

International Relations for Reducing Wildfire Impacts – Some History and Some Thoughts¹

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Abstract

In this paper, we describe the international activities that FAO has undertaken with partners over the years and then reflect on the role of international relations in reducing wildfire impacts on ecosystem services. FAO has long had a focus on wildfire management and been one of the international organizations facilitating the development of a comprehensive approach of Integrated Fire Management through applying the 5Rs; Review and Analysis, Risk Reduction, Readiness, Response to fires and Recovery. As a neutral global institution, FAO hosts secretariats for global and regional networks on fire management as well as a relevant FAO-statutory bodies. Every year, wildfires burn millions of hectares of forest woodlands and other vegetation, causing the loss of many human and animal lives and an immense economic damage, both in terms of resources destroyed and the costs of suppression. There are also impacts on society and the environment. In many instances, wildfires will have a bearing on the achievement of the Sustainable Development Goals (SDGs) and in some instances may threaten their success. Integrated Fire Management that is data based, information rich, scientifically sound and locally anchored in communities will contribute to successful SDGs and Paris Agreement implementation. Many bilateral agreements exist between countries to cooperate in the case of fire suppression, and many regional networks have been initiated to strengthen capacities in fire management, and mostly all promote integrated fire management, but they have not all been effective and sustained. One might conclude that the success of international efforts in integrated fire management, or any exchange on fires, has been limited. International relationships can undoubtedly contribute to reducing wildfire impacts. The strongest mode of this is likely to be through interaction and exchange, joint problem solving and sharing experience in fire management and research rather than pooling firefighting resources. In this respect the existing networks and working groups should be encouraged and supported.

Keywords: Integrated Fire Management; Wildfires; International Fire Agreements; Networks; FAO.

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Introduction

The issue(s) of wildfires and ecosystem services is a broad one but critical and it seems becoming more so. We have already in the last year seen Indonesian peat forests burning again and the Fort McMurray fire in Alberta; both impacting upon the services we expect from our landscapes (but generally do not see very clearly and tend to take for granted).

In this paper, we describe the international activities that FAO has undertaken with partners over the years and some that are in train and in planning. Having set out those elements, we then reflect on the role of international relations in reducing wildfire impacts on ecosystem services.

FAO Fire Management Role and Mandate

The FAO Ministerial Meeting on Forests and the 17th Session of the FAO Committee on Forestry, March 2005 (Rome, Italy 2005) called upon FAO, in collaboration with countries and other international partners, including the UNISDR, to develop a strategy to enhance international cooperation in fire management, that advanced knowledge, increased access to information and resources and explored new approaches for cooperation at all levels. They also requested preparation of voluntary guidelines on the prevention, suppression and recovery from forest fire. The need for such tools to assist in international cooperation had also been highlighted at the 3rd International Wildland Fire Conference and the International Wildland Fire Summit (Sydney, Australia 2003) because of the increasing incidence and severity of impacts of major fires globally.

An international expert consultation in wildland fires (Madrid, May 2006) agreed that the non-legally binding Strategy to Enhance International Cooperation in Fire Management includes the overarching framework and four components:

1. Fire Management Voluntary Guidelines;
2. Implementation Partnership;
3. Global Assessment of Fire Management; and
4. Review of International Cooperation in Fire Management.

These tools have been tailored primarily for land-use policy makers, planners and managers in fire management, including the Governments, the private sector and non-governmental organizations to assist in the formulation of policy, legal, regulatory and other enabling conditions and strategic actions for more holistic approaches to fire management. Their scope includes the positive and negative social, cultural, environmental and economic impacts of natural and planned fires in forests, woodlands, rangelands, grasslands, agricultural and rural/-urban landscapes. The fire management scope includes early warning, prevention, preparedness (international,

national, sub-national and community), safe and effective initial attack on incidences of fire and landscape restoration following fire.

FAO has long had a focus on wildfire management and been one of the international organizations facilitating the development of a comprehensive approach of Integrated Fire Management through applying the 5Rs; Review and Analysis, Risk Reduction, Readiness, Response to fires and Recovery.

Many actors are dealing with fires from different angles and on different levels: NGOs supporting community development; forestry companies; remote sensing research centers; governmental organizations responsible for agriculture, forestry, international cooperation and civil protection. Coordination, communication and a better exchange of experiences between all actors is essential.

