

Effectiveness of Community Fire Auxiliary Group (CFAG) Mechanism in Community Fire Safety Preparedness: An Assessment in Municipality of Rizal, Laguna

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DOI: <https://doi.org/10.51244/IJRSI.2026.1305000156>

Received: 30 May 2026; Accepted: 04 June 2026; Published: 05 June 2026

The Problem and Its Background

INTRODUCTION

Fire is considered a necessary component of life globally. Fire is very useful if it is controlled by human beings, but when it escapes control, it can be destructive. Fire incidents can pose a threat to a person's life, property, and even a country's economy. It usually leads to heavy financial losses and loss of human life. It is considered a negative event that has tangible costs in terms of human life and property.

In the Philippines, the Community Fire Auxiliary Group (CFAG) is essential to improving community preparedness and fire safety. CFAG is a volunteer-run organization made up of locals that supports firefighting efforts until professional fire services arrive, encourages fire prevention education, and facilitates early fire detection. Involving community members in fire safety initiatives, planning drills, and sharing crucial information on fire protocols promotes a culture of shared responsibility. By speeding up response times and lowering fire risks, the CFAG also helps the Bureau of Fire Protection (BFP) minimize casualties and property damage. By equipping locals with the knowledge and skills to respond effectively to fire emergencies, CFAGs significantly increase community resilience despite obstacles such as limited resources and funding, ultimately making the community safer and better prepared for disasters.

Communities still face significant risks from fire incidents, which can cause property damage, injuries, and environmental damage. To enhance fire prevention, early detection, and emergency response at the local level, community-based fire safety groups like the Community Fire Auxiliary Group (CFAG) have been created in partnership with the Bureau of Fire Protection (BFP). Despite their widespread presence, there is limited data to evaluate how well CFAGs improve fire safety and reduce fires in surrounding communities. CFAGs provide rapid response during fire emergencies, helping to limit damage until professional firefighters arrive. Additionally, CFAGs educate residents on safety measures and preparedness to prevent fires from occurring.

The purpose of this study is to evaluate the effectiveness of the CFAG mechanism in the Municipality of Rizal, Laguna, focusing on the group's ability to promote community involvement, accelerate fire incident response, and support fire prevention education. It also examines CFAG members' readiness through training and resource availability. Understanding these elements is essential to identify the advantages and disadvantages of the CFAG system and to suggest improvements that will enhance residents' fire safety resilience.

This study aims to provide important insights into community-based fire safety strategies by examining residents' perceptions and the operational performance of the Community Fire Auxiliary Group in the municipality of Rizal, Laguna. The results will ultimately lessen the frequency and severity of fire disasters in the municipality by assisting local government organizations, fire safety organizations, and community leaders in better supporting and optimizing the CFAG mechanism.

Background of the Study

The Municipality of Rizal, Laguna's Community Fire Auxiliary Group (CFAG) mechanism for community fire safety preparedness stems from the Philippines' increasing need for localized, community-based approaches to emergency response and fire prevention. Particularly in densely populated and fire-prone barangays (villages), fire incidents continue to pose serious risks to life and property. Acknowledging the Bureau of Fire Protection's (BFP) shortage of personnel and resources, the Philippine government implemented policies encouraging local governments and communities to take an active role in fire safety initiatives.

DILG Memorandum Circular No. 2019-40 mandates the implementation of "Oplan Ligtas na Pamayanan" in all barangays nationwide. Issued on March 15, 2019, this circular requires barangay councils to adopt the program to enhance fire prevention, emergency response, and disaster risk management at the grassroots level.

The study fills a knowledge gap by examining how well CFAGs function within the community framework, particularly in municipalities in Laguna such as Rizal. It seeks to assess the effectiveness of CFAGs in improving community disaster resilience, operational difficulties, and preparedness. This context underscores the importance of evaluating CFAGs as essential elements of the comprehensive national strategy to enhance public health and grassroots fire safety.

THEORETICAL FRAMEWORK

The Community-Based Fire Safety Model explains how Community Fire Auxiliary Groups (CFAGs) reduce fire incidents by actively involving local communities as partners in fire prevention, preparedness, and emergency response. This model positions CFAGs as vital links between residents and formal fire authorities, such as the Bureau of Fire Protection (BFP), empowering communities to contribute meaningfully to fire safety and resilience. Key components of the model:

Community Engagement/ Volunteer Participation: CFAGs encourage residents' involvement in identifying fire hazards, educating others about fire safety, and advocating for preventive measures. This fosters a sense of shared accountability. **Training and Capacity Building:** CFAG members improve their abilities to carry out early fire detection, initial suppression, evacuation support, and risk mitigation tasks through ongoing training and resource provision.

Collaborative Partnerships/Coordination with BFP and LGU: To increase overall fire management effectiveness, the model emphasizes collaboration between official fire services and local auxiliaries, combining professional firefighting with community action. **Risk Mitigation and Resilience:** Risk assessments, fire drills, and education campaigns help improve community resilience against fire threats and reduce ignition sources.

By using this model, the effectiveness of CFAG can be thoroughly evaluated, accounting for response times, community involvement, member training, and educational outreach. It fits well with the realities of Rizal, Laguna, where organized, empowered community groups familiar with their surroundings can better manage fire risks. As a result, the Community-Based Fire Safety Model provides a suitable theoretical framework for assessing and enhancing CFAG mechanisms within the municipality's socio-environmental context.

Conceptual Framework

The conceptual framework for the effectiveness of the CFAG mechanism towards improving community preparedness and public safety in the Municipality of Rizal, Laguna would include a number of important components based on the results of various studies on this topic conducted in the Philippines within recent years:

Program Components: Training and Education: This stage entails the process of teaching the people within the community important fire safety information and skills through training sessions organized by the Fire

Auxiliary Group. Community Outreach: Being active in reaching out to people to sensitize them on the importance of the Fire Auxiliary Group Program. **Resource Mobilization:** Creating means of obtaining and distributing important resources like fire-fighting gear, communication equipment, and learning material.

