



EUROPEAN FORUM FOR
DISASTER RISK REDUCTION



PORTUGAL
MATOSINHOS 2021

**Strengthening Governance in Landscape Fire Management
and Boosting Citizen's Awareness**

26 November 2021

Advances in Governance in Landscape Fire Management in Europe and Central Asia: Global Implications

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The Global Fire Monitoring Center (GFMC)



Landscape Fire Governance – From Local to Global

The **EECCA** Region: **E**astern **E**urope – **C**aucasus – **C**entral **A**sia

Challenges, achievements and the way ahead

- **Community:** Local issues with regional to global impacts
- **Nation:** Cross-sectoral / inter-institutional challenges
- **Region:** Cross-boundary problems and solutions
- **International / Global:** Overarching framework

Contemporary Eurasian Landscapes (I)

Widespread increase wildfire risk due to

- Land-use change – associated with rural exodus and abandonment of the rural space
- Consequently – reduced land cultivation resulting in increasing flammability of rural landscapes

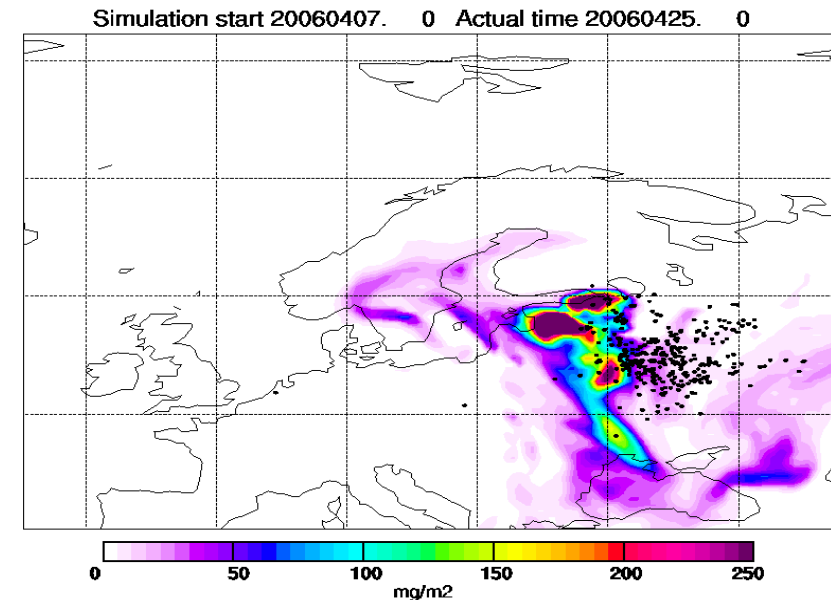


Contemporary Eurasian Landscapes (II)

Local Fire Use

Agricultural Burning: Threats to soils, environment and communities

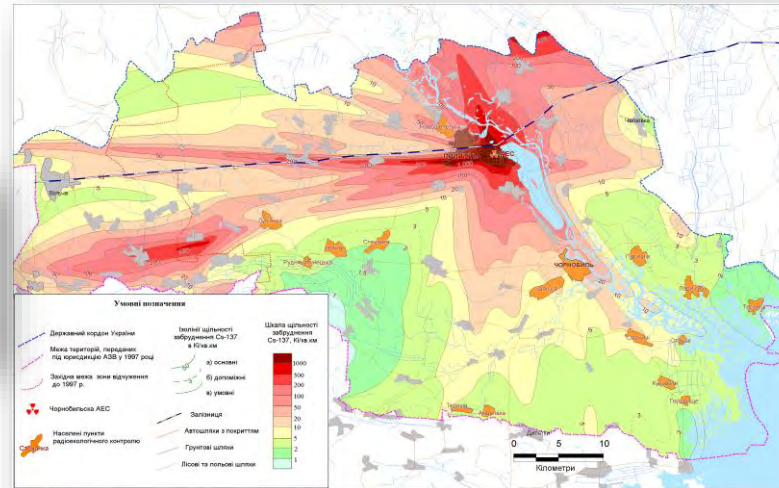
Need to develop Certified Villages – Eligible for subsidies and fire protection support



Contemporary Eurasian Landscapes (III)

Wildfires on contaminated terrain:
Chemical, post-conflict, radioactivity

Need for highly specialized approaches, e.g.
armored or Unmanned Aerial Systems (UAS)
for Reconnaissance, Coordination & Response



Outreach through Regional Fire Management Resource Centers in the EECCA Region:

Development of Guidelines for Local Communities (2012-2013)

Defence of Villages, Farms and Other Rural Assets against Wildfires: Guidelines for Rural Populations, Local Communities and Municipality Leaders in the Balkan Region



Προστασία Χωριών, Αγροκτημάτων και Άλλων Αγροτικών Περιουσιών από Πυρκαγιές:

Οδηγίες προς τον Τοπικό Πληθυσμό και τις Δημοτικές Αρχές στην Περιοχή των Βαλκανίων



