Greek countryside becoming more inflammable

Kathimerini speaks to Johann Goldammer, an international fire expert who heads the Global Fire Monitoring Center

BY GIORGOS LIALIOS *Kathimerini*

Investing in more water-dropping aircraft and fire trucks will not bring the desired results in Greece. Authorities should rather change their model of forest management, placing more emphasis on prevention and reinforcing the role of the forest service, Johann Goldammer, an international fire expert who heads the Global Fire Monitoring Center, tells Kathimerini in this interview.

Goldammer, who led the scientific committee tasked with investigating the underlying causes of the 2018 Mati tragedy and submitting proposals for reforming Greek fire protection, says

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that attention must be given to urban sprawl into forest landscapes, as well as reviewing the types of vegetation and building regulations.

The fire ecologist also calls for the greater engagement of civil society in fire prevention and fire risk management.

– What are your first thoughts regarding what has been happening in Greece over the last week or so?

The fires have been predictable. Greece has three types of landscapes, which are increasingly threatened by wildfires. First, the natural landscapes, for instance remote natural mountain forests, largely uninhabited and far away from cities and villages. Historically, these forests were only occasionally affected by fires. Today and in the future, the wildfire risk is increasing due to more recurrent and severe droughts.

Second, the cultural landscapes, that were cultivated over millennia, are increasingly abandoned as a consequence of the rural exodus: Never in history before today have the cultural landscapes of Greece have been so much neglected by decreasing land cultivation. Never in history has so much burnable vegetation been available to be consumed by uncontrolled wildfires.

Third, rural villages and farmsteads as well as the peri-urban areas, including industrial sites that are close to highly flammable vegetation. We saw this in 2018 in Mati and again this year in other suburbs of Athens.

- Let's start with those peri-urban areas. What action should be taken to secure them?

Urban planning is necessary and needs to be linked to landscape planning in the interface between open land and urban areas. These areas, like Mati or where the recent fires in Athens took place, are places that are less densely covered by houses, infrastructure, concrete and asphalt and are surrounded by gardens and the typical Mediterranean shrublands.

People enjoy commuting to green suburbs because they provide better living conditions than the overheated cities. When living in such an area, one has to consider the wildfire risk. During heatwaves and droughts this wonderful scenery becomes flammable and potentially a deadly trap, like Mati. Civil society – the homeowners,



Firefighters are seen trying to contain a massive forest fire near the village of Kamatriades on Evia, on the night of Tuesday, August 10.

landowners and inhabitants – should be aware of the wildfire risk and therefore have the responsibility to actively contribute toward reducing the risk of wildfires that threaten their properties and security. In in their own interest, they should take care of the land around their houses and villages in order to reduce flammability.

Let us remember 30-40 years ago, when electricity, gas and oil were not common, people used every stick of wood for heating and cooking. The land was intensively cultivated and grazed by domestic animals. There was much less vegetation to burn by wildfires as compared to today. We must look back, learn from these traditional cultural practices and take precautionary measures to protect our properties and villages.

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– Should the state prohibit already burnt mixed areas from being rebuilt?

There is a difference between the threats of certain natural disasters. For example, in Germany, there is an ongoing discussion about the settlements which had been hit by floods some weeks ago – if they should be rebuilt or abandoned, because the risk of extreme weather events will increase. Theoretically, it is possible to protect them with walls, dikes and other technical measures. However, these areas will remain endangered. Thus, there is a lively discussion in Germany whether these settlements should be rebuilt – and subjected to similar flood events in future.

When it comes to fire risk, a village that has been burned can be rebuilt without problems. What needs to be reconsidered is the intensive management of vegetation inside and around the village, like bushland and forests,

in order to keep the village safe. Additionally, we know that in fire situations, there are occasionally flying "spot fires," which can be transported by strong winds over distances of up to several hundred meters. If they hit a wooden roof, even a house located inside a village could catch fire. Therefore, houses should be rebuilt or reconstructed in a way that they will become less flammable, with more protected roofs, doors and windows. In Mati, we saw that some individual houses survived inside the inferno because they were newly and safely constructed.

– Should we talk about a change in building regulations?

Let us look to places like California or Australia, where the houses are predominantly built using wooden material. They have fires every year. Now even the USA is considering changing the building regulations, even though imposing building restrictions in the US is not so easy, as it is a matter of restricting liberalism and freedom. However, we need to adjust the way we are living for our own safety.