Stakeholder Engagement: Encouraging active engagement and cooperation amongst community members so that there is a feeling of ownership and accountability for fire safety. **Local Authorities:** Cooperating with local fire brigades, government authorities, and other interested parties to be aligned with current fire safety strategies and policies.

Communication and Information Dissemination: **Internal Communication:** Ensuring smooth communication between members in the Fire Auxiliary Group. **External Communication:** Creating plans on how to communicate fire safety information to the general public using different forms of media, such as workshops, pamphlets, and social media platforms.

Monitoring and Evaluation: **Performance Metrics:** Establishing Key Performance Indicators (KPIs) to measure the effectiveness of the Fire Auxiliary Group Program, such as response time, community involvement rate, and impact on fire incidences statistics. **Feedback mechanisms:** Developing feedback channels to receive feedback from the community, Fire Auxiliary Group, and other stakeholders to improve the program. **Sustainability strategies:** **Capacity Building:** Building capacity by providing continued learning and skills development of Fire Auxiliary Group members to maintain their effectiveness. **Incorporation within Community Events:** Incorporating fire safety within community events to promote sustainability within the community.

Crisis Response and Preparedness: **Emergency Protocols:** Establishing effective procedures that will be used to respond to fires, as well as coordinating with the local fire department and other relevant agencies. **Community Drills:** Carrying out regular fire drills in the community in order to prepare for such emergencies using the Fire Auxiliary Group Program.

The Community Fire Auxiliary Group mechanism's effectiveness in reducing fire incidents and improving preparedness within the municipality of Rizal, Laguna, can be measured using this framework, which allows us to determine the impact of the independent variables on the dependent variable. It will also help determine critical areas where intervention is needed to improve the community's fire prevention programs

Research Paradigm

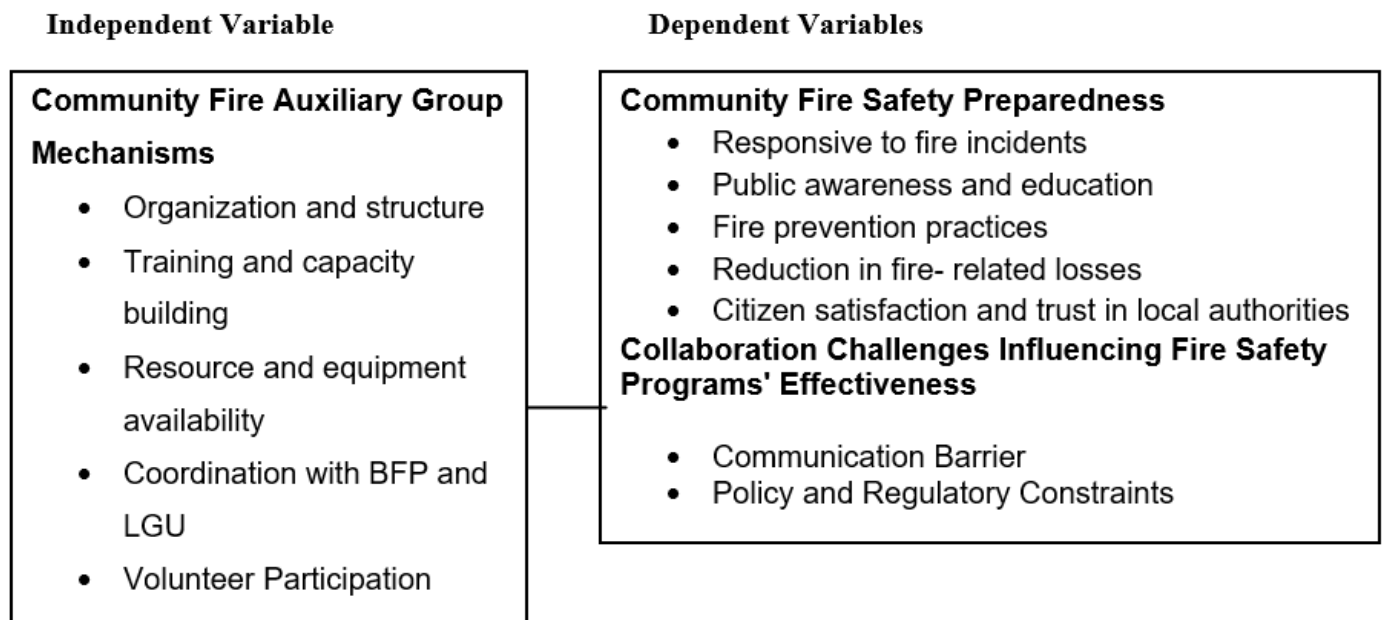


Figure 1: Research Paradigm

Statement of the Problem

This study aims to analyze the effectiveness of the community fire auxiliary group mechanism in community fire safety preparedness: an assessment in the Municipality of Rizal, Laguna.

Specifically, it sought to answer the following questions:

1. What is the level of the respondents' perception of community fire safety auxiliary group mechanisms in terms of:
 - 1.1 Organization and structure,
 - 1.2 Training and capacity building,
 - 1.3 Resource and equipment availability,
 - 1.4 Coordination with BFP and LGU and
 - 1.5 Volunteer Participation?
2. What is the level of the community fire safety and preparedness as observed by respondents in terms of:
 - 2.1 Responsive to fire incidents,
 - 2.2 Public awareness and education,
 - 2.3 Fire prevention practices,
 - 2.4 Reduction in fire- related losses and
 - 2.5 Citizen satisfaction and trust in local authorities?
3. Is there a significant relationship between the community fire auxiliary group mechanism and Community fire safety preparedness?
4. What challenges exist in the coordination and collaboration among CFAGs, the Bureau of Fire Protection (BFP), and MDRRM that affect the efficiency of fire safety programs?
5. Which among the community fire auxiliary group mechanisms significantly predict the challenges affecting the fire safety program?

