



ROLE AND IMPACT OF COMMUNITY FIRE AUXILIARY GROUP IN LA TRINIDAD, BENGUET

Renato Jr M Flora

Graduate School, University of Baguio

Article DOI: <https://doi.org/10.36713/epra19903>

DOI No: 10.36713/epra19903

ABSTRACT

The Community Fire Auxiliary Group (CFAG) played a vital role in enhancing fire safety within La Trinidad by fostering community involvement, facilitating early detection of fires, and promoting education on fire prevention measures. The research aimed to assess residents' perceptions of the CFAG's effectiveness in three key areas: fire prevention, fire response, and community engagement, as well as its overall impact on their knowledge and practices regarding fire safety. Using a descriptive survey method, the study involved 380 respondents from Barangay Balili, Barangay Betag, Barangay Pico, Barangay Poblacion, Barangay Puguis, and Barangay Lubas-barangays that had established CFAGs. Data was gathered through surveys, personal interviews, and literature reviews. The findings revealed that La Trinidad residents generally viewed the CFAG positively, recognizing its effectiveness in preventing fires and improving response times during incidents. The CFAG successfully fostered a sense of collective responsibility among residents and effectively engaged them in fire safety initiatives. Additionally, residents reported feeling informed about fire safety protocols and confident in their ability to respond to emergencies due to CFAG training sessions. However, while there was strong agreement on the importance of these initiatives, the study highlighted a need for improved participation rates in training sessions and better information sharing within the community. To enhance the CFAG's effectiveness, it was recommended that the Bureau of Fire Protection (BFP) implement continuous training for CFAG members, increase accessibility to training sessions, collaborate with local organizations for outreach, conduct regular fire drills, distribute educational materials, engage community leaders for advocacy, and undertake longitudinal studies to assess the impact of these initiatives. These strategies were deemed essential for fostering a proactive and resilient community prepared for fire emergencies.

KEYWORDS: Community Fire Auxiliary Group, fire safety, fire prevention, fire response, community engagement

I. INTRODUCTION

Community Auxiliary Groups, also known as Community Emergency Response Teams (CERT) or similar organizations, play a vital role in enhancing local emergency response capabilities worldwide. The concept of community-based emergency response originated in the 1980s in Los Angeles, California, where the Los Angeles Fire Department developed the CERT program after experiencing several significant disasters. This initiative aimed to train volunteers to effectively respond to emergencies within their communities (Federal Emergency Management Agency [FEMA], 2021). Since its establishment, the CERT model has been adopted and modified by various countries, including the United Kingdom, Canada, Japan, and Australia, each adapting the program to meet their unique needs and contexts (United Nations Office for Disaster Risk Reduction [UNDRR], 2021).

In the Philippines, Community Auxiliary Groups are referred to as Community Fire Auxiliary Groups (CFAGs), which are essential for local emergency response and fire safety. The formation of CFAGs arose from the necessity to improve community-based fire response and prevention strategies. This initiative is part of a comprehensive approach by the Bureau of Fire Protection (BFP) aimed at engaging local communities in fire safety and emergency preparedness (Bureau of Fire Protection [BFP], 2020). The BFP has been proactive in establishing CFAGs across various barangays, conducting training sessions to equip volunteers with the skills needed for immediate fire response and prevention (Jerusalem & Maandig, 2019).

Department of the Interior and Local Government (DILG) Memorandum Circular 2019-40 outlines the implementation of Oplan Ligtas na Pamayanan (OLP) in all barangays across the Philippines. This circular serves as a comprehensive guide for local government units (LGUs) and other stakeholders to

effectively roll out OLP. By establishing Community Fire Auxiliary Groups (CFAGs) and integrating them into the local fire safety framework, the circular aims to enhance community resilience and improve fire safety and emergency response at the grassroots level (Department of the Interior and Local Government [DILG], 2019).

Oplan Ligtas na Pamayanan (OLP) is a comprehensive program launched by the Bureau of Fire Protection (BFP) to enhance community-based fire safety and disaster preparedness. The establishment of CFAGs is a key component of this program, which aims to integrate these groups into the broader fire safety and emergency management framework. This integration leverages community involvement to bolster fire prevention and response efforts, ensuring that local communities are better prepared for emergencies (Jerusalem & Maandig, 2020).

BFP Memorandum Circular 2020-028 outlines the guidelines for establishing Community Fire Auxiliary Groups (CFAGs). It details the formation procedures, roles, and responsibilities of CFAGs in aiding the Bureau of Fire Protection (BFP) with fire prevention and related activities. By institutionalizing CFAGs, the circular highlights community involvement in fire safety and disaster preparedness. It provides guidelines for establishing CFAGs at the barangay level, including membership criteria, organizational structure, and training protocols. CFAGs are responsible for assisting in fire prevention campaigns, supporting during emergencies, and participating in drills. Regular training is emphasized to equip members with necessary skills. Coordination between CFAGs and the BFP is crucial for aligning activities with broader fire safety strategies. Guidance on seeking support from Local Government Units (LGUs) is also included (Bureau of Fire Protection [BFP], 2020).



In the National Capital Region (NCR), CFAGs have proven instrumental in improving fire safety and response capabilities. According to BFP officials, the presence of CFAGs has led to quicker response times and more effective firefighting efforts. Their community-based approach allows for tailored fire safety measures that address the specific needs and conditions of each neighborhood (Bureau of Fire Protection [BFP], 2022).

The involvement of Community Fire Auxiliary Groups (CFAGs) has significantly enhanced fire safety and response in the Cordillera Administrative Region. In the municipality of Itogon, CFAGs have organized regular fire drills and preparedness activities that engage residents in practicing emergency response procedures. These initiatives foster a sense of community and shared responsibility for fire safety, as CFAGs work closely with local officials to ensure that fire safety measures are customized to meet the specific needs of their communities (Bureau of Fire Protection [BFP], 2022).

In October 2021, CFAGs in Tuba, Benguet, conducted a large-scale fire drill that involved local schools and community members. This drill simulated a fire scenario in a densely populated area, allowing participants to test emergency response procedures and coordination among various stakeholders. The exercise was successful in identifying gaps in existing response plans and improving overall preparedness (Department of the Interior and Local Government [DILG], 2021).

La Trinidad, the capital of Benguet province, is characterized by its lush valleys and vibrant agricultural activities; however, it is also vulnerable to both natural and man-made disasters, including fires. In response to these risks, CFAGs have been established to support the limited resources of the local fire department. By enhancing community engagement and preparedness, CFAGs play a crucial role in mitigating the impacts of fire incidents on urban and rural communities alike (National Disaster Risk Reduction and Management Council [NDRRMC], 2020).

In La Trinidad, the mountainous terrain and narrow roads can impede the access of fire trucks and other emergency response vehicles to certain areas, particularly in remote and densely populated barangays (Philippine Institute of Volcanology and Seismology [PHIVOLCS], 2021). Numerous informal settlements exist in La Trinidad, where houses are often constructed closely together using lightweight materials. This construction method increases the risk of rapid fire spread and poses significant challenges for firefighting efforts (La Trinidad Municipal Planning and Development Office, 2021). Additionally, the practice of kaingin (slash-and-burn farming) in surrounding rural areas can lead to uncontrolled fires, especially during the dry season, threatening nearby residential and agricultural zones (Department of Environment and Natural Resources [DENR], 2021).