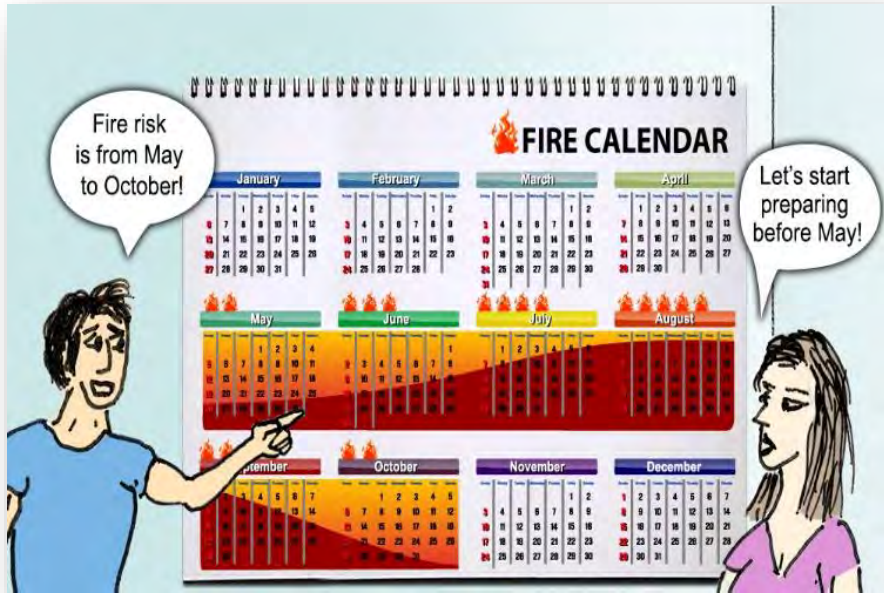
Δημοσίευση του Παγκοσμίου Κέντρου Παρακολούθησης Δασικών Πυρκαγιών σε συνεργασία με την Ανοιχτή Μερική Συμφωνία για την Αντιμετώπιση Μεγάλων Καταστροφών του Συμβουλίου της Ευρώπης

Με την ευγενική υποστήριξη του

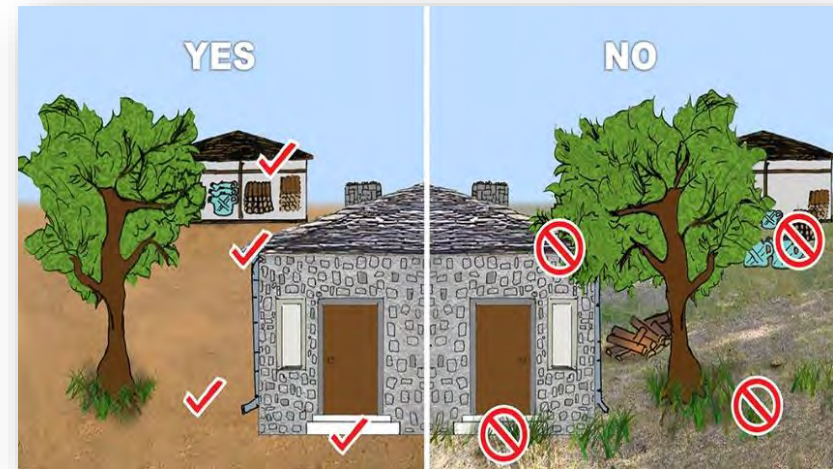
Ιδρύματος Μαρία Τσάκος - Διεθνές Κέντρο Ναυτικής Έρευνας και Παράδοσης



Defence of Villages, Farms and Other Rural Assets against Wildfires: Guidelines for Rural Populations, Local Communities and Municipality Leaders in the Balkan Region



Preparation of local people to become aware of wildfire threats and to prepare their home for defense against wildfires



Defence of Villages, Farms and Other Rural Assets against Wildfires:
Guidelines for Rural Populations, Local Communities and Municipality Leaders in the Balkan Region



Preparation of local people to become aware of wildfire threats and to prepare their home for defense against wildfires



Defence of Villages, Farms and Other Rural Assets against Wildfires: Guidelines for Rural Populations, Local Communities and Municipality Leaders

The Mongolian Version – illustrations adjusted to local culture

ТҮЙМРИЙН АЮУЛТАЙ ҮЕ

ТҮЙМРИЙН ЭХИРЛЭЛ 2-Р САРД ЭХЭЖИ БАЙНА.

2-Р САРААС ӨННӨ ТҮЙМРЭЭС УРЬДГААР СЭРГИЙНГ ӨВӨЛГӨӨЗӨ.

ГЭР, ХАШААН ДОТОР, ГАДУУР БАЙГАА ХАТСАН ӨВС, ШАТАХ ЭРСДЭЛТЭЙ ЗҮЙЛСИЙГ ЦӨВЭРЛЭХ ХЭРЭГТЭЙ.

