

# MEMORANDUM OF UNDERSTANDING ON COOPERATION AND MUTUAL ASSISTANCE FOR THE INTEGRAL MANAGEMENT OF FIRE AMONG ACTO MEMBER COUNTRIES\*

## Preamble

The Member Countries of the Amazon Cooperation Treaty:

In compliance with the principles enshrined in the Treaty, especially concerning Articles I, II, XVI, XVII, and XVIII.

Recognizing that, to achieve sustainable development, the protection of the environment must constitute an integral part of the development process.

Reaffirming that, following the Charter of the United Nations and the principles of international law, States have the sovereign right to use their resources in accordance with their environmental and development policies.

Considering the need to protect natural ecosystems and promote socioeconomic development through integral fire management and risk management in forest fires.

Recognizing that the existence of common ecosystems and problems derived from the damage caused by forest fires in one country can affect and compromise the renewable natural resources of other Member Countries, as well as cause losses to the environmental and scenic heritage and people, among others.

Bearing in mind that the material, financial, human, and technical resources available in each country may be insufficient for integral fire management.

Noting the desire of the Parties to strengthen mutual understanding, cooperation, exchange of knowledge, experiences, and reciprocal assistance.

Taking into account the existence of successful technical cooperation agreements on training in integrated fire management and risk management in forest fires between two or more Member Countries.

Taking into account the need to strengthen regional cooperation to promote integrated fire management incorporating the ecological, socio-economic, and technical aspects of fire in an articulated way to face the social and conservation problems that arise from forest fires, as well as reduce the risk and impact of disasters natural or man-made disasters that can be caused by forest fires.

The Participating States have reached the following UNDERSTANDING:

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\* Document approved on June 1, 2021 by the Technical Working Group of ACTO Member Countries formed to prepare the "Memorandum of Understanding for Cooperation and Mutual Assistance in Integrated Fire Management among ACTO Member Countries".

## SECTION 1

### OBJECTIVE AND STRATEGIES

1. The Member Countries agree to develop a *Cooperation System for Integral Fire Management in the Amazon Region* in order to deal with the ecological, social, environmental, and technical aspects of fire in an integral manner, including risk management and fire combat in the Amazon countries and in particular in the Amazonian territories.
2. The following strategies are established for the integral management of fire in the Amazonian territories:
  - a) Construction and officialization of the Amazon Network for Integral Fire Management, made up by the eight ACTO Member Countries; as well as a Technical Working Group integrated to the Network.
  - b) By unanimous decision of the Member Countries, the Technical Working Group may exchange experiences with other countries with a view to strengthen the coordination, collaboration and the exchange of knowledge, experiences and technical resources.
  - c) The effective understanding of the ecological, social, cultural, and economic role of fire; as well as the analysis of possible positive and negative effects derived from the use of fire.
  - d) The development and implementation of adequate policies and actions regarding fire, promoting safe and effective fire use and regulation mechanisms, in accordance with the diversity of rural actors and preventing fires that produce negative impacts.
  - e) Risk management for forest fires in their different processes should take into account the ecological, social, cultural, and economic aspects.
  - f) The development of educational processes and the dissemination of information on integral fire management and risk management for forest fires.
  - g) The implementation of strategies and plans for the integral management of fire and risk management for forest fires.
  - h) Strengthening fire management preparedness at all levels, which include traditional uses, prescribed or controlled burning, and forest fire management, taking advantage of existing regional initiatives in this regard.
  - i) Adaptive management, research, and transfer of information and knowledge for the integral management of fire and risk management in forest fires.

## SECTION 2

### DEFINITIONS

3. For the purposes of this Memorandum of Understanding, it will be understood as:
  - a) **Integral fire management:** A broad, holistic, or completely unified approach to deal with issues related to fire, considering biological, environmental, cultural, social, economic, and political interactions, and assuming that fire can generate positive and negative effects for the conservation of ecosystems and sustainable development. Integral fire management includes fire management; the ecology of fire; and the culture of fire.
  - b) **Fire management:** Fire management is the 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.

**c) Culture of fire:** Considers the needs and socioeconomic impacts of fire, including the traditional use of fire by different rural actors, in particular indigenous peoples, local communities, and other tribal communities.

**d) Fire ecology:** Is a scientific discipline related to natural and anthropogenic processes related to fire and its role as a process of the ecosystem; as well as the study of its ecological effects and interactions, which can generate beneficial aspects and/or harmful impacts in sensitive environments, tolerant and fire resistant.