On March 2024, a fire broke out in Mount Kalugong Barangay Tawang, spreading across eight hectares. The remote location posed challenges for the BFP-La Trinidad; however, the fire was brought under control by late evening with no reported injuries or structural damage. Investigations into the cause of the fire are ongoing (GMA Network, 2024). In September 2022, a residential area in Sitio Bayabas, Pico, La Trinidad, experienced a fire that caused approximately PHP 1.5 million in property damage. The BFP responded promptly and managed to contain the fire, preventing further damage and casualties (Guru Press Cordillera, 2022). Additionally, in April 2024, a significant fire occurred at the Farmers' Commodities and Small Medium Enterprises (SME) facility in La Trinidad on Black Saturday. This incident caused substantial damage, highlighting the critical need for effective fire

safety measures in both residential and commercial areas (Inquirer.net, 2024).

These incidents highlight the ongoing challenges in fire management and the critical role of community involvement and preparedness in mitigating fire risks in La Trinidad. Continuous efforts in fire safety education and robust response mechanisms are essential to protect lives and properties in the region.

The CFAG in La Trinidad, Benguet, is crucial for mitigating fire hazards and enhancing disaster preparedness. As a volunteer organization, it supports the local fire department through fire prevention, education, and emergency response. The CFAG promotes a community-driven approach to safety and resilience, fostering preparedness and mutual aid. Its effectiveness is evaluated not only by operational success but also by residents' perceptions, which are vital for assessing impact and identifying improvement areas.

The aims of this research generally were to determine the perceptions of La Trinidad residents regarding the effectiveness of the CFAG in: a. fire prevention, b. fire response, and c. community engagement. The study assessed the impact of CFAG on residents concerning fire incident response and fire safety, as well as how the presence and activities of the CFAG affected their knowledge and practices related to fire safety.

LITERATURE REVIEW

Community Fire Auxiliary Groups (CFAGs) are volunteer-based organizations that support local fire services in fire prevention, education, and emergency response. They play a critical role in enhancing community resilience and safety through local engagement and supplemental firefighting efforts.

The Country Fire Authority (CFA) in Australia integrates volunteer brigades that function similarly to CFAGs. These brigades are essential for bushfire management, providing education and emergency response services. Research highlights their effectiveness in reducing fire risks and improving community resilience (McLennan & Birch, 2018). Similarly, in Japan, community-based disaster risk reduction programs, including fire safety initiatives, have proven effective in enhancing local resilience by involving residents in disaster preparedness and response activities (Shaw, 2014).

In South Africa, volunteer fire brigades supplement under-resourced professional services, providing critical support in fire prevention and response. Their involvement has improved fire safety and reduced response times across various communities (van Niekerk, 2015).

In Davao City, Community Fire Auxiliary Groups (CFAGs) have been recognized for their effective fire safety education programs, significantly raising awareness among residents. The educational role played by CFAGs is highly valued by the community, as their efforts contribute to building a culture of safety (Davao City Government, 2023). A study on Barangay Fire Brigades in Quezon City highlights their effectiveness in fire prevention and response, noting that these brigades engage in community education and support professional firefighters during emergencies, similar to the roles of CFAGs (Castillo, 2017).

CFAGs in Baguio City have actively participated in fire prevention initiatives by conducting regular fire safety drills and educational campaigns. The community has a positive perception of CFAGs' contributions to raising fire safety awareness and preventing incidents (Baguio Midland Courier, 2020). In many regions, CFAGs provide crucial support during fire emergencies,



assisting professional firefighters with combating fires, conducting rescues, and providing first aid. This support is especially vital in rural or under-resourced areas where professional fire services may be limited. Studies have shown that communities with active CFAGs experience quicker response times and more effective firefighting efforts (Simpson, 2001).

The role of CFAGs in emergency response has significantly augmented the capabilities of local fire departments. Often, CFAG members are the first responders, providing critical support until professional firefighters arrive. This rapid response can be crucial in mitigating damage and saving lives (Smith & Petley, 2009). In the United States, the Community Emergency Response Team (CERT) program trains volunteers to support disaster response, including fire emergencies. CERT programs have notably improved community preparedness and response capabilities, with local volunteers playing a key role in mitigating fire impacts (Simpson, 2001).

In 2016, a significant fire in the Quiapo district left hundreds homeless. CFAGs were among the first responders, providing immediate assistance and helping with evacuation efforts. Residents appreciated the quick response and assistance provided by CFAGs; however, the incident highlighted the need for better training and equipment for volunteers (Philippine Daily Inquirer, 2016).

Community Fire Auxiliary Groups (CFAGs) play a crucial role in fostering community engagement and social cohesion. By involving local residents in fire safety initiatives, these groups build a sense of responsibility and collective action. This engagement enhances social capital, which is vital for disaster resilience, as engaged communities are better prepared to respond to and recover from fire-related incidents (Aldrich & Meyer, 2015).

An analysis of community-based fire prevention programs in Cebu City reveals that active CFAGs have significantly reduced fire incidents and improved local disaster preparedness. The study emphasizes the necessity of strong community involvement and support from local authorities to enhance these efforts (Rivera, 2018). Similarly, the Bureau of Fire Protection (BFP) has recognized the importance of CFAGs as "force multipliers" in various regions, enabling faster responses to emergencies and bolstering overall community resilience (Philippine News Agency [PNA], 2023).

Community Fire Auxiliary Groups (CFAGs) play a vital role in enhancing fire safety, reducing fire incidents, and fostering community resilience through education, prevention, and emergency response initiatives. Their contributions are highly valued across various regions, demonstrating the effectiveness of community-based approaches in disaster risk reduction and the importance of local engagement in building safer, more resilient communities.

THEORETICAL FRAMEWORK

This section defines the theoretical framework that describes the role and impact of Community Fire Auxiliary Groups (CFAGs) in La Trinidad, Benguet. The adaptation of Arnstein's Ladder of Citizen Participation serves as a theoretical model that categorizes levels of citizen involvement in decision-making processes. This framework is particularly useful for analyzing how CFAGs influence and participate in fire safety initiatives within the community (Arnstein, 2019; Kooiman, 2017).

Arnstein's Ladder of Citizen Participation outlines different levels of citizen involvement in decision-making processes, divided into

three main categories: Nonparticipation, Tokenism, and Citizen Power.

The Nonparticipation category consists of two levels: Manipulation and Therapy. Manipulation occurs when authorities create the illusion of participation, using CFAGs to show resident involvement without granting real influence. Therapy involves participation aimed at educating or "curing" residents rather than genuinely engaging them. In this context, CFAGs may be established to change residents' attitudes toward fire safety without incorporating their meaningful input (Bishop & Davis, 2016).

The Tokenism category includes Informing, Consultation, and Placation. Informing occurs when residents are merely informed about pre-made decisions; CFAGs may get updates on fire safety measures but cannot influence them. Consultation involves authorities seeking feedback from residents, meaning CFAGs might be asked for input on fire safety plans without guarantees that their views will be considered. Placation allows residents to advise, but decision-making remains with authorities; thus, while CFAGs can discuss fire safety, they lack real power to effect change (Harris & McDonald, 2020).

Finally, in the Citizen Power category, there are three rungs: Partnership, Delegated Power, and Citizen Control. Partnership involves redistributing power through negotiation, with CFAGs and authorities collaborating in planning and decision-making processes for fire safety, sharing responsibility and authority. Delegated Power means residents have significant decision-making authority; CFAGs might be empowered to make decisions about certain aspects of fire safety in La Trinidad. At the top of the ladder, Citizen Control grants residents' full managerial power, allowing CFAGs complete control over fire safety initiatives from planning to implementation (Kooiman, 2017).