БОРООНЫ УС ТОСОХ, ХУДАГ, БУЛАГ ШАНД Г.М УСНЫ ЭХ ҮҮСВЭРЭЭС УСНЫ САВАНД УС НӨӨЦӨЛЖ, БЭЛЭН БАЙХ

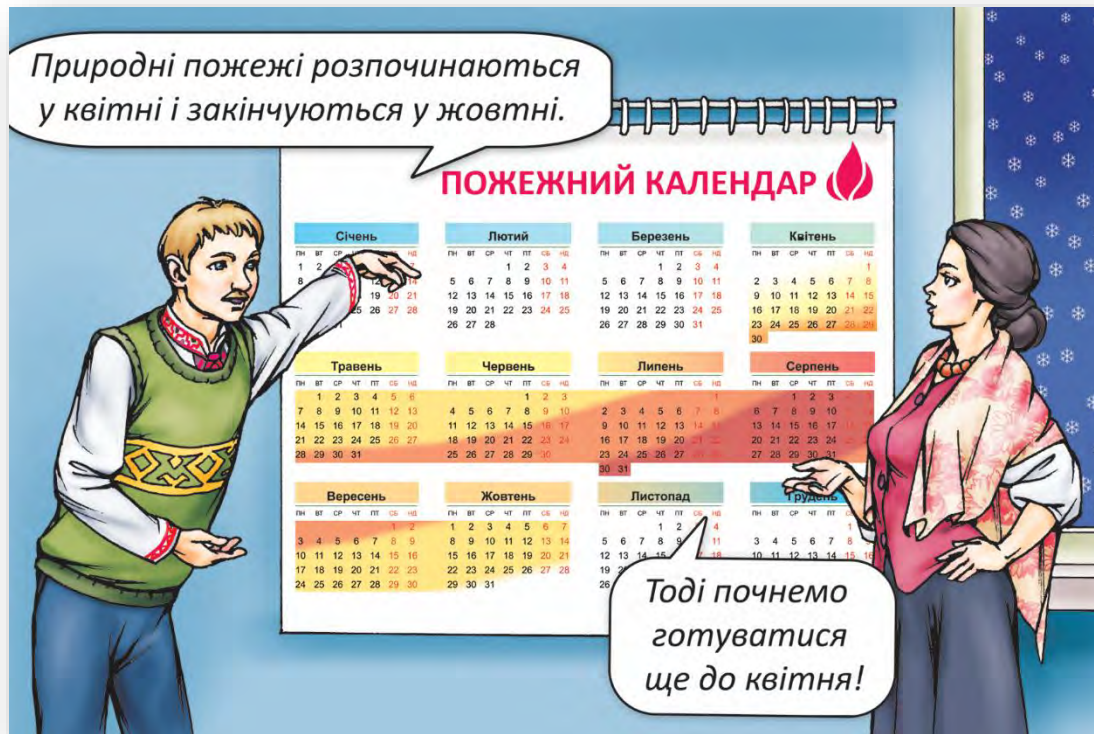
ГУДАМЖИЙН ДУГААР, ЗАМЫН ТЭМДЭГЛЭГЭЭ ЗЭРГИЙГ НӨМӨРЧ УРГАСАН, УНЖСАН МӨЧРИЙГ ЦӨВЭРЛЭХ. ИНГЭСНЭЭР ГАЛ СӨНӨГЧИД ГАЛЫН АЮУЛД ӨРТСӨН БАЙШИН, ГУДАМЖ, ХОРООЛОЛ, СУУРИНЫ БАЙРЛАЛЫГ ТОДОРХОЙЛОХОД ХЯЛБАР БАЙХ БОЛНО

ХЭРЭВ ОЙ, ХЭЭРИЙН ТҮЙМЭР ОЙРТОН ИРЭЭЛ ОЙ, МОД СӨГ БУХИЙ ГАЗРЫГ НЭН ТҮРҮҮНД ОРХИН ЗАЙЛАХ ХЭРЭГТЭЙ. ГОЛ, НУУР, ЦӨӨРӨМ ЭСВЭЛ ШАТАХ МАТЕРИАЛГУЙ ГАЗАРТ ХОРГОДОХ ХЭРЭГТЭЙ

ХЭРЭВ ТА БОЛОН ТАНЫ ОЙР ДОТНЫ ХЭН НЭГЭН ТҮЙМЭРТ БҮСЛЭГДЭН ТӨХИӨЛБӨЛД ГОЛ, БЕТОН ГҮҮР ЗЭЭРЭГ ШАТАХ БОЛОМЖГУЙ ГАЗАРТ ЯАГАЛТАЙ ӨНХ ШААРДЛАГАТАЙ.

Defence of Villages, Farms and Other Rural Assets against Wildfires: Guidelines for Rural Populations, Local Communities and Municipality Leaders

The Ukrainian Version – illustrations adjusted to local culture



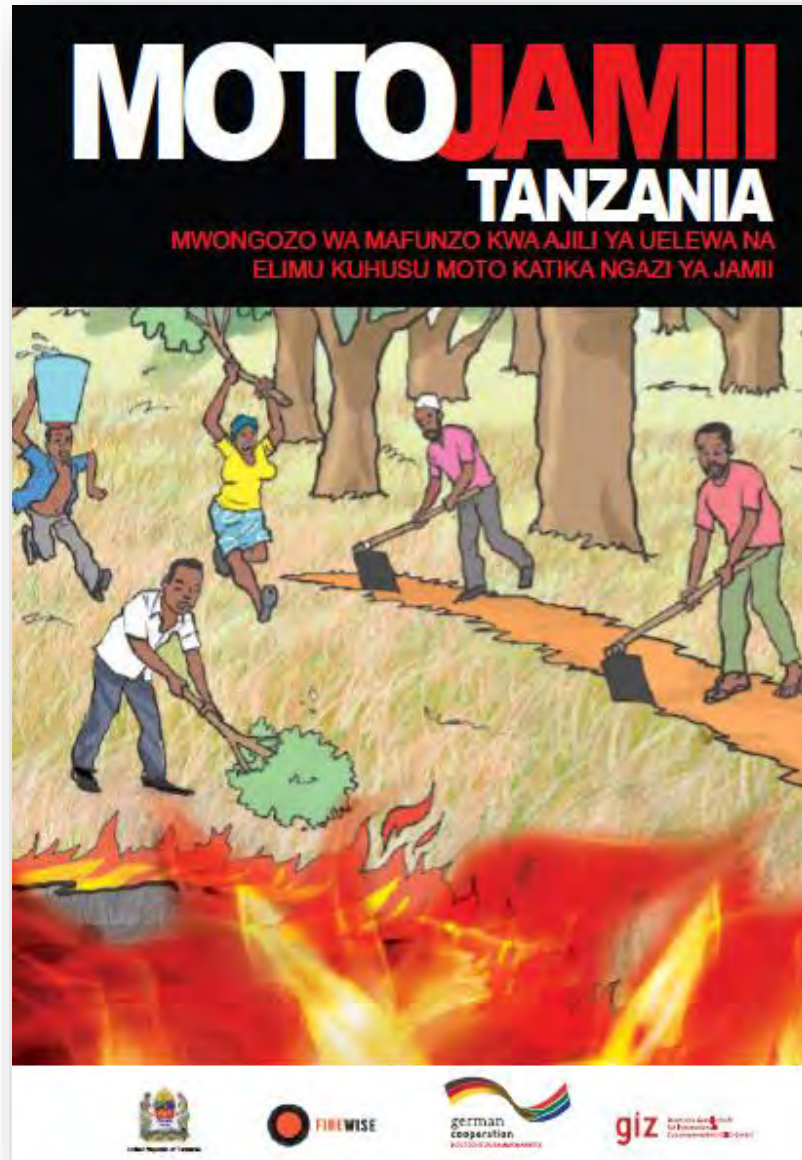
Defence of Villages, Farms and Other Rural Assets against Wildfires: Guidelines for Rural Populations, Local Communities and Municipality Leaders

