

Forest fire protection plan

of the NILEAS Olive Producers' Group

Chora, Messinia - Greece

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History

The plan was developed based on the experience gained after the wildfire of July 25, 2007 that started by the village Metaxada of the Municipality of Nestor, in Messinia, Peloponnese. The plan (Figure 1) was completed, in the form described below, in early 2008.



Figure 1. Forest fire protection plan of the NILEAS Olive Producers' Group

The plan was implemented partially for the next fire that started a month later, on 24 August 2007, under critical fire weather conditions. The new fire originated near the same village and the fire front moved westwards. The cause was probably premeditated arson. The example of the group of producers with agricultural tractors who participated in the previous fire, this time mobilized many more farmers with tractors and agricultural vehicles with sprayers. It is estimated that the total number of tractors was over forty and the number of other vehicles over fifteen.

The participation of all these people and the efforts they made until the morning resulted, in spite of the extreme conditions, in the containment of the fire and the prevention of its spread west of the road axis Metamorphosis - Chora and the rural road Agia Kyriaki - Chora. If the fire had continued westwards due to the difficult gorges, it would have reached the sea and the damage to forest and agricultural crops would have been enormous. A decisive factor in the successful response, was the placement by the municipality (according to the plan) of fire hydrants of the type used by the Fire Service, on boreholes that provide water for irrigation. This achieved quick supply of water to the spraying machines. Also, the voluntary participation of citizens who had trucks with water carrying capacity, who carried water to the firetrucks so that they would not have to move away from the fire front to refill, increased firefighting effectiveness

After this experience, the project was further enriched and our assessment is that it can significantly contribute to the immediate and effective response to potential fires in the future, which due to climate change will be more frequent. It is noted that in the second fire of 24 August the contribution of the Fire Service to control fire spread was minimal compared to the efforts made by the volunteers.

In mid-September 2007, the Mayor of Nestor verbally requested from the NILEAS Producers' Group to submit proposals for acquisition of fire infrastructure by the Municipality. Our proposals were submitted through a letter to the Mayor and the Municipality was also informed about our fire protection plan, which we proposed to be adopted by the municipality, enriched and implemented under its responsibility and with our full assistance. Unfortunately, in the end this did not happen.

In the letter NILEAS proposed that the consultation should start in February 2008 and that a preparedness exercise should be held in May, which also did not happen.

Unfortunately, the project gradually fizzled out due to lack of response and participation, mainly because we did not have any fires in the following years. A second reason was that there was no provision on the part of the local government (prefecture, municipality) to cover losses suffered by producers during the fire fighting.

What we are now (2024) implementing is training of the volunteer group of NILEAS on how to act in case of fire and how to mobilize when it happens (Figures 2 & 3).



Figures 2 & 3. Forest fire protection training at the offices of the NILEAS Olive Producers' Group

Objective

The utilization of the existing infrastructure of the NILEAS Olive Producers' Group with the aim of immediate reaction to a possible fire that may occur in forest or agricultural land within or outside the boundaries of the Group's farmland. Knowledge of the area, the possibility to access with tractors even in the most difficult areas, and the good use of boreholes and irrigation networks are the strengths of the plan.

Resources

The boreholes and irrigation networks, water storage tanks in the agricultural plots, mobile fire-fighting equipment and agricultural tractors with sprayers belonging to the members of the NILEAS group.

Definitions

Fire Safety Coordination Team: Volunteer members of the NILEAS group who are responsible for implementing the plan in the event of an emergency. The team consists of three producer members of the NILEAS group.

Fire Safety Team Leader: Has the responsibility of coordinating the team with those participating in the fire protection plan.

Deputy Fire Safety Team Leader: Replaces the leader when he/she is absent.

Agricultural tractor and sprayer operators Team: Volunteer team members who have agricultural tractors with mounted or trailed sprayers, which will be used as fire-fighting vehicles in the event of a fire. The whole team is under the supervision of the fire safety team.