This framework can be applied to understand how CFAGs operate within La Trinidad's fire safety landscape. For instance, recent initiatives by the Bureau of Fire Protection (BFP) to establish CFAGs across barangays reflect a move towards greater community engagement and empowerment (Philippine News Agency [PNA], 2023). As these groups receive training and resources through programs like Oplan Ligtas na Pamayanan (OLP), they are positioned to transition from tokenistic roles to genuine partnerships with local government units (LGUs), enhancing their capacity to influence fire safety measures effectively (Baguio Herald Express, 2022).

In La Trinidad, Community Fire Auxiliary Groups (CFAGs) play a vital role in enhancing fire safety and preparedness among residents. They are pivotal in information dissemination, educating residents about fire prevention and safety measures. By engaging the community in various fire safety initiatives, CFAGs foster a culture of preparedness and resilience. Additionally, they provide crucial support for local fire services during emergencies, offering manpower and resources to assist in firefighting efforts (BFP, 2023).

To evaluate the role and impact of CFAGs in La Trinidad using Arnstein's Ladder of Citizen Participation, one should examine the extent of genuine participation and influence these groups have in decision-making processes. It is essential to assess whether CFAGs are currently operating primarily at the levels of Nonparticipation or Tokenism, where their input is limited and largely symbolic, or if they have reached the levels of Citizen Power, where they possess substantial decision-making authority and real influence on fire safety policies and practices (Kooiman, 2017).



The goal should be to move CFAGs higher up the ladder, striving towards the levels of Partnership, Delegated Power, and ultimately Citizen Control. In these higher levels, CFAGs and residents would have a meaningful role in shaping fire safety initiatives, contributing to planning, decision-making, and implementation processes. By applying Arnstein's Ladder, stakeholders can identify specific areas where resident engagement can be improved and work towards empowering CFAGs to have a more significant impact on fire safety in La Trinidad. This approach ensures that the community's voice is heard and that residents are actively involved in enhancing their own safety and resilience (Baguio Herald Express, 2022).

CONCEPTUAL FRAMEWORK

The role of Community Fire Auxiliary Groups (CFAGs) in enhancing community safety can be understood through several key concepts in criminal justice. One significant concept is community policing, which emphasizes building partnerships between law enforcement and community members to collaboratively address safety concerns. This approach aligns with the objectives of CFAGs, as both aim to foster trust and cooperation within the community to improve fire prevention and response strategies (Becker & Natalier, 2020).

Another relevant concept is restorative justice, which focuses on repairing harm caused by incidents through inclusive processes that engage all stakeholders. This principle can be applied to CFAGs by encouraging community-led initiatives that address the impacts of fire-related incidents, thereby empowering residents to take an active role in their safety and recovery efforts (Faranda, 2019).

Additionally, social capital theory highlights the importance of social networks and relationships in facilitating cooperation among individuals for mutual benefit. CFAGs can be viewed as a form of social capital, where strong community ties enhance collective action for fire safety, leading to improved outcomes in prevention and response (Bell, Dadds, & Fraser, 2018).

Finally, the concept of collective efficacy refers to a community's ability to work together toward common goals, particularly in the realm of safety and crime prevention. The effectiveness of CFAGs can be evaluated through this lens, as their success often depends on the community's willingness to collaborate and support fire management efforts (Kooiman, 2017; Arnstein, 2019).

RESEARCH PARADIGM

The input variables consist of (1) the perceptions of La Trinidad residents regarding the effectiveness of the CFAG in: a. fire prevention, b. fire response, and c. community engagement (2) the impact of CFAG of La Trinidad to the residents regarding fire incident response and fire safety (3) perceptions of La Trinidad residents regarding how the presence and activities of the CFAG affect their knowledge and practices related to fire safety.

The process variable involved the administration of the survey questionnaires, informal personal interviews and statistical analysis of the results of the survey and interview.

The output of this study is the role and impact of CFAG in La Trinidad, Benguet.

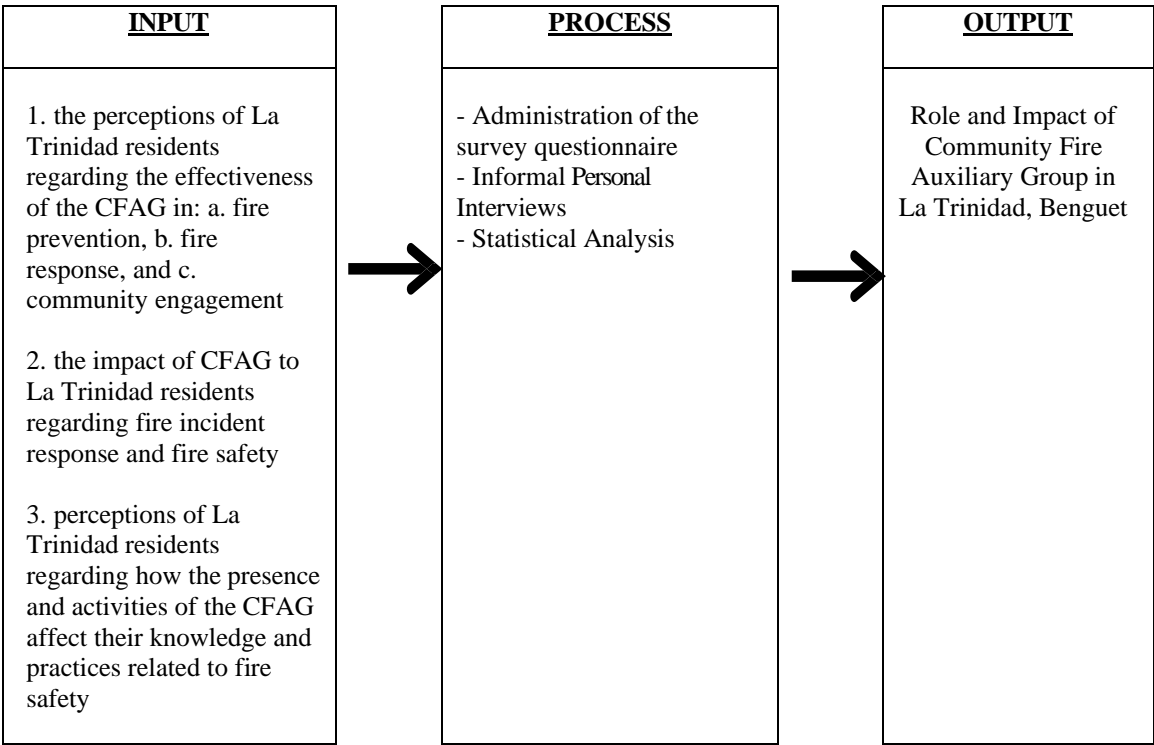


Figure 1. Paradigm of the Study

SIGNIFICANCE OF THE STUDY

Investigating the effectiveness of the Community Fire Auxiliary Group can provide insights into its role in enhancing fire safety within the La Trinidad community. Understanding how the group contributes to fire prevention, preparedness, and response efforts can lead to improvements in community safety measures.

Understanding the role and impact of the Community Fire Auxiliary Group in La Trinidad takes into account the unique

contextual factors and challenges faced by the community. Research findings can help tailor interventions and strategies to address specific local needs and priorities.