In this continuing effort FAO has worked alongside and partnered with UNISDR, WMO, WHO and others including through the Regional Forest Commissions across the world. FAO has contributed an invaluable series of publications, projects, programs and services to its member countries and engagement with many other agencies, multi-lateral agencies, development partners, NGOs and INGOs and networks. Collaborating with these partners and member countries FAO will continue to support, lead and create technical publications of direct relevance in support of Integrated Fire Management that constitutes good practice and supports the implementation of these practices at policy and field level

FAO has a network of Regional Forestry Commissions, made up of the forest management agencies in member countries. Six Regional Forestry Commissions were established by the FAO between 1947 and 1959. Every two years, the Commissions bring together the Heads of Forestry in each major region of the world to address the most important forestry issues in the region. The Commissions consider both policy and technical issues. The Commissions play a key role in the international arrangement on forests, serving as a link between global dialogue at the Committee on Forestry (COFO) and the United Nations Forum on Forests (UNFF), and national implementation. The Regional Forestry Commissions are also active in-between formal sessions. Most of the Commissions have technical working groups or sub-regional chapters that implement projects that benefit from collaboration among countries in the region.

As a neutral global institution, FAO hosts secretariats for global and regional networks on fire management as well as a relevant FAO-statuary body:

- The Fire Management Actions Alliance which promotes integrated fire management through the use of the Fire Management Voluntary Guidelines;
- The UNECE/ FAO Team of Specialists on Forest Fire;

- Silva Mediterranea is an FAO statutory body that covers the Mediterranean region and is a forum for advising and taking action on key forestry issues for Mediterranean countries and also has a Forest Fires working group.

FAO is member of the European Forest Fire Information (EFFIS) Network (<http://forest.jrc.ec.europa.eu/effis/about-effis/effis-network>) of the European Union which meets twice a year i.e. before and after the main fire season. FAO is also member of the Wildland Fire Advisory Group, which brings the existing regional networks and working groups together and which meets once a year.

FAO works with a wide range of international organizations, multilateral and bilateral donors, regional and national institutions, governments, research and academic institutions, international and national NGOs, private sector (corporate and smallholder), civil society and other stakeholders. Included are organizations working directly or indirectly with fire management, such as:

- CIFOR, Fire Research
- Global Fire Monitoring Center (GFMC)
- Office for the Coordination of Humanitarian Affairs (UN-OCHA)
- International Strategy for Disaster Reduction (UN-ISDR)
- USDA Forest Service
- ITTO

Over the years, FAO has implemented more than 60 field projects in some 40 countries together with other UN Agencies and a number of bilateral donors. In these projects, the need for integrated and participatory approaches to fire management is stressed, including the involvement of local people in the planning and execution of programs; in the prevention, detection and control of wildfires; and in the sound management of the use of fire as a tool in management of agricultural, grazing and forest lands. Each project has also a strong country capacity development and legal review component.

Fires in the Global Context

The global estimate of land area affected by fire in 2000 was 350 million hectares, much of which was forest and woodland. Most of the area burned was in sub-Saharan Africa, followed at some distance by Australia (Fire management global assessment 2006). There have been a number of assessments conducted since and the issues of fires, damage and loss including of ecosystem services remain with us and are global in scale.

The role of fire in the world's vegetation is mixed. In some ecosystems natural fires are essential to maintain ecosystem dynamics, biodiversity and productivity.

Fire is also an important and widely used tool to meet land management goals. However, every year, wildfires burn millions of hectares of forest woodlands and other vegetation, causing the loss of many human and animal lives and an immense economic damage, both in terms of resources destroyed and the costs of suppression. There are also impacts on society and the environment – for example, damage to human health from smoke, loss of biological diversity, release of greenhouse gases, damage to recreational values and infrastructure. All ecosystem values are being impacted by fires.

Most fires are caused by people. The list of human-induced causes include land clearing and other agricultural activities, maintenance of grasslands for livestock management, extraction of non-wood forest products, industrial development, resettlement, hunting, negligence and arson. Only in very remote areas of Canada and Russian Federation is lightning a major cause of fires.

There is evidence from some regions that the trend is towards more fires affecting a larger area and burning with greater severity, while the risk of fire may be increasing under climate change in association with land-use changes and institutional constraints on sustainable forest and fire management.

