Co-funded by
the European Union

Project Result 3:

Mid-term Impact Assessment of the Training Package During Fire Season

NATIONAL REPORT CYPRUS

Project number: 2021-1-DE02-KA220-ADU-000028430

Table of Contents

Executive Summary 3

Introduction: 4

Description of Participants 6

Presentation of Main Findings 8

Factor 1: The survival rate of communities: 8

Factor 2: The severity of the fires in the communities: 11

Factor 3: The survival rate of animals in the communities: 14

Factor 4: The material loss: 16

Factor 5: The confidence of the participants when threatened by the fires: 18

Discussion and Conclusion: 21

Recommendations: 23

Appendix: 24

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Executive Summary

The National Report of Cyprus for the “Mid-Term Impact Assessment of the Training Package During Fire Season” compile the study’s results during 2023’s fire season. The history of forest fires in Cyprus dates back decades, with natural and human-induced factors contributing to their occurrence. The study compares the results from a cohort of 40 trainee participants and 40 non-trainee participants, with similar socioeconomic and geographic backgrounds. The results positively impact the trainees’ confidence, readiness, and preparedness after the training package of the project. This outcome underscores the efficacy of the project's training sessions in enhancing individuals' abilities to address fire-related situations effectively. However, trainees’ proactive stance and non-trainees’ concerns about fire preparedness education to the wider rural population are still vital. In light of these insights, the report provides targeted recommendations to reinforce community resilience in the face of wildfires. These recommendations encompass multifaceted approaches, including the launch of community engagement campaigns to encourage broader participation, the implementation of supplementary customized hands-on training sessions, initiatives for public education, the provision of psychological support, and the strategic establishment of fire suppression points to curtail response times. By embracing these suggestions, communities can better equip themselves to navigate the challenges of wildfires and further fortify their capacity to respond effectively.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Introduction:

The "Mid-term Impact Assessment of the Training Package During Fire Season" presents a comprehensive analysis of the effectiveness and outcomes of the Forest Fire Protection training package aimed at enhancing preparedness and response strategies during the fire season in Cyprus, in 2023. The National Report in Cyprus concentrates on the findings of the impact study on the state of readiness and resilience of the rural populations. From this report specific stakeholders in rural – policy making will be benefitted, as they will have insights of participants from the assessment of forest fires in their community during the summer period of 2023. The report will also be disseminated through the generalist fields on the web to the public through press. Furthermore, the report delineates the upscaled training modules developed in prior stages of the project, in a study comparing a cohort of 40 trained participants against an equivalent number of non-trained individuals. The comparisons are drawn from communities sharing comparable socioeconomic and geographic profiles, a distinction made at the inception of this project result.

The history of forest fires in Cyprus dates back decades, with natural and human-induced factors contributing to their occurrence. Anthropogenic activities such as discarded cigarette butts, poorly managed agricultural practices, and deliberate acts of arson have played a significant role in igniting these fires[1]. The devastating consequences have resulted in habitat loss, soil erosion, and the release of large amounts of carbon dioxide into the atmosphere[2]. Recognizing this issue's urgency, the Cypriot government has taken proactive measures to enhance forest fire protection and management. The Department of Forestry, under the Ministry of Agriculture, Rural Development and Environment, plays a pivotal role in implementing policies and strategies to prevent and mitigate forest fires[3]. Some of these

[1] Xanthopoulos, G. (2005). Forest Fires in Cyprus: Environmental and Socioeconomic Impacts. In Forest Fires: Behavior and Ecological Effects (pp. 209-221). Elsevier.
[2] Arianoutsou, M., & Ne'eman, G. (2002). Post-fire recovery of plant communities in a Mediterranean ecosystem in Mt. Carmel, Israel. Israel Journal of Plant Sciences, 50(sup1), 95-104.
[3] Department of Forests, Republic of Cyprus. (2023). About Us. Website Link: https://www.moa.gov.cy/moa/fd/fd.nsf/fd93_en/fd93_en?OpenDocument (Access Date: 28/09/2023)

strategies include firebreaks, surveillance and early detection, public awareness and education, collaborations, international support and legislation and enforcement[4].

Despite these efforts, the challenge of forest fire protection remains complex and dynamic. Climate change introduces uncertainties, altering weather patterns and increasing the frequency and intensity of wildfires.[5] Investing in a robust training package becomes paramount as wildfires continue to pose significant threats to ecosystems and human lives. The Forest Fire Protection project impact study assessment delves into the tangible impact of the training, shedding light on its contributions to minimizing fire-related risks and optimizing resource allocation. Through rigorous evaluation and data-driven insights, this report offers a nuanced understanding of the program's achievements and areas for improvement, providing key stakeholders with valuable information to refine strategies for future fire seasons.

The Forest Fire Protection project training aimed to enhance these strategies to evolve to address these changing conditions, focusing on rural adult citizens. The activity of the impact study has assessed the following factors: the survival rate of their communities, the severity of the fires in their communities, the survival rate of their animals, the material loss, and the confidence of the participants when threatened by the fires. These have been assessed in 4 communities exposed to the Project's training and 4 communities not exposed to this training, with a similar socioeconomic and geographic profile.