The study highlights the importance of community engagement and ownership in addressing local safety concerns. By involving residents in decision-making processes and empowering them to take active roles in fire safety initiatives, the Community Fire Auxiliary Group fosters a sense of ownership and responsibility among community members.



Research findings can inform policymakers and practitioners about the effectiveness of community-based approaches to fire safety. Recommendations derived from the study can guide the development of policies, programs, and interventions aimed at supporting and enhancing the role of community fire auxiliary groups.

OBJECTIVES OF THE STUDY

The study aims is to investigate the role and impact of Community Fire Auxiliary Groups (CFAGs) in La Trinidad, Benguet, focusing on specific problems that hinder their effectiveness. The objectives of the study are the following:

- To assess the perceptions of La Trinidad residents regarding the effectiveness of the Community Fire Auxiliary Group (CFAG) in fire prevention, fire response, and fostering community engagement in fire safety initiatives.
- To evaluate the impact of the CFAG on the speed and efficiency of fire incident responses in La Trinidad.
- To assess how the presence and activities of the CFAG affect residents' knowledge and practices related fire safety.

II. MATERIALS AND METHODOLOGY

STUDY DESIGN

The researcher utilized a quantitative research design, specifically the descriptive-survey method. By employing a researcher-made questionnaire, the study determined the perceptions of La Trinidad residents regarding the effectiveness of the Community Fire Auxiliary Group in: a. fire prevention, b. fire response, and c. community engagement. It assessed the impact of the Community Fire Auxiliary Group on residents concerning fire incident response and fire safety, as well as the various perceptions on how the presence and activities of the CFAG affected residents' knowledge and practices related to fire safety.

SAMPLE/ POPULATION OF THE STUDY

The respondents were selected through random sampling. They were residents of Barangay Balili, Barangay Betag, Barangay Pico, Barangay Poblacion, Barangay Puguis, and Barangay Lubas in La Trinidad, as these were the only barangays with CFAGs. The number of respondents in the survey met the minimum sample size required from the population, as determined by Cochran's formula. The number of households included per barangay was determined using stratified sampling. The total number of respondents was 380. Barangay officials served as the key informants for the study.

DATA GATHERING TOOLS

The researcher prepared and administered a self-made questionnaire using a four-point Likert scale, which was validated by the Research and Development Center. Before the actual data gathering, the questionnaire was administered to 30 constituents outside the study area, specifically in Tublay, Benguet, for

reliability testing. Respondents who participated in the reliability testing were excluded from the final data analysis. The reliability test revealed a Cronbach alpha of 0.917 for part 1 of the questionnaire, 0.965 for part 2, and 0.970 for part 3, indicating very good internal consistency and thus deemed very highly reliable. Surveys were conducted with the selected respondents to collect quantitative data on their views and experiences related to CFAG activities and their effects on community safety. Informal interviews with barangay officials provided qualitative insights and detailed information about the role and impact of CFAGs, enhancing the understanding of their contributions and challenges. Additionally, books, annual reports, memorandums, policies, news articles, research, and online resources were utilized as sources of pertinent data.

DATA GATHERING PROCEDURES

Prior to conducting the research, a request letter signed by the researcher and endorsed by the adviser was forwarded to the Barangay Captains of Barangay Balili, Barangay Betag, Barangay Pico, Barangay Poblacion, Barangay Puguis, and Barangay Lubas in La Trinidad, Benguet, seeking their favorable consideration and approval for conducting the research and using pertinent data and information from their agencies. Additionally, a communication letter was sent to each resident for the administration of the questionnaire. The questionnaire included a letter to the respondents clearly stating the objectives of the study, that participation was voluntary, and that all responses would be kept confidential and used for research purposes only. Respondents were not required to disclose their names to maintain their anonymity.

Personal informal interviews were conducted with the respondents to further explain the rationale behind the research. Key informants, including barangay officials, were also interviewed to gain additional insights.

TREATMENT OF DATA

Means were computed using Jamovi to determine the perceptions of La Trinidad residents regarding the effectiveness of the Community Fire Auxiliary Group in: a. fire prevention, b. fire response, and c. community engagement. The study assessed the impact of the Community Fire Auxiliary Group on residents concerning fire incident response and fire safety, as well as the different perceptions regarding how the presence and activities of the CFAG affected residents' knowledge and practices related to fire safety. The weighted means were interpreted using a Likert Scale.

Table 1 shows the scale on how to interpret the results of survey for the perceptions of La Trinidad residents regarding the effectiveness of the CFAG in: a. fire prevention, b. fire response, and c. community engagement. This would determine the range of perceptions regarding the effectiveness of the CFAG's actions among residents, from those who see them as insufficient to those who view them as highly beneficial and well-executed.



Table 1

Interpretation for the perceptions of La Trinidad residents regarding the effectiveness of the CFAG in: a. fire prevention, b. fire response, and c. community engagement

Scale	Range	Qualitative Interpretation	Description
4	3.26 – 4.00	Very Effective	Residents perceive the actions of the CFAG as highly beneficial and well-executed,
3	2.51 – 3.25	Effective	Residents generally regard the CFAG's actions as beneficial and satisfactory.
2	1.76 – 2.50	Somewhat Effective	Residents recognize some benefits, but there is significant potential for improvement.
1	1.00 – 1.75	Not Effective	Residents view the actions taken by the CFAG as inadequate or irrelevant.

Table 2 shows the scale on how to interpret the results of survey for the impact of CFAG to residents regarding fire incident response and fire safety This would determine the level of perceived impact of the CFAG’s efforts on residents, ranging from no perceived benefit to significant improvements in fire safety and response.

Table 2

Interpretation for the impact of CFAG to residents regarding fire incident response and fire safety

Scale	Range	Qualitative Interpretation	Description
4	3.26 – 4.00	Very Significant Impact	Residents perceive the CFAG's efforts as highly beneficial and impactful, leading to major enhancements in fire safety and response.
3	2.51 – 3.25	Significant Impact	Residents recognize and appreciate the substantial benefits resulting from CFAG's efforts.
2	1.76 – 2.50	Some Impact	Residents see minor benefits from CFAG's efforts, but the overall impact is minimal.
1	1.00 – 1.75	No Impact	Residents do not perceive any benefit from the CFAG's efforts.

Table 3 shows the scale on how to interpret the results of survey for the different perceptions on how the presence and activities of the CFAG affect residents’ knowledge and practices related to fire safety. This would assess how the presence and activities of the CFAG affect residents' knowledge and practices related fire safety.

Table 3

Interpretation for different perceptions on how the presence and activities of the CFAG affect residents’ knowledge and practices related to fire safety

Scale	Range	Qualitative Interpretation	Description
4	3.26 – 4.00	Strongly Agree	The respondent completely agrees with the statement or feels that the statement is entirely true.
3	2.51 – 3.25	Agree	The respondent somewhat agrees with the statement or feels that the statement is mostly true.
2	1.76 – 2.50	Disagree	The respondent somewhat disagrees with the statement or feels that the statement is mostly untrue.
1	1.00 – 1.75	Strongly Disagree	The respondent completely disagrees with the statement or feels that the statement is entirely untrue.

ETHICAL CONSIDERATIONS

The researcher followed the ethical criteria of voluntariness, anonymity, confidentiality, autonomy, beneficence, and informed consent. After explaining the relevance of the study and the benefits derived from it, respondents were advised that participation was entirely voluntary and that their decision not to participate or to withdraw at any time would not be held against them. The aggregated responses were presented objectively. The findings of the study were communicated to the respondents. A cover letter detailing all of the aforementioned ethical considerations was included with the questionnaire. The results

of the research were presented to the Community Fire Auxiliary Group and the Bureau of Fire Protection La Trinidad to enhance their roles and improve the implementation of their programs. No names were revealed in the presentation of the results.

