



14-18 March 2015
Sendai, Japan

The Global Wildland Fire Network: A Policy and Outreach Programme of the Global Fire Monitoring Center (GFMC), Germany

The Problem

Vegetation fires interact with human environmental concerns in terms of catastrophes, carbon and climate. Between 2011 and 2014 more than 776 people were killed by wildfires, 532,000 people were evacuated in wildfire situations worldwide, and a total of 16,100 destroyed houses recorded. Based on modeling it is estimated that annual human mortality due inhalation of fire-generated particulate matter <2.5 micrometers (PM2.5) may reach 339,000. Permanent transfer of carbon from burned ecosystems, which will not recover after fire, to the atmosphere contributes to about 20-30% of global emissions from fossil fuels. At the present time only a few countries have implemented policies addressing the role, consequences and management of vegetation fires comprehensively and across sectors. None of the international environmental conventions explicitly address vegetation fires as a driver of environmental degradation. There are also not yet protocols in place that provide internationally accepted standard methods and procedures for countries that provide and receive assistance in wildland fire emergencies that would ensure inter-operability, efficiency and safety of cooperating parties.

The Epistemic Community

The Global Fire Monitoring Center (GFMC), an institution of the German Max Planck Society for the Advancement of Sciences and member of the German Committee for Disaster Risk Reduction, established in 1998 with funding of the German Foreign Office, chaired one of the four Working Groups of the UNISDR Inter-Agency Task Force for Disaster Reduction, the Working Group on Wildland Fire. In 2001 this group transited to the Global Wildland Fire Network (GWFN), which since then is serving the UNISDR system as a *Thematic Platform*. The UNISDR Wildland Fire Advisory Group (WFAG) provides advisory support to the United Nations, to international organizations and governments and is coordinated by the GFMC. This work is also performed in GFMC's function of Associate Institute of the United Nations University – the *think tank* of the UN system.

Under the impression of limited coordinated response to the theme of wildland fire in the UN system the GFMC felt obliged to take the initiative for developing a White Paper on Vegetation Fires and Global Change that would unveil the urgency for coordinated international action.

Science, Policy and Practice

The contributions of the White Paper reveal that globally, fire regimes are altering in parallel with and under the influence of socio-economic developments, land-use change and climate change. Increasing vulnerability of society to the direct and secondary effects of wildland fires, as well as the transboundary nature and consequences of wildland fires, are challenge to countries and international organizations to define their common interests in developing informed national, regional and international policies aimed at enhancing sustainable and integrated fire management capacity. The requirement for systematic and efficient sharing of scientific and technical expertise, solutions and resources, including transboundary cooperation, means that the transition from informal information exchange and networking to a more systematic and formalized cooperation is more necessary than ever.

Focus on Action

Since the 1990s the GWFN and WFAG have significantly contributed to develop cross-sectoral policy dialogue addressing the management of vegetation fires, and have contributed to build capacities in fire management at national level, e.g. in the Eastern Europe, Caucasus and Central Asia (EECCA) region – notably in Armenia, Azerbaijan, Georgia, Mongolia and Ukraine – and in Southeast Europe. This work was mainly implemented under the Environment and Security (ENVSEC) Initiative under the auspices of the Organization for Security and Cooperation in Europe (OSCE) and the Council of Europe through its European and Mediterranean Major Hazards Agreement (European Open Partial Agreement – EUR-

OPA). Numerous countries and regional organizations in South America, Sub Sahara Africa and Eastern Asia were supported by knowledge exchange between countries and international organizations.

In 2013-14 the German Federal Ministry for Food and Agriculture provided finances to the UN Economic Commission for Europe (UNECE) to entrust the GFMC in convening and following up the UNECE/FAO Regional Forum on Cross-boundary Fire Management. In the follow-up of the Forum the WFAG launched the International Wildfire Preparedness Mechanism (IWPM). The IWPM is a voluntary, non-financial instrument hosted by the GFMC, which offers support to nations to build fire management capacity through exchange of knowledge and expertise.

Wildfire Disaster Risk Reduction and the post-2015 HFA

The Third World Conference on Disaster Risk Reduction will pave the way for a renewed HFA that will provide rationale and suggested action for the post-2015 period. The Global Fire Monitoring Center and the Global Wildland Fire Network will continue to be available for nations, international organizations and the UN system to serve as think tank and advisory body in the attempt to be prepared and capacitated to address the challenging cross-sectoral issues and action needs in wildland fire management at global level, notably in wildfire disaster risk reduction. The epistemic wildland fire community will continue to challenge the UN system to develop voluntary or legally binding commitments to facilitate inter-agency, international and cross-boundary cooperation



Goldammer, J.G. (ed.) 2013. Vegetation Fires and Global Change: Challenges for Concerted International Action. A White Paper directed to the United Nations and International Organizations. Kessel Publishing House, 398 p. Online version: http://www.fire.uni-freiburg.de/latestnews/recent_pub.htm



The IWPM (<http://www.fire.uni-freiburg.de/iwpm/index.htm>) is closely interacting with the International Fire Aviation Working Group (<http://www.ifawg.org/>) and has recently launched the first draft of the *Fire Aviation Guidelines* with the *International Manual of Common Rules for Fire Aviation* – a first set of voluntary international standards for safe and efficient international aerial firefighting operations.

Prepared by GFMC: <http://www.fire.uni-freiburg.de/>