According to 11 years of Moderate Resolution Imaging Spectroradiometer (MODIS) satellite data for Tanzania, 10 to 14 percent of the land area is burned each year, or approximately 11 million hectares in a country of 88 million hectares. Protected areas, game reserves, game-controlled areas and forest reserves were found to be a significant proportion of the burned area.

In 2015, fires burned in three protected areas in Chile – China Muerta National Reserve, Nalca Lolco National Reserve and Conguillio National Park: 4 500 hectares were affected. Scientists in Chile are predicting that by 2050 average rainfall will drop significantly as a result of climate change. This can be expected to increase the risk of wildfires.

In May 2016, wildfires forced the biggest evacuation in the history of Alberta, Canada, when over 85 000 people left Fort McMurray in the face of fires driven by strong winds and an extended dry period. More than 2 600 homes and other structures were destroyed by the wildfires, which burned more than 241 000 hectares. The size, severity and intensity of the Fort McMurray wildfires exceeded anything that fire management plans had provided for. The fires affected the city, surrounding community, and the province of Alberta and Canada as a whole. Wildfire researchers noted that this very large fire was consistent with expected changes in Canada's fire regime as a result of climate change.

Fire Management Voluntary Guidelines

FAO has coordinated the development of the Fire Management Voluntary Guidelines aimed at helping countries develop an integrated approach to fire management, from prevention and preparedness to suppression and restoration.

The FAO Guidelines advise authorities and other stakeholder groups that fire-fighting should be an integral part of a coherent and balanced policy applied not only to forests but also across other land-uses on the landscape.

Fire Management Actions Alliance

Fire plays a critical role in nature and in land management:

- in maintaining fire dependent ecosystems,
- in providing an important and cost-effective land use tool, and
- in causing deforestation, forest degradation, emission of greenhouse gases and destruction of livelihoods, biodiversity and infrastructure.

The purpose of the Fire Management Actions Alliance is to stimulate improved fire management and reduce damage from fire worldwide. The Alliance was established 16th May 2007 at the 4th International Wildland Fire Conference in Seville, Spain by 40 founding members.

The Objectives are to:

- review and update the Fire Management Voluntary Guidelines;
- encourage stakeholders at all levels to adopt and use the Guidelines;
- review experiences from applying the Guidelines;
- develops / provides global examples of documents that support the Guidelines;
- strengthen international cooperation in fire management.

Fire Management Global Assessment 2006

Although globally the impacts of vegetation fires are increasingly recognized, there is a lack of information regarding their trends and underlying causes, especially at national level. Obtaining information on the occurrence, scope and damage generated by wildfires is one of the key challenges to be addressed, as a basis for designing effective national fire management strategies, especially in the field of prevention. More data are also needed to better understand the relationship between vegetation fires and climate change.

FAO prepared the Fire Management Global Assessment Study (2006) and since then global fire data were an integral part of the Global Forest Resources Assessment (2010, 2015). The collection of data and information on fires is also being considered

for FRA 2020. Further steps are being made to develop a new global assessment to obtain more accurate data on areas burned at global level and to characterize the fire regimes at national level.

Forest Fires and the Law

Additionally to these tools and based on the Voluntary Guidelines FAO has developed Legal Guidelines for fire management and reprinted a Wildland Fire Management Training Manual to complement the fire management strategy publications, originally developed by the Finnish Ministry of Foreign Affairs.

Fire History Product

Wildfire is not being effectively brought under management and is compromising ecosystems, human lives, built assets and infrastructure, livelihoods and food security. Fires continue to effect landscapes and local people and create large volumes of greenhouse gases. In many places wildfires will have implications for achieving the Sustainable Development Goals. Wildfires are increasing and are upsetting the balance between natural fires that stimulate and sustain ecological processes, traditional fire use and community fire use. While what constitutes good practice in Integrated Fire Management is well established, many countries do not have systems in place to support the implementation of these practices at policy and field level.

Data on fire incidence, land area and biomass burned is weak in many countries and incomplete globally. Making available area burnt by fire over time cross-referenced to vegetation types would underpin the understanding and planning for Integrated Fire Management, a core and key step in wildfire Disaster Risk Reduction.