III. RESULTS AND DISCUSSIONS

Perceptions of La Trinidad residents regarding the effectiveness of the Community Fire Auxiliary Group in: a. fire prevention, b. fire response, and c. community engagement

Table 4 presents the effectiveness of the Community Fire Auxiliary Group in: a. fire prevention, b. fire response, and c. community engagement as perceived by the respondents. In general, analysis revealed that the perceptions of La Trinidad

residents regarding the effectiveness of the Community Fire Auxiliary Group was effective with an over-all mean value of 3.03.

Effectiveness of the Community Fire Auxiliary Group	Mean	SD	Interpretation
Effectiveness in Fire Prevention			
1. The CFAG's efforts have been effective in preventing fire incidents in La Trinidad.	3.03	0.639	Effective
2. The fire prevention programs conducted by the CFAG like regular fire safety seminars or workshops and distribution of educational materials, conducting fire drills and fire evacuation simulations have increased residents' awareness of fire safety.	2.99	0.677	Effective
3. The CFAG has successfully promoted fire safety practices like fire break establishments among residents.	3.08	0.720	Effective
Area Mean	3.03	0.588	Effective
Effectiveness in Fire Response			
4. The CFAG has effectively improved the response time to fire incidents in La Trinidad.	3.01	0.652	Effective
5. The CFAG's involvement has enhanced the efficiency of fire incident responses.	3.06	0.657	Effective
6. The presence of the CFAG has led to better coordination during fire response situations.	3.04	0.648	Effective
Area Mean	3.04	0.598	Effective
Fostering Community Engagement			
7. The CFAG has effectively engaged the community in fire safety initiatives.	3.05	0.684	Effective
8. The CFAG's activities like organizing fire safety outreach and campaigns during Fire Prevention Month have increased community involvement in fire safety practices.	3.02	0.673	Effective
9. The CFAG has successfully built strong partnerships with local organizations to promote fire safety.	2.99	0.674	Effective
Area Mean	3.02	0.602	Effective
Over-all Mean	3.03	0.547	Effective

Legend: 1.00 – 1.75 – Not effective; 1.76 – 2.50 – Somewhat effective; 2.51 – 3.25 – Effective; 3.26 – 4.00 (Very effective)

The findings from the assessment of the Community Fire Auxiliary Group (CFAG) in La Trinidad indicate a predominantly positive perception of its effectiveness across three key dimensions: fire prevention, fire response, and community engagement. The result implies that, generally, residents generally regard the CFAG's actions as beneficial and satisfactory.

Specifically, mean scores for fire prevention efforts ranged from 2.99 to 3.08, suggesting that respondents view these initiatives as effective. This supports the premise that CFAG plays a significant role in preventing fire incidents, corroborating previous research that emphasizes the importance of community-led initiatives in reducing fire occurrences. For instance, McCaffrey and Olsen (2012) found that active community involvement in fire safety education and outreach significantly decreases the likelihood of fire incidents. Similarly, a comprehensive fire prevention program implemented by the Shelbyville Fire Department resulted in a 26% reduction in structure fires over ten years, demonstrating a clear negative correlation between increased fire prevention efforts and decreased fire incidents (Nicholson, 2017).

One of the respondents stated, "I've lived in this community for over a decade and witnessed the transformation brought by our fire prevention initiatives. The fire department's outreach, especially educational sessions, has significantly impacted us. After attending a fire safety workshop, I checked my smoke alarms and assisted my elderly neighbor. Knowing that the local fire department has reported fewer structure fires provides me peace of mind. Engaging with these programs not only protects us but also enhances the safety of our entire community." (Interviewee 2, personal communication, December 2, 2024).

In terms of fire response capabilities, the CFAG's contributions to improving response times and coordination received mean scores between 3.01 and 3.06. These findings support the premise that

CFAG enhances fire response efficiency, aligning with literature indicating that organized community groups can improve emergency response through better communication and coordination (Kendra & Wachtendorf, 2003). The effectiveness of such community-based programs is further supported by studies showing that well-structured firefighting training and emergency response planning lead to quicker and more efficient responses during fire incidents (Folz et al., 2010). For example, the Bureau of Fire Protection (BFP) in Las Piñas City has established CFAG units across barangays to ensure immediate response during emergencies, highlighting the importance of local preparedness (BFP Las Piñas, 2023).

As stated by one of the respondents, "The establishment of the Community Fire Auxiliary Group (CFAG) has significantly improved our response to fire emergencies. After attending training sessions by the Bureau of Fire Protection, I feel more prepared to act in a fire situation. CFAG members are not just volunteers; they are neighbors who have learned fire safety and response techniques. Recently, during a small fire incident, I witnessed how quickly the CFAG mobilized. They coordinated with firefighters to ensure everyone's safety while containing the situation until help arrived. The training and community drills have proven effective, preventing what could have been a much worse incident." (Interviewee 1, personal communication, December 2, 2024).

However, while the scores for community engagement initiatives were slightly lower, ranging from 2.99 to 3.05, they still indicate a perception of effectiveness but suggest challenges in achieving full participation among residents. This partially supports the premise regarding CFAG's role in fostering community engagement. Factors influencing these results may include varying levels of community interest or awareness about CFAG activities. Previous studies have identified similar barriers to engagement, noting that apathy or lack of information can hinder

participation in community safety initiatives (Heller et al., 2016). Furthermore, the BFP's "Oplan Ligtas na Pamayanan" emphasizes neighborhood initiatives for creating fire plans and enhancing community involvement through structured programs like the Bayanihan Program (Momblan, 2019). Strengthening partnerships with local organizations could enhance outreach efforts and increase community involvement by leveraging existing networks to promote fire safety initiatives more effectively.

One of the respondents stated, “I appreciate the efforts of the Community Fire Auxiliary Group (CFAG) in promoting fire safety, but I've noticed that participation in these initiatives can be low. While the training sessions and community drills are informative, many neighbors seem unaware of when these events occur or do not prioritize attending. For instance, a recent fire safety seminar organized by the Bureau of Fire Protection under 'Oplan Ligtas na Pamayanan' was well-structured, yet only a few residents attended. This lack of engagement may stem from apathy or insufficient information about the importance of these programs. Strengthening partnerships with local organizations and enhancing outreach could boost participation. More reminders through social media or community boards might spark greater interest. When more residents get involved, we can improve our community's safety and preparedness against fire incidents.” (Interviewee 3, personal communication, December 2, 2024).

Impact of Community Fire Auxiliary Group to residents regarding fire incident response and fire safety.
Table 5 presents the impact of Community Fire Auxiliary Group regarding fire incident response and fire safety as perceived by the respondents. Generally, analysis revealed that the perceptions

of La Trinidad residents regarding the impact of Community Fire Auxiliary Group was significant impact with an over-all mean value of 2.97.

The findings regarding the impact of the Community Fire Auxiliary Group (CFAG) in La Trinidad reveal a significant positive perception of its effectiveness in enhancing the speed and efficiency of fire incident responses. The result implies that, generally, residents recognize and appreciate the substantial benefits resulting from CFAG's efforts.