In conclusion, forest fire prevention in Cyprus is a multidimensional endeavor that combines environmental conservation, public safety, and sustainable land management. The introduction lays the foundation for a comprehensive exploration within the subsequent chapters of the "Mid-term Impact Assessment of the Training Package During Fire Season." As the reader progresses through the forthcoming sections, a holistic comprehension of the program's execution and outcomes will be gained. These upcoming segments contribute to a well-rounded evaluation of the training package's efficacy. Engaging in insightful discussions

[4] Cyprus Civil Defence. (2020). Preventing Forest Fires. Website Link: https://www.moa.gov.cy/moa/fd/fd.nsf/fd93_en/fd93_en . (Access Date: 28/09/2023)
[5] IPCC. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

and deriving actionable recommendations, this report aims to facilitate informed decision-making and improve strategies to better prepare and respond to future fire seasons.

Description of Participants

Trainee Participants

A total of 40 participants have been trained during the project activities. The training was held under physical piloting activities with the course content developed in the second project result. It was a blended learning of total suggested time to be 18 hours of studying. The trainees who actively participated in these training packages were exposed to strategies for self-protection, readiness, and preparedness. Also, expert trainers in firefighting, facilitated workshops in the pilot training activities.

Figure 1: Pilot training images

The participants trained come from diverse occupational backgrounds and are located in communities around the capital of Nicosia including Akaki, Astromeritis, Orounta and Kato Moni villages. Sectoral work examples include the village community leaders and people working in each community council. The occupational backgrounds vary, including civil servants, private employees, administrative assistants, farmers, educators and teachers, researchers, and people working in the local fire stations. The age groups range accordingly by 40% are 51-70 years old, 35% are 31-50 years old, while a smaller percentage of 12.5% are 18-30 y/o and another 12.5% are over 70 years old.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

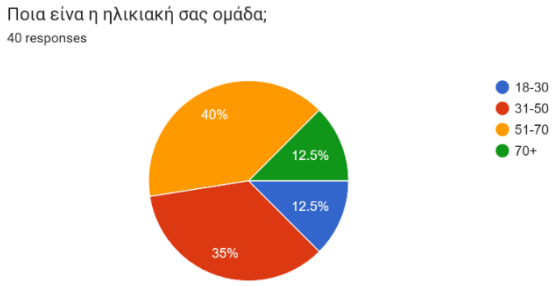

Figure 2: What is your age group?

Non-Trainee Participants

A total of 40 participants have been trained during the project activities. The non-trained participants come from diverse occupational backgrounds and are located in communities around Limassol, Paphos, and Larnaca, including Pirgos, Ora, Livadia and Agios Pavlos villages. Sectoral work examples include the village community leaders and people working in each community council. The occupational backgrounds vary, including civil and private servants, administrative assistants, farmers, educators and teachers, researchers, and people working in the local fire station. Non-trainee participant's age groups vary from 35%, lying in a spectrum from 31-50 years old, 27.5% from 51-70 years old, 27.5% from 18-50 years old and 10% above 70 years old.

Figure 3: What is your age group?

Presentation of Main Findings

In general, trainees and non-trainee participants have scored mean values above 6 (out of 10) in the statements in all factors included in the survey questionnaires. An analysis and presentation of each factor has been made in the sections below.

Factor 1: The survival rate of communities:

The impact of the training on community survival rates and preparedness for forest fire emergencies is evident through higher confidence levels and awareness among trainee participants compared to non-trainee participants. The trainee participants felt more confident that their communities have adequate resources and support to handle a forest fire emergency (8.0 score), compared to non-trainee participants (6.0 score). Also, trainee participants were more aware of the national legislation on Fire Protection. Regarding where they get informed about potential wildfires in their area, trainees (8.6 score) and non-trainees (7.7 score) reached approximately close mean results, while trainee participants were slightly more confident.

