



Conclusions and proposals of the Independent Committee

tasked to

Investigate the Underlying Causes and Explore the Perspectives for the Future Management of Landscape Fires in Greece











The political decision

- A devastating fire with 100 victims in Eastern Attica Region (Greece) on 23 July 2018 motivated the Greek Prime Minister Alexis Tsipras to appoint the Director of the Global Fire Monitoring Center (GFMC), Prof. Dr. Johann Georg Goldammer, to form an Independent Committee tasked to investigate the underlying causes and the forest fire management challenges and explore the re-organization needs for improving the future management of landscape fires in Greece
- Official Appointment of the Committee made by Prime Minister decision Y60 on 10/9/2018.

















The Committee



George Eftychidis
Center for Security Studies –KEMEA
Ministry of Citizen Protection



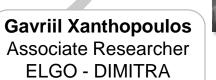
Ioannis Mitsopoulos
Ministry of Environment
and Energy



George Mallinis
Associate Professor,
Democritus University of Thrace



Alexandros
Dimitrakopoulos
Professor
Aristotle University of
Thessaloniki















The Tasks of the Committee

- Analyze / assess the underlying reasons for the increase of landscape fire hazards and risks, in Greece during the recent years.



- Review the actual landscape fire risks and evaluate the current fire management system, including the state of prevention, preparedness, mitigation and response to fire emergencies.



- Propose an applicable policy and required actions for the reform of the national forest fire management system, notably a national cross-sectoral policy that will take into account the crosscutting nature of landscape fires, in order to reduce the risk of adverse consequences of fires to the landscapes and the population.













Modus Operandi of the Committee

- ➤ Collected and analyzed the views of 73 independent scientists and practitioners, experts in the field of fire science and management
- ➤ Collected the views of 28 relevant authorities (Ministries, Agencies, Administration etc.) and organizations involved in landscape fire management, and met in person with representatives of the most directly involved ones.
- ➤ Organized a National Round Table on Fire Management (11/12/2018), to allow live discussion and interaction among the key agencies of the country regarding the key findings of the Committee

























Report on the Greek Landscape Fire Management System and perspective improvements

The work of the Committee resulted in a report made public and delivered to all policy and decision makers in Greece. The report is organized in 3 main chapters:

- 1. Current situation of landscape fire management in Greece
- 2. Gaps and problems of landscape fire management in Greece
- 3. Proposals for future landscape fire management in Greece







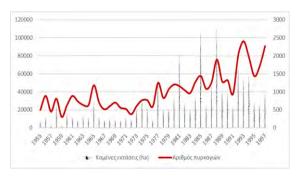




Landscape fires in Greece: Current situation

There is evidence of an increase in the annual area burned and the number of forest fires from 1980 onwards, reaching even up to 2.7 million hectares in 2007, almost five times the average in the preceding forty years.

75% of the burned area is caused by fires exceeding 1000 hectares. These fires account for 4% of all fires, proving that the occurrence of large fires constitutes a major problem.















Land planning and forest management deficit

- Increased accumulation and continuity of burnable vegetation (wildland fuels) due to the abandonment of intensive land-use of the countryside and inadequacy of forest management linked with limited availability of funds and institutional weakness of the Forest Service.



- Increased land development in forested areas and high risk of fire occurrence at the perimeter of urban areas, villages, farmsteads and touristic areas













WUI: A modern fire safety and security issue in Greece

The incidents of the last decade, notably the extreme fire affecting the community of Mati in July 2018, reveal that human security and health, private and public assets as well as critical infrastructures are at major threat









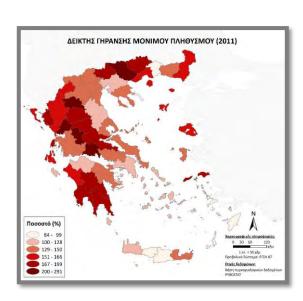






Socio-economic causes

 Increased aging of the population in the rural areas which leads to lack of people able to respond to landscape fires. - Diachronic reduction of the number of people working in the primary production sector, who normally have interest to protect their activity from fires and support fire-fighting locally











