Group of Experts on Forest Fires in Latin American and the Caribbean (GEFF LAC)

PILLARS FOR NATIONAL AND REGIONAL POLICY

STRATEGIC PILLARS

for National and Regional Policy

INTEGRATED FIRE MANAGEMENT

INTERNATIONAL FRAMEWORKS AND PARTNERSHIPS FOR INTEGRATED FIRE MANAGEMENT

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Note on institutional responsibility

The content of this publication is the result of the technical work of the GEFF LAC Policy Panel The opinions, analyses, and recommendations expressed here do not necessarily represent the official position of the entities to which the members of the Panel are affiliated, nor do they engage their institutional responsibility. This document is presented as a technical input to strengthen regional cooperation, public policy formulation and the adoption of the Integrated Fire Management approach in Latin America and the Caribbean.

FOREWORD:

A Regional Commitment to Resilience and Integrated Fire Management

Latin America and the Caribbean are experiencing an unprecedented combination of climatic and social change. Forest fires, increasingly frequent and severe, have ceased to be a seasonal event and have become a structural challenge that threatens our biodiversity, food security and the well-being of millions of people. In light of this situation, the Group of Experts on Forest Fires in Latin American and the Caribbean (GEFF LAC) is spearheading the leadership of the transition towards Integrated Fire Management (IFM).

Through the Policy Panel, we have consolidated this document as a strategic compass. It is not simply a compilation of agreements; it is testament to almost three decades of normative and scientific evolution. From the first guidelines of ITTO, the International Tropical Timber Organisation, in 1997, to the recent milestones of IIFAN, the International Indigenous-Led Fire Adaptation Network, and the Bogotá Summit of 2025, the region has charted a clear course that integrates scientific rigour with the ancestral wisdom of our indigenous peoples and local communities.

This technical input recognises that fire is a complex element that requires equally complex and participatory governance. By adopting the FAO's 5Rs approach and aligning ourselves with the Sendai Framework for Disaster Risk Reduction 2015-2030, we are building public policies based on evidence and territorial justice. Each chapter of this work reflects the leadership of our member countries and the strength of our partnerships with organisations such as the ACTO (Amazon Cooperation Treaty Organisation) the European Union, UNEP and the FAO.

We are delivering this document to decision-makers, technicians, and aid workers as a tool for action. Our goal is for these foundations to serve to update legislation, strengthen brigades and, above all, protect the natural heritage of each of our countries. In the lead-up to COP30 in Belém, GEFF LAC reaffirms that fire management is not just about fire suppression, but is a fundamental pillar for environmental peace and sustainability in our region.

GEFF LAC Policy Panel

March 2026

EXECUTIVE SUMMARY:

The paradigm shift
from suppression to management

This document constitutes the technical and political reference framework of the Group of Experts on Forest Fires in Latin America and the Caribbean (GEFF LAC). Its purpose is to link international commitments to the territorial realities of the region, facilitating the transition from models based solely on suppression towards Integrated Fire Management (IFM).

This effort is based on more than 27 years of global regulatory evolution, integrating scientific evidence, the safeguarding of biodiversity, and deep respect for the knowledge of indigenous peoples and local communities.

The sustained increase in the incidence, severity and duration of forest fires in Latin America and the Caribbean (LAC) has led countries in the region to strengthen their international cooperation and seek more comprehensive approaches to fire management. In this context, and in recognition of the need for a regional technical platform that facilitates the exchange of information, standardises criteria and supports the development of evidence-based public policies, **in 2020 the Group of Experts on Forest Fires in Latin American and the Caribbean (GEFF LAC) was created.** This initiative arises within the framework of the European Union's support project to improve the management of forest fires in LAC and as part of the strengthening of the **Global Wildfire Information System (GWIS)**, promoted by the Joint Research Centre (JRC) of the European Commission.

Since its formation, GEFF LAC has brought together technical representatives from ministries and agencies responsible for the environment, forests, risk management, agriculture and civil protection in the countries of the region. Its creation responded to the need to establish a permanent space in which national institutions and international partners could address, in a coordinated manner, the challenges posed by fire management in highly diverse and vulnerable ecosystems.

The **central objective of GEFF LAC** is to facilitate the exchange of knowledge and best practices on forest fire management in order to improve fire policies at the national and regional levels, and thus minimise the damage caused by fires in the region.

To this end, GEFF LAC has established a working structure based on six **specialised thematic groups**, which were formalised during its 5th Regional Meeting held on 7 November 2023. They are:

- **Group 1** The prevention of forest fires
- **Group 2** Restoration of ecosystems
- **Group 3** Information systems and support for fighting forest fires
- **Group 4** Operational training for collaboration in fire-fighting
- **Group 5** National and regional policy pillars
- **Group 6** Cooperation projects

The six GEFF LAC groups analyse priority issues such as prevention, fuel management, the technical and traditional use of fire, and prescribed burns. They also address the restoration of ecosystems, the operational strengthening of fire-fighting services, early warning systems, and the development of regulatory instruments. This framework makes it possible to address the complexity of fire management, generating recommendations tailored to the specific circumstances of each region.

GEFF LAC plays a strategic role in the collective technical construction of inputs for the design and updating of public fire management policies. Its key functions include supporting the development of national Integrated Fire Management (IFM) proposals, identifying institutional gaps, and promoting the planned use of fire in accordance with ecological and cultural criteria. Lastly, it coordinates with leading organisations that facilitate knowledge transfer and funding:

European Union (JRC/GWIS): Scientific support and global monitoring.

FAO: Voluntary guidelines and management standards.

UNEP and Regional Organisations: Alignment with global climate change and biodiversity agendas.

Executive Summary

The Group of Experts on Forest Fires in Latin American and the Caribbean (GEFF LAC) working group on national and regional policy pillars has as its fundamental objective the strengthening of the technical and strategic pillars that guide the development of public policies. Its work focuses on the management of forest fires and the implementation of Integrated Fire Management (IFM) throughout the region.

This group seeks to generate and systematise knowledge that allows countries to have technical inputs, comparative analyses and strategic recommendations for the formulation and strengthening of regulatory frameworks, national strategies and governance mechanisms for fire. Its work centres on promoting evidence-based public policies, expressed at the regional level and aligned with current challenges related to climate change, disaster risk management, the conservation of ecosystems and sustainable landscape management.

The group's main lines of work include:

- **Compilation and systematisation of studies** carried out in the countries of Latin America and the Caribbean and in the region as a whole, in order to consolidate a knowledge base that supports the design of public policies and management strategies for fire.
- **Preparation of an annual report on forest fires in Latin America and the Caribbean**, which allows for the analysis of trends, impacts, institutional advances and emerging challenges in fire management in the region.
- **Adaptation and dissemination of the FAO's "5 R" approach** to forest fire management, promoting its availability in Spanish and Portuguese to facilitate its application by countries in the region.
- **Analysis of Integrated Fire Management and its relationship with climate change**, identifying its role in reducing fire risk, adapting landscapes and mitigating emissions.

- **Comparative review and analysis of legislation, regulations and public policies** related to forest fire management and the incorporation of the Integrated Fire Management approach into countries' institutional frameworks.
- **Promotion of joint awareness and outreach campaigns** on the risk of forest fires and the importance of adopting responsible practices in the use of fire.
- **Strengthening education and public awareness**, promoting the inclusion of information on forest fires, fire management and prevention in educational processes and training spaces.

Through these actions, the group contributes to consolidating a regional knowledge and technical reference repository that facilitates informed decision-making and strengthens cooperation among the countries of Latin America and the Caribbean in matters of fire management. The generation of technical inputs, comparative analyses, and forums for exchange leads to the identification of good practices, lessons learned, and opportunities for improvement in the formulation and implementation of public policies related to forest fires.