**e) Forest Fire:** Understood as forest fire or vegetation, the fire that spreads uncontrollably over all types of natural or planted vegetation, in natural or rural areas, produced by human action or caused by nature; causing serious environmental, climatic, economic, and social damage, to the detriment of the natural heritage.

**f) Burns:** The use of planned and controlled fire with a specific objective, when regulated by the country is not considered a forest fire.

**g) Risk management for forest fires:** Includes the processes related to the knowledge of risk, risk prevention/reduction, preparation, reply, rehabilitation and restoration.

**h) Operative Understandings:** Strategies, procedures, and operative protocols for the attention, combat, control, and liquidation to face forest fires.

**i) Amazonian Network for Integral Fire Management:** Made up by Member Countries signatories of this MOU, the Network aims to implement the MOU, aimed at strengthening the regional capacity of ACTO countries in managing integral fire management and risk management for forest fires (defined in subheading a and g). The Network will follow the implementation of the MOU, evaluate its results and progress; and it will provide strategic orientations for its fulfillment. In the Network, ACTO fulfills the role of Executive Secretary.

**j) Network Technical Group:** Operational structure of the Amazonian Network for Integral Fire Management designated by Member Countries. According to needs, experts and national institutions related to integral fire management may be temporarily incorporated to advice on technical - scientific issues.

**k) Environmental Functions of the Forest:** Result of the interactions between the species of flora and fauna of the ecosystems, of their own dynamics, of the space or physical (or abiotic) environment and of solar energy, in such a way that they guarantee balance and harmony with Mother Earth. Examples of environmental functions are: the hydrological cycle, nutrient cycles, sediment retention, pollination (provision of pollinators for plant population reproduction and seed dispersal), filtration, purification and detoxification (air, water and soil), biological control (regulation of population dynamics, pest and disease control), nutrient recycling (nitrogen fixation, phosphorus, potassium), soil formation (rock weathering and organic matter accumulation), the regulation of greenhouse gases (reduction of carbon emissions, capture or fixation of carbon), the provision of scenic or landscape beauty.

### SECTION 3

#### SCOPE OF COOPERATION AND TECHNICAL ASSISTANCE IN INTEGRAL FIRE MANAGEMENT

4. Establishment and development of actions to provide an immediate response to the risk management of forest fires in Member Countries, especially those related to the development of guidelines and procedures for operational actions in response to forest fires in Amazonian territories [1]. The foregoing will seek to avoid duplication of efforts and considering other existing initiatives.
5. Preparation and application of strategies, plans, and programs of regional, national and local scope in the area of integrated fire management, that contribute and complement the national efforts of the Member Countries.
6. Development of meeting spaces, opportunities, and instruments for the management of knowledge and exchange of information and experiences to improve interventions on integral fire management in Member Countries.
7. Establishing and strengthening of processes of information, monitoring, and early warning on integral management of fire and heat sources in Member Countries, including their impact on the emission of greenhouse gases in the Amazon Region.
8. Start a Regional Program for Learning, Training, Exchange of Experiences and Innovation in integral fire management and risk management in forest fires with the active participation of the Member Countries.

### SECTION 4

#### REGIONAL COOPERATION ON FOREST FIRES

9. The Member Countries will promote and prioritize the implementation of existing initiatives and/or experiences, be these either bilateral, regional, or international, of countries or organizations that do not generate new bureaucratic, financial, or personnel obligations and that are aimed at establishing response actions regional to incidents caused by forest fires in Amazonian countries.
10. Regional cooperation in forest fire risk management will have the following priorities:
  - a) Protect life, wild flora and fauna, the biodiversity, the soils, ecosystems, the environment and property of people who may be affected by the forest fire.
  - b) Design, develop and implement prevention and risk reduction measures for forest fires.
  - c) Guarantee the safety of response personnel.
  - d) Mobilize regional cooperation to activate the response in accordance with the requirements of the affected country or countries.
  - e) Strengthen and/or improve the capacities of the signatory countries to provide a timely and efficient response to large-scale forest fire events.

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[1] For the purposes of this article, the provisions of Article II of the Amazon Cooperation Treaty will be taken into account.

**11.** The Member Countries will carry out the coordination processes for risk management in the event of forest fires in their Amazonian territories, according to the state of the situation and the availability of means and resources of the participating countries.

**a)** When the situation exceeds the response capacity, the local authority of the affected country will be in charge of activating the response to this memorandum through the corresponding official diplomatic channels to request the cooperation of the Member Countries.