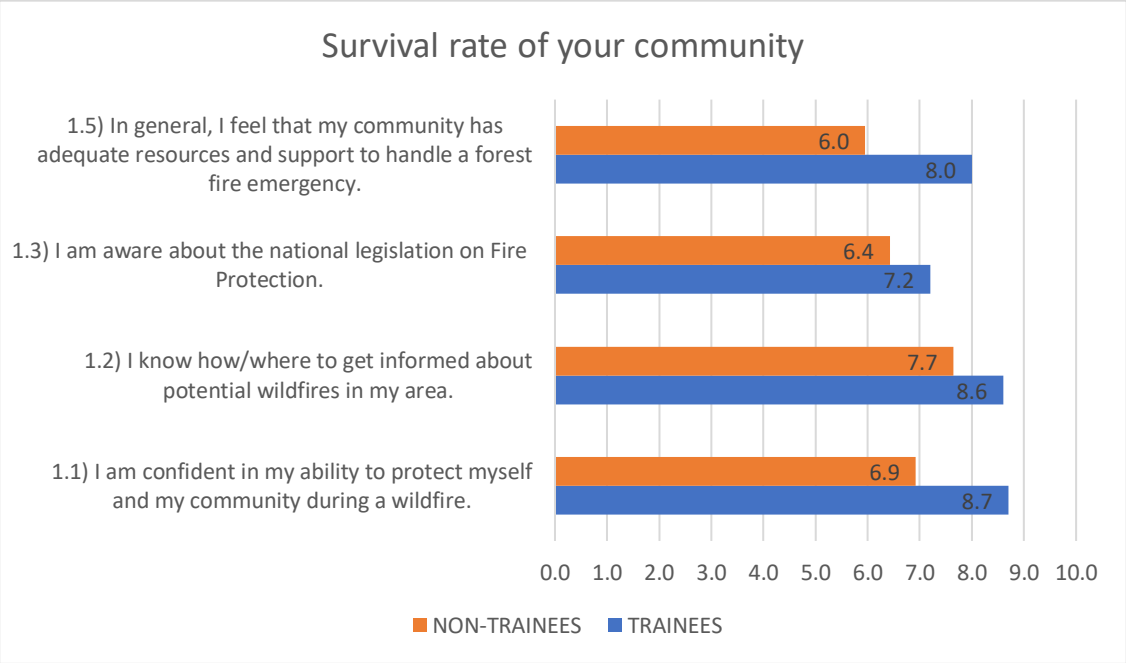

Figure 4: Calculated combined mean results of the community's survival rate-related questions.

Notably, trainee participants felt more confident in their ability to protect their community during wildfires (8.7 score) than non-trainee participants (6.9 score). In conclusion, the enhanced confidence, improved resource perception, and heightened awareness of legal

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

regulations observed among trainee participants underscore the effectiveness of the training in empowering communities to protect themselves during wildfires.

A distinct contrast emerges when considering the availability of safety equipment at participants' homes in the event of a fire. Notably, 57.7% of trainee participants expressed intentions to acquire such equipment, in stark contrast to the 20% of non-trainee participants with similar plans. A smaller proportion of trainees reported lacking safety equipment (10%), whereas a larger percentage of non-trainees indicated the absence of such provisions (40%). Interestingly, the numbers are more closely aligned when examining those already possessing safety equipment that have already equipped their homes (32.5% of trainees and 40% of non-trainees).

Additional Comments:

Trainees: The trainee participants expressed their community's fire safety concerns, citing a small emergency fire truck while they prayed that fire incidents would not occur at all. They have a list of volunteers equipped with machinery, emphasizing an enhanced need for fire trucks. Despite having a fire station and feeling more prepared after seminars, they acknowledge that outcomes depend on the fire type. They also recognize the importance of preventive measures against forest fires and believe their community has taken adequate positive steps after the training. Overall, they stress the importance of community preparedness in dealing with crises and emphasizes the role of education and information in effectively addressing potential fire threats.

Trainee Comments:

"After this training, I believe that my community has taken enough measures for awareness and prevention." (Private Servant, age 51-70)

Non-Trainees: According to the non-trainees' survey, the communities take fire safety seriously with various measures in place, such as water tanks and water intake points, along with annual seminars in collaboration with the Fire Service to educate residents. However, some participants stated that their community is lacking fire trucks. Other participants stated that they cooperate with neighboring communities and have a well-prepared fire protection plan awaiting funding. A volunteer firefighting team, fire-fighting vehicle, and light system

contribute to readiness, although outcomes depend on fire type. Overall, the community is proactive and prepared, but funding challenges persist.

The trainee and non-trainee participants share concerns about their community's fire safety, highlighting the lack of emergency resources such as small fire trucks and fire stations. However, the trainee group seems more proactive in seeking knowledge and preparedness, as they mention attending seminars and feeling more informed afterwards. They also emphasized the importance of preventive measures against forest fires. In contrast, the non-trainee group's approach relies more on hope and prayer for fire prevention. Both groups acknowledge the significance of community preparedness and the need for fire trucks, indicating a shared understanding of the importance of resources in dealing with potential crises. The fact that a huge proportion of trainee and non-trainee participants are equipped with fire safety tools shows their awareness of possible danger and risk.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Factor 2: The severity of the fires in the communities:

Even though the training could not affect the severity of fires in the communities, the results reveal significant results. More trainee participants know where to get informed about the severity of fires. Regarding the role of forests in the environment and the need to manage and protect them, trainees (9.3 score) and non-trainees (9.4 score) have similar levels of understanding. Similarly, it is represented that both trainees (8.9 score) and non-trainees (8.4 score) are aware of some preventive measures that can be considered to reduce the risk of wildfires. Overall, the severity of fires in communities is acknowledged from these three statements from both participant groups that have the same level of comprehension about the effects of fire on the environment.