Strengthened country capacities and activities in the collection and flow of data to and within the country; fire management planning including through enhanced analysis of data and stakeholder engagement and implementation of fire management plans will enable the evidence based planning to reduce the number and extent and impacts of wildfires. Wildfires impact most often and most heavily on local people, community assets and the landscape in which they live and work. Reducing the damage and loss of wildfires will directly benefit communities and landscape values.

Good practice in Integrated Fire Management has been documented but a critical input to fire management planning, data on fire incidence, land area and biomass burned is missing. Many countries do not have systems in place to collect basic data to support the implementation of good fire management practices at policy and field level. Making available area burnt by fire over time cross-referenced to vegetation types would underpin the understanding and planning for effective fire

management. This analysis can help focus efforts and resources on the critical areas where intervention and investment are needed; and raise awareness of the importance of wildfire management to the achievement of global objectives such as the Sustainable Development Goals and the UNFCCC Paris Agreement.

FAO has prepared a concept and will convene a series of meetings, with international experts and relevant agencies, experienced users and fire managers to; Characterize the needs of countries and prepare a ‘State of Knowledge’ on remote sensing fire data and identify future potential for fire data sources and their use.

The objective is to provide access to fire data for countries to conduct relevant analyses. The concept is to enable:

- selection of an area (such as country boundary or province or specifying an area)
- setting of time period, size range, other ‘settable’ aspects
- selection of characteristics to be displayed – active fire data, burnt area, fire radiative power
- potentially interaction with other data sets such as
 - land cover
 - land use
 - vegetation type
 - infrastructure
 - terrain
 - national statistics on population, income and poverty, health,
- summary statistics and analytics on numbers of fires and area burned:
 - by time period (day, week, month, season, year)
 - by tenure
 - by land use
 - by fire size
 - in proximity to means of access, infrastructure, protected areas, land uses, etc.
 - areas burned multiple times

Fires and Greenhouse Gas Emissions

Climate change is now generally acknowledged as the greatest environmental challenge of the twenty-first century, exacerbating major global threats such as hunger, poverty, population displacement, air pollution, soil degradation, desertification and deforestation. Forests play a key role in the global carbon cycle and thus in climate change. They store and, in growing, absorb huge quantities of carbon. When cleared, burned or degraded, however, they release carbon in the form

of carbon dioxide and other greenhouse gases. Globally, forests currently contribute an estimated 10–11 percent of total greenhouse gas emissions.

Climate change also increases the risk of wildfires. Fire's behavior is largely determined, in order of importance, by wind, humidity (dryness of the air) and a long way third, temperature (an indirect measure of air dryness). Thus warmer temperatures and associated drier conditions can often increase the likelihood of a wildfire starting or spreading. These conditions also favor the spread of pests and diseases that can weaken or kill trees. Compromised trunks and branches can then accumulate to become a store of easily ignited forest "fuel".

Overall, global wildfires consume an estimated 5 130 million tons of biomass per year, 42 percent of which is burned in Africa, including fires associated with deforestation. This burning releases approximately 3 431 million tons of CO₂, as well as significant quantities of other greenhouse gases.

In Tanzania, FAO developed a study on carbon accounting and vegetation fires. The calculation has provided estimates for a single year, annual, of emissions from fire of CO₂, CO, CH₄, N₂O and NO_x. The results are directly proportional to the area burnt with a larger area burnt leading to a larger estimate of emissions. Overall figures for CO₂ emissions per annum on average for 11 years of burned area for two Districts was approximately 27 million tons of CO₂. It has been identified that the amount of CO₂ emissions annually from vegetation fires in Africa is very large and for savannah fires is estimated at approximately 22% of the biomass burned globally. A relatively small change to the fire regime could have significant consequences for the net global carbon budget and for Tanzania's reporting under its international obligations.

Indonesia has also been seriously affected by fires. Between June and October 2015, 2.6 million hectares of forested land burned. This is a scenario that has been repeated a number of times in every decade since 1983. The impacts on the population of Indonesia and on some neighboring countries include impaired health, disruptions to transport and to Indonesia's economy in particular. The cost to Indonesia is estimated at more than US\$16.1 billion. Greenhouse gas emissions are estimated at approximately 1 750 million metric tons of carbon dioxide equivalent (MtCO₂e), nearly the same as Indonesia's estimated annual economy-wide emissions of 1 800 MtCO₂e per year. Fires like those in 2015 will make Indonesia's task of reaching its 29 percent GHG reduction target extremely difficult to achieve.