Hypothesis

There is no significant relationship between the community fire auxiliary group mechanism and Community fire safety and preparedness.

There is no significant relationship between the community fire auxiliary group mechanism and the problem of reduced efficiency in the fire safety program.

Significance of the Study

This research is extremely important for many facets of society, especially for enhancing public safety and disaster preparedness at the local level in the Municipality of Rizal, Laguna. Understanding the function and effectiveness of Community Fire Auxiliary Groups (CFAGs) offers valuable insights as community-based disaster risk reduction and fire safety strategies gain prominence in the face of both natural and man-made hazards.

Local Government Units (LGUs) and Barangay Officials. This study will empirically document the performance and challenges of CFAGs in the municipality. LGUs can use the results to evaluate the policies and operational support currently offered to these groups. It can also help barangay officials identify training and resource gaps and enhance coordination with CFAGs to ensure the group's effectiveness during emergencies.

Bureau of Fire Protection (BFP). The study will offer valuable insights into the implementation of programs such as Oplan Ligtas na Pamayanan, particularly regarding CFAG support and local mobilization. The results

can inform future training programs, resource allocation strategies, and engagement strategies that enhance BFP's partnerships with local communities in fire prevention and emergency response.

Community Fire Auxiliary Group Members and Volunteers. CFAG members can learn more about their current strengths and development areas. The study will emphasize the importance of their role in the community while encouraging increased participation, morale, and dedication. It might also serve as a starting point for advocacy efforts to enhance the recognition, sustainability, and logistical support for their service.

Community Residents of Rizal, Laguna. The study will advance our understanding of how CFAGs contribute to their safety and well-being. It can foster a sense of shared responsibility for disaster preparedness and encourage community involvement in fire prevention and response activities. As residents learn more, they can participate more actively and collaboratively in CFAG activities.

Academics and Researchers. This study adds to the growing body of research on community-based disaster risk reduction (CBDRR) in the Philippine context, focusing on fire safety and grassroots volunteerism. It could serve as a guide for future studies on CFAGs or other community-based emergency response groups in other regions.

Policymakers and Program Developers. National agencies and policymakers can use the results to evaluate and enhance existing frameworks governing community fire auxiliary operations. To strengthen institutional support for CFAGs, it may also offer policy recommendations, including possible budgetary allocations, integration into regional disaster risk reduction and management (DRRM) plans, and long-term sustainability mechanisms.

The relevance of this research lies in the fact that the human component, or the aspect of coordination within the CFAG, is crucial in making the process much faster than the availability of material components, such as firefighting equipment. The study shows that proper coordination of efforts within a group, efficient communication among firefighters, and effective organizational systems for responding to emergencies can lead to faster firefighter responses.

The results of the survey can be useful for members of the CFAG and barangay councils, since they emphasize the importance of training, good organizational structure, and coordination processes in emergencies. At the same time, the survey can help the BFP and local authorities establish more effective community fire programs, with attention paid not only to material aspects but also to organizational and communication processes.

Scope and Limitation

This study aims to assess the Effectiveness of the Community Fire Auxiliary Group Mechanism in Community Fire Safety Preparedness within the municipality of Rizal, Laguna. It examined the impact of CFAGs on community fire safety preparedness, specifically their responsiveness to fire incidents, public awareness and education campaigns, fire prevention practices, and efforts to reduce fire-related losses.

The respondents were 75 CFAG members, 10 BFP personnel, 10 LGU personnel, and 75 community members. The study is descriptive in nature and limited to a survey on the effectiveness of the community fire auxiliary group mechanism in community fire safety preparedness in the Municipality of Rizal, Laguna.

Definition of Terms

The following terms are conceptually and operationally defined for a better understanding of this study.

Citizen Satisfaction and Trust in Local Authorities. This refers to the degree of trust and approval that the community has for the Local Government Unit (LGU), the Bureau of Fire Protection (BFP), and local fire services. High levels of satisfaction and trust show that people think their local government is competent, trustworthy, and proactive in maintaining fire safety and protection.

Coordination with BFP and LGU. This refers to the cooperative relationship among the Local Government Unit, the Bureau of Fire Protection, and the Community Fire Auxiliary Group. By coordinating community initiatives with official fire safety programs and policies, this approach ensures coordinated efforts in planning, training, communication, and response during fire incidents or disasters.

Communication Barrier. This refers to anything that prevents proper communication of information, which can affect reaction time, coordination, and safety in such emergencies. It is important to overcome such barriers by ensuring adequate training and the availability of appropriate tools.

Community Fire Auxiliary Group (CFAG). It refers to a community-based organization composed of trained volunteers that assist with fire prevention, suppression, and disaster response efforts in partnership with the Bureau of Fire Protection (BFP) and the Local Government Unit (LGU). Its mechanism outlines the organization's composition, operational procedures, and relations with governmental organizations.

Community Fire Safe Preparedness. It describes the group initiatives, plans, and actions implemented at the local level to prevent, address, and recover from fires. To reduce the impact of fires on people, property, and the environment, it focuses on increasing citizens' awareness, preparedness, and resilience.

Fire Prevention Practices. This is the collection of behaviors, customs, and laws intended to lessen the probability of fires. Fire safety codes and ordinances, smoke alarm installation, routine electrical system inspections, and appropriate storage of combustible materials are a few examples.

Organization and Structure. It refers to the hierarchy and organizational structure of the Community Fire Auxiliary Group, including the delegation of responsibilities, roles, and lines of command to members. It outlines the reporting structure and leadership positions (such as Team Leader, Safety Officer, and Logistics Officer) to ensure efficient operation and accountability.

Public Awareness and Education. This means informing the public about fire risks, emergency procedures, and safety measures. Fire safety campaigns, school programs, community drills, and information sharing are examples of activities that can teach citizens how to prevent and respond properly to fires.