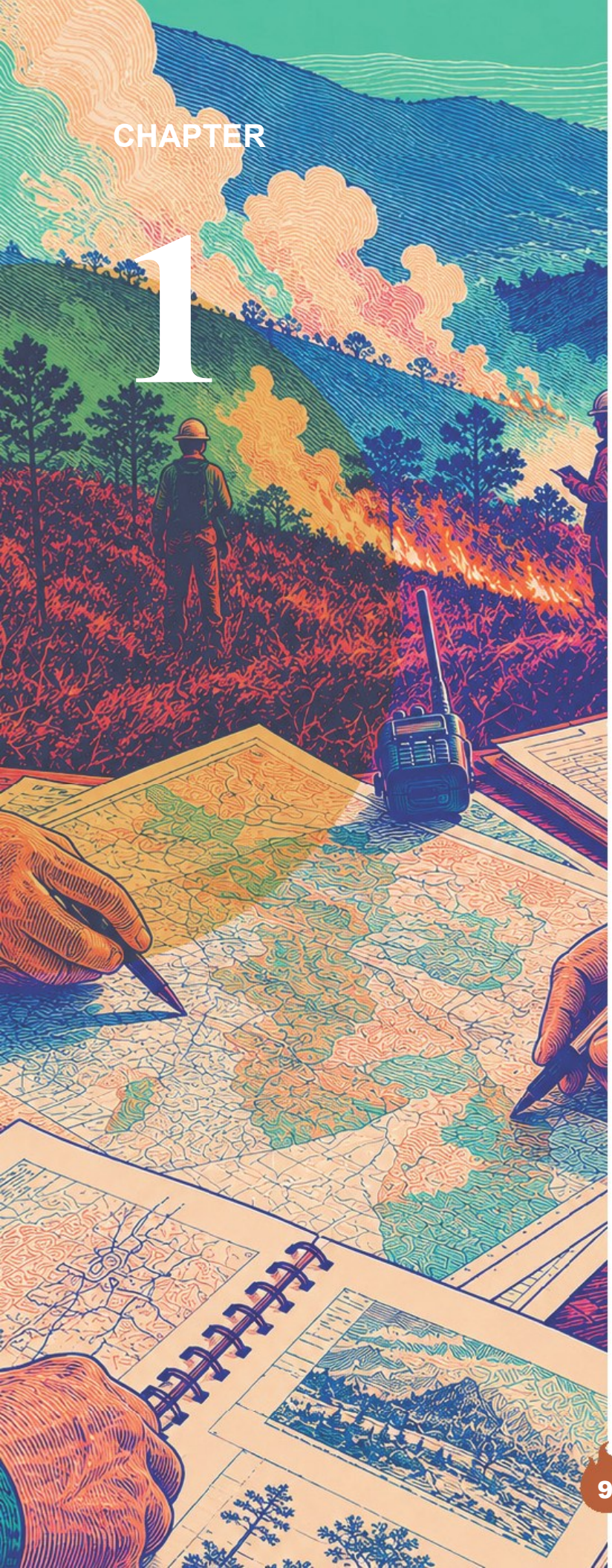
Similarly, the group's work seeks to promote the progressive incorporation of the Integrated Fire Management approach into national and regional agendas, recognising that effective fire management requires an approach that goes far beyond the mere suppression of fire. In this regard, it promotes a view that integrates prevention, preparedness, response, restoration and sustainable landscape management, as well as coordination among different sectors of public policy such as disaster risk management, environment, agriculture, rural development and territorial planning.

The group also promotes the strengthening of regulatory frameworks, planning instruments, and institutional strategies that enable countries to more effectively address the challenges associated with the increase in forest fires, in a context marked by climate change, transformations in land use, and pressures on ecosystems.

Another key aspect of the group's work is its facilitating the convergence of regional efforts, promoting dialogue between governments, international organisations, research centres and civil society organisations. This collaboration seeks to generate synergies that contribute to the development of more comprehensive and coordinated approaches, as well as to the strengthening of technical and institutional capacities in the region.

Strategic Contents:

International calls for Integrated Fire Management (IFM)



CHAPTER

1

The Technical and Regulatory Foundation (1997-2015)

The document “Frameworks and Partnerships for Integrated Fire Management” is an input prepared by the working group on **national and regional policy pillars** of the Group of Experts on Forest Fires in Latin America and the Caribbean (GEFF LAC). This input aims to gather the main international documents that guide countries in adopting the Integrated Fire Management approach, and to present the international and regional groups, networks and initiatives that currently coordinate cooperation efforts, knowledge exchange and capacity building in this area.

The objective is for interested countries to be able to learn about these references, consult them in more detail and use them as a basis for the construction or strengthening of public policies, national strategies and governance frameworks for fire. Rather than proposing a single model, this booklet offers an overview of the available international frameworks, which can be adapted to the ecological, social, cultural and institutional realities of each territory.

The development of this input also responds to a broader international process. For the past 27 years, the international community has repeatedly called on countries to adopt a comprehensive approach to fire management, with the aim of reducing forest fires and protecting both ecosystems and local cultures. These calls, reflected in a series of

declarations, frameworks for action, technical documents and international meetings, underscore the urgent need to move towards fire management strategies that not only address fire risks, but also promote the conservation of natural resources and recognise the traditional practices of communities.

This comprehensive approach is not limited to fire prevention, but also emphasises the need to actively involve local communities in decision-making processes, and in the development of strategies adapted to their specific cultural and ecological contexts. Implementing public policies that recognise and promote integrated fire management is essential, given that many communities have developed sustainable and resilient practices that can be integrated with contemporary technical approaches to forest management. Failure to take this knowledge into account could lead to a loss of understanding and exacerbate the adverse effects of climate change and the intensification of forest fires.

For decision-makers, understanding this approach is not just a technical recommendation, but a strategic necessity to ensure environmental, economic, and social sustainability.

Without communities, there can be no integrated fire management, only incomplete policies.

Countries that make progress in adopting comprehensive approaches to fire management will be better prepared to face the challenges of climate change, reduce the risk of forest fires, and at the same time preserve ecosystems and cultures that depend on fire for their survival.

Based on the above, this booklet seeks to become a reference tool for decision-makers, technical teams and institutions responsible for fire management, facilitating knowledge of the main international frameworks, instruments and guidelines related to Integrated Fire Management. Its purpose is to motivate countries to review, analyse and compare these instruments with their own regulatory frameworks, public policies and national strategies, so that they can identify opportunities for strengthening, updating or better coordinating their institutions.

1.1 ITTO Guidelines (1997) on the management of fires in tropical forests and gender equality.

In 1997, the International Tropical Timber Organisation (ITTO) published guidelines on fire management in tropical forests, based on previous guidelines on the sustainable management of tropical forests, both natural and planted, and the conservation of biodiversity in these ecosystems. Their purpose was to provide a technical and conceptual basis for policy makers and administrators to design programmes that respond to the challenges associated with tropical forest fires. These guidelines emerged with the aim of reducing the damage caused by fires and promoting the safe, planned and beneficial use of fire in land management, in accordance with United Nations Resolution 44/236 on natural disaster reduction.

The ITTO guidelines are structured around principles that include specific recommendations for integrated fire management with a cultural and community focus. Regarding the cultural management of fire, these guidelines explicitly propose the following actions:

- The incorporation of women as active participants in community fire management activities, taking advantage of their knowledge and experience in the use of fire for agriculture, livestock and forest management.
- Consideration of controlled burns and/or other preventive techniques, in order to avoid damage caused by the spontaneous spread of fire in savannah and grassland ecosystems.
- Education of populations living in savannah ecosystems, grasslands or surrounding areas, which require the periodic use of fire for their survival, through training processes on the proper use of fire, including appropriate burning techniques.
- Recognition that certain forestry activities carried out by local communities require the use of fire, and that these should therefore be regulated through measures aimed at reducing the risk of fires.

1.2 FAO Voluntary Guidelines (2007): The first global management framework.

The Food and Agriculture Organisation of the United Nations (FAO) coordinated a participatory and inter-institutional process with the purpose of drawing up the Fire Management Voluntary Guidelines. This process involved government experts, representatives of non-governmental and intergovernmental organisations, private sector professionals, and international experts on forest fires.