Ukrainian Practice



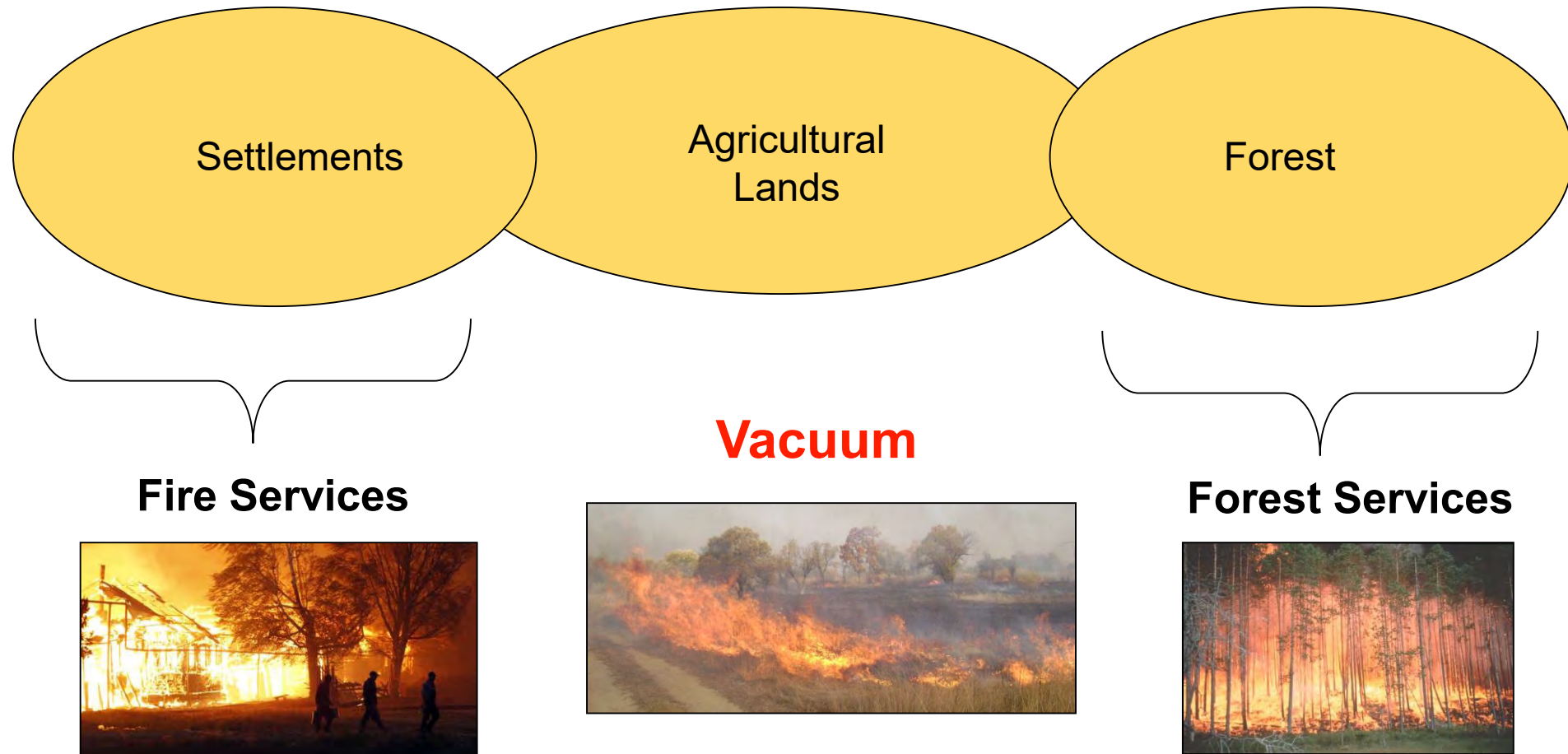
Forest Fire School for Volunteers of Luhansk Region
Sievierodonetsk, Luhanska Oblast, Ukraine, 27 June 2021

Lessons learned – from Africa and South East Asia



In many Countries of the EECCA Region:

Legal / technical vacuum for managing agricultural fires



Cross-sectoral Dimension of Landscape Fire Management

Fires are burning across the sectoral responsibilities of land owners and land management agencies:

Typically responsible agencies

- **Natural ecosystems: Forests and other protected areas**
- **Agricultural and pasture lands**
- **Farms, villages and suburbs**
- **Infrastructures (incl. critical infrastructures), traffic**
- **Waste deposits and otherwise contaminated lands**
- **Military terrain**
- **Forest Service**
- **Park Service**
- **Ministry of Agriculture**
- **Ministry of Interior**
- **Crisis Management**
- **Ministries for Public Health and Environment**
- **Ministry for Defense**

Bidirectional Approach in Support of the Development of National Fire Management Policies:

Pragmatic Exchange at the Science-Policy-Practitioners-Interface (SPPI)

- „Top Down Approach“ through national policy dialogue & inter-agency coordination based on scientific evidence
- “Bottom-up Approach” by learning from and capacitating local rural communities: Collecting and disseminating experience in Integrated Fire Management



National

Reforms accomplished or underway

- **Portugal:** See first presentation by AGIF
- **Mongolia:** Steppe and Forest Fires Committee
- **Greece:** Proposal elaborated
- **Ukraine:** National Strategy 2030 underway



Principles of proposed Landscape Fire Management Agencies (I)

1. Transdisciplinary and Innovation

Policy and strategic planning and relevant decision making shall be based on sound scientific knowledge and considering technological capabilities and innovation; this will include considering the revival of traditional, socio-economically sound and environmentally benign land-use practices. A multi-disciplinary scientific approach is mandatory to address the cross-sectoral nature of fire management at landscape level.

2. Holisticness, Integration and Inclusion

Policy development and strategic planning shall be holistic, i.e. address the fire problem at landscape level by including all relevant institutional mandates and the potential and capacity of contribution of the civil society.

Principles of proposed Landscape Fire Management Agencies (II)

3. Coherence

The mandates and activities in fire management of State institutions and other stakeholders shall be coherent (harmonized) and meet the overarching national fire management policy and implementation plan.

4. Cohesiveness

The National Fire Management Plan shall be considered cohesive (obligatory) for individual institutional / sectoral planning and activities.

5. Coordination

The implementation of actions under the National Fire Management Plan shall be monitored in a permanent basis and highly coordinated

Role of Intergovernmental Organizations in the EECCA Region



Strengthening national governance and cross-boundary cooperation in fire management, wildfire crisis preparedness and response

Interoperability: Effectiveness – Efficiency – Safety



International Fire Management Training Courses for the South Caucasus and Western Balkans (2010, 2014)
Central Asia (2014) and Eastern Europe (2018)

Interoperability:

International competency standards for training of firefighters



Status (November 2021):

Available in 22 languages for the use in 60+ countries

www.gfmc.online



Estándares de Competencias y Materiales de Entrenamiento

Versión en Español para América Latina y el Caribe

Incluido Estándares en Portugués

Introducidos para la ocasión del

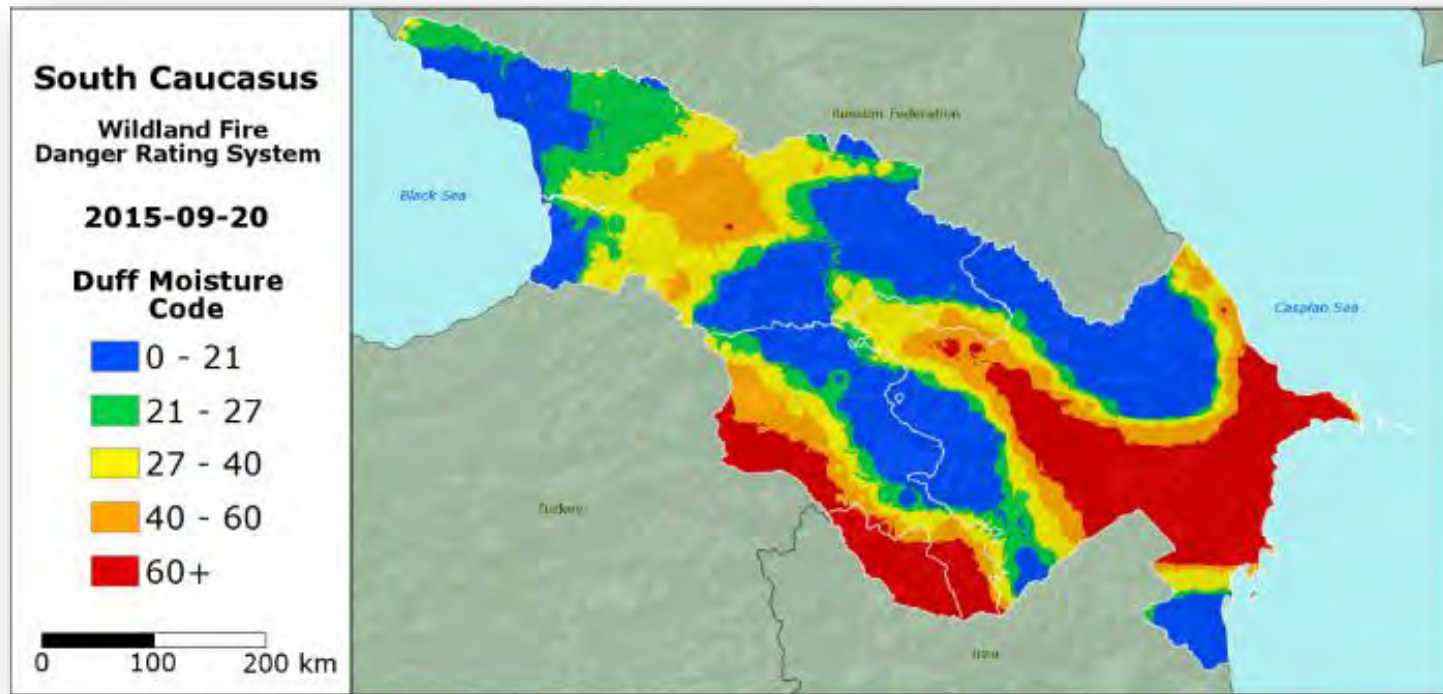
Primer Simposio Regional de Cooperación en Manejo del Fuego Inter-Fronterizo en Sudamérica