Policy and Regulatory Constraints. This describes the vital systems that guarantee safety, accountability, and coordination, but they may at times hinder the freedom of movement and quick response capability of community-based firefighting auxiliaries. Compliance with policy and regulatory constraints is very important for safety preparedness.

Reduction in Fire-Related Losses. This refers to the reduction in the harm caused by fire incidents to people, property, and the environment. It is accomplished through efficient planning, prompt action, and preventative measures that reduce community-wide injuries, fatalities, and financial losses.

Resource and Equipment Availability. It refers to the equipment, supplies, and logistical assistance required for the group to operate efficiently. It consists of vehicles, first aid kits, communication devices, and firefighting supplies (such as hoses, extinguishers, and personal protective equipment). These resources must be properly maintained and managed to guarantee preparedness in an emergency.

Responsive to Fire Incidents. It speaks to the community's and the local fire department's ability to act quickly and effectively in the event of a fire. It requires timely reporting, efficient resource mobilization, and coordinated firefighting and rescue operations to minimize damage and ensure public safety.

Training and Capacity Building. This involves teaching and preparing members to perform emergency response, firefighting, rescue, and fire prevention duties effectively. It consists of structured training sessions, workshops, and simulations offered by the BFP or affiliated organizations to improve operational readiness, safety awareness, and knowledge.

Volunteer Participation. This relates to community members' commitment and involvement in fire safety and response programs. By emphasizing civic responsibility, teamwork, and a willingness to serve without compensation, it strengthens community resilience and shared responsibility for safety.

REVIEW OF RELATED LITERATURE AND STUDIES

Reviewing related literature and studies is an essential component of the study. It aims to comprehensively analyze and synthesize prior research and scholarly works relevant to the study's topic.

Related Literature

In the Philippines, a neighborhood-based volunteer fire safety organization, the Community Fire Auxiliary Group (CFAG), was established to support the Bureau of Fire Protection's (BFP) barangay-level mandate. Community Fire Defense Sub-Units (CFDS) are composed of residents grouped by sitio, purok, or clusters of about 100 households. The CFAG organization is standardized. While BFP teams are en route, these units serve as the first responders to localized fires. A thorough approach to fire safety and emergency response in the community is made possible by the structure's inclusion of specialized functional units, such as Communication, Evacuation, Search and Rescue, Medical/First Aid, Security, and Traffic.

To enable timely communication and mobilization during emergencies, the barangay council and a designated "Bumbero sa Barangay" (barangay fire officer) are in charge of CFAG member registration, training, and the creation of a member database. To promptly notify nearby members of a fire incident, this database contains contact information for group messaging. To achieve fire safety goals, CFAG actively engages in fire prevention, community education, hazard mitigation, and preparedness programs, emphasizing a cooperative spirit rooted in the Filipino bayanihan tradition (BFP OLP Guidebook, 2022).

Community Fire Auxiliary Groups (CFAGs) are voluntary associations that assist in fire prevention, education, and firefighting operations within the local communities. CFAGs play a vital role in enhancing community resilience and safety through local participation and assistance in firefighting operations.

The Project Bayanihan Revised Comprehensive Implementing Guidebook, according to BFP (2022), explains that the objectives of this project are to enable the barangay to implement systematic approaches and procedures to prevent fire, respond to emergencies, and manage disaster risks. It further explains that this program's development has come as an answer to the need for fire safety programs that will be adaptive, comprehensive, and inclusive. It is important to mention that the main purpose of this program is to meet the requirements of cities, municipalities, and barangays concerning fire risk mitigation.

The Oplan Ligtas na Pamayanan (2018) is a broad initiative that was introduced by the Bureau of Fire Protection (BFP). This initiative seeks to promote fire safety and disaster preparedness at the community level. The formation of the CFAGs is one of the main components of this initiative. This initiative seeks to incorporate the CFAGs into the overall fire safety and emergency management framework (Jerusalem & Maandig, 2020).

The Memorandum Circular No. 28 series 2020 by the BFP provides the framework for creating CFAGs. The document discusses the process of formation, duties, and functions of CFAGs in helping the BFP carry out their activities related to fire prevention. The creation of CFAGs, as outlined in the circular, underscores community participation in fire safety and disaster preparedness. It provides information on how to form CFAGs within the barangay level, such as requirements, organization, and training process. The CFAGs are tasked with providing help in fire prevention campaigns, responding during emergencies, and taking part in drills. Training is important in ensuring that members possess the required competencies. Cooperation between CFAGs and the BFP is important in ensuring that activities align with overall fire safety measures. Support from Local Government Units (LGUs) is discussed (Bureau of Fire Protection (BFP, 2020).

According to the article, CFAGs can be considered an effective strategy for engaging the community in

disaster risk reduction. CFAGs have proved very effective in promoting community resilience by ensuring that communities engage volunteers, use local knowledge, and receive support from institutions.

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).

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.

Community Fire Auxiliary Group (CFAG) is a well-organized and structured community organization established under the Bureau of Fire Protection, and its main goal is to enhance the fire safety preparedness of the barangay. This is a voluntary fire auxiliary group, and bayanihan is its main operating philosophy for dealing with fire incidents in the community. (Capalonga Fire Station, 2024).

Its organizational structure comprises hierarchical components, including a chief, an assistant chief, and several other departments, such as communication, evacuation, search and rescue, medical, and security units (Capalonga Fire Station, 2024).

As stated by DILG (2020), there have been initiatives taken by the BFP for modernization, which involved upgrading facilities and equipping them with better facilities, along with the proper training of the employees. These efforts have been made to improve the efficiency of firefighters while dealing with emergency situations.

The importance of having well-trained responders cannot be overstated when it comes to mitigating fires and other emergencies. According to the Rural Health Information Hub (2022), emergency personnel like firefighters, emergency medical services, and law enforcement are central to any emergency response, including preparation, response, and recovery efforts. The readiness of these individuals to respond in an emergency hinge on their training.