**b)** The Member Countries will offer all the migration, customs and logistical information necessary for the fulfillment of the activities carried out under this Memorandum of Understanding, in accordance with the existing provisions among the participating countries

**12.** The Member Countries will consider taking advantage of good practices and existing mechanisms in ACTO to:

**a)** Designate both technical and diplomatic focal points in each country for the activation, request for support and management, through direct communication channels, taking advantage of existing structures at the national level and the instruments provided at the regional level.

**b)** Periodic updating of technical and support directories, as well as those related to technical, human, and technological resources, which can be activated, sharing this information with the countries linked to this Memorandum of Understanding.

**13.** Within the framework of regional cooperation, Member Countries will provide guidelines for cooperation in forest fire risk management, considering existing experiences; they will also promote the cooperation of the Member Countries among themselves.

**14.** The operational actions for Integral Fire Management and Risk Management for forest fires will be established in an operational understanding, that once approved by the Member Countries, will be a constitutive part of this Memorandum of Understanding in accordance with the provisions in the sole paragraph of Article 1 of the Amazon Cooperation Treaty (ACT), without prejudice to other specific operational instruments deemed necessary.

**15.** The Member Countries will be responsible for the implementation of this Memorandum of Understanding for the integral management of fire and risk management in forest fires; and ACTO Permanent Secretariat will facilitate and promote their coordination and operation.

## **SECTION 5**

### **PROGRAMS, PROJECTS, AND INITIATIVES IN MATTERS OF INTEGRATED FIRE MANAGEMENT**

**16.** The Member Countries will decide to develop joint efforts related to the formulation and implementation of programs, projects, and initiatives of regional, national, and local scope, to assist and complement national efforts in the integral fire management, prioritizing the following actions according to financial availability:

**a)** Strengthening the institutional capacities of the different organisms or organizations with direct or indirect responsibilities in the integral management of fire and/or integral risk management.

**b)** Promotion of training processes, training and permanent training of personnel in integral fire

management, seeking standardization that facilitates joint work; as well as improvement in the logistics and equipment endowment.

**c)** Development of programs, projects, and initiatives of regional, national and local scope for integral fire management; as well as instruments that generate inter-institutional agreements for planning and managing fire in territories at risk.

**d)** Preparation of technical and operational recommendations for the use and regulation of fire, considering the ecological attributes and environmental functions of ecosystems; as well as respecting cultural and social aspects of the communities.

**e)** Supporting the development of national and regional systems to assess forest fire danger and provide early warnings based on forecasts of the potential for complex fires.

**f)** Development of methodologies to face technical processes in integral fire management and risk management.

**g)** Strengthen and support the formation of local and national inter-institutional technical committees that can serve as support to integral fire management strategies.

**h)** Promotion of education and public information processes, prioritizing prevention and risk reduction and attention to forest fires.

**i)** Manage technical and financial resources to implement actions at the national and regional level for integral fire management.

**17.** Joint actions related to the prevention, risk reduction and control of forest fires; as well as recovery of affected areas, will focus mainly on:

**a)** Encourage knowledge management, identification, and risk estimation actions.

**b)** Strengthening of operational, logistical, and financial capacities to attend in a coordinated, effective, and efficient manner the extinction and control of forest fires.

**c)** Strengthening of regional capacities in matters of evaluation, rehabilitation, reconstruction and/or recovery of areas affected by forest fires.

**d)** Promote prescribed and scheduled burning programs when they are regulated by the country as an integral fire management tool or other specific objectives such as ecosystem management.

**e)** Promote alternatives to the use of fire where for ecological and/or legal reasons the fire is not adequate.

**f)** Alert about situations of high danger produced by complex forest fires.

**g)** Promotion of community awareness and education programs on fire, promoting responsible partners linked to prevention, detection, and information on fires, rescuing local and traditional knowledge.

**h)** Development of local, national, and regional communication campaigns to disseminate fire prevention messages and the appropriate use of fire, using digital, print, radio, and television media.

**i)** Development of regional and international communication campaigns, in coordination and in conjunction with the member countries, to disseminate the results of the initiatives promoted under the

context of this Memorandum of Understanding.

**18.** The Permanent Secretariat of ACTO will prepare proposals for programs, projects, and initiatives in the area of integral fire management, which, after the consultations carried out and the approval of Member Countries, will facilitate, within the framework of this MOU, financing management, as well as the necessary actions for its implementation. The proposals will not be mandatory.