As a result, voluntary guidelines were generated that constitute a framework of principles and strategic actions aimed at addressing the cultural, social, environmental and economic dimensions of fire management, serving as an instrument for policy formulation and the promotion of comprehensive and sustainable approaches.

The FAO's Fire Management Voluntary Guidelines offer a common, globally applicable framework for addressing forest fire management in a comprehensive, participatory, and collaborative manner. By defining principles and lines of action, these guidelines are designed to be used by a wide variety of actors: from governments and international organisations to local communities and landowners. Likewise, they facilitate the coordination of efforts at the local, national and international levels, promoting the implementation of more effective, culturally appropriate and environmentally sustainable fire management policies and practices.

One of the aims of the FAO's Fire Management Voluntary Guidelines is to contribute to the establishment and implementation of policies at the national and sub-national levels, as well as to the development of programming mechanisms that strengthen and/or improve the legal, regulatory and institutional framework necessary for the execution of responsible actions in the area of fire management, taking into account all relevant biological, technological, economic, social, cultural and environmental aspects.

When science meets ancestral knowledge, fire ceases to be just a threat and becomes a tool for life.

With regard to the community and cultural dimensions, the guidelines adopt an inclusive approach that underlines the importance of recognising, valuing and incorporating the traditional knowledge and cultural practices of communities, especially the ancestral knowledge of indigenous peoples, as a basis for sustainable fire management. Furthermore, the importance of promoting fire management approaches is highlighted, emphasising their contribution to food security and the improvement of living conditions for local populations.

The guidelines also encourage technical, financial and mutual assistance cooperation between organisations, governments and communities, promoting the exchange of knowledge and resources that strengthen local capacities to manage fire in a sustainable and culturally appropriate manner. Additionally, they promote:

- **The participation of all stakeholders:** Including governments, local communities, non-governmental organisations, the private sector, and other interested parties.
- **Recognition of traditional knowledge:** Valuing the ancestral knowledge of indigenous peoples regarding the management of fire.
- **Adapting to local contexts:** Recognising the diversity of ecosystems and social conditions in different regions of the world.
- **Collaboration between different sectors:** Promoting cooperation between governments, communities, scientists and other key stakeholders.
- **Informed decision-making:** Based on scientific evidence and traditional knowledge.

Within the multi-sector aspects, the Fire Management Voluntary Guidelines promote the concept of "good fire", which is based on the traditional use of fire to benefit habitats, reduce fire threats and preserve cultural values. They stress that the controlled use of fire not only promotes the development of crops and natural food sources, but also

contributes to the conservation of traditional landscapes and vegetation patterns.

Apart from this, the guidelines also explicitly state that knowledge management is an important, though often overlooked, part of fire management. The guidelines emphasise that data management must go beyond basic approaches, integrating both scientific advances and traditional and popular knowledge. In particular, they emphasise that, in fire-dependent ecosystems, traditional knowledge, passed down through generations, offers valuable information that, when combined with the latest scientific discoveries, can achieve fire management that benefits both ecosystems and communities.

Regarding social and cultural principles, Principle 1 “Sustainable livelihoods” explicitly states that the proper use and management of fire will promote sustainable livelihoods. This principle advocates for the active extinguishing of unplanned fires that threaten sustainable assets and subsystems, and for the responsible use of fire in activities such as forestry, agriculture, livestock farming and biodiversity conservation. In addition, it focuses on the implementation of fuel reduction programmes, the promotion of controlled burns to restore natural fire regimes, and the proper management of natural fires in fire-dependent ecosystems. It also highlights the importance of effective monitoring and assessment of the impacts of both controlled and unplanned burning.

Based on the above regarding the social and cultural principles of the guidelines, “Principle 3: "Traditional uses of fire" directly states that the traditional uses of fire on lands of indigenous populations and rural communities must remain as a custom for these communities, but must be adapted to current environmental conditions. This principle advocates for several key aspects, such as the continuity of the traditional use of fire, provided that its negative effects on communities and resources are minimised. It also highlights the importance of preserving and integrating the traditional knowledge of indigenous communities into modern fire management programmes. Furthermore, it promotes the maintenance of diverse landscapes and environments that favour habitats, species, resources and opportunities for recreational, commercial and cultural activities.

Finally, in the institutional principles of the guidelines, Principle 9, “Multistakeholder approach”, states that successful fire management requires participatory management methods that are appropriately shared by the public, private landowners, fire services and the communities concerned. It also emphasises the need for effective coordination among the multiple organisations involved, the use of knowledge and leadership from local communities, and the participation of diverse actors at the local, national and international levels, including indigenous peoples and rural communities.

1.3 Sendai Framework (2015 – 2030): Disaster risk reduction as a guiding principle

- Working Group on the Measurement and Recording of Disaster Risk Reduction Indicators (GT/RRD, 2017)
- The Amazonian countries, as members of the United Nations, are committed to the implementation of the Sendai Framework for Disaster Risk Reduction (DRR) 2015-2030. This framework was adopted during the third World Conference on Disaster Risk Reduction, which took place in Sendai, Japan, on 18 March 2015.
- The creation of the Sendai Framework was the result of a process of intergovernmental negotiations and consultations with various stakeholders over a period of three years. This international framework is characterised by its concise and action-oriented approach to disaster risk reduction in the post-2015 period. Furthermore, it addresses cooperation between countries and establishes procedures for the periodic review of its implementation.
- The Sendai Framework has thus become the governing principle for Amazonian countries, guiding actions at various levels to reduce forest fires. The proposed actions are organised into four priorities for action, which countries agree to implement according to their capabilities and in accordance with their national laws and regulations.

Among the Sendai commitments is the creation and adoption of recommendations from an Intergovernmental Working Group on indicators and terminology related to DRR. In this regard, in compliance with this commitment, in November 2017 the **Working Group on the Measurement and Recording of Disaster Risk Reduction Indicators (GT-RRD)** was created. The group's coordinating countries are Paraguay and Peru, and they have the support of the Technical Secretariat provided by the United Nations Office for Disaster Risk Reduction (UNDRR), with additional support from the Environmental Statistics Area of ECLAC and the United Nations Environment Programme.

The main objective of the GT-RRD is to integrate disaster risk reduction data into official statistics, taking advantage of the robustness and quality backed by the principles of National Statistical Offices. Its specific objectives are:

- To act as a counterpart in the development of indicators for disaster risk reduction, aligned with the Sustainable Development Goals (SDGs), in collaboration with other regional economic commissions.
- To define or adapt indicators, minimum standards and metadata related to disaster risks that are relevant to the 2030 Agenda and the SDGs.
- To identify, disseminate and apply methodologies to measure indicators and process statistical data together with partners and experts in the field.

CHAPTER

2

Governance and Cooperation (2021-2024)

2.1 Memorandum of Understanding on cooperation and mutual assistance for Integrated Fire Management among the Member Countries of the ACTO (2021)

The Amazon basin represents a key region in the transition towards integrated fire management. Since 2021, the Memorandum of Understanding on Cooperation and Mutual Assistance for Integrated Fire Management (MOU IFM), approved by the Amazon Cooperation Treaty Organisation (ACTO), has promoted a holistic approach that addresses biological, social, cultural and political aspects related to fire. This approach seeks not only to prevent fires, but also to recognise their role in ecosystem conservation and sustainable development.