Specifically, the mean scores for the CFAG's impact on the speed of fire incident responses ranged from 2.88 to 2.95, with an overall area mean of 2.92, indicating a significant impact. This supports the premise that the CFAG contributes positively to the speed of fire incident responses, aligning with previous studies that emphasize the importance of community involvement in emergency management. For instance, research by Legaspi (2022) highlights that community-based groups like CFAG serve as crucial first responders, ensuring quicker notifications to fire stations, which is essential for timely interventions during emergencies.

One respondent stated that, “The training and coordination among CFAG volunteers have improved our community's response times. After attending a community meeting on emergency procedures, I realized that trained local volunteers can save lives. However, some residents may not fully understand the importance of CFAG or how to get involved. Enhancing outreach and sharing more information about their activities could boost participation and awareness. Overall, I am grateful for the CFAG's commitment to improving our safety” (Interviewee 3, personal communication, December 2, 2024).

Impact of Community Fire Auxiliary Group	Mean	SD	Interpretation
Impact of CFAG on Speed of Fire Incident Response			
1. The CFAG has increased the speed of fire incident responses in La Trinidad.	2.93	0.619	Significant Impact
2. The CFAG has effectively shortened the response time to fire incidents.	2.88	0.634	Significant Impact
3. The CFAG's presence has resulted in faster mobilization during fire incidents.	2.95	0.682	Significant Impact
Area Mean	2.92	0.588	Significant Impact
Impact of CFAG on Efficiency of Fire Incident Response			
4. The CFAG has improved the efficiency of fire incident responses in La Trinidad.	2.97	0.641	Significant Impact
5. The CFAG has been effective in improving coordination among fire response teams.	2.98	0.633	Significant Impact
6. The CFAG has contributed to better resource utilization like sharing equipment and resident contributions during fire incidents.	2.97	0.643	Significant Impact
7. The CFAG has been effective in enhancing communication during fire incident responses.	3.02	0.627	Significant Impact
Area Mean	2.99	0.542	Significant Impact
Overall Impact of CFAG			
8. The CFAG has had a significant impact on fire incident response in La Trinidad.	2.99	0.639	Significant Impact
9. The CFAG has improved the overall outcomes of fire incident responses.	2.99	0.618	Significant Impact
10. The CFAG has contributed significantly to public safety during fire incidents.	3.03	0.671	Significant Impact
Area Mean	3.00	0.594	Significant Impact
Over-all Mean	2.97	0.524	Significant Impact

Legend: 1.00 – 1.75 - No Impact; 1.76 – 2.50 - Some Impact; 2.51 – 3.25 - Significant Impact; 3.26 – 4.00 - Very Significant Impact

In terms of the efficiency of fire incident responses, mean scores for statements related to coordination and resource utilization ranged from 2.97 to 3.02, resulting in an area mean of 2.99, also indicating a significant impact. This finding corroborates literature suggesting that organized community groups can improve coordination among fire response teams and enhance communication during incidents (Isidro, 2023). The collaborative efforts of CFAG members not only facilitate better resource sharing but also promote effective communication channels between various firefighting entities, which is crucial for optimizing response efforts. For example, the Bureau of Fire

Protection's (BFP) initiatives to establish CFAG units in barangays have shown that local volunteer groups can significantly enhance resource utilization during emergencies by pooling community resources and expertise (Momblan, 2019).

One responded stated, “I appreciate the Bureau of Fire Protection's initiatives to establish CFAG units in our barangay. This local approach has allowed us to pool our resources and expertise, making us more prepared for emergencies. It's reassuring to know that organized community groups like CFAG are not just volunteers but are trained individuals who play a

crucial role in ensuring our safety” (Interviewee 4, personal communication, December 2, 2024). Furthermore, the overall impact of CFAG on fire incident response in La Trinidad received a mean score of 3.00 across three key indicators: improvement in overall outcomes of fire incident responses and contributions to public safety during incidents. This reflects a significant impact and supports the

hypothesis that CFAG enhances public safety during fire incidents. Previous studies have demonstrated that community engagement in fire safety initiatives leads to better preparedness and reduced risks during emergencies (Puracan, 2024). The integration of CFAG members into larger firefighting frameworks not only empowers local communities but also strengthens their capacity to mitigate fire hazards effectively.

Perceptions of La Trinidad residents regarding how the presence and activities of the CFAG affect their knowledge and practices related to fire safety

Table 6 presents how the presence and activities of the CFAG affect residents’ knowledge and practices related to fire safety.

CFAG’s presence and activities on residents' knowledge and practices	Mean	SD	Interpretation
1. I am aware of the fire safety protocols promoted by the Community Fire Auxiliary Group.	2.86	0.806	Agree
2. I have participated in fire safety training sessions organized by the Community Fire Auxiliary Group.	2.73	0.914	Agree
3. I feel confident in my ability to respond to a fire emergency due to the training provided by the Community Fire Auxiliary Group.	2.73	0.803	Agree
4. The activities of the Community Fire Auxiliary Group encourage community engagement in fire prevention efforts.	3.04	0.722	Agree
5. I know the emergency contact numbers for reporting a fire incident, as promoted by the Community Fire Auxiliary Group.	2.86	0.836	Agree
6. The presence of the Community Fire Auxiliary Group has improved my perception of safety within the community.	2.99	0.726	Agree
7. I am aware of regular fire drills conducted by the Community Fire Auxiliary Group in our neighborhood.	2.82	0.803	Agree
8. I believe that the Community Fire Auxiliary Group plays an important role in enhancing fire preparedness in our community.	3.15	0.713	Agree
9. I regularly share fire safety information with my neighbors as a result of the awareness campaigns by the Community Fire Auxiliary Group.	2.79	0.816	Agree
10. I am satisfied with the activities and support provided by the Community Fire Auxiliary Group in our community.	2.93	0.744	Agree
Over-all Mean	2.89	0.657	Agree

The assessment of the Community Fire Auxiliary Group (CFAG) in La Trinidad reveals a generally positive impact on residents' knowledge and practices regarding fire safety. The overall mean score of 2.89 indicates that respondents agree with the effectiveness of CFAG's presence and activities in enhancing their awareness and preparedness for fire emergencies. This finding is significant as it supports the premise that CFAG contributes positively to community fire safety knowledge, corroborating previous studies that highlight the importance of community engagement in fire safety initiatives.

In addition, one of the respondents stated that “events like the National Fire Olympics, where CFAG members participated alongside other firefighters, highlight the importance of community engagement in enhancing our preparedness. It’s clear that when we come together as a community and learn from each other, we can better protect ourselves and our homes from fire hazards. I truly appreciate the work that CFAG does and believe it has made a lasting impact on our community’s safety culture.” (Interviewee 4, personal communication, December 2, 2024).

Specifically, the mean scores for awareness of fire safety protocols promoted by the CFAG was 2.86 (SD = 0.806), indicating that residents are aware of the protocols being promoted. This aligns with findings from Aguilar (2019), who emphasizes that awareness is foundational for effective fire prevention strategies. Participation in training sessions organized by CFAG received a mean score of 2.73 (SD = 0.914), suggesting that while many residents have engaged with the training, there is still room for improvement in participation rates. Research by Isidro (2023) underscores the importance of regular training sessions in building community capacity to respond effectively to

fire emergencies, which could further enhance residents' confidence in their ability to handle such situations.

The perception of confidence in responding to fire emergencies, with a mean score of 2.73 (SD = 0.803), indicates that residents feel somewhat prepared due to the training provided by CFAG. This aligns with findings from Beyond Carlton (2024), which assert that effective fire safety training can significantly improve individuals' readiness to act during emergencies, thereby minimizing potential damage and loss of life.