Parque Nacional Santa Teresa, Uruguay, 30 de Mayo al 02 de Junio 2016



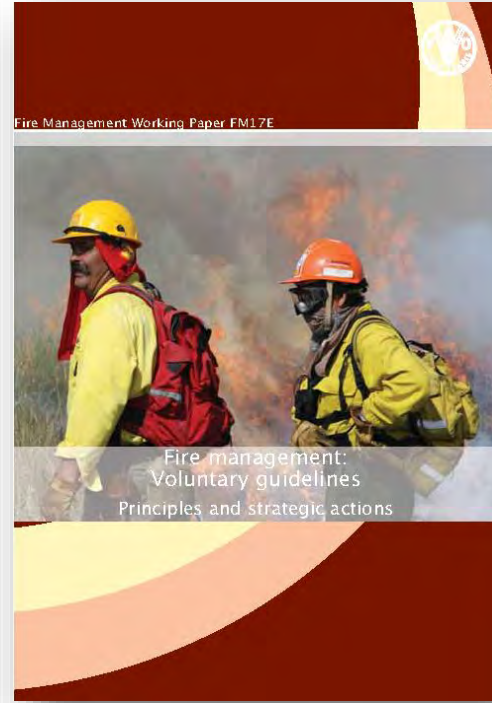
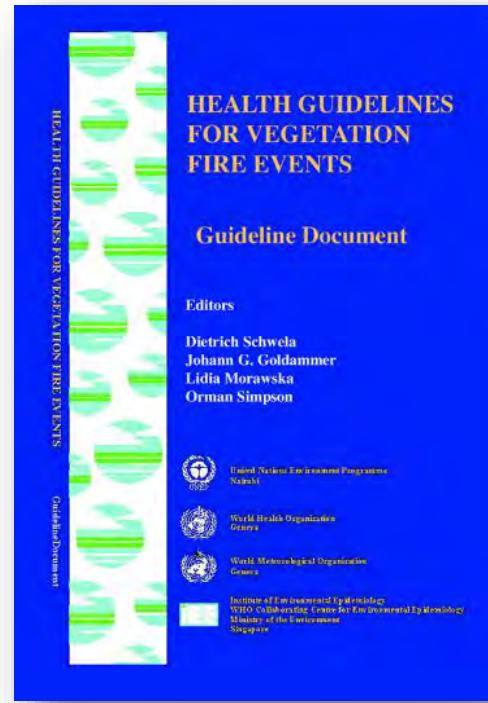
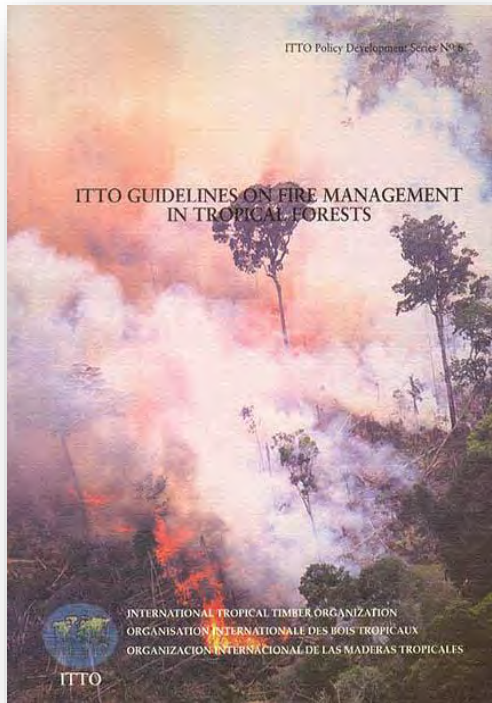
Climate Change = Change of Fire Weather

- Development of a Regional Wildfire Early Warning System for the South Caucasus



International Actors – The United Nations Family

Voluntary Guidelines for Fire Management: Support for Policy and Strategy Development



ITTO 1998



WHO 1999



FAO 2005



International Actors – The United Nations Family

UNECE / FAO Forum on Cross-boundary Fire Management (2013)