In rural areas, where there may be fewer emergency workers, responders often have to take on different roles beyond their usual jobs. Training programs help them learn important skills such as putting out fires, rescuing people, using emergency communication, and responding in ways that respect different cultures. With the right training, responders can act quickly, reduce damage, save lives, and help build a safer, stronger community.

The training program for the CFAG, Fire Brigades, and Fire Volunteers shall be divided into two levels based on the level of competency that certain units of the group should possess. These two levels are A. Basic Skills for Responders Training (BSR Training) - the first and awareness level training program designed to provide the responders with the basic firefighting and emergency response skills and competencies. This training shall be provided to all who wish to become members of the CFAG, or who were nominated as members, prior to being officially recognized as members of the company fire brigades or fire volunteer organizations.

Technical Skills for Responders Training (2020) is the second training program that is specifically aimed at equipping the CFAG members, Fire Brigades, and Fire Volunteers with technical skills in the different units, including emergency medical first responders, rescue, traffic, and evacuation control, among others (BFP Memorandum Circular 2020-028 Guidelines in the Conduct and Administration of Training).

In the article by Guadalquiver (2023), entitled "More community fire brigades eyed in Bacolod City," it is noted that there has been an active campaign by the Bureau of Fire Protection (BFP) in Bacolod City in pushing for the creation of more Community Fire Auxiliary Groups (CFAGs). To date, only 8 out of 61 barangays have fire brigades. Fire Marshal Chief Inspector Rodel Legaspi has pointed out that with the large number of people in the city and the lack of firemen, volunteers from the CFAGs are very important as force multipliers in providing an immediate response during fires.

As part of their effort to conduct seminars and symposiums, the BFP intends to train the volunteers on fire prevention and fire response procedures. This will enable the volunteers to prepare themselves in case of a fire outbreak, and this will promote greater cooperation among the people. The article mentions the Mayor Albee Benitez Barangay Fire Olympics, which is the first ever in the region, as a way of developing skills among the volunteers.

Capacity building and fire safety training in the case of Community Fire Auxiliary Groups (2019) involve training the community members of the volunteer group in fire fighting techniques and fire safety procedures. Such training involves classroom sessions, hands-on training on firefighting techniques, how to use the fire extinguisher and hosepipes, rescue operations, and first aid practices. Training takes several days depending on the level of competency required from the volunteers, who in turn are trained to be able to act as the first responders until the Bureau of Fire Protection (BFP) teams arrive at the scene of the fire incident.

To strengthen practical knowledge and increase volunteer confidence, ongoing capacity-building is prioritized through training sessions and field exercises. Additionally, this promotes cooperation and improved working relationships between BFP staff and CFAG members. Research indicates that training improves CFAG's effectiveness in reducing fire incidents and minimizing damage, but obstacles such as limited resources and low participation persist. Sustained, easily accessible training programs, community engagement initiatives, and collaboration with nearby organizations are suggested enhancements to ensure comprehensive fire safety preparedness.

Resource and Equipment Availability

It involves equipment and precautionary measures that need to be put into place by every firefighter in order to ensure their safety. Personal protective equipment (PPE) should be available at all times to all firefighters in order to protect them against fire, heat, smoke, and dangerous chemicals. They include helmets, gloves, boots, and fire-resistant clothing (Smith et al., 2020). It gives one a preview of what to do with their equipment and proper maintenance procedures. Firefighters are also required to learn about the kind of hazards that their equipment will not protect against (Khan et al., 2020). By complying with PPE rules, firefighters will be able to do their job much more effectively and efficiently.

In dealing with fire incidences, firefighters face physical dangers such as heat exposure, smoke inhalation, and possible collapse of buildings. Additionally, firefighters are exposed to great psychological stress as a result of making difficult decisions and witnessing traumatic events. Difficulties associated with dealing with complex structures and ensuring there is enough water are also very challenging tasks for firefighters. (Lagata et al., 2022). Noise, building materials, and the chaos that accompanies fires make it hard to communicate, making it extremely crucial. Besides being challenging, firefighters have to deal with dangerous materials and protect themselves while rescuing others. (Florentin et al., 2022).

It is important to note from the discussion that fire safety cannot be achieved solely through machinery and procedures; rather, it is a product of proper resource allocation, training, and situational awareness. Firefighters need to be adequately prepared physically and mentally to increase their effectiveness.

Memorandum Circular BFP (2020) -028 presents the regulations on the establishment of the Community Fire Auxiliary Groups (CFAGs). The document specifies the procedures and functions of the CFAGs in helping the Bureau of Fire Protection (BFP) in fire prevention and other related tasks. Through the creation of CFAGs, the memorandum stresses that the community plays an important role in fire safety and disaster preparedness.

Fire Prevention, Emergency and Drills shall be facilitated by the CFAGs. Training plays a very important role as it provides knowledge and skills that are needed. Coordination between the CFAGs and the BFP should be properly done to enable their activities to complement the overall strategy on fire safety. Assistance from Local Government Units (LGUs) shall also be provided. (BFP, 2020).

Ronda, (2024) reported that the fire incident at Barangay Luna, Surigao City, highlights the prompt and efficient response led by the Bureau of Fire Protection (BFP) Surigao City Central Fire Station and local agencies in successfully controlling the fire at Parkway Building. Importantly, the Community Fire Auxiliary Group (CFAG) of Barangay Luna played a crucial supporting role in this collaborative effort. The Community Fire Auxiliary Group volunteers assisted in immediate fire response activities, including evacuation and first aid, helping to contain the fire and reduce potential damage while professional firefighters were ending route.

The successful engagement of stakeholders is essential for the effective development of any program at the community level. In this theoretical model, the role of stakeholders in the creation and implementation of a community project is recognized. The Fire Auxiliary Group Project must involve stakeholders in its implementation to get their views on the project, create public trust and make the project sustainable in the long run. Engaging the community members to work together to take responsibility for fire safety within the community. Local Authorities: Coordination with the local fire brigades, governmental agencies and other organizations connected with the fire safety program. (J Kujala, 2022).