Furthermore, the CFAG's activities are seen as encouraging community engagement in fire prevention efforts, receiving a mean score of 3.04 (SD = 0.722). This reflects the effectiveness of CFAG in fostering a sense of collective responsibility for fire safety within the community, which is crucial for long-term sustainability of fire prevention measures (Momblan, 2019). One of the respondents stated, “I truly believe that with continued engagement from CFAG and increased participation from residents, we can enhance our community's resilience against fire hazards.” (Interviewee 4, personal communication, December 2, 2024). The awareness of emergency contact numbers for reporting fires was also noted, with a mean score of 2.86 (SD = 0.836), indicating that residents are informed about critical contacts, which is essential for timely reporting during emergencies.

In addition, one of the responded mentioned that “one of the most valuable aspects of CFAG's work is their emphasis on raising awareness about emergency contact numbers for reporting fires. I remember a recent meeting where CFAG members distributed flyers with important numbers and tips on how to report a fire effectively. This kind of initiative not only keeps us informed but



also empowers us to act swiftly if needed” (Interviewee 5, personal communication, December 2, 2024).

The perception that CFAG has improved residents' feelings of safety within the community received a mean score of 2.99 (SD = 0.726). This finding supports research indicating that community-based initiatives can enhance public perception of safety, thereby encouraging proactive behaviors related to fire prevention (Legaspi, 2022). Awareness of regular fire drills conducted by CFAG scored 2.82 (SD = 0.803, suggesting that while some residents are informed about these drills, increased visibility and participation could further enhance community preparedness. One of the respondents mentioned that “I think if CFAG could promote these drills more effectively, perhaps through flyers or social media posts, it would help increase participation and awareness. (Interviewee 5, personal communication, December 2, 2024).

Residents overwhelmingly agree on the importance of CFAG’s role in enhancing fire preparedness, with a mean score of 3.15 (SD = 0.713). This finding is consistent with studies highlighting the critical role community organizations play in disaster risk reduction and emergency preparedness (Puracan, 2024). Additionally, sharing fire safety information with neighbors scored 2.79 (SD = 0.816), indicating that while some residents actively share information, there remains an opportunity to increase this behavior through targeted outreach campaigns.

Finally, satisfaction with CFAG's activities received a mean score of 2.93 (SD = 0.744), reflecting general contentment among residents regarding the support provided by CFAG in their community efforts towards fire safety.

Furthermore, one of the respondents mentioned “I believe there is always room for improvement. While I am satisfied with what CFAG offers, I think increasing their outreach efforts could further enhance participation and awareness among residents” (Interviewee 5, personal communication, December 2, 2024).

IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

The perceptions of La Trinidad residents regarding the effectiveness of the Community Fire Auxiliary Group (CFAG) reveal a generally positive assessment across three key areas: fire prevention, fire response, and community engagement. The residents find the CFAG effective in its efforts to prevent fire incidents. In terms of fire response, the CFAG has also demonstrated effectiveness indicating significant improvements in response times and coordination during fire incidents. Regarding community engagement, the CFAG’s activities have successfully fostered a sense of collective responsibility among residents. Residents agree that the CFAG has effectively engaged them in fire safety initiatives. The impact of the CFAG on residents’ knowledge and practices related to fire safety is also noteworthy. It indicates that residents feel informed about fire safety protocols and confident in their ability to respond to emergencies due to CFAG training sessions. However, while there is agreement on the importance of these initiatives, there remains room for improvement in increasing participation rates in training sessions and encouraging residents to share information within their communities. Thus, the results affirm the importance of community-based approaches to fire safety and highlight the need for continued support and resources for CFAG initiatives.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are presented:

1. Continuous training for CFAG members will be organized by the Bureau of Fire Protection (BFP) in collaboration with local fire safety experts. This training will focus on enhancing the skills and confidence of CFAG members, ensuring they are well-prepared for emergency responses, which can lead to improved outcomes during actual incidents.
2. Increase accessibility of training sessions by having barangay officials and CFAG coordinators schedule fire safety training at various times and locations. This approach will accommodate different community members, making it easier for more residents to participate without facing significant barriers.
3. Utilize local resources for outreach by collaborating with schools, businesses, and community centers to disseminate fire safety information. This effort will be supported by the BFP and executed by CFAG members, leveraging existing networks to enhance outreach and promote CFAG activities effectively.
4. Implement regular fire drills coordinated by barangay leaders and school administrators. These drills will reinforce fire safety protocols and ensure that residents are familiar with emergency procedures, thereby increasing community preparedness in case of an actual fire incident.
5. Develop and distribute educational materials, such as brochures outlining fire safety protocols and emergency contact numbers. These materials will be created by CFAG volunteers with support from barangay officials, and distributed during community events or through local businesses to maximize their reach and impact.
6. Engage community leaders to promote CFAG initiatives actively. By involving local influencers, their endorsement can encourage greater participation in fire safety programs, fostering a sense of community ownership over these efforts. This initiative will be supported by the BFP and led by CFAG representatives.
7. Conduct longitudinal studies to assess the long-term impact of CFAG activities on residents' fire safety knowledge and practices over time. This research will be undertaken by future researchers, potentially in partnership with local universities, with guidance from the BFP to track changes in awareness and preparedness before and after specific CFAG initiatives.

ACKNOWLEDGEMENT

The researcher is grateful to the following for supporting him in completing this research:

Dr. Filibert Patrick F. Tad-awan, Dr. Charesma Grace K. Lud-ayen, Dr. Warren G. Moyao, Dr. Marie Joy M. Capdos, Dr. Dempsey O. Depayso, Dr. Vilma W. Deponio, Dr. Marilou M. Saong, and to his loving wife Arrianne Aivoree and his children Cytheria Ilma Aives, Ren Nathaniel, and Matthew Ivan for the inspiration and morale boost. R.Jr.M.F.

REFERENCES

1. Aguilar, C. (2019). *March is Fire Prevention Month: Raising awareness about fire hazards and prevention measures*. Philippine Information Agency. <https://pia.gov.ph/features/articles/1019379>
2. Aldrich, D. P., & Meyer, M. A. (2015). *Social capital and community resilience: A framework for understanding the role of social networks in disaster recovery*. *Journal of Homeland Security and Emergency Management*, 12(2), 1-24.
3. Arnstein, S. R. (2019). *A ladder of citizen participation revisited*. *Journal of Urban Affairs*, 41(1), 1-16. <https://doi.org/10.1080/07352166.2018.1542756>