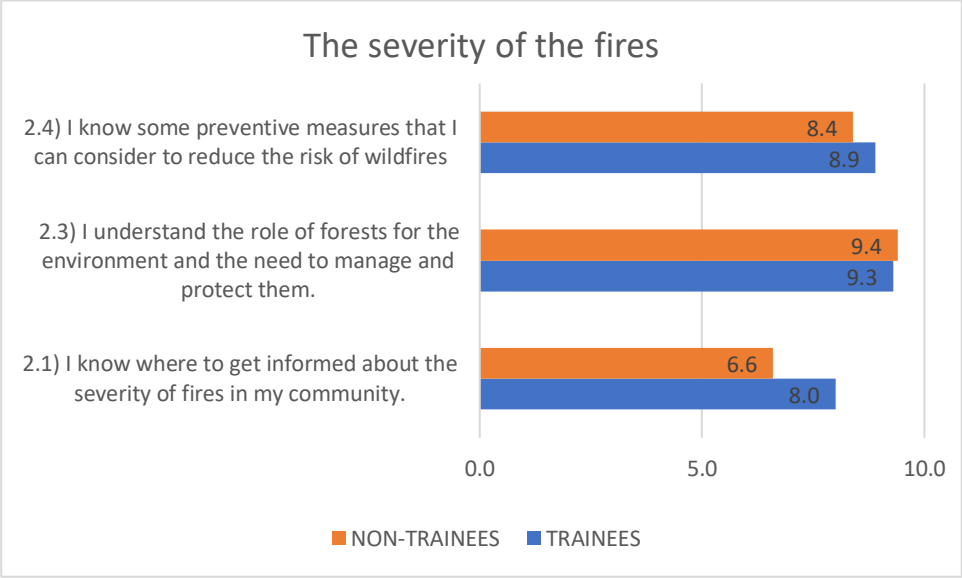

Figure 5: Calculated combined mean results of the questions regarding the severity of the community fires.

It is worth noting that 77.5% of trainees, compared to 47.5% of non-trainees, know how to classify forest fires according to the fire danger rating. Also, 12.5% of non-trainees mentioned that they do not know how to classify fires compared to 0% of trainees. However, 22.5% of trainees mentioned that they do not know but have heard about it, while 40% of non-trainees indicated that even if they do not know, they have heard about it.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

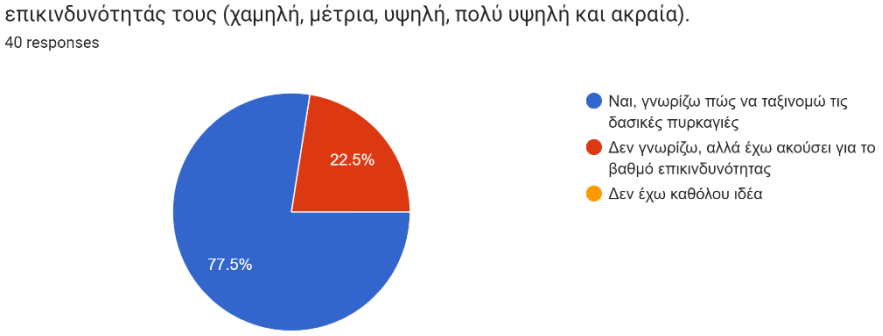

Figure 6: Trainees Question - 2.2) I know how to classify forest fires according to the fire danger rating (low, moderate, high, very high, and extreme)..

- *Blue = Yes, I know how to classify forest fires.*
- *Red = I don't know, but I have heard about the rating.*
- *Yellow = I have no idea at all*

Figure 7: Non-trainees Question - 2.2) I know how to classify forest fires according to the fire danger rating (low, moderate, high, very high, and extreme).

- *Blue = Yes, I know how to classify forest fires.*
- *Red = I don't know, but I have heard about the rating.*
- *Yellow = I have no idea at all*

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Additional Comments

Trainees: The trainee participants expressed their concerns about fire severity in communities, particularly emphasizing the need for additional measures to counter uncontrolled burning, which directly threatens homes in vulnerable geographic areas. They recognized the serious consequences of wildfires on trees, wildlife, and the environment as a whole. After understanding wildfires' nature and environmental implications, participants discussed the protective measures they learned to mitigate fire risks and the crucial role of forests in environmental preservation. The discussion highlighted the multifaceted impacts of wildfires on communities, including the loss of human life and injuries, destruction of property and infrastructure leading to economic losses, and adverse effects on human and ecosystem health due to smoke and harmful emissions. This comprehensive understanding underscores the significance of proactive prevention measures to alleviate wildfires' far-reaching effects on communities and the environment.

Testimonial:

"After the training, I know some protective measures I can take to reduce the risk of a fire and the role of forests for the environment." (Local Government – Community Secretary, age 51-70)

Non-trainees: Non-trainee participants shared their insights on fire severity, highlighting the challenges they would face in a fire outbreak due to the distant locations of firefighting resources, often exceeding a 40-minute response time. They emphasized the psychological toll of fires on residents, their impact on attracting new inhabitants, and the disruption of livelihoods. The environmental devastation, loss of human life, and property damage were cited as significant consequences. Specifically, these fires were noted to be catastrophic for both the environment and individuals engaged in agriculture and rural occupations, such as farming and forestry. Orchards and olive groves were highlighted as being particularly vulnerable. The participants' comments underscored the urgent need for effective firefighting strategies and prevention measures to mitigate the extensive effects of wildfires on residents and the environment.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Both trainee and non-trainee participants expressed concerns about fire severity, acknowledging its far-reaching impact on communities and the environment. Trainee participants focused on measures to prevent and reduce fire risks, including controlled burning and the role of forests in environmental protection. They demonstrated an understanding of the concept of wildfires and their ecological implications, emphasizing individual responsibility for prevention.

On the other hand, non-trainee participants highlighted practical challenges in fire management, such as the limited accessibility of firefighting resources within a reasonable timeframe. They also delved into wildfires' psychological and economic consequences, including their influence on residents' well-being, community growth, and livelihoods. These participants stressed the urgent need for effective firefighting strategies to address these challenges.