Inter-agency cooperation among the Bureau of Fire Protection (BFP) and Local Government Units (LGUs) plays an essential part in efficient fire safety management. As per the Fire Code of the Philippines, LGUs are required to support BFP efforts, including the implementation of fire safety regulations and the establishment of community fire brigades. Studies have shown that effective cooperation between agencies results in greater efficiency and preparedness, while community involvement positively impacts emergency response management. Initiatives such as "Oplan Ligtas na Pamayanan" demonstrate that when BFP programs are combined with LGU support and community cooperation, they yield effective, ready communities.

The review also highlights recurring coordination problems. Some of these problems include unclear division of responsibilities, insufficient funding, and ineffective communication systems. Although such constraints exist, there is no doubt that close cooperation between agencies leads to faster responses, better preparation, and reduced fire threats.

In summary, the research paper highlights the need for integrated collaboration, grounded in sound policies and partnerships, to improve fire prevention programs. With proper coordination among the Bureau, local government units, and the community, the efficiency and effectiveness of fire prevention initiatives, such as CFAGs, will be greatly increased.

Volunteer Participation

A volunteer firefighter must have a high degree of competence, training, and commitment to time—factors which constitute a barrier to the recruiting and retaining process in the case of Slovenia, since most volunteers work as firefighters while being employed full-time in another profession. To determine why people would commit themselves to such a difficult undertaking, both internal and external factors must be taken into account.

The theories concerning volunteer motivation can be classified into two general schools of thought. The first school is concerned with individual, intrinsic qualities and meaning, whereas the second school uses the economic approach by examining the costs and benefits associated with volunteering. The functional theory

includes both aspects and highlights six core motivations: security, altruism, assistance, professional goals, interpersonal relations, and self-improvement.

Maintaining active volunteers is crucial to ensure there is always an available group of volunteers capable of providing such help. It is also crucial to extend current efforts to improve coverage and facilitate faster responses. There are two areas that should be considered when talking about retention; these are the experiences of volunteers and their motivation for volunteering. Since volunteers are not bound to keep volunteering, poor experience or unsatisfied motivation could cause a high level of turnover among volunteers.

Prytz, et al. (2023) found that motivation is one of the main determinants of volunteers' engagement in emergency response organizations. According to their research findings, organized volunteering greatly enhances emergency response effectiveness, especially at higher, sustained participation rates.

The paper presents several research findings indicating how effective emergency responses are when there is a strong, reliable volunteer effort. Effective organization of volunteers helps to increase coverage and speed of response.

Overall, the article emphasizes that effective volunteer fire brigades are determined by adequate motivation of volunteers, good experience among volunteers, and effective engagement. The issues mentioned ensure that the volunteers are reliable and willing to assist with their work.

Gilbert et al. (2021) stated traditional human resource management techniques for unpaid workforces are limited, and without financial compensation, volunteers are less likely to remain committed to organizations, and traditional human resource management practices cannot be applied to volunteers. Work satisfaction and guarantees are essential for influencing volunteer continuance. Volunteerism rates are influenced by generation.

According to Lee et al. (2022), contended leadership across generational boundaries affects the values, priorities, and motivations of employees. Lee et al. stated that employer leadership styles are directly connected with employee relationships, satisfaction, future career decisions, productivity level, and employee retention. Organizations need to consider recruitment processes, organizational policies and procedures, how well they convey what volunteers do, overall training and development, and general volunteer-organization fit. Volunteer motivation varies among generations, and flexibility is necessary for addressing diverse needs of workers.

Emergency service providers, such as fire departments, face unique factors that influence volunteer retention and motivation. Frequent alarms, overexposure to emergencies, and unpleasant incident encounters negatively impact volunteer motivation and diminish their desire to continue volunteering (Prytz et al., 2023). A supportive work environment is highlighted as critical for supervisory and peer support, as well as for opportunities to apply learned behaviors on the job (Phan & Xuan, 2024).

Firefighters frequently encounter stressful and dangerous challenges at work (Lim & Moon, 2023). Phan et al. (2024) suggested that volunteerism is a matter of the heart rather than a matter of human capital. Supportive work environments heighten employees' interest in their tasks and boost their productivity (Phan et al., 2024). This includes identified support, a positive work culture, peer interaction, and supervisory relationships to enhance volunteer retention.

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) to engage 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 and in conducting training sessions to equip volunteers with the skills needed for immediate fire response and prevention (Jerusalem & Maandig, 2019).

Community Fire Auxiliary Group (CFAG), on the other hand, provides an excellent opportunity to improve community fire safety preparedness through a grass-root level intervention mechanism. CFAG operates under the Bureau of Fire Protection, fostering community engagement and reflecting the Filipino tradition of bayanihan, enabling residents to serve as first responders in fire-related emergencies (Baguio et al., 2023).

Several studies have revealed that CFAG has made significant improvements in fire prevention techniques, response preparedness, and community awareness, and has received positive feedback from residents regarding its ability to mitigate fire risks (Flora, 2025).

Similarly, other training programs such as Basic Skills for Responders Training have improved the skills of CFAG members to respond to fire emergencies, albeit continued capacity building efforts are required (Licudine et al., 2025). However, there are various obstacles to the operation of CFAG due to resource constraints, inadequate training, and organizational limitations (Baguio et al., 2023).

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).

According to the literature review, community fire safety preparedness is an important aspect of fire safety. It depends on factors such as awareness, training, participation, and institutional support. Community organizations like CFAG have been identified as playing an important role, as they offer training and promote fire prevention measures. Nevertheless, the literature review indicates that individuals' preparedness within communities tends to be moderate due to challenges related to insufficient resources and training. In view of this, there is a need to enhance individuals' fire safety preparedness within communities through improved CFAG mechanisms, coordinated with the BFP and LGUs.