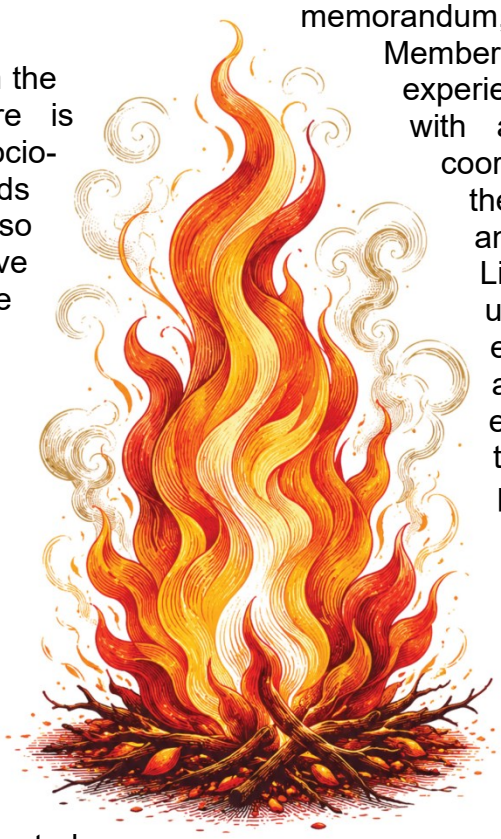
The MOU IFM adopts Myers' 2006 definition of Integrated Fire Management, which defines it as the broad, holistic or completely unified approach to dealing with fire-related issues, considering biological, environmental, cultural, social, economic and political interactions, and assuming that fire can generate positive and negative effects for ecosystem conservation and sustainable development. Integrated fire management is divided into three fundamental axes:

- **Ecological approach:** The ecological role of fire can be related to the types of ecosystems, which are characterised as fire-dependent, fire-sensitive, and fire-independent. For a proper understanding

of this, it is also necessary to explore concepts such as fire regime, altered fire regime, intensity, severity, adaptation, and biodiversity and fire prescription, among others.

- **Fire management:** Range of possible technical decisions and actions, aimed at the prevention, detection, control, containment, manipulation or use of fire in a given landscape to meet specific goals and objectives.

- **Social and Cultural:** From the social point of view, fire is associated with the socio-economic and cultural needs of its use and is also compared with the negative impacts that fire can have on society.



In the MOU IFM, the Member Countries of the Amazon Cooperation Treaty, considering the need to protect natural ecosystems and promote socio-economic development through integrated fire management and risk management in the face of forest fires, reached an understanding in which they agree to develop a Cooperation System for Integrated Fire Management in the Amazon Region in order to address the ecological, social, environmental and technical aspects of fire in an integrated manner, including risk management and the fight against forest fires in the Amazonian countries in general and in particular in the Amazonian regions of those countries.

Among the many considerations in this memorandum, it is established that Member Countries may exchange experiences with other countries with a view to strengthening coordination, collaboration and the exchange of knowledge and technical resources. Likewise, the effective understanding of the ecological, social, cultural and economic role of fire is explicitly recognised; as is the analysis of the possible positive and negative effects that result from the use of fire. The implementation of strategies and plans for the integrated management of fire and risk management in the face of forest fires.

Among the many considerations in this memorandum, it is established that Member Countries may exchange experiences with other countries with a view to strengthening coordination, collaboration and the exchange of knowledge and technical resources. Likewise, the effective understanding of the ecological, social, cultural and economic role of fire is explicitly recognised; as is the analysis of the possible positive and negative effects that result from the use of fire. The implementation of strategies and plans for the integrated management of fire and risk management in the face of forest fires.

Risk management in the face of forest fires, in its various processes, must take into account ecological, social, cultural, and economic approaches.

Member countries will decide to develop joint efforts related to the formulation and implementation of programmes, projects and initiatives of regional, national and local scope, to assist and complement national efforts in the integrated management of fire, prioritising the following actions involving the culture of fire according to the availability of funding. These efforts include the development of technical and operational

recommendations for the use and regulation of fire, taking into account the ecological attributes and environmental functions of ecosystems; as well as respecting the cultural and social paradigms of the communities.

Apart from this, the Memorandum also establishes that Member Countries will prioritise the exchange of information and experience related to the culture of fire, as well as:

- Moving forward in the research and safeguarding of traditional and ancestral knowledge and wisdom about the use of fire in indigenous peoples and local communities.
- Conducting research and disseminating knowledge about sustainable alternatives to the use of fire.
- Promoting integrated fire management as a measure to protect the natural and cultural heritage of member countries in the Amazon Basin and Region.
- Acknowledging the cultural and socio-economic impacts of fire, taking into account its use in agricultural, livestock and agro-forestry activities.
- Taking account of ecological, social, cultural, and economic approaches in the various processes involved in managing the risk of forest fires.

The MOU IFM urges Member countries to develop joint efforts related to the formulation and implementation of programmes, projects and initiatives of regional, national and local scope, to assist and complement national efforts in the integrated management of fire, prioritising actions that involve the culture of fire according to the availability of funding. These efforts include the development of technical and operational recommendations for the use and regulation of fire, taking into account the ecological attributes and environmental functions of ecosystems; as well as respecting the cultural and social aspects of the communities.

With regard to priorities in the exchange of information and experience related to the culture of fire, the MOU IFM calls upon Member Countries to:

- Move forward in the research and safeguarding of traditional and ancestral knowledge and wisdom about the use of fire in indigenous peoples and local communities.
- Research and disseminate knowledge about sustainable alternatives to the use of fire.

- Investigate the integrated fire management approach as a measure to protect the natural and cultural heritage of member countries in the Amazon Basin and Region.
- Identify the cultural and socio- economic impacts of fire, taking into account its use in agricultural, livestock, and agro-forestry activities.
- Investigate the beneficial aspects and harmful impacts of fire on ecosystems, public health, and the economy.

Finally, the MOU on Integrated Fire Management (IFM) explicitly states that Member Countries will prioritise the exchange of information and experience on fire ecology. This includes management in protected natural areas and other conservation methods, in order to safeguard the natural and cultural heritage of the Amazon Basin and Region. Likewise, regional priorities include the development, updating and exchange of monitoring systems that address the three technical components of the IFM: operational management, culture and ecology of fire.

2.2 Global Fire Management Hub – Fire Hub (2023)

The need to strengthen global fire governance took institutional form in 2022, when the UN Food and Agriculture Organisation (FAO) and the United Nations Environment Programme (UNEP) announced, during the XV World Forestry Congress and subsequently at the 26th session of the Committee on Forestry (COFO), the proposal to create a Global Platform for Fire Management. This initiative arose in response to the accelerated increase in high-severity fires driven by climate change, fuel accumulation, the expansion of the agricultural and cattle-farming frontier, and the persistence of management models focused exclusively on suppression.

The recognition by Member States that reactive approaches are insufficient and financially unsustainable prompted the development of an international mechanism aimed at aligning policies, technical capacities and scientific knowledge with cultural and community practices as well as fire management. As a result of this process, in May 2023 the **Global Fire Management Hub (or Fire Hub)** was officially launched during the 8th International Conference on Forest Fires, consolidating a multi-level coordination space – global, regional, national and community – aimed at accelerating the transition towards Integrated Fire Management (IFM).

Faced with the scenario of millions of hectares affected by fires, with impacts on the global climate, biodiversity and food security; the Fire Hub represents a paradigm shift in international fire governance. Its creation consolidates a technical and political framework that allows a shift from reactive, costly and isolated responses towards preventive, participatory and culturally relevant approaches, capable of reducing risks and strengthening the relationship between communities and their territories.

The Fire Hub's central purpose is to support countries in strengthening their institutional, technical, and social capacities to implement comprehensive strategies that link prevention, risk reduction, preparedness, response, recovery, and, as a priority, **the planned use of fire**. This transition involves overcoming restrictive regulatory frameworks based on widespread prohibition, moving towards models that recognise fire as an essential ecological and cultural process in many landscapes around the world.

Recognising the ancestral fire means recognising communities as living guardians of the territory and the landscape.

From a technical perspective, Fire Hub works along five strategic lines:

- **Exchange of operational information and data,** including fire satellite monitoring systems, risk analysis and behaviour models.
- **Development of institutional capacities,** through specialised training, direct support to national agencies and strengthening of fire-fighting services and technical bodies.
- **Risk assessment and early warning,** using tools that integrate climatic variables, fuel availability and vulnerability patterns.
- **Support for public policies,** promoting regulatory frameworks that integrate prevention, inter-institutional coordination and territorial governance.
- **Promoting fire-resilient communities,** by combining science, technology, traditional knowledge and cultural practices.