Damage and Loss

FAO has a Strategic Program focused on making the case that prevention (risk reduction) is more economically sensible behavior than firefighting (response). A

strong setting out of the impacts on ecosystem services of wildfires will provide further support to that thesis.

The nexus between “damage and loss” as experienced in human terms and the ecosystem “damage and loss” and the issues of pricing these values and the implications of accepting the values and factoring them into national to local planning and international interactions and arrangements. This may potentially lead to rational behavior in planning to manage wildfires. That would see an emphasis on research and analysis of causes, sources and motivations for wildfires, risk reduction and preventing wildfires, preparedness (early warning for early action). It would also include an emphasis on systematic community engagement, alternatives to fire use, planned and programmed deliberate fire use for ecosystem health, and appropriate investment to initiate and sustain such programs including continuous improvement.

Integrated Fire Management and successful SDG and Paris Agreement implementation

In many instances, wildfires will have a bearing on the achievement of the Sustainable Development Goals (SDGs) and in some instances may threaten their success. In relation to the role and impacts of wildfire and fire management on the SDGs, those of particular interest are Goals, 1, 2, 3, 7, 13 and 15. IFM reduces the risk of impacts on the fundamental elements underpinning the SDGs, frames up sensible use of fire where appropriate and seeks to mitigate some impacts.

Specifically:

- Fires regularly damage crops, assets and create costs for recovery that impoverish or make people food insecure. Integrating fire management, including prevention and sensible use, into agriculture, pastoralism and forestry reduces the risk of this damage and loss that locks people into poverty and a cycle of food insecurity.
 - Goal 1: End poverty in all its forms everywhere
 - Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Access to reliable supplies of fuel is a critical aspect for maintaining health and wellbeing. The bulk of the world’s poor use wood as fuel, and losses of trees and timber to fires compromise the quality and supply of wood. This leads to the use of less suitable fuels that may require more effort to collect and generate impacts on health; directly through smoke and particulates when poor fuel burns less efficiently, and indirectly through the additional effort – expending more time and energy to collect

fuel?—, range more widely or collect more quantities of less optimal fuels.

- Goal 3: Ensure healthy lives and promote wellbeing for all at all ages
- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- Globally, fires release approximately 3 431 million tons of CO₂, as well as significant quantities of other emissions. The scale and scope of wildfires has been increasing. The application of IFM, starting with the compilation of a data and information base that creates understanding, can reduce unwanted fires and their emissions, contributing to the nationally determined contributions that countries made in Paris in 2015.
 - Goal 13: Take urgent action to combat climate change and its impacts
- Wildfires are a significant factor in forest degradation, destruction and land-use change. Landscape integrity and biodiversity as well as catchment, livelihood and protective values can all be compromised by wildfires, sometimes for extended periods perhaps many decades. IFM reduces the risk of these impacts, damage and loss.
 - Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Reflection on the Past

Integrated Fire Management that is data based, information rich, scientifically sound and locally anchored in communities will contribute to successful SDGs and Paris Agreement implementation. Using well-conceived IFM policies and programs, countries can plan coherently at the landscape scale to ensure the sustainability of natural resources, livelihoods and cultural values in ways that address poverty, health, equity, sustainability and wellbeing. Appropriate, urgent action on sustainable fire management offers another avenue to reduce greenhouse gas emissions, adapt to climate change and strengthen the planet's resilience.

Bilateral agreements

Many bilateral agreements exist between countries to cooperate in the case of fire suppression. They depend on the commitment of sovereign countries, each with their own requirements, opportunities and challenges. They set frames for issues like:

- In the case of big and long lasting fires the exchange of fire crews which takes places at times between Canada, USA, New Zealand and Australia took nearly a decade to put in place. It mostly sees middle level fire managers exchanged, as they are the most useful resource and the ones that 'burn out' most quickly hence having to be rotated off the fire for a break. Recently South African crews helped to fight fires in the USA and there has also been exchange of firefighters from Chili to South Africa.
- Bilateral agreements also may help to define cross boarder activities for neighboring countries like in the case of Spain and Portugal and France and Italy.
- Bilateral agreements also might coordinate the use of heavy equipment, such as aircraft, between neighboring countries.
- Based on the existing agreements FAO helped to develop a format for bilateral agreements.
- There are not many examples of coordination of exchange above the bilateral level. One example is the MICC, a European coordination mechanism which tries to coordinate the offer of fire planes in Europe in the case one of the member countries is facing fires above the level they can handle.