The article emphasizes the need to strengthen CFAG structures through better support, improved training programs, and coordination with the BFP and LGUs. In general, the article demonstrates that although CFAG structures are essential for fire safety in Philippine communities, they can reach their full potential through continued investment, cooperation, and capacity building.

The responsiveness of the Community Fire Auxiliary Group (CFAG) to fire incidents can be measured by the speed and effectiveness of its response, including early detection, evacuation, and initial fire suppression efforts. The group's high responsiveness indicates the effectiveness of the training and coordination with the Bureau of Fire Protection, as well as fire prevention drills, which will eventually lead to a reduction in the number of fire incident victims and the frequency of incidents. This is directly related to the effectiveness of the CFAG Mechanism in community fire safety preparedness.

According to Jusoh et al. (2023), response time is one of the most critical indicators of fire service performance, with delays in arrival directly linked to the severity of fire incidents. In fact, Montagna (2025) found that each additional minute of response time significantly increases the probability of property damage and casualties. These findings highlight the importance of well-trained personnel, efficient dispatch systems, and strategically located fire stations in reducing response delays.

The physical readiness of firefighters also plays a vital role in operational effectiveness. Liu et al. (2022) demonstrated that a 12-week occupationally tailored training program improved firefighters' strength, endurance, and task performance under stressful conditions. In same context, Nazari et al. (2021) noted that physically fit personal experience lower fatigue and improved cognitive function during emergency situations. These findings underline the need for continuous fitness programs and skill specific drills to maintain high performance during fire incidents.

Disaster management is a process of effectively preparing for and responding to disasters. It involves strategically organizing resources to reduce the harm caused by disasters. It also involves a systematic

approach to managing the responsibilities of disaster prevention, preparedness, response, and recovery. Tulane University School of Public Health and Tropical Medicine (2021). The effectiveness of disaster management policies in reducing the impact of natural disasters largely depends on several key factors: early warning systems, community preparedness, infrastructure resilience, and coordinated response efforts.

Shahidan et al. (2022) noted that delayed responses are more common in regions that use auxiliary firefighters, underscoring the importance of auxiliary firefighters. In addition, Lagata et al. (2022) observed some limitations, such as a shortage of manpower and insufficient resources, that could hinder efficient response.

By effectively integrating community involvement, training, and cooperation with nearby fire departments, CFAG's response to fire incidents enhances resilience and reduces fire risks and losses. Through prompt, coordinated action and education, this community-based mechanism plays a critical role in improving fire safety outcomes and fostering a safer living environment. Synthesis indicates that an effective response to fire hazards relies on quick, synchronized, and highly trained community response. The involvement of the community, training, and coordination between the community and fire services make Community Fire Awareness Groups (CFAGs) very useful.

Public Awareness plays a very important role in fire prevention and emergency preparedness. As per a study on the impact of the CFAG program in La Trinidad, Benguet, the program successfully increased residents' awareness of fire safety practices. The CFAG informed residents about fire safety practices through training and information dissemination.

Furthermore, a study analyzing the impact of CFAG on various barangays in the Philippines found that the mechanism successfully increased residents' awareness and knowledge of fire safety practices through organized training programs in collaboration with the BFP (Bureau of Fire Protection).

Almeida and Queirós (2020) found that regular fire drills significantly reduce evacuation time by helping occupants become familiar with exit routes and emergency procedures. Their research highlights that repetitive practice through drills increases occupants' confidence and reduces hesitation during actual emergencies, enabling faster, more organized evacuations. The familiarity gained through frequent drills minimizes confusion and bottlenecks, thereby improving the overall safety and efficiency of evacuation processes.

According to the literature reviewed, the effectiveness of the CFAG model is highly dependent on its capacity to sustain public awareness and comprehensive fire safety education. With the help of training and seminars, the CFAG model equips citizens with the necessary information and skills for fire safety. Nonetheless, it is essential that the program be consistently implemented and actively participated in for it to remain effective.

The Community Fire Auxiliary Group (CFAG) is instrumental in ensuring the implementation of fire prevention practices since it conducts fire safety inspection, awareness campaigns, and other preparedness activities at the barangay level (Flora, 2024). Various studies have observed that CFAG has a positive impact on community awareness of the importance of safe fire practices and reduces fire incidents (Pineda et al., 2025). According to a study conducted by Pineda et al. (2025), the role of CFAG in promoting fire safety within the community was analyzed. It was found that CFAG played an important role not only during emergencies but also in implementing preventive measures for fire protection, including risk management and training programs, which led to fewer fire hazards.

The proactive measures of the Community Fire Auxiliary Group's (CFAG) Fire Prevention Practices, which involve inspections, storage of flammables, and community maintenance of fire safety equipment, are referred to as Fire Prevention Practices. This is directly related to the effectiveness of the CFAG Mechanism in the preparedness of the community in fire safety as the consistent application of these measures reduces fire outbreaks and indicates that the community-led training and monitoring efforts are successful. Ultimately, the reduced outbreaks verify the mechanism's role in developing a vigilant and self-reliant community that mitigates dangers before they escalate.

According to Guevara (2025), fire safety refers to the set of precautions, minimize the risk of fire-related accidents and ensure the safety of individuals and property in the event of a fire. It involves a combination of awareness, preparedness, and proper safety practices to prevent fires and mitigate their impact if they occur. It is important in every community because it helps protect people, homes, businesses, and the environment from the dangers of fires. It is not just about preventing fires, but also about being ready to handle them when they occur.