## **SECTION 6**

### **KNOWLEDGE MANAGEMENT AND EXCHANGE OF INFORMATION AND EXPERIENCES**

**19.** The Member Countries will establish the following priorities in the exchange of information and experiences *in relation to integral fire management*:

- a)** National legal frameworks related to comprehensive fire management and risk management for forest fires.
- b)** National and regional research agendas on integral fire management.
- c)** Experiences on implemented measures, processes and/or methodologies in forest fire monitoring.
- d)** National and regional meetings related to fire management, scientific research, and the rescue of customs and traditional and ancestral knowledge about fire of indigenous peoples and communities in general.

**20.** The Member Countries will establish the following priorities in the exchange of information and experiences *in relation to the culture of fire*:

- a)** Research and rescue of traditional and ancestral knowledge and knowledge on the use of fire in indigenous peoples and local communities.
- b)** Research and dissemination of sustainable alternatives to the use of fire.
- c)** Comprehensive fire management as a measure to protect the natural and cultural heritage of the member countries in the Basin and the Amazon Region.
- d)** Cultural and socioeconomic impacts of fire considering its use in agricultural, livestock and agrosilvopastoral activities.
- e)** Beneficial aspects and detrimental impacts of fire on ecosystems, public health, and the economy.

**21.** The Member Countries will establish the following priorities in the exchange of information and experiences *in relation to the ecology of fire*:

- a)** Comprehensive fire management in protected natural areas and other conservation modalities to protect the natural and cultural heritage of the Member Countries in the Basin and the Amazon Region.
- b)** Effect of fire on populations of forest species and other vegetation cover in Amazonian ecosystems.
- c)** The natural cycles of the different Amazonian ecosystems and the impacts of fire, including its effect as a factor of environmental disturbance/alteration that favors or deteriorates biological diversity.

**d)** Influence of Climate Change on the fire regimes of Amazonian ecosystems, including intensity and frequency of forest fires.

**e)** Response of different amazon ecosystems to the fire regime.

**22.** The Member Countries will establish the following priorities in the exchange of information and experiences *in relation to risk management in forest fires*:

**a)** Improving the capacity of national institutions for prevention and response to forest fires.

**b)** Risk assessment, prevention, and reduction of forest fires.

**c)** Development of planning and support instruments for prevention and response to forest fires and burns.

**d)** Preparation of prevention and contingency plans for the control of forest fires in the amazon territories.

**e)** Experiences on implemented measures, processes and/or methodologies for the integral management of risk in forest fires.

**f)** Knowledge and research results related to comprehensive forest fire risk management.

**g)** Development of recovery plans and programs for the affected areas with a integral and sustainable forest management approach.

**23.** For the development of processes related to the knowledge management and exchange of information and experiences in integrated fire management, ACTO Permanent Secretariat will coordinate with Member Countries competent entities to facilitate meeting spaces, tools, or specific virtual and/or face-to-face instruments, according to the availability of financial resources.

**24.** The Member Countries will promote missions to exchange experiences among themselves, involving two or more countries subject to the availability of financial resources.

## **SECTION 7**

### **INFORMATION AND MONITORING ON INTEGRAL FIRE MANAGEMENT**

**25.** For information and monitoring on integral fire management, special consideration should be given to existing regional initiatives related to information management that do not require greater resources by rapidly capitalizing on tools such as the Amazon Regional Observatory (ORA) of ACTO, which among others, aims to promote the exchange of information, the integration and strengthening of the national information and monitoring systems on forest fires in the Member Countries in the Amazon Region.

**26.** Regional priorities for information and monitoring on integral fire management and risk management for forest fires include:

**a)** Strengthening existing information and monitoring systems in the countries.

**b)** Development, updating and exchange of information and monitoring systems regarding the technical components of integral fire management: fire management, fire culture, and fire ecology.



**c)** Formation and operation of forest fire monitoring systems, which includes heat sources, burning scars, early warnings, real-time monitoring of active fires with an emphasis on Amazonian territories.

**d)** Development and exchange of methodologies on risk maps with analysis of threats and vulnerability, working documents to map the areas burned and/or deforested by forest fires and those referring to the conditions that favor the occurrence of fires; as well as other estimates that are of interest to the countries.

**e)** Establishment of development methodologies and/or generation of fuel load maps (biomass available to burn), of high risk for the occurrence of forest fires.