Technical adviser: A member of the team who, by virtue of his profession, has the necessary knowledge of irrigation pumping units and irrigation and fire-fighting equipment.

Organizational infrastructure.

- 1. The irrigation boreholes that belong to the members of the NILEAS Fire Protection Unit are marked on an orthophoto map with a red circle (fire protection plan file No. 1). The path of a fire truck to approach each of these boreholes is also marked on the map. On the back side of the map, information on the accessibility for a fire engine and whether there is a fire hydrant is recorded. In the same way, water storage tanks located on parcels of land that can be used to refill agricultural sprayers are also recorded.
- 2. The orthophoto maps of the parcels that are irrigated through a pipeline and are located near forest areas, are collected (fire protection plan file No. 2). The orthophoto map shows in red the course and end of the pipeline. On the reverse side of the orthophoto map, information on the accessibility of the point by a firetruck, agricultural tractor or pedestrian is recorded.

A 2-inch switch with a quick disconnect similar to that used by the Fire Service, shall be placed at the end of each pipeline.

3. Collect in a file (Fire Protection Plan File No. 3) the contact details of the fire safety Team members, those of the farm tractor operators team members and the mobile and landline telephone numbers of all the team members. Also, collect useful telephone numbers of all the possibly involved local authorities of the first and second level of the Ministry of Public Works, the Forest Service Office, the Police Offices, etc.

Duties of the fire safety team:

- Brief the Fire Service about the team's plan.
- Communicate with the Fire Service station at whose disposal the fire team will be available in the event of a fire.
- Communication with the members of the fire team.
- Communication with producers (owners of boreholes and water storage tanks).
- Contact with all members of the NILEAS Olive Producers' Group.
- Communication with agricultural tractor operators.
- Training of all parties involved prior to the summer season and in any modification of the plan.
- Communication with the technical advisor for information or materials that will be needed.

Duties of the Fire Safety Team Leader:

- Ensures delegation of responsibilities to the members of the Fire Safety Team
- Is responsible for good coordination of all parties involved.

- Ensures that all parties involved are trained prior to the summer season and about any modification of the plan.
- Ensures that fire protection files 1,2 and 3 are updated when there are changes.

Duties of the team of agricultural tractor operators:

- They have their sprayer full of water and suspended on the agricultural tractor.
- They follow the instructions of the Fire Service and the team leader in case of a fire.
- Under the guidance of the Fire Service they use the ability of the agricultural tractors to approach difficult areas to contain the fire.
- Under the guidance of the Fire Service and the leader, they patrol the fire perimeter to prevent reignitions.

Duties of borehole owners.

- If they are notified by the fire safety team, they must go immediately to their fields.
- Under the guidance of the leader, they activate the pumping units and the water networks (taps, etc.).
- They ensure that firetrucks and agricultural tractors are refilled.

In case of a wildfire:

- If the team becomes aware of a fire or is notified by the Fire Service, the plan is activated under the responsibility of the leader.
- They communicate with the Fire Service, get information on intensity, direction, as well as supply points that the Fire Service may need.
- They immediately inform borehole owners located in the potential fire area and request their immediate assistance.
- With the guidance of the fire team members, the above ensure that the fire trucks' refilling points are immediately activated and water is transported through the pipelines to where it is needed.
- They immediately transport the fire-fighting equipment and connect it to the pipelines.
- immediately inform the members of the agricultural tractor operator team and give them instructions on the points to go to, after consultation with the Fire Service.
- Maintain constant communication with the Fire Service to ensure efficiency and avoid any accident.

Periods of high risk for fire starts:

- When the National Weather Service announces that the weather conditions are going to favor the occurrence of fires, the whole Group under the responsibility of the fire safety team is put on alert:
 - Agricultural tractors are supplied with fuel, sprayers supplied with water and mobile phones are on around the clock.
 - Surveillance of the area from points with good visibility by members of the NILEAS Olive Producers' Group.

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