In Greece, there is the example of earthquake-resistant building codes that are accepted by society. However, there are not adequate regulations addressing other risks like wildfire. It is time to rethink.

Proactive evacuations

– In the recent fires in Greece, there were a lot of proactive evacuations. This contributed to zero human losses but also met with scientific criticism. What do you believe?

This discussion is relevant in many places globally. The idea of self-defense requires preparation. If a village is completely unprepared, full of flammable material, inhabited mostly by old people, evacuation is the right thing to do. However, if an area is prepared and people have the awareness of how to protect their houses and lives, then they could provide assistance to the fire service in defending their properties. In many countries, the fire services are exclusively based on volunteers.

- Can you give an example?

Germany has 1.3 million volunteers. Professional fire and rescue services exist only in cities over 100,000 inhabitants, and not at all in rural areas. This means that volunteers more or less exclusively handle the task of fighting fires in the rural landscapes.

In Central and Northern European countries, fires are only now becoming a problem – we did not have these problems over the last half century. This means we also need to adjust.

In the case of Greece, if the flammability of the landscape continues to rise because nothing is done, airplanes and big fire trucks will never be enough to solve the problem. Look at California, for example. This state has fire management capacities, which are considered to be the best in the world. However, these days even Californians cannot control the fires in the bushlands and forests – despite the fact that they have a large fleet of firefighting aircraft and well-equipped and trained ground forces.

Prime Minister Kyriakos Mitsotakis said that the situation in Greece is like a powder keg that exploded and could not be controlled. He is right. The conclusion: The powder keg has to be dismantled before the fire occurs.

– What surprised you the most when you were studying the case of Greece as head of the committee back in 2018? I was not surprised because these were known facts.

There are many players, many institutions that have a partial role in fire management – from precaution to fighting. I was aware about the fact that in 1999 the responsibility for forest fire fighting was shifted from the forest service to civil protection.

Globally, we think that fire management should be primarily a responsibility of the landowner or manager, which in Greece, in the case of forests, is the forest service. Of course, in extreme situations, the forest service may be overwhelmed and assistance by civil protection, even the army, will be needed.

Since 1999, the key problem in Greece is that the forest service has been weakened by restrictions in its institutional mandate and the finances required to adequately perform the necessary management services, including fire protection.

– Why are governments in Greece and elsewhere so reluctant to change their approach?

In many countries – not to say in most countries – the main emphasis is placed on strengthening the response system by enhancing firefighting capabilities. Professional landscape fire managers, supported by the scientific community, recommend focusing on increasing the resilience of society and landscapes to fires.

This is an approach that only a few countries followed – for instance Portugal. The government created an agency similar to the one we recommended

for Greece. Portugal is now prioritizing fire prevention. This is reflected in a shift in investments. This approach includes a number of tools, like intensifying grazing in order to reduce forest fuel, to ask for intensive forest management and the inclusion of civil society in fire prevention and fire risk management. Such decisions require a long-term approach.

During my work in Greece – by the way, my first involvement in fighting fires dates back to 1985, when I supported the Hellenic Army and Navy in controlling wildfires on Thassos island – I heard that "Greek people think that because they pay taxes it is the government's responsibility to

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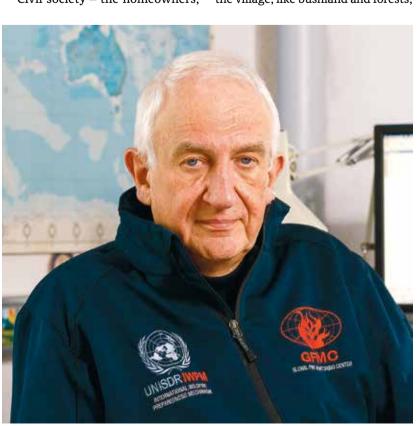
take care of everything." However, no government in the world can manage and protect all the lands. We need to encourage the active participation of civil society to take responsibility. This will require some time to evolve.

Scientists provide the best knowledge and the best science. They don't interfere with politics. I can only say that political decisions should be based on science. Globally, we see that the gap between the scientific recommendations and the political decisions is still wide. The handling of the Covid-19 pandemic has shown that many governments, like the governments of Greece and my home country Germany, have based their political decisions in handling the pandemic on the best science. This decision may guide us in handling environmental and humanitarian crises in future.





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