**f)** Development and exchange of methodologies for the preparation of a standardized historical record on the occurrence of forest fires (areas in hectares, dates, etc.).

**27.** ACTO Permanent Secretariat will prepare, based on existing information and according to the availability of financial resources, regional reports on the progress in the management of integrated fire management.

## **SECTION 8**

### **REGIONAL LEARNING, TRAINING, EXCHANGE OF EXPERIENCES, AND INNOVATION PROGRAM ON INTEGRAL FIRE MANAGEMENT**

**28.** The Regional Learning, Training, Exchange of Experiences, and Innovation Program on Integral Fire Management in the Amazon Region will be promoted under the coordination and management of ACTO Permanent Secretariat. The latter to be developed within the framework of the Amazon Network on Integral Fire Management with the participation of public, private, academic entities and interested organizations of civil society, to reach common guidelines for the integral management of fire in the Amazonian territories.

**29.** The Member Countries propose the following regional priorities for learning, training, exchange of experiences, and innovation in integral fire management:

**a)** Contribute to the education and training of highly competent personnel trained in integrated fire management and risk management for forest fires.

**b)** Promote the exchange of policies, strategies, plans, programs, and projects on integrated fire management and risk management against forest fires among the Amazonian countries.

**c)** Promote the formulation, management and execution of specific scientific research projects on the integral management of fire and forest fires.

**d)** Promote planning and implementation actions for integrated fire management and community-based fire management.

**e)** Promote the permanent incorporation of new knowledge on integrated fire management.

**f)** Encourage the development and implementation of educational programs for regional outreach; as well as the communities of the Amazonian territories in all aspects related to the integral management of fire and risk management in forest fires.

**g)** Facilitate the articulation, exchange of experiences and cooperation with regional and international information networks on the subject.

**30.** ACTO Permanent Secretariat, in coordination with the Member Countries, Amazonian Universities and other training and training entities, will promote the development of the Regional Learning, Training, Exchange of Experiences, and Innovation Program proposed by the Network of training courses in integral fire management and risk management for forest fires. To this end, the PS/ACTO will seek resources with potential donors.

## **SECTION 9 DISPUTE SETTLEMENT**

**31.** The Member Countries agree to make the necessary effort in order to solve the controversies that result from the application or interpretation of this MOU and its specific Operational Understandings, through the following mechanisms: direct negotiation, consultation, and conciliation.

**32.** If Member Countries deem it appropriate, they may request technical support from ACTO Permanent Secretariat

**33.** If a solution is not achieved through the aforementioned mechanisms, any of the Member Countries may request ACTO Permanent Secretariat a consultation meeting to be held at an agreed headquarters, within ninety (90) days after notification of the request.

**34.** If a solution is not reached through the consultation mechanism, Member Countries may constitute a Special Conciliation Commission that will be made up of five members, two representing each Member Country in dispute, plus an independent conciliator designated by common agreement.

**35.** The Member Countries may maintain direct contact with each other to find a negotiated solution to the disputes that have arisen at any time.

## **SECTION 10 MODIFICATIONS OF THE MOU AND THE SPECIFIC OPERATIONAL UNDERSTANDINGS**

**36.** Once the MOU enters into force, Member Countries will meet regularly, either virtually or in person, once a year in order to propose an annual operating plan and evaluate its results and consider possible modifications and/or updates; as well as in an extraordinary way at any time at the request of one of the Member Countries.

**37.** Modifications to this MOU shall enter into force immediately after their approval by the National Focal Points of the Ministries of Foreign Affairs of the Member Countries.

## **SECTION 11 ADHESION PROCESS**

**38.** This Memorandum will take effect in the Member Countries after a Verbal Note is sent in which they indicate that they have completed the internal procedures to adhere to it.

## SECTION 12 FINANCING

**39.** The activities under this MOU and the actions to be implemented by the Member Countries may be financed by jointly seeking non-reimbursable resources and/or donations from regional, international, multilateral organizations and international cooperation agencies; or resources that the countries freely allocate for the development of actions, not forcing in any way any of them to this allocation.

## SECTION 13 FINAL PROVISIONS

**40.** After the adoption of this MOU by the Member Countries, *the Amazon Network for Comprehensive Fire Management* is formed.

**41.** Each Member Country will try to keep available all updated data, documents, legislation, and all information necessary to facilitate the implementation of this MOU, and to inform ACTO Permanent Secretariat for its dissemination for the benefit of Member Countries.

**42.** This MOU will be implemented in accordance with the current legislation of each Member Country.