Both groups recognized the catastrophic potential of wildfires, acknowledging their capacity to cause loss of life, property destruction, and environmental degradation. While trainees were focused on prevention measures and forest ecosystems, non-trainees provided insights into the real-world challenges communities face during fire emergencies and the broader socio-economic implications. In summary, trainees focused on proactive measures, while non-trainees highlighted the complex consequences and difficulties in managing wildfire events.

Factor 3: The survival rate of animals in the communities:

The training has affected the level of action participants took regarding the animals/pets of the communities. More trainee participants (8.1 score) than non-trainee participants (6.9 score) felt prepared to evacuate their animals/pets in a forest fire. Similarly, more trainee participants (8.2 score) compared to non-trainee participants (6.3 score) have taken steps to ensure the safety of animals/pets during a forest fire. In summary, the training has demonstrated a tangible impact on participants' proactive measures concerning community animals and pets, with trainee participants displaying both a higher sense of preparedness for evacuation (8.1 vs. 6.9 score respectively) and a greater commitment to ensuring their animals' safety during forest fire incidents (8.2 vs. 6.3 score respectively) compared to their non-trained participants.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

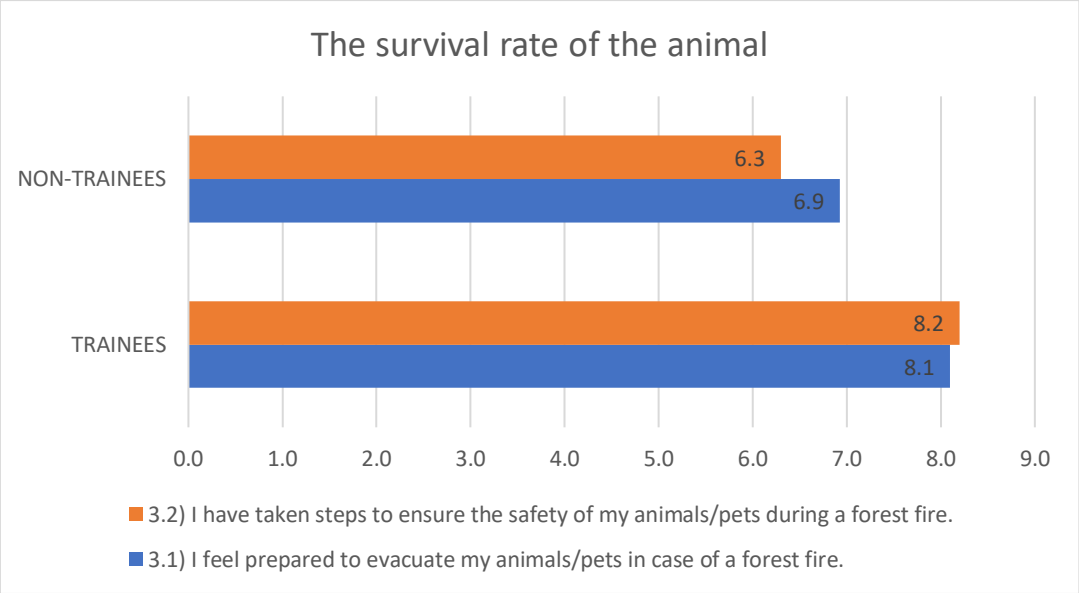

Figure 8: Calculated combined mean results of the questions regarding the survival rate of animals/pets.

Additional comments

Trainee: The trainee participants shared their insights on enhancing the survival rate of animals in their communities during emergencies. They emphasized the importance of creating firebreaks by cleaning the premises and providing suitable shelter options. They suggested relocating animals to clean areas for safety. They believed many individuals might overlook their pets due to anxiety and panic during such situations, highlighting the significance of raising awareness and prevention measures in addressing this issue. While acknowledging the challenge of moving animals to a different location, they described their preparedness with fire extinguishers, hoses, water tanks, and easily accessible cages. They also mentioned their intention to incorporate animal evacuation methods into their escape plans. Even though many of them personally didn't have pets, they expressed interest in obtaining information about how to assist animals during emergencies.

Non-trainee: The non-trainee participants discussed their approach to ensuring the survival of animals in their community in case of emergencies. They mentioned having fire extinguishers strategically placed around their house, hoses connected to outside faucets, and a water tank prepared for firefighting purposes. They have set up the animals' cages for easy access and mobility. Although the number of animals they own is small, they believe rescuing them is

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

possible. However, they admitted to lacking a formalized plan for emergency situations and acknowledged the challenges of relocating the animals to a different location. Despite the difficulties, they expressed their readiness to take the animals with them if needed immediately.

In summary, non-trainee and trainee participants recognized the importance of safeguarding animals during emergencies and shared some preparedness measures such as fire extinguishers and accessible cages. Trainees demonstrated a more proactive approach, suggesting more comprehensive planning involving cleaning premises, creating firebreaks, and incorporating animal evacuation methods into escape plans. This suggests that non-trainees can benefit from guidelines tailored through regular trainings and support.

Factor 4: The material loss:

This section refers to whether fire incidences that occurred during the fire season had caused material loss in the communities. Both trainee and non-trainee participants reported that their properties are well-prepared to withstand a forest fire (8.8 trainees & 8.1 non-trainees). Also, both trained (9.1 score) and non-trained (9.3 score) participants believed in the importance of taking precautions to reduce the risk of damage or material loss from forest fires. Similarly, trainees (8.9 score) and non-trainees (8.5 score) know what type of forest is closest to their homes and how fast a fire can spread and reach their homes. However, the data indicates a notable distinction in the proactive investment realm, with more trainee participants taking preventative actions to safeguard their properties from forest fires (7.9 score) than their non-trained counterparts (6.8 score). In summary, the findings collectively highlight the pronounced

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

influence of the training on participants' perceptions and actions, underscoring the role of preparedness in enhancing community responses to forest fire emergencies.