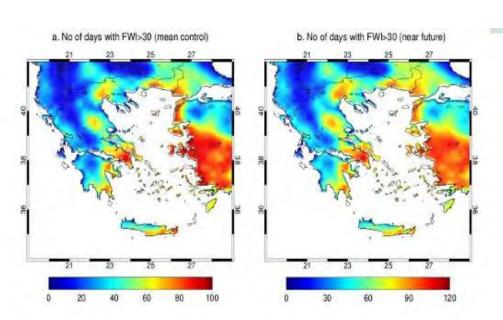


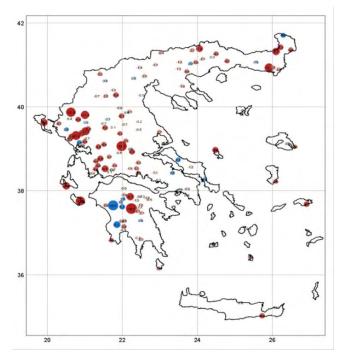




The climate change issue

- Increase of air temperature
- Extreme weather events
- Extension of "summer" drought season





Decline of precipitation values between 1950-2012. Red color negative, blue positive











Preference of funding suppression vs prevention

The current system greatly favor suppression against prevention both at strategic and operational level of funding











Underlying Causes (1)

- Political interventions not scientifically supported, such as the transfer of firefighting responsibility from the Forest to the Fire Service (Law 2612/1998).
- Lack of a coherent and cohesive National Landscape Fire Protection Plan integrating the competences and responsibilities of all stakeholders in the field of landscape fire management.
- Disconnected plans of prevention and suppression introducing coordination barriers among services and agencies.
- Lack of cooperation spirit between the agencies and services involved in fire management, especially between the fire brigade and the forest service due to downgrading of the fire prevention projects
- Lack of legal context and the current distributed structure of the forestry service, which sub-optimizes their operational role and performance.











Underlying Causes (2)

- Lack of professional and certified training of landscape fire management staff
- Low level of information sharing amongst the actors of landscape fire management and deficit in the coordination of fire suppression created by such lack of information.
- Increase of fuel load and the risk of occurrence of extreme and difficult-tocontrol wildfires due to rural abandonment and underfunding of forest management.
- No systematic and permanent forest fuel management projects.
- Excessive dependence of fire-fighting on aerial resources.
- Extensive use of urban fire extinguishing practices in landscape fires.











Underlying Causes (3)

- Lack of efficient awareness and mobilization of citizens and weak integration of volunteers in landscape fire management.
- Lack of fire risk perception of the people living at the interface between highly flammable natural / cultural landscapes and residential / peri-urban areas.
- Reluctance of the involved services to introduce scientific knowledge, innovation and advanced technologies in fire management practice, as consequence of lacking a national scientific and coordinating body playing the role of science-policy-practitioners interface.











The Proposed New System for Landscape Fire Management

- The problem of landscape fires should be tackled by the State using a holistic approach, through an integrated and coherent management framework
- The overall and unified planning should address jointly the prevention and suppression of fires, as well as the restoration of burned areas in an integrated manner to ensure and strengthen societal, environmental and economic resilience.
- Application of the law should be strengthened by integrating it into operational planning within the framework of a unified and interagency national plan for the protection of the landscape and the safety and security of local populations from landscape fires.











Landscape Fire Management Organization (LFMO)

- The development of an organization (LFMO) that will operate in a supervisory and co-operative manner with the multiple stakeholders involved in landscape fire management is proposed as a core element of a future reform
- LFMO will have an advisory, coordinative and supervisory role in landscape fire management in the country with the main mission to develop an interagency National, Landscape Fire Management Plan and to monitor and follow up its application.
- The organization will support the continuous and substantial effort to prevent fires and shall guarantee the necessary collaboration and interaction between the actors involved, according to the provisions of the National Landscape Fire Management Plan.











Principles of LFMO (1)

1. Transdisciplinarity 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. Holistic policy, 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 LFMO (2)

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 Landscape Fire Management Plan will be considered cohesive (obligatory) for individual institutional / sectoral planning and activities.