This last pillar is fundamental for the legislative and programmatic transition to IFM. In numerous territories, indigenous peoples, local communities, and rural producers have developed sophisticated fire-use systems to maintain productivity, reduce fuel, protect biodiversity, and ensure the continuity of cultural and spiritual activities. However, decades of suppression-based policies have led to criminalisation, loss of knowledge, and increased risk from the accumulation of flammable vegetation. The Fire Hub helps reverse these trends by facilitating frameworks that:

- recognise the cultural, ancestral and community fire as a legitimate tool for landscape management;
- promote specific regimes for traditional practices and prescribed burns;
- involve communities in early warning, monitoring, and decision-making systems and
- promote co-management between the State and local actors through territorial fire management agreements.

Global Fire Management Hub/Fire Management Hub (2023)

The Global Fire Management Hub (“Fire Hub”) was launched during the **8th International Conference on Forest Fires in 2023**, as an initiative aimed at strengthening global cooperation in the face of the growing challenges associated with fires in forest and rural landscapes. This space brings together international partners, technical institutions and specialised organisations in order to support countries in developing capacities to implement integrated fire management approaches.

The work of the Fire Hub is organised in five main pillars, which are listed below:

- **Exchange of knowledge and data:** This pillar seeks to strengthen the global knowledge base on fires by defining key concepts, generating and disseminating specialised publications, providing technical advice on integrated fire management, and organising international workshops and events. It also promotes open and timely access to datasets, tools, and information products relevant to decision-making.
- **Developing capabilities:** This includes training processes aimed at national actors, mentoring programmes for young fire professionals, and the strengthening of expert networks. These actions seek to consolidate technical and institutional capacities that allow countries to implement effective strategies suited to their territorial contexts.
- **Communities resilient to forest fires:** This pillar promotes community-centred approaches, acknowledging the importance of indigenous and traditional knowledge in fire management. It also promotes community-based fire management and incorporates a gender-based approach, equal opportunities, diversity and inclusion as fundamental elements for building more resilient territories in the face of fire risk.
- **Fire risk reduction and early warning:** This includes the development and application of methods and tools for assessing the risk of forest fires, as well as the analysis of loss and damage following fires. It also includes strengthening early warning systems to anticipate and reduce the impacts of these events.
- **Development and implementation of integrated fire management policies:** This pillar seeks to support countries in incorporating integrated fire management into national and sub-national public policies, as well as to strengthen international cooperation by supporting regional fire management networks.

Managing fire means bringing together data, capabilities, policies and resilient communities to protect the territory before emergencies occur.

2.3 Landscape Fire Governance Framework (2023)

The Landscape Fire Governance Framework is a proposal presented by the scientific and technical community during the 8th International Wildland Fire Conference (Porto, 2023) to address the global increase in the frequency and severity of forest fires.

The framework proposes moving beyond traditional approaches focused solely on prevention and response, and advancing towards a broader and more integrated governance model, involving governments, the private sector, academia and civil society. Its objective is to guide public policy makers in the development of strategies, institutions, and management mechanisms that address the complexity of the problem.

The central focus is integrated fire management and the framework proposes guiding principles for policy formulation and risk management, including: focus on impacts and outcomes for society, planning based on future scenarios, participation of local communities in policy design, efficient use of resources, institutional coordination, transparency, continuous evaluation,

scientific innovation and recognition of traditional knowledge.

It also sets out key action priorities: strengthening multi-level governance and inter-sector coordination; restoring and actively managing rural areas to reduce fuel accumulation; promoting behavioural changes to decrease fire triggers; and developing training and qualification programmes for actors involved in fire management.

Regarding governance, the framework indicates that the risk of forest fires must be managed by means of complex and participatory governance systems, since these events are linked to social, economic and environmental factors. Differences among actors in power, institutional capacities and visions can hinder cooperation, so risk must not be defined solely by means of technical models, but also through negotiation and participation processes with the actors involved.

A central element proposed is risk assessment, which must consider hazards, exposure and vulnerability, as well as the environmental, social and economic impacts of fires. It also recommends incorporating prospective analyses and future scenarios related to climate and socio-economic changes. Furthermore, it points out the importance of understanding how different social groups perceive risk, in order to design early warning systems and communication strategies that make sense for the population concerned.

The framework also promotes adaptive management, with continuous monitoring, performance indicators, and periodic review of policies and plans to improve the system. Noting that stakeholder participation is fundamental: governments, local communities, indigenous peoples, scientists, the private sector, and social organisations must be involved in decision-making. It also

highlights the importance of integrating scientific knowledge with traditional knowledge and promoting more sustainable fire practices.

Likewise, emphasis is placed on the public communication of risk, with clear, transparent and evaluable strategies, including collaboration with the media to improve the perception and understanding of fire risk.

Finally, the framework underlines the need for international cooperation, data exchange, joint training programmes, and institutional mechanisms that facilitate coordination between countries. To implement these actions, it proposes the creation of inter-sector governance bodies integrating public authorities, the scientific community, civil society and other relevant sectors, thus strengthening decision-making and the management of forest fire risk.

2.4 Integrated Fire Management Voluntary Guidelines: Principles and Strategic Actions (2024)

The second edition of Fire Management Voluntary Guidelines updates and expands the international framework for fire management, moving from a suppression-focused approach to the holistic Integrated Fire Management (IFM) approach. This approach, adopted by the FAO in 2006, consists of five fundamental components — the 5 “Rs”: Review and Analysis, Risk Reduction, Readiness, Response, and Recovery — and recognises the ecological, sociocultural, economic and governance dimensions associated with fire.

Compared to the original document, this second edition incorporates advances in fire science, especially in relation to the effects of climate change, and refines key principles on traditional fire use, equity, inclusion, and recognition of indigenous and local knowledge. It also updates the terminology, distinguishing between fire, wildfires, and the broader concept of landscape fires, which includes both natural and anthropogenic fires, cultural and ecological burns, and prescribed fires in different types of vegetation and landscapes, both natural and managed.

Within the framework of Integrated Fire Management, these guidelines recognise that fire fulfils essential ecological roles, while at the same time it can generate adverse impacts on vulnerable populations, livelihoods and ecosystems. From this perspective, fire is conceived as a tool to reduce fuel and therefore fires, maintain ecological integrity and rehabilitate fire-dependent ecosystems, always under safe and planned use regimes.

The document states that IFM is based on three complementary pillars: fire management (prevention, suppression and planned use), fire ecology and fire culture, which incorporates socio-economic, cultural and community needs. It also covers the complete planning cycle: prevention, early warning, detection, mobilisation, suppression, and management of post-fire impacts.

For the guidelines to be implemented, the document stresses the importance of collaboration between governments, specialised agencies, local communities, indigenous peoples, NGOs, academia and international organisations, inviting States to voluntarily integrate these principles into their regulatory, institutional and operational frameworks.

Finally, these guidelines recognise that the diversity of ecological, cultural, and socio-economic contexts demands differentiated approaches. Technical and financial capacities vary between countries, so it will be necessary to strengthen technical assistance, scientific cooperation, technology transfer and training programmes, especially in countries with high recurrence of fires, small islands, fragile ecosystems or low forest cover.

The guidelines conclude that the transition to IFM involves balancing protection, sustainable use of fire, community resilience and ecological conservation, in a safe, efficient, socially just and environmentally responsible institutional framework.

CHAPTER

3

Science, Networks and Evidence

3.1 IUFRO Occasional Paper No. 32: Global Fire Challenges in a Warming World (2018)

With the aim of strengthening the scientific basis for decision-making in forest fire management, the World Bank and the International Union of Forest Research Organisations (IUFRO) organised an international workshop in 2018. This event brought together leading scientists and government experts from around the world to analyse the latest research on wildfires and their relationship to climate change. The knowledge generated in that workshop serves as a basis for designing more effective policies and strategies to prevent and mitigate the impacts of forest fires in an ever warmer world, and this was reflected in the World Bank's policy document on forest fire management strategies. Overall, the synthesis of globally available scientific evidence revealed the following key issues for landscape management and governance (IUFRO, 2018):

Climate change, with longer, hotter and drier fire seasons, combined with other environmental changes linked to population growth and unsustainable land-use practices, is contributing to extreme wildfire events that exceed current fire management capabilities. The world is entering a “new reality” that requires novel approaches to fire governance. Fire is an inherent feature of the Earth system and many ecosystems, including their fauna, depend on it for their long-term survival. However, current changes in global fire activity in terms of location, intensity, severity and frequency

are likely to have enormous costs for biodiversity, ecosystem services, human well-being and livelihoods, as well as for national economies, in ways that have not yet been assessed. Therefore, it is urgent to invest in social, economic, and environmental monitoring, especially in understudied regions.