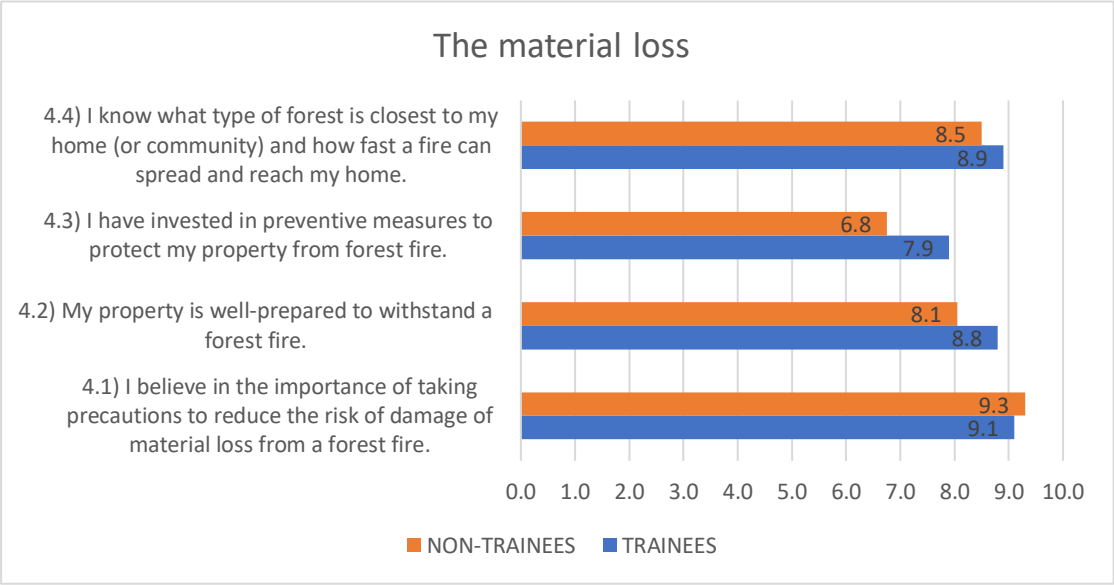

Figure 9: Calculated combined mean results of the questions regarding the material loss.

Additional Comments:

Trainee: The trainee participants expressed concern about the significant material losses caused by wildfires, particularly in terms of ecological damage to forests and wildlife. They acknowledged the dangers of wildfires and sources of ignition, emphasizing the need to recognize these risks. They also mentioned that forest fires can result in substantial material damage as they destroy forests and vegetation, leading to harm to natural resources and the environment. This damage can have adverse effects on the environment, economy, and human safety.

Non-Trainee: The non-trainee participants expressed grave concerns about the potential consequences of a wildfire, highlighting both material and environmental damages as immeasurable. They mentioned the destruction of properties, the devastation of local flora and fauna, and decreased goods production as possible outcomes. Some participants lamented the limited means they have left to protect against future fires and conveyed a sense of tragedy. They also emphasized the importance of timely management, such as cutting grass that comes into contact with house walls, to mitigate fire risks.

Both trainee and non-trainee participants shared concerns about the profound ramifications of wildfires, including environmental degradation and material losses. While trainees highlighted such disasters' broader ecological and economic impacts, non-trainees evoked a more personal and emotional connection, emphasizing the potential for immeasurable damage and a sense of helplessness. Despite differing perspectives, both groups underscored the critical need for proactive fire prevention strategies and immediate measures to mitigate risks.

Factor 5: The confidence of the participants when threatened by the fires:

The training package greatly impacts the participants' confidence when threatened by the fires. Trainee participants are more attentive to how to react in a forest fire (8.6 score) than non-trainee participants (6.0 score). In the case of a forest fire, trainee participants know the steps to take (8.4 score), whereas the non-trainee participants have a lower mean value (7.2 score). Regarding the participant's familiarity with the emergency plan, trainees (8.6 score) and non-trainees (7.7 score) participants have close results, however trainees seem to be slightly more familiar. Correspondingly, again regarding the emergency plan, trained (8.1 score) and non-trained (7.7 score) participants know where the fire safety zone is and potential safe meeting points in a fire incident. Both types of participants' ability to use firefighting tools and equipment is also very close (8.4 trained and 7.4 non-trained).

In summary, trainee participants exhibit heightened attentiveness and readiness for forest fire responses, evident in their proactive approach to reaction steps (8.4 for trainees vs. 7.2 for non-trainees) and familiarity with emergency plans (8.1 for trainees vs. 7.7 for non-trainees). Furthermore, the marginal difference in the ability to use firefighting tools and equipment

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

underscores the effectiveness of the training package in equipping participants with practical skills (8.4 for trained and 7.4 for non-trained).