Outcome:
The International
Wildfire Preparedness
Mechanism



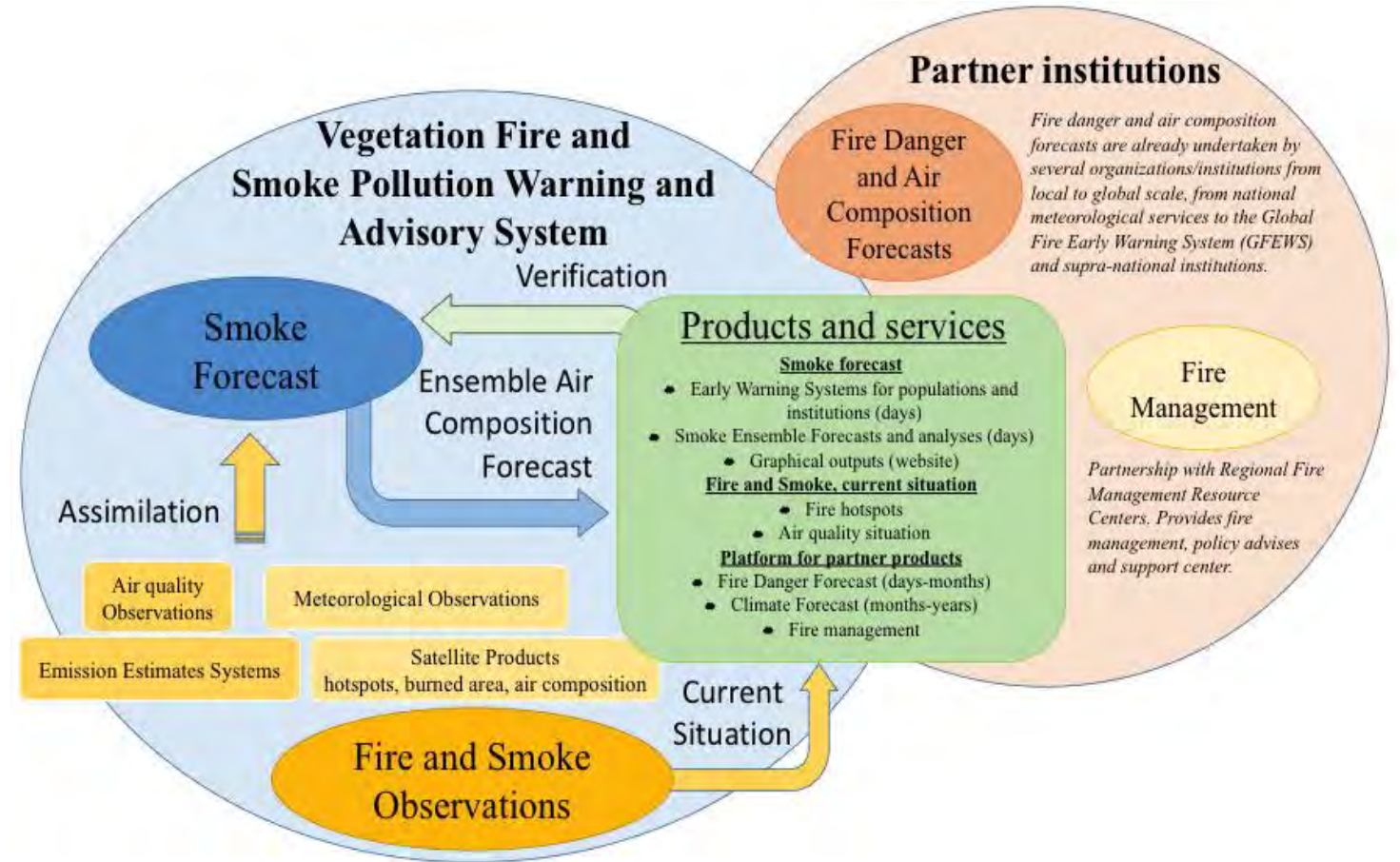
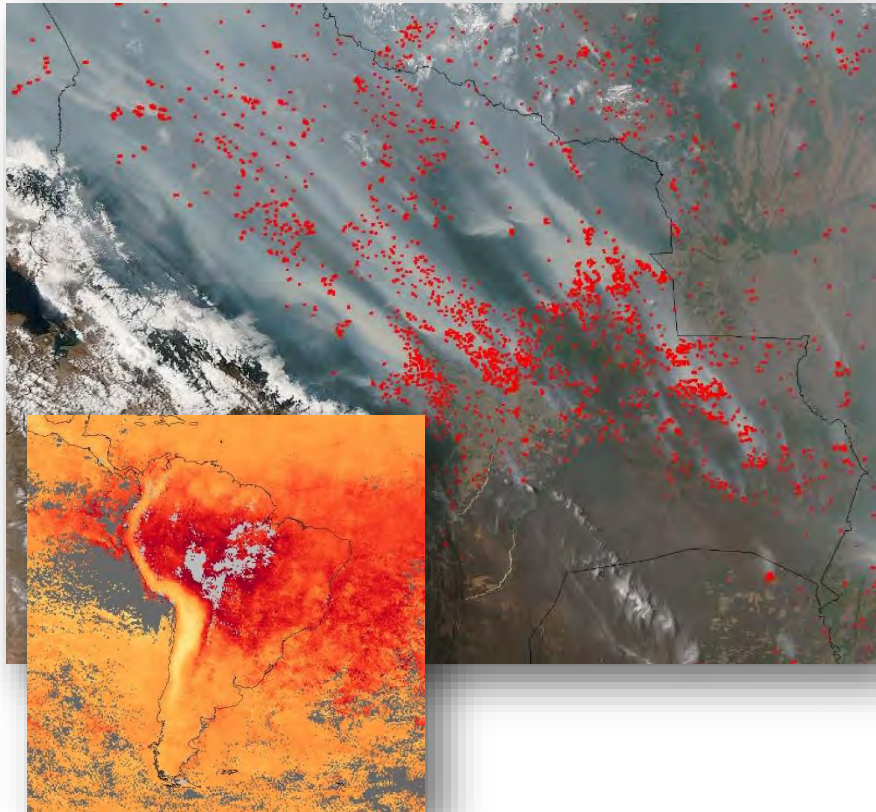