Integrated fire risk reduction is a fundamental pillar for adapting to continuous changes in global fire risk. Sustainable fire risk mitigation requires the implementation of coordinated regional approaches, based on a clear understanding of fires in their context, raising populations' awareness and preparedness, active fire surveillance and effective early warning systems, adaptive suppression strategies, restoration of fire regimes, landscape-scale fuel management, changes to many land-use practices, and active landscape restoration.

The participation of local communities, landowners, businesses, and public stakeholders, through multiple levels of governance, is crucial to restoring and conserving landscapes that are biodiverse and functional, respectful of local cultures and identities, economically productive, and, above all, resilient to fire.

Throughout history, people have achieved a sustainable coexistence with flammable ecosystems and have often used fire as a land management tool, thus shaping many modern and ancient landscapes around the world. Traditional knowledge of fire is therefore key to adapting to local changes in fire activity, using known techniques to reduce hazardous fuel loads, conduct prescribed burns, and implement sustainable landscape management practices. Developing adaptive capacity to deal with fires must be based on knowledge of the natural and cultural roles of fire, how they have shaped our modern landscapes and their importance in the long-term functioning of socio-ecological systems.

Advances in land systems science, geospatial technologies, and computer modelling will help improve our understanding of the long-term ecological and socio-economic drivers of fire through the widespread collection and distribution of globally harmonised fire data. However, creating and sharing this knowledge requires national and international investments in scientific and operational programmes on fire science.

Catastrophic wildfires are undoubtedly part of our future. Current scientific estimates are likely conservative, implying that changes in fire activity could be more severe than anticipated. We must act now to mitigate catastrophic fires and limit the occurrence of disastrous situations. Given that there are disparities, but also similarities, in fire risk levels around the world and the capacities to manage it, the transfer of knowledge and technologies through international cooperation is a fundamental factor in learning to live with fire. Considering the global dynamics of fires whose negative impact has increased in intensity, frequency and extent, and that recent catastrophic fire events may reinforce current policies of total fire suppression that have been supported in Western countries for decades, a “No Fire” motto is no longer a realistic option (IUFRO, 2018).

Faced as we are with increasingly intense wildfires, the answer is not to refuse or reject fire, but to manage it in an integrated way.

Therefore, although solutions to fire risks are based on comprehensive environmental management, it is acknowledged that ultimately, effective adaptation to wildfires will only be possible with the necessary political will to address the problem (IUFRO, 2018).

The IUFRO document's expert group (2018) points out that policies and practices that fail to consider the needs and concerns of local communities and their traditional knowledge, are unlikely to lead to positive results. Therefore, learning to coexist with fires requires the active participation of communities, building trust, understanding their concerns and maintaining a transparent dialogue to decide policy options (IUFRO, 2018). These options must be recognised in the national fire plan and must include local and traditional knowledge of fire management. If the complexity of social situations is not adequately addressed, efforts to achieve integrated fire management could fail, and national fire policies would be limited to simple suppression, making it difficult to adapt to future fire threats (IUFRO, 2018).

Likewise, the IUFRO document (2018) reveals that the management of forest fire disaster risks must begin with an acknowledgement of the diversity of uses of fire in the world and of the fact that fire can be a necessary tool for community survival. However, it points out that converting fire management recommendations adapted to local contexts into global guidelines, such as those expressed in the Sustainable Development Goals (SDGs) or Nationally Determined Contributions (NDCs), is a difficult challenge.

Based on the above, understanding how society perceives prescribed burning and the restoration of the natural fire regime is fundamental to obtaining social support (IUFRO, 2018). The document also states that, while hierarchical approaches are necessary in fire management, paternalistic or controlling strategies should be abandoned in favour of those that allow all stakeholders to assume greater responsibility in decisions about fire risk management.

IUFRO Forest Fires Working Party:

The International Union of Forest Research Organisations, IUFRO is an international non-profit network, made up of forest research organisations from around the world, with the aim of facilitating scientific cooperation, knowledge exchange and the generation of evidence in forestry matters.

Its structure is organised into a number of **Thematic divisions,** each grouping multiple specialised units (research groups, working parties) dedicated to different aspects of forest science. Among these divisions is **Division 8 – Forest Environment,** dedicated to the study of the forest environment, its biodiversity, its ecological functioning, as well as the natural risks and disturbances that can affect it. Within the Forest Environment Division, the areas are subdivided into various subtopics, among which is the Forest Fires Working Party (8.03.05).

The Forest Fires Working Party focuses its efforts on understanding, researching, and promoting the proper management of fires in forest and natural vegetation environments — with a holistic approach that recognises both the hazards and the ecological functions of fire. This working party takes a very serious approach to the multiple challenges posed by forest fires: impacts on human safety, health, livelihoods, biodiversity, ecosystem services, and greenhouse gas emissions. Furthermore, it recognises the increasing complexity of the problem in a context of climate change and intensifying disturbances, which increases the urgency of science-based, informed, coordinated fire management.

This working party seeks to:

- **Coordinate international research** on forest fires and facilitate cooperation between scientists, forest managers and authorities.
- **Generate and share scientific and technical knowledge** on fire ecology, fuel regime, fire behaviour, socio-environmental impacts, air quality, emissions and post-fire restoration, among others.
- **Provide a global link** through initiatives such as the Global Fire Monitoring Centre (GFMC), which works in conjunction with IUFRO to maintain up-to-date flows of information, alerts, satellite data and prevention tools.
- **Promote evidence-based fire management policies and practices** by pushing for the responsible suppression of uncontrolled fires as well as the controlled or planned use of fire — where ecologically appropriate — and the restoration of affected ecosystems.
- **Promote international cooperation and networks of experts,** by organising meetings, congresses, conferences and specialised technical sessions on forest fires, both regionally and globally.

The IUFRO Forest Fires Working Party indicates that it can represent an essential node in global fire governance for several reasons:

- It provides a robust **scientific platform** connecting researchers from around the world, facilitating the exchange of data, experience and best practices.
- It contributes to building an integrated understanding of fire— not only as a risk, but also as part of natural ecological processes — which is key to implementing landscape management approaches that recognise the ecological and social functions of fire.
- It supports the formulation of national and regional regulations, public policies and strategies for integrated fire management, based on scientific evidence, risk assessment, restoration and prevention.
- It responds to contemporary challenges: climate change, expansion of vulnerable areas, pressure on forests and vegetation, threats to livelihoods, biodiversity and ecosystem services.

3.2 Fire-Adapt (2023)

FIRE-ADAPT is a project that brings together universities, research centres, forest fire management agencies and non-governmental organisations from various regions of the world. As part of its implementation, it generated an international knowledge exchange network that strengthens research into and implementation of Integrated Fire Management, particularly in tropical and subtropical ecosystems. This network seeks to connect scientific and professional communities working in fire management, promoting a continuous dialogue between academic research, operational practice and territorial knowledge.

Specifically, the project seeks to:

- consolidate an international network of scientific and technical cooperation on Integrated Fire Management.
- Generate scientific evidence on the ecological and social effects of fire management on tropical and subtropical landscapes.
- Promote the exchange of knowledge between scientists, land managers and civil society.
- Develop shared methodologies for planning and evaluating fire management practices.
- Contribute to improving the career paths of young researchers through academic exchanges and international collaboration.