Based on many bilateral agreements relating to fire management FAO developed a format for bilateral agreements.

Networks/working groups

Many regional networks have been initiated to strengthen capacities in fire management, and mostly all promote integrated fire management, but they are not all effective and sustained.

Some are working groups with strong institutional settings and national political support like the North American Forestry Commission Fire Management Working Group and the Asian Pacific working group on fire management. The Working Groups are a forum for exchanging experience and technology for the protection and control of forest fires; for cooperation among the member countries to develop strategies and actions to solve technical and management problems; and to actively participate with international agencies to conduct and promote activities that will foster world-wide cooperation and development.

Many other regional networks have been set up under the umbrella of the Global Fire Monitoring Centre and mainly serve for capacity building and exchange of experiences. Without strong government support they depend heavily on project support when projects are available. Lacking a clear institutional base however complicates obtaining projects, so they often depend on bigger national projects.

Especially the Africa regional fire management network is not very visible and lacks activities.

In between these two groups one can place the Silva Mediterranea working group on fire management and the Fire Management Network for Mesoamerica of the Central American Commission of Environment and Development; they have strong institutional settings but also depend on projects for their functioning as they lack strong political support. Because of their strong institutional settings they have been successful in obtaining project support from time to time.

Besides these regional fire management networks or working groups, other thematic ones exist like:

- Several regional networks of the GOFC/Gold Network mostly dedicated to research
- The European Commission's Expert Group on Forest Fires comprises the national correspondents to the [European Forest Fire Information System \(EFFIS\)](#).
- The International Fire Aviation Working Group (IFAWG) comprises representatives from countries and jurisdictions who regularly utilize aerial means in managing landscape fire, including for firefighting

International cooperation

While over the years many projects have taken place in developing countries by national or multilateral development agencies to strengthen national capacities in integrated fire management, it is very difficult to measure the impact and uptake. One might conclude that the success of international efforts in integrated fire management, or any exchange on fires, has been limited. The efforts often include development or revision of national policies and legal frameworks, pilot awareness raising, prescribed burning activities, pilot training of local (community-based) fire crews. What remains behind often are a series of workshop reports, proceedings, guidelines, manuals and other documentation (now often websites).

However the experiences of bilateral and multilateral activities in many cases have also led to the development of guidelines which can be used by other countries or cooperation to strengthen their capacities. (Fire Management Voluntary Guidelines, Legal Framework revision, Best cases in Community Based Fire Management etc.)

More attention should go to these activities which are not visible as fire management activities; land and landscape management activities which reduce the incidence and impacts of fire, as well as supporting policy and legal frameworks.

Conclusions

Reflecting on the experiences of the past efforts at fire management exchange enables some reflections on the potential of international relations for reducing wildfire impacts. The efforts have had mixed success and few of them have been able to persist. Those examples of groups that have continued over time deserve careful study and analysis to better understand the factors that have enabled their endurance. Candidates for analysis include Working Group 1 of Silva Mediterranea, some of the regional networks set up under the umbrella of the Global Fire Monitoring Centre and the European Commission's Expert Group on Forest Fires.

Sustainability requires funding to be available and stable, interested agencies supported by governments and interested and committed individuals to participate. This is not always feasible. Government officers have full time jobs and are accountable to perform their allocated tasks to fulfill the institutional mandate. In many countries governments are still in the process of developing and formulating effective governance and functional agencies, meaning there are usually limitations on resources and constraints on capacity.

International relationships can undoubtedly contribute to reducing wildfire impacts. The strongest mode of this is likely to be through interaction and exchange, joint problem solving and sharing experience in fire management and research rather than pooling firefighting resources. In this respect the existing networks and working groups should be encouraged and supported. FAO through its regional forestry commissions and over 130 country offices can contribute connectivity and create opportunities for continued collaboration.

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