5. Coordination

The implementation of actions under the National Landscape Fire Management Plan will be monitored on a permanent basis and highly coordinated











Priorities of the LFMO

- Development of a National Landscape Fire Management Plan, which will include a joint design of measures and actions for landscape fire management at all administrative levels with the participation and cooperation of all stakeholders.
- 2. Revise the duration and the start-end of the fire season based on the available statistical data and the climate change estimates.
- 3. Create a scientifically documented National Landscape Fire Risk Assessment System.
- 4. Revisit the balance and relation between investments / costs for the prevention and suppression of landscape fires and rationalize expenditures accordingly.











Priorities of the LFMO (2)

- 5. Exploitation of all resources, based on central planning, focusing on optimizing the efficiency of firefighting system.
- 6. Development of certified and joint training programmes for staff of all stakeholders to improve cooperation, synergy and coordination.
- 7. Conduct of annual, seasonal, regional joint, interagency exercises for acquainting with roles and procedures (in particular the rules of engagement), for training purposes (in the context of certified training) and for evaluating the readiness of the actors involved.











Priorities of the LFMO (3)

- 8. Cooperation with GSCP for developing a unified and common (interagency) system regarding landscape fire management, similar to the NIIMS/ICS systems, based on the principles of operational cooperation and coordinated distribution and utilization of resources and capabilities (services) of all involved agencies.
- 9. Elaborate roles and responsibilities of the incident command and the landscape fire management system, under the NIMS/ICS, according to the training qualification and certification of the personnel joining the operations and not using exclusively criteria of hierarchy.









Priorities of the LFMO (4)

- 10. Development and implementation of situation awareness tools such as a central daily readiness reporting system (fire season) of the actors involved in fire management or a recording and mapping system of funded prevention projects (e.g. by local authorities).
- 11. Development of an activity and cost accounting system to monitor and evaluate the effectiveness and efficiency of the overall organization
- 12. Investigate scientifically the feasibility and appropriateness for applying prescribed burning in Greece and evaluate the possibility of using fire as a firefighting tool (suppression fire / backfire).









Priorities of the LFMO (5)

- 13. Work on public awareness in order to instill an understanding of the need for improved security concerning landscape fires, and to increase voluntary participation of citizens in fire protection plans.
- 14. Development of a specific spatial data infrastructure to store and share historical, current and future landscape fire related information using the appropriate technology.
- 15. Development, in cooperation with relevant stakeholders, of proper maps regarding the wildland-urban interface areas and assets potentially at risk such as critical infrastructure, cultural heritage sites etc.











Forest Service (1)

Essential reorganization and reform of the Forest Service, which should be properly supported in capabilities and resources. In particular, regarding the Forest Service, the following actions should be considered:

- Restoring the vertical structure of the Organization by reintegrating regional services from decentralized administrations into a centralized agency.
- 2. Issue and activate promptly the provision of Article 100 (L. 4249/2014) concerning the competences of Forest Service as responsible of fire prevention. Involve the Forest Service in the initial attack of fires in forest areas.











Forest Service (2)

- Development of a Forest Corp. (DASO) within the Forest Service. DASO's objective will be to implement the landscape protection legislation from illegal human activities and to serve as first responders (initial attack) to any fire affecting forests and the rural landscape.
- 4. Elaborate and design, in cooperation with the LFMO and the Fire Service, over the next five years, a plan for the spatial allocation of responsibilities in landscape fire-management (incl. firefighting). DASO may take over the role of firefighting in designated (pure) forest areas, whereas the Fire Service will be responsible for areas of high population density and the wildland urban interface areas.
- 5. Both (Forest and Fire) agencies shall operate within the interagency framework of coordination and cooperation for the suppression of landscape fires (NIMS/ICS).