Fire-Adapt brings together specialists from different disciplines and regions to address key aspects of Integrated Fire Management and to work collaboratively in six working groups:

- **Carbon dynamics:** Area of expertise that integrates methods aimed at quantifying carbon losses and gains in fire-prone ecosystems of tropical and subtropical regions, as a result of integrated fire management activities, and associated with live and dead vegetation pools, such as grasses, woody debris, litter and organic soil, which act as fuel for fire.
- **Biodiversity conservation:** Area of expertise that addresses the effects of integrated fire management and wildfires on biodiversity and the ecosystem, in tropical and subtropical regions. Particularly, it aims to identify efficient methods of monitoring biodiversity and particular fire regimes that promote biodiversity in different biomes, and better fire management practices to benefit biodiversity and human life.
- **(Inter)cultural services and human well-being:** Area of expertise that focuses on the formulation, promotion, and implementation of integrated fire management (IFM) practices and/or public policies by enabling an inter-cultural and participatory vision based on the interaction of actors and sectors, and the experiences acquired throughout the project that are shared through two main themes: building IFM collaborative and inter-cultural partnerships, and cultural knowledge and perceptions about landscape fires.
- **Modelling and forecasting:** Area of expertise that studies the effectiveness of integrated fire management in providing ecosystem services and mitigating wildfire risk using modelling and remote sensing approaches.
- **Integrated Fire Management as a climate adaptation approach:** Area of expertise that merges expertise around cross-cutting themes which are relevant for research and knowledge integration

between the natural, social and Earth system sciences, between sectors (academic and non-academic) and between FIRE-ADAPT partners with various audiences, including broader academic, policy and citizen communities, and the general public.

- **Communication and outreach:** Area that coordinates the dissemination, communication, outreach and exploitation actions to guarantee the impact of FIRE-ADAPT.

3.3 Amazonian Network for Integrated Fire Management of the ACTO-RAMIF (2023)

In December 2023, the Amazonian Network for Integrated Fire Management (RAMIF) was established, fulfilling the Memorandum of Understanding for Cooperation and Mutual Assistance for Integrated Fire Management (MOU IFM) among the member countries of ACTO, the Amazon Cooperation Treaty Organisation. The functions of the network include dialogue on the legislation, regulations and policies of the Amazonian countries regarding Integrated Fire Management.

The First Regional Meeting of the Amazonian Network for Integrated Fire Management (RAMIF) was in June 2024, and at this event, which brought together the focal points and the Technical Group of the Network from the Amazonian countries, in an effort to strengthen integrated fire management in the region, a work plan and its implementation schedule were developed and approved.

CHAPTER

4

Regional Leadership and Milestones by Country (2025-2026)

4.1 International Indigenous-led Fire Adaptation Network, IIFAN, (2025)

On 30 and 31 October 2025, the Food and Agriculture Organisation of the United Nations (FAO) provided technical assistance in Panama City for the development of the first co-creation dialogue of the International Indigenous-led Fire Adaptation Network (IIFAN). The working session included the participation of representatives from more than 20 indigenous organisations from the seven socio-cultural regions recognised by the United Nations (UN). This meeting was aimed at establishing mechanisms to allow the strategic leadership of indigenous peoples in the implementation of Integrated Fire Management (IFM) to be recognised at a global level (2025).

4.2 Belém Declaration (9 August 2023)

The Belém Declaration, issued on 9 August 2023, during the IV Meeting of Presidents of the States Party to the Amazon Cooperation Treaty (ACT) in Belém do Pará, Brazil, establishes a renewed commitment by Amazonian countries to jointly address various critical challenges, including the forest fires affecting this crucial region of the world. The countries that signed the Amazon Cooperation Treaty committed to consolidating efforts to address these challenges collectively. The Declaration highlights the importance of an integrated vision and cooperation among countries to address problems affecting the region as a

whole, such as forest fires, within the framework of a general environmental crisis.

Regarding the institutional strengthening of the ACTO, in point 13 of the declaration, the presidents of the Amazonian countries reaffirm their commitment to the implementation of projects, programmes, studies, negotiations and other ongoing initiatives, such as the Memorandum of Understanding on Integrated Fire Management.

Apart from this, with regard to the section on Forest and Biodiversity Protection, point 45 of the Declaration proposes the elimination of illegal logging, the strengthening of the application of forest legislation, and integrated fire management for the reduction of forest fires.

Finally, regarding forest fires, the Regional Cooperation section, specifically point 52 of the Declaration, indicates the need to deepen cooperation and joint actions within the framework of the Memorandum of Understanding on cooperation and mutual assistance for integrated fire management between the States Parties. This includes addressing forest fires through the development of policies, instruments, technical actions, and the use of innovation and technology, aimed at their prevention, fire management, promotion of alternatives to the use of fire in rural areas, fire response and strengthening of technical, scientific and institutional capacities, as well as community capacity.

These commitments are ratified in the Bogotá Declaration, adopted in August 2025 during the Fifth Summit of Amazonian Presidents, where it was drawn up as a critical roadmap towards COP30 (Belém), focused on the implementation of financial and governance mechanisms. Regarding fires and fire management, the agreement focuses on moving from political will (expressed in 2023) to technical and inclusive operability.

Governance, regional cooperation, and shared knowledge are the foundation for tackling forest fires.

Meeting on Public Policies Affecting Forest Fires (1998)

In October 1998, 71 participants from 33 countries and 13 international organisations, including representatives from the private sector and non-governmental organisations, met at the FAO headquarters to analyse public policies that contribute to the occurrence of forest fires. During the meeting, information was gathered from institutions responsible for addressing the problem of forest fires and recommendations were formulated regarding planning, prevention, control, mitigation and rehabilitation. Furthermore, a strong message was conveyed to Member States, through the FAO as a neutral forum, on the need to comprehensively address regulatory issues related to fires. Finally, practical actions that countries could implement were proposed, consolidated in a declaration addressed to the forestry ministers, who met in Rome in March 1999.

The meeting report acknowledges that fire is a natural ecological process that influences multiple ecosystems, which have evolved in response to its dynamics and impacts. It also highlights that traditional knowledge about the use of fire is deeply rooted in the cultures of both developing and developed countries. In many rural contexts, fire continues to be an essential tool for land clearing, food security, and other fundamental local

development activities. In other scenarios, its application is geared towards various objectives related to the management of natural resources and the landscape.

The document also stresses that one of the main challenges for makers of policies on sustainable forest management and land use is how to reconcile the beneficial functions of fire when used in a controlled manner with its negative impacts when it is uncontrolled or misused.

Finally, the report urges us not to underestimate the value of accumulated experience, indigenous knowledge and local traditions linked to the use of fire as a guide for the design of integrated fire management policies and practices.

Meetings of the Latin American and Caribbean Forestry Commission - LACFC (2021)

According to its Statutes, the functions of the Latin American and Caribbean Forestry Commission (LACFC) include advising the FAO on the formulation of forest policies, reviewing and coordinating their implementation at the regional level, exchanging information and, through special auxiliary bodies, providing guidance on the most appropriate methods and measures to address technical problems, as well as formulating relevant recommendations in relation to these issues.

In its thirty-second meeting held in Kingston, Jamaica, from 6 to 10 September 2021, LACFC recognised the high quality of the information provided by the FAO, as well as the cooperation and collaboration between the countries of the region, donors and international agencies in fire management. Therefore, among other actions, it requested support for the coordination of the various regional fire management initiatives, including the Regional Group of Experts; as well as the promotion of fire prevention and management as an integral part of restoration activities during the UN Decade on Ecosystem Restoration, to prevent restoration efforts from being negatively affected by forest fires; and the strengthening of its technical team to support and reinforce national technical and institutional capacities in fire management.

In addition, the Commission recommended promoting measures to strengthen countries' capacity for integrated fire management, and suggested that the Regional Conference discuss the issue of forest fires and promote integrated fire management in agricultural and forestry systems.

At this thirty-second meeting of LACFC, the Secretariat presented document FO/ LACFC/2021/9 “Integrated Fire Management”, which led countries to stress incorporation of the concept of integrated fire management into national discussions, in order to propose public policies to address the problem of forest fires, with an emphasis on the underlying causes. Likewise, the Commission encouraged countries to:

- Take account of the role of communities and traditional and ancestral knowledge about fire in their various analyses; acknowledge the important role played by women and recognise the need to learn to live with fire by managing landscapes exposed to risk.