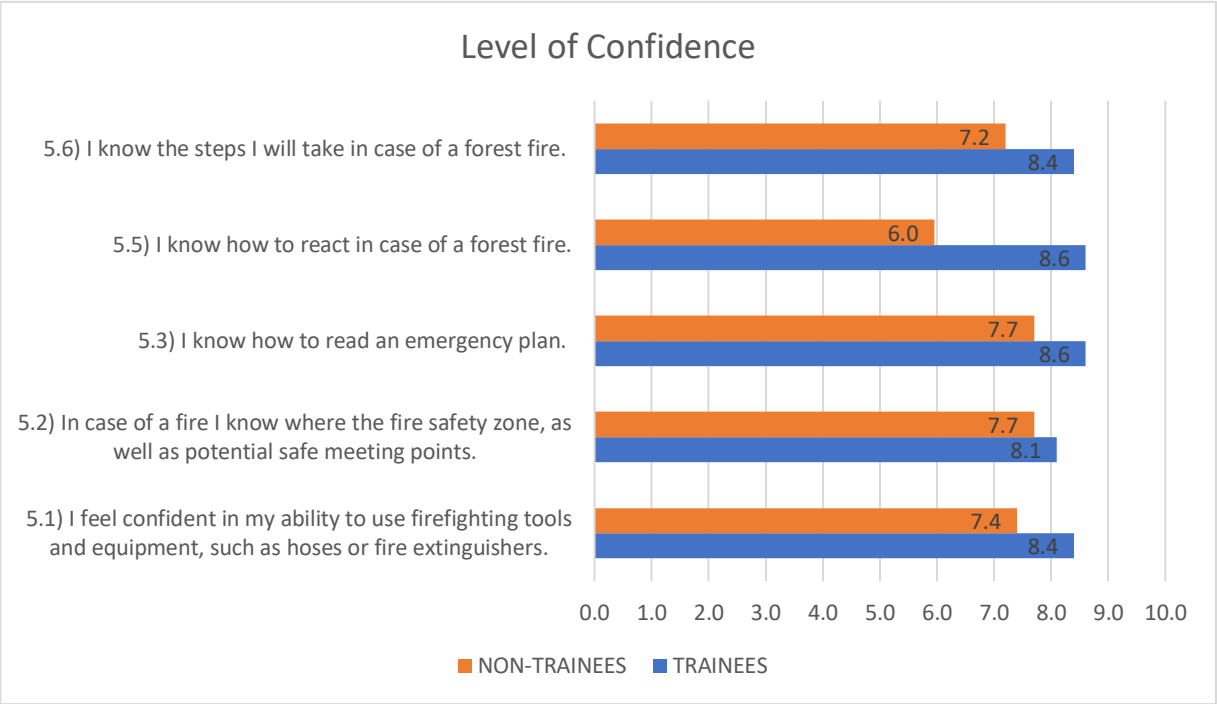

Figure 10: Calculated combined mean results of the questions regarding the level of confidence.

Additional Comments:

Trainees: Trainee participants who are experts in the field, mentioned that fire safety requires maintaining calmness, readiness for danger, and self-assurance. This confidence is achieved through a combination of two factors: information and education, along with the presence of appropriate resources and an escape plan. While they consider themselves more experienced, they acknowledge limitations in effectively dealing with fire situations.

Other participants who are not experts in the field mentioned that attending the seminars has enhanced their understanding of the importance of forests and how to protect themselves. They comprehended general procedures for handling forest fires in various situations and locations, including the significance of emergency kit items. They emphasized that fire management is crucial and should be undertaken by specialized and trained professionals. After the training, participants reported increased knowledge. Others recognized that a community's readiness level could be measured through factors like the existence and functionality of emergency plans, population training for emergencies, resource availability for disaster

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

response, and collaboration among different organisations and communities for effective crisis management.

Non-trainees: Generally, non-trainee participants stressed the importance of being intimately familiar with the village and the area where the fire unfolds. This becomes especially critical in regions characterized by mountains or semi-mountainous terrains. They proposed that those who reside permanently or own vacation properties in these areas should collaborate to transport volunteers to locations that might be unfamiliar to them or even unknown in the event of a fire. Other participants commented that especially when adverse winds are not a factor, it enables them to contribute more effectively to fire containment.

One participant referred to substantial expertise and confidence as a forestry professional. However, another participant commented that a lack of proactive engagement persists within their community. While a few individuals have shown interest in volunteering, the overall response has been limited. Despite participants' growing experience, non-trainees admitted to their limitations in efficiently handling fire emergencies. They emphasized the urgency of educating the general population about fire response procedures. Drawing from their own personal involvement in firefighting on multiple occasions, they emphasized the need to remain composed during fire suppression efforts.

In summary, these non-trainee perspectives underscore the existing challenges in community involvement, underscore the necessity of having a deep understanding of the fire's location, advocate for continuous public education, and stress the importance of maintaining a sense of calm amidst the intensity of firefighting activities.