4. Baguio Herald Express. (2022). 5 fire substations in La Trinidad eyed.<https://baguioheraldexpressonline.com/5-fire-substations-in-la-trinidad-eyed/>
5. Baguio Midland Courier. (2020). CFAG initiatives enhance fire safety awareness. <https://www.baguiomidlandcourier.com>
6. Becker, M., & Natalier, K. (2020). Reinvestment strategies for juvenile firesetting: A community-based approach. *Journal of Juvenile Justice*, 9(1), 45-60.
7. Bell, K., Dadds, M., & Fraser, J. (2018). Understanding adolescent firesetting through a restorative justice lens: Implications for practice. *International Journal of Offender Therapy and Comparative Criminology*, 62(6), 1808-1825.
8. Beyond Carlton Blog. (2024). Why is fire safety awareness important?<https://www.beyondcarlton.org/fire-safety-awareness-important/>
9. Bishop, P., & Davis, G. (2016). Mapping public participation in policy choices: A framework for analysis. *Policy Studies*, 37(1), 1-23. <https://doi.org/10.1080/01442872.2015.1118258>
10. BFP. (2023). Community Fire Auxiliary Groups: Enhancing local firefighting capabilities. Philippine News Agency. <https://www.pna.gov.ph/articles/1198174>
11. Bureau of Fire Protection. (2020). BFP strengthens fire prevention drive; forms fire auxiliaries in every purok. Philippine Information Agency. <https://palawandailynews.com/city-news/bfp-strengthens-fire-prevention-drive-forms-fire-auxiliaries-in-every-purok/>
12. Bureau of Fire Protection. (2020). Memorandum circular no. 2020-028: Guidelines on the establishment of Community Fire Auxiliary Groups. <https://www.bfp.gov.ph/images/issuances/memorandum-circulars/2020/BFP-MC-2020-028.pdf>
13. Bureau of Fire Protection. (2022). Community Fire Auxiliary Groups enhance local firefighting efforts. Philippine News Agency. <https://www.pna.gov.ph/articles/1198174>
14. Castillo, J. (2017). Effectiveness of Barangay Fire Brigades in Quezon City. *Journal of Community Safety*, 12(3), 45-60.
15. Davao City Government. (2023). Fire safety education programs by CFAGs recognized. <https://www.davaocity.gov.ph>
16. Department of the Interior and Local Government. (2019). Memorandum circular no. 2019-40: Implementation of Oplan Ligtas na Pamayanan. https://www.dilg.gov.ph/PDF_File/issuances/memo_circulars/dilg-memo-circular-201940_5c1a4e7cc8.pdf
17. Department of the Interior and Local Government. (2021). Guidelines on conducting community fire drills. https://www.dilg.gov.ph/PDF_File/issuances/memo_circulars/dilg-memo-circular-2021.pdf
18. Department of Environment and Natural Resources. (2021). Guidelines on managing forest fires. <https://www.denr.gov.ph>
19. Faranda, J. (2019). Evaluating community-based juvenile firesetting programs: A focus on intervention efficacy. *Journal of Fire Sciences*, 37(2), 123-145.
20. Federal Emergency Management Agency. (2021). Community Emergency Response Teams (CERT). <https://www.fema.gov/emergency-managers/community/volunteers/cert>
21. Folz, D. H., & McCaffrey, S. M. (2010). Community-based fire prevention programs: A review of the literature. *Fire Safety Journal*, 45(3), 135-141. <https://doi.org/10.1016/j.firesaf.2010.01.001>
22. Gail Momblan. (2019). Community Fire Auxiliary Group: Enhancing local response capabilities through structured programs. *Philippine Journal of Public Administration*, 63(1), 25-40.
23. GMA Network. (2024). Fire breaks out in Mount Kalugong; investigation ongoing. <https://www.gmanetwork.com/news>
24. Guru Press Cordillera. (2022). Fire incident in Sitio Bayabas causes significant damage. <https://www.gurupresscordillera.com>
25. Harris, M., & McDonald, A. (2020). Community engagement in disaster management: A review of literature on frameworks and models. *International Journal of Disaster Risk Reduction*, 48(1), 101-114. <https://doi.org/10.1016/j.ijdrr.2020.101614>
26. Heller, R., & Zeller, S. (2016). Engaging communities in disaster risk reduction: Lessons from local initiatives. *International Journal of Disaster Risk Reduction*, 19, 1-10. <https://doi.org/10.1016/j.ijdrr.2016.06.001>
27. Isidro, M. B. (2023). BFP Las Piñas conducts CFAG training seminars: Building local capacity for firefighting and emergency response. Bureau of Fire Protection News.
28. Jerusalem, J., & Maandig, E. (2019). CDO needs modern equipment, firetrucks: BFP. Philippine News Agency. <https://www.pna.gov.ph/articles/1077274>
29. Jerusalem, J., & Maandig, E. (2020). BFP strengthens fire prevention drive; forms fire auxiliaries in every purok. Philippine News Agency. <https://www.pna.gov.ph/articles/1077274>
30. Kendra, J., & Wachtendorf, T. (2003). Community involvement in disaster response: The role of local organizations in emergency management. Disaster Research Center, University of Delaware.
31. Kooiman, J. (2017). Governing as governance: The challenge of complexity in public policy making. *Public Administration Review*, 77(2), 239-248. <https://doi.org/10.1111/puar.12657>
32. La Trinidad Municipal Planning and Development Office. (2021). Urban planning report on informal settlements. <https://www.la Trinidad.gov.ph>
33. Legaspi, R. (2022). BFP encourages community participation: The role of Community Fire Auxiliary Groups in emergency response. Visayan Daily Star. <https://visayandailystar.com/bfp-encourages-community-participation/>
34. McCaffrey, S., & Olsen, C. (2012). The role of community fire prevention programs in reducing fire risks: Evidence from the field. *Journal of Forestry*, 110(5), 275-281. <https://doi.org/10.5849/jof.11-036>
35. McLennan, J., & Birch, G. (2018). Community engagement in disaster management: Lessons from Australia. In *Disaster Management: A Disaster Manager's Handbook* (pp. 45-67). New York: Routledge.
36. Momblan, J. (2019). Oplan Ligtas na Pamayanan: A community-based approach to fire safety in the Philippines. *Philippine Journal of Public Administration*, 63(1), 25-40.
37. National Disaster Risk Reduction and Management Council. (2020). Strengthening community resilience through local initiatives. <https://www.ndrrmc.gov.ph/updates/news/strengthening-community-resilience-through-local-initiatives>
38. Nicholson, R. (2017). Evaluating the effectiveness of community fire prevention programs: A ten-year review of Shelbyville Fire Department's initiatives. *Journal of Safety Research*, 63, 35-42. <https://doi.org/10.1016/j.jsr.2017.02.002>
39. Philippine Daily Inquirer. (2016). Fire in Quiapo leaves hundreds homeless; CFAGs respond quickly. <https://newsinfo.inquirer.net>
40. Philippine Institute of Volcanology and Seismology. (2021). Disaster risk assessment report. <https://www.phivolcs.dost.gov.ph>
41. Philippine News Agency. (2023). BFP strengthens community engagement through CFAG initiatives. <https://www.pna.gov.ph/articles/1198174>
42. Philippine News Agency. (2023). More community fire brigades eyed in Bacolod City. <https://www.pna.gov.ph/articles/1198174>
43. Puracan, L. S. (2024). National Fire Olympics: Empowering communities through participation and collaboration in firefighting efforts. Baguio Herald Express Online.
44. Rivera, A. (2018). Community-based fire prevention programs: An analysis from Cebu City. *Philippine Journal of Disaster Risk Reduction*, 5(1), 34-48



45. Shaw, R. (2014). *Disaster risk reduction: A local perspective*. Tokyo: United Nations University Press.
46. Simpson, A. (2001). *Community engagement in fire safety: Lessons from Australia*. *Fire Safety Journal*, 36(2), 123-135.
47. Smith, R., & Petley, D. (2009). *The role of community responders in emergency management*. *International Journal of Disaster Risk Reduction*, 3(4), 256-265.
48. United Nations Office for Disaster Risk Reduction. (2021). *Disaster risk reduction: Global overview*.
<https://www.unisdr.org/we/inform/publications/75158>
49. van Niekerk, D. (2015). *The role of volunteer fire brigades in enhancing community resilience*. *Fire Safety Journal*, 74(1), 32-41.