most knowledgeable about their landscape, its history, fire use in land uses, those who use fire and why it is used. The fire "Review" can help to analyse these factors in consultation with local people and relevant actors to engage and develop with them approaches that will sustain existing social values and perhaps create new values to strengthen community participation in the sustained management of the landscape.

7. When conducting a national fire management review, FAO uses the 5Rs, starting with Review and Analysis steps to provide an initial understanding of the fire context. This can then be developed and discussed with interested actors, including countries. Once completed, a report that articulates the objective, steps, findings and implications with respect to damage and loss, food security, risk reduction and strategic planning for Integrated Fire Management in the longer term can be prepared.

8. Last year FAO undertook a review of past efforts on fire management networks in Latin America and the Caribbean to identify impediments to active, functioning fire management networks. Efforts to establish regional collaboration through networks started with an invitation from the North American Forestry Commission (NAFC) to initiate an activity with colleagues from the south that began in San José, Costa Rica in October of 2004. With the support of an FAO technical cooperation project, subregional strategies were developed in the same year. A Central American working group is still functional under the Central American Commission for Environment and Development and updated its strategy in 2015. At regional level, an informal network exists and meets on an irregular basis. It seems that collaboration through a fire management network as a solid institutional set of arrangements faces significant challenges. Damaging or dramatic fires recur at intervals and attention to integrated fire management is not always maintained in the period between damaging and dramatic fires.

9. Current fire management related activities by FAO and where FAO is engaged are set out below:

- Ongoing projects: FAO is supporting the design and implementation of projects with a fire management component like the Green Climate Fund Results Based Payment projects in Chile - a project related to restoration of fire affected areas - and in Argentina, on initiatives for **enhanced response to forest fires**. Other projects with fire management components are in Bolivia, Honduras, Paraguay, Trinidad and in the Dominican Republic.
- Review of projects: in order to develop an FAO strategy for fire management in LAC, FAO is undertaking an inventory of all FAO fire management project activities in the region, including those of other organisations and entities to the extent that is feasible.
- The Global Wildfire Information System (GWIS) country profiles supported by the European Commission in collaboration with FAO provide a starting point for country information if not otherwise available. These tools provide information on the geographic distribution of wildfires, burnt areas and emissions, and assess wildfire regimes and impacts at country and sub-country level for all continents around the world.
- The EU-LAC Policy Dialogue Project - Support to wildfire management in the Amazon and LAC region – has the overall objectives of reducing the impact of wildfires in the Amazon region and neighbouring countries through cooperation with LAC countries and regional and international organizations (The Amazon Cooperation Treaty Organization (ACTO), Leticia Pact, United Nations Environment Programme (UNEP), FAO, The United Nations Office for Disaster Risk Reduction (UNDRR, etc.) by providing evidence for policies. It aims at sharing the experience of the European Commission on the establishment of the Expert Group on Forest Fires (EGFF) in collaboration with FAO *Silva Mediterranea* and possibly establish a similar expert group. The objectives include establishing cooperation with fire management services in the countries and a common base of information on wildfires, which would facilitate data harmonization in the region and support fire management in the countries towards better prevention, preparedness and response to wildfires, facilitating exchange of information, experiences and best practices among the countries.
- The Issue Based Coalition-Climate Change and Resilience (ICB) of the UN Agencies in Latin America and the Caribbean through a Task Team on Fires, led by FAO, is producing a UN brief. Amongst others, the brief highlights the United Nations (UN)

system capacities that exist in several Agencies in the area of wildfires and fire-related services and products, as well as their related prevention and response efforts.

- The Amazon Cooperation Treaty Organization (ACTO) works regionally through programmes, projects and initiatives to address the different problems affecting the Amazon, such as forest fires. Since the high-profile fires in the Amazon Region in 2019, a Technical Working Group responsible for forest fires was approved in June 2021 and a Memorandum of Understanding for Cooperation and Mutual Assistance for Integrated Fire Management among ACTO Member Countries is being prepared. The Amazon Integrated Fire Management Network is to be established, consisting of the eight ACTO Member Countries. A webinar on cooperation and mutual assistance for integrated fire management among the member countries of ACTO is being planned.