Both trainees and non-trainees voiced similar concerns about community involvement when it comes to responding to fire threats. Both groups expressed disappointment in their communities' limited response to volunteering. They also agreed on the importance of local knowledge in firefighting, especially in areas with complex terrains. Both recognized the need for continuous education and training, with trainees highlighting specialized expertise and non-trainees stressing public awareness. However, a key difference emerged in the trainees' greater confidence due to their professional backgrounds, contrasting with the non-trainees' acknowledgment of their limitations. Overall, both groups emphasized the importance of preparedness, local understanding, and education in effective fire management.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Discussion and Conclusion:

After thoroughly considering all the main findings from the analyzed data, it becomes evident that the training, which closely adhered to FFP's trainer guidelines, positively impacted the trainee participants in terms of their confidence. The trainees who actively participated in these training packages were exposed to strategies for self-protection, readiness, and preparedness. As a result, overarching observations indicate a strong sense of recognition regarding the importance of environment and forest protection from both groups. This sentiment is particularly prevalent among participants who have invested time and effort in fostering fire prevention strategies. In conclusion, it is evident that experience and knowledge could improve someone's preparedness against wildfires.

The comments provided by both the trainee and non-trainee participants offer valuable insights into the Cypriot communities' perceptions of fire severity and preparedness. These perspectives highlight different aspects of different communities' fire approaches, shedding light on proactive measures and pressing concerns. The trainee participants demonstrated a positive attitude toward fire preparedness. They discussed their efforts to enhance community readiness, including the presence of volunteers, fire trucks, and a fire station. The impact of training on their awareness and understanding was evident, as they acknowledged the diversity of fire types and the importance of preventive measures. Their emphasis on collaboration, education, and proactive strategies underscored a holistic approach to mitigating the impact of potential crises. Conversely, the non-trainee participants presented a more apprehensive viewpoint. They expressed worry about their communities' ability to effectively manage fires, citing the challenge of distant suppression points as a potential hindrance to timely response. Their comments emphasized the far-reaching consequences of fires, ranging from psychological distress and discouraging newcomers to economic losses and environmental devastation. The particular concern for agriculture and the potential destruction of valuable orchards and olive groves underscored the economic implications of inadequate preparedness.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Both trainee and non-trainee participants highly valued material loss due to fire catastrophes during the fire season. The training affected trainee participants to invest in preventive measures to protect their property, while some non-trainee participants also invested. The training package notably impacts participants' confidence, attentiveness, preparedness steps, and practical skills in dealing with forest fires. However, its influence on understanding the emergency plan and familiarity with fire safety zones appears less pronounced, as both trained and non-trained participants showed similar results in these areas.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Recommendations:

To fortify community resilience against wildfires, a series of recommendations can be implemented, bolstering fire preparedness and safeguarding both life and property. To enhance community fire preparedness, it is recommended to establish a localized network of strategically positioned fire suppression points within the community. This initiative would reduce response times during fire incidents, minimizing potential damage and risks associated with distant suppression points. By placing these resources, the community can significantly improve its ability to effectively address fires, thereby increasing overall resilience and safeguarding residents, property, and vital agricultural assets. Another recommendation to enhance community readiness against forest fires is establishing a community firefighting fund. This fund could be created through collaborative efforts between local authorities, residents, and relevant stakeholders. It would ensure a sustainable financial resource for acquiring and maintaining firefighting equipment, such as fire trucks, tools, and protective gear.

To enhance animal survival during emergencies, the community could establish a comprehensive preparedness plan that includes creating firebreaks by clearing premises, ensuring access to essential firefighting tools such as fire extinguishers and hoses, and developing organized evacuation strategies for pets and animals. Raising awareness about the potential for panic-induced abandonment of pets and providing information on proper animal care during crises will contribute to a more resilient and compassionate community response.

Multiple approaches are also recommended to enhance confidence among rural citizens in fire response. Community engagement campaigns could be initiated to encourage wider participation. Tailored training programs for trainers/educators and the general public will help build skills and confidence. Moreover, regular simulated fire training initiatives could provide practical experience and guidance. Public education campaigns and psychological support will address knowledge gaps and emotional preparedness. Feedback loops will ensure continuous improvement, while recognition will motivate further engagement. Encouraging lifelong learning through ongoing education and training will solidify confidence in fire management efforts. By adopting these multifaceted strategies, communities can reinforce their collective resolve and knowledge, creating a stronger defense against the challenges posed by wildfires.

Co-funded by the European Union

This material has been created with the financial support of the European Commission. The contents of this material represent the exclusive responsibility of its authors and the European Commission is not responsible for the way that the contents of this information will be used.

Appendix:

Bibliography

Xanthopoulos, G. (2005). Forest Fires in Cyprus: Environmental and Socioeconomic Impacts. In Forest Fires: Behavior and Ecological Effects (pp. 209-221). Elsevier.

Arianoutsou, M., & Ne'eman, G. (2002). Post-fire recovery of plant communities in a Mediterranean ecosystem in Mt. Carmel, Israel. Israel Journal of Plant Sciences, 50(sup1), 95-104.

Department of Forests, Republic of Cyprus. (2023). About Us. Website Link: https://www.moa.gov.cy/moa/fd/fd.nsf/fd93_en/fd93_en?OpenDocument (Access Date: 28/09/2023)

Cyprus Civil Defence. (2020). Preventing Forest Fires. Website Link: https://www.moa.gov.cy/moa/fd/fd.nsf/fd93_en/fd93_en. (Access Date: 28/09/2023)

IPCC. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

Access to the Survey Data:

→ https://drive.google.com/file/d/1Egm89lmslMt5XjuWZGQTVoBF91wlq3PQ/view?usp=sharing

Piloting Images