Fire Service (1)

The Hellenic Fire Service will continue to offer its services with regard to the suppression of landscape fires, being the main fire suppression agency in the country, considering at the same time to:

- 1. Enhance the cooperation with the other actors involved in landscape fire management in the framework of the NIMS / ICS, and be involved in the planning stage of prevention, based on LFMO guidelines.
- 2. Substantially improve the education and training of its permanent staff and their volunteers regarding landscape firefighting.











Fire Service (2)

- Adopt and adapt the utilization of various available innovative solutions, new technologies and tools that will improve the effectiveness of planning and response of the Fire Service, always taking into account the cost (efficiency).
- 4. Provide emphasis on the use of ground forces and resources (machinery and tools) in landscape firefighting.
- Disconnect the recruitment of seasonal firefighting personnel from today's socio-economic criteria and link them only to experience, knowledge and fitness criteria.









Ministry of Environment and Energy

The Ministry of Environment and Energy will need to take mostly institutional measures and in particular:

- 1. Amend the Law 4447/2016 with regards to the special spatial plans that refer to environmental degradation and protection from natural disasters for the wildland-urban interface areas, to take into account the protection of infrastructure, the safety and security of the population and the resilience of the landscape of these areas to fires.
- 2. Accelerate the completion of the Forest Maps and Forest Cadastre national projects









General Secretariat of Civil Protection

The General Secretariat for Civil Protection (GSCP) has to contribute to the management of landscape fires in the new system in cooperation with the LFMO with regard to:

- 1. The central operational coordination of the actions of all the actors involved in all phases of the landscape fire management cycle.
- 2. The operation and coordination of the incident management system (NIMS/ICS) in the design of which landscape fire management will be integrated.
- 3. The definition of the conditions and the implementation method for organizing preventive removal and eventual evacuation of population in the event of uncontrolled fires in cooperation with LFMO, Local Municipalities, Fire Brigade, Forest Service, Ambulance/Emergency Services and Police.









Local Municipalities-Administration

For the Local Municipalities-Administration it is proposed to:

- Contribute to the development of a central and unified database of an Integrated Information System (IIS) of civil protection with the equipment, tools and personnel of all stakeholders involved operationally in landscape fire management.
- 2. Regulate by law the elaboration of integrated local fire protection plans by the local authorities at municipality level in cooperation with all involved stakeholders.











Ministry of Rural Development and Food

The Ministry of Rural Development and Food shall contribute with the following main action:

- Establish a national rural development plan, which will foresee and provide real and substantial incentives for the preservation and reinforcement of traditional activities in the countryside and forests (logging, resin, honey production, non-wood forest products, etc.) within the framework of the environmental dimension of the Common Agricultural Policy (CAP).









Civil Society

- Create incentives for enhanced involvement of the local population to protecting forest and rural areas through the development of compatible and sustainable economic activity, having ensured a safe and secure environment for such activities.
- 2. Raise awareness and enhance the active participation of citizens in the overall improvement of fire prevention and fire safety and to systematically raise their awareness aiming to increase their participation and cooperation with the teams of volunteers.











Volunteers

Summary:

- Set up a single/common governance system for volunteers at central, regional and local level, focusing to their certified training, the rules of coordination with the Fire Brigade and Civil Protection, and addressing the issues related to their equipment, employment, liabilities and insurance.











Revitalization of rural and forest areas (1)

It is recommended to initiate a public and parliamentary debate about economic measures, including tax incentives, that would help to revive forestry, agriculture, livestock farming, etc., which will help to intensify the employment of local human resources for the production of food, forestry products, renewable energy sources, landscape management, including conservation and protection of cultural heritage, while at the same time reducing the "fuel load" and thus the fire hazard.











Revitalization of rural and forest areas (2)

Such a public and parliamentary debate could lead to develop visions and plans for the socio-economic development of the rural space of the country strengthening environmental protection and the safety of citizens at the same time.

The creation of incentives should be part of a specific regional development plan aiming to strengthen the "Green Economy" or "Bioeconomy", which could lead to the creation of "green jobs" in the forest and rural areas, offering alternative positions in the labor market.











Website of the Committee, including the download of the report:

http://gfmc.online/allgemein/press-release.html

Contact

epitropiy60@gmail.com