International Actors – The United Nations Family

World Meteorological Organization (WMO)



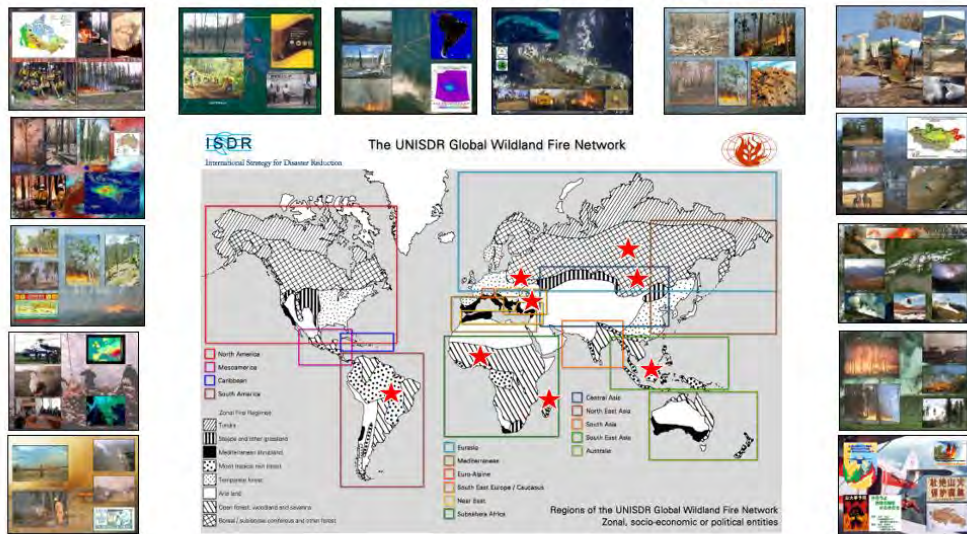
Vegetation Fire and Smoke Pollution Warning and Advisory System



International Actors – Civil Society Organizations partnering with UN and Multilateral Organizations

- UNISDR Global Wildland Fire Network and Wildland Fire Advisory Group
- Regional Fire Management Resource Centers (14 Regions – 8 Centers)

The Global Wildland Fire Network in 2021
14 Regional Wildland Fire Networks
8 Regional Fire Management Resource Centers ★



The Regions of the UNISDR Global Wildland Fire Network and the Regional Hubs
North America – Mesoamerica and Caribbean – **South America** – Caribbean – Mediterranean / Near East
– **Eastern Europe** – **Southeast Europe / Caucasus** – **Subsahara Africa (Eastern Africa – Western Africa)**
– South Asia – **Southeast Asia** – Australasia – Northeast Asia – **Central Asia** – **Eurasia** – Euro-Alpine



UNISDR Inter-Agency Task Force:
Wildland Fire Advisory Group (since 2001)

International Wildland Fire Conferences (since 1989) – The last: 7th IWFC Brazil 2019: Campo Grande Statement



“Building Sustainable and Fire-Resilient Societies and Landscapes”

- Support of the **Sustainable Development Goals**, the goals of the **Paris Agreement** and the **Sendai Framework for Disaster Risk Reduction 2015-2030**
- This approach would be further strengthened by an appropriate **United Nations instrument**

The Way Ahead: International Coordinated Action

Exemplary – The UN Family

➤ **Scientific Basis**

- WMO: Early warning, monitoring and forecasting of landscape fires and smoke pollution

➤ **Wildfire Emergency Response**

- UNEP/OCHA Joint Environment Unit (JEU) and partners (INSARAG, GFMC, ICAO Member States)

➤ **Technical – Example Aerial Firefighting (22 Nov 2021)**

- ICAO: Normative / regulatory role for setting international standards for Fire Aviation with Member States and IFAWG

➤ **Environmental – Green Infrastructure**

- Partnership for Environment and Disaster Risk Reduction (PEDRR): Ecosystem-based solutions



The Global Fire Monitoring Center (GFMC)

The Way Ahead: International Coordinated Action

Responding to the Proposal of the 7th International Wildland Fire Conference (2019):



Creation of an International Instrument – an Overarching Umbrella for Collective Action

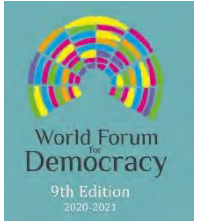
- **International Landscape Fire Management Framework**
 - Expanding the informal voluntary International Wildfire Preparedness Mechanism (IWPM) to the Sendai Framework

- **Timeline**
 - 8th International Wildland Fire Conference – Portugal 2023



Democracy, Environmental and Human Security – Only “Rights” ?

- Climate change and the COVID-19 Pandemic reveal the need for civil society to collectively take more responsibility – volunteerism and beyond!
- As civil-society organization working at the Science-Policy-Practitioners Interface (SPPI), we – the GFMC and the regional actors – feel obliged to actively support a culture of participation of civil society in preparedness, response and recovery to climate extremes and pandemics.
- The strengths of democracy – co-evolving with environmental challenges that are threatening human health and security: Civil society shall be convinced to actively participate and take responsibility in disaster risk reduction – not only claiming the “right” to be protected...



*“Ask not what
your country can
do for you; ask
what you can do
for your country.”*

President John F. Kennedy
January 20, 1961





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Thanks for Your Attention



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