- Actively participate in the Regional Expert Group on Forest Fires and recognise its potential as a first step towards the formation of an Integrated Fire Management Network.

- Consider community forest management as an appropriate tool in fire management.

The 2022 UN Environment Programme (UNEP) Rapid Response Assessment

A milestone in forest fire research is the 2022 report by UNEP and GRID-Arendal, which offers a comprehensive overview of the global crisis. With the collaboration of more than 50 experts, this study reveals the growing threat of extreme fires and the urgent need to reformulate fire management policies. The report highlights the importance of recognising that not all fires are harmful and that proper management can even bring ecological benefits.

In response to this situation, the report proposes the implementation of the “5 Rs” in forest fire management: Review and Analysis, Risk Reduction, Readiness, Response and Recovery. This integrated approach includes specific recommendations for governments, regional organisations, and fire management and knowledge communities, based on lessons learned globally. Among the most important recommendations, the need to promote integrated fire management is emphasised, recognising its ecological role and designing policies that favour the controlled use of fire and land. This would help maintain and restore healthy ecosystems, benefiting both the environment and human populations.

Based on lessons learned globally, the UNEP and GRID-Arendal report proposes a new approach to forest fire management, centred on the 5 “Rs”: Review and Analysis, Risk Reduction, Readiness, Response and Recovery. This integrated strategy seeks to promote more sustainable fire management, recognising its ecological role and the growing relevance of traditional, cultural and contemporary knowledge in fire management.

Regarding the cultural role of fire, the report presents case studies worldwide that highlight the diversity of fire-related cultural practices among indigenous peoples, noting that these practices are vast and rich, that they include the use of fire in activities such as agriculture, hunting, and spiritual rituals, and that fire is a fundamental tool for the survival and well-being of many communities. The report also notes that despite this long tradition and their deep knowledge, indigenous peoples often face obstacles in exercising their leadership and participating in decision-making regarding fire management in their territories.

The report notes that, despite the effects of colonisation and its persistent legacies, which have led to the loss of traditional lands and territories, as well as the disruption of various cultural fire practices, some indigenous peoples have managed to preserve fundamental aspects of their culture, language and knowledge, including those related to fire management. Apart from this, there are active efforts to reclaim and revitalise this ancestral knowledge. Based on the above, the report advocates for a more sustainable management of fire, recognising the importance of traditional knowledge in its controlled use for land management. It also highlights that indigenous communities play a crucial role in the conservation of ecosystems and biodiversity, thanks to their fire prevention practices. In this context, the report calls on governments to integrate this knowledge into management policies and programmes, as this is key to ensuring the sustainability of ecosystems and the preservation of local cultures.

The report also underlines the importance of empowering communities and local authorities in areas vulnerable to such events, strengthening their capacities to respond to, prepare for and recover from fires, and ensuring their active participation in the process so that their needs and concerns are duly considered. Furthermore,

there is a call to incorporate a gender perspective into fire management, given that research shows the existence of differentiated roles in decision-making related to forest fires.

Finally, this report acknowledges that the relationship between indigenous peoples, landscapes, and fire varies both between and within nations, but offers the following recommendations to strengthen indigenous leadership in fire management (Sullivan et al., 2022):

Develop programmes that strengthen and dignify indigenous knowledge and practices related to fire – including its cultural use – for sustainable land management, encompassing both fire prevention and emergency response.

- Support the creation of collaborative cross-sector partnerships that allow managers, guardians and holders of indigenous knowledge to work together with other fire management stakeholders, regardless of formal land rights.
- Promote processes that recognise and value indigenous cultural knowledge and principles, in order to guide the development of protection strategies and participation mechanisms in disaster management and risk reduction.
- Recognise the sovereignty and self-determination of indigenous peoples, as a basis for promoting the knowledge and use of fire in the management of their traditional lands and territories.
- Support the design of integrated fire management strategies, with a gender focus, coordinating institutions and on an inter-sector basis, incorporating diverse perspectives, knowledge and actors, including adaptive practices of indigenous cultures and communities in rural territories.
- Protect indigenous knowledge systems about fire as essential cultural assets, capable of offering adaptive solutions to climate change, including the integrated management of protected areas.

Without indigenous knowledge, fire management loses memory, territory, and meaning.

Meetings of the Forestry Commission for Latin America and the Caribbean – LACFC (2023).

At the thirty-third meeting of the Latin America and Caribbean Forestry Commission (LACFC) held in Ecuador in 2023, the Commission urged its members to participate in the respective forest fire expert groups — such as the South American Regional Expert Group, the Fire Working Group of the Central American Commission on Environment and Development, and the Amazon Network for Integrated Fire Management, and use them as platforms to further the exchange of experiences and knowledge, as well as mutual support.

The Commission also requested FAO to continue promoting and leading a common approach to integrated fire management among all United Nations agencies in the region; to promote this tool as a management strategy in agricultural and forestry systems, strengthening inter-sector coordination; and to foster a common terminology for its implementation. In addition, it requested support and technical advice for the South American Regional Expert Group on Forest Fires (European Union), the Wildfire Working Group of the Central American Commission on Environment and Development and the Amazon Network for Integrated Fire

Management (ACTO), in partnership with other organisations.

The Commission also urged exchanges between countries on national coordination regarding strategies and funds for fire prevention and fighting, and redoubled efforts to develop the Global Fire Management Hub (FAO/UNEP), with the aim of providing more support for strengthening regional and national capacities. Finally, it recommended including integrated fire management on the agenda of the next session of the FAO Forestry Committee.

Working groups and networks on Forest Fires and Integrated Fire Management

The increasing complexity of forest fires in different regions of the world has prompted the creation of technical and intergovernmental working groups as well as international scientific, technical and institutional cooperation networks aimed at improving the understanding of fire and strengthening capacities for its management. These networks play a fundamental role in facilitating the exchange of knowledge, promoting interdisciplinary research, and connecting scientists, public institutions, civil society organisations, and territorial actors involved in fire management.

In the context of Integrated Fire Management (IFM), international networks allow progress towards more comprehensive approaches that recognise the interaction between ecological processes, social dynamics and land management strategies, making responsible use of fire. They also contribute to generating scientific evidence, developing analytical tools, sharing best practices, and strengthening cooperation between countries facing similar challenges related to forest fires.

Annexes and directory

GEFF LAC Policy Group Directory

COUNTRY	INSTITUTION
ARGENTINA	NATIONAL FIRE MANAGEMENT SERVICE (SNMF)
	FEDERAL EMERGENCY AGENCY (AFE)
	MINISTRY OF SECURITY (MINSEG)
BOLIVIA	DIRECTORATE OF FOREST MANAGEMENT AND DEVELOPMENT
BRAZIL	BRAZILIAN INSTITUTE OF THE ENVIRONMENT AND RENEWABLE RESOURCES (IBAMA)/NATIONAL CENTRE FOR THE PREVENTION AND FIGHTING OF FOREST FIRES (PREVFOGO)
CHILE	NATIONAL FORESTRY CORPORATION (CONAF)
COLOMBIA	NATIONAL UNIT FOR DISASTER RISK MANAGEMENT (UNGRD)
	NATIONAL FIRE DEPARTMENT OF COLOMBIA (DNBC)
	MINISTRY OF THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT (MADS)
ECUADOR	NATIONAL SECRETARIAT FOR RISK MANAGEMENT (SNGR)
	MINISTRY OF ENVIRONMENT AND ENERGY (MAE)
MEXICO	NATIONAL FORESTRY COMMISSION (CONAFOR)
PARAGUAY	NATIONAL FORESTRY INSTITUTE (INFONA)
PERU	NATIONAL FOREST AND WILDLIFE SERVICE (SERFOR)
	NATIONAL FIRE DEPARTMENT OF PERU (INBP)
URUGUAY	NATIONAL EMERGENCY SYSTEM (SINAE)
	MINISTRY OF LIVESTOCK, AGRICULTURE AND FISHERIES (MGAP)

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