Fire safety management is a systematic approach to preventing fires and managing fire risks. It involves identifying potential fire hazards, assessing the risks, and implementing measures to prevent fires from occurring or reduce the impact of a fire emergency. Fire safety management aims to ensure that buildings and facilities are designed, constructed, and maintained to minimize the risk of fire incidents, and that people are trained to respond appropriately in the event of a fire emergency. Fire safety management is crucial because fires can cause significant damage to property and can result in injuries or loss of life (Sysma, 2024)

The author cites fire safety activities as one of the main components of community fire safety, especially through the work of Community Fire Auxiliary Groups (CFAG). These activities involve inspection, proper handling of combustible substances, and maintenance of fire safety devices in the community. The activities are related to preparedness because their consistent implementation helps prevent fires and demonstrate that fire safety can be achieved through community training and monitoring.

The tangible outcomes of the Community Fire Auxiliary Group's (CFAG) efforts, including the reduction in property damage, injuries, and deaths during fire incidents, are evident in the reduction of fire-related losses. This directly impacts the effectiveness of the CFAG Mechanism in preparing communities for fire safety, as a reduction in losses indicates that training, rapid response, and preventive strategies have been combined effectively to enable communities to mitigate risks. Ultimately, tangible losses demonstrate the mechanism's overall impact and encourage greater participation in fire safety initiatives.

One of the main objectives of Community Fire Auxiliary Groups (CFAGs) in terms of fire safety readiness is reducing fire-related losses. By encouraging early detection, quick intervention, and public education about fire hazards, CFAGs improve community-level fire prevention and response. According to research, communities with active CFAGs experience far fewer fire incidents and faster emergency response times, thereby reducing property damage and casualties.

The Bureau of Fire Protection (BFP) frequently provides CFAG members with specialized training that allows them to perform fire drills, instruct locals on fire safety, and serve as first responders, particularly in remote or underdeveloped areas. Their proactive involvement in risk mitigation reduces the severity of fires and prevents them from spreading. For instance, through coordinated community engagement and cooperation with fire authorities, CFAGs have been credited with increased preparedness and decreased fire losses in Baguio City and La Trinidad.

In addition to saving lives and property, CFAGs increase community resilience and confidence in local fire safety initiatives by lowering fire-related losses. However, to optimize CFAG efficacy, issues like scarce resources and community involvement require ongoing attention.

According to the literature reviewed, the effectiveness of the CFAG mechanism is attributed to its ability to reduce fire losses in terms of prevention, public awareness, and response capacity. However, its effectiveness is highly dependent on continuous education and community participation, which ultimately result in safe communities. Another approach to reducing fire losses is through increased public awareness, systematic training, and quick responses from the community. Authors are in agreement regarding the effectiveness of the CFAG mechanism in improving fire safety preparedness by allowing citizens to respond promptly to fires.

The success of the Community Fire Auxiliary Group (CFAG) in training, prevention, and response activities results in citizen satisfaction and trust in the local government, as citizens experience tangible improvements in their safety. This is directly related to the CFAG Mechanism's effectiveness in preparing the community for fire safety, because a high level of satisfaction leads to participation in drills and reporting activities, creating a

feedback loop that sustains and enhances the activity's effectiveness. Ultimately, effective systems such as CFAG enhance community unity and readiness by verifying their functionality through citizen loyalty.

The effectiveness of Community Fire Auxiliary Groups (CFAG) and fire safety readiness depends on citizen satisfaction and confidence in local government. Increased community cooperation with emergency response and fire prevention initiatives is a result of high levels of satisfaction and trust. People are more likely to take part in fire drills, pay attention to safety advisories, and follow fire regulations when they have faith that local authorities and CFAG will act swiftly and competently.

Research demonstrates that timely and dependable fire response, in conjunction with efficient communication and public education, increases community resilience to fire hazards by boosting satisfaction and trust. Additionally, trust encourages residents to actively participate in preparedness activities by lowering perceived risk and fear. On the other hand, a lack of trust can impede fire safety initiatives and reduce community involvement.

Therefore, a key component of successful CFAG operations and general fire safety readiness is cultivating and preserving citizen satisfaction and trust through open, knowledgeable, and compassionate service. Communities are better able to prevent, respond to, and recover from fire incidents as a result of this reciprocal reinforcement of social capital.

Policy and regulatory constraints play a significant role in the implementation of Community Fire Auxiliary Groups. The Bureau of Fire Protection (2026) establishes standardized guidelines for CFAG organization, training, and coordination with local government units; however, implementation varies across localities due to capacity and resource constraints. Similarly, BFP Memorandum Circular No. 2020-028 requires competency-based training and certification before deployment, which may limit the immediate participation of volunteers. Delos Reyes (2025) noted that LGU-level constraints, such as limited funding and weak institutional support, affect CFAG sustainability. Furthermore, regulatory requirements such as fire safety compliance procedures and inspection systems can delay operational readiness. These findings suggest that while policies and regulations are necessary to ensure safety and accountability, they may also create constraints that affect the responsiveness and effectiveness of community fire auxiliary groups.

Related Studies

Fire protection services play a crucial role in safeguarding communities by preventing, mitigating, and responding to fire-related emergencies (Salim et al., 2021). In the Philippines, these services have evolved from informal volunteer brigades into formal institutions, culminating in the establishment of the Bureau of Fire Protection (BFP), which now serves as the primary agency for fire prevention, suppression, inspections, community education, and emergency rescue operations (Longa et al., 2024).

The article shows how important fire protection is for community safety through the preventive measures and mitigation efforts implemented. The fire protection does not simply involve putting out fires but rather risk management, education of the citizens about fire dangers, inspections, and other activities aimed at reducing the danger posed by fire accidents and reducing losses.

The history of fire protection services in the Philippines has shown that such systems have evolved from community volunteer organizations to a more formalized structure. In turn, the formation of a Bureau of Fire Protection was a natural result of this process, creating an institution responsible for fire safety management in the Philippines.

Lapada (2022) identified educational background as a significant predictor of participants' ability to internalize disaster risk reduction concepts. Similarly, Aliesa et al. (2024) emphasized the effectiveness of customized educational interventions in bridging knowledge gaps within diverse community fire safety programs. These studies corroborate the current results, underscoring the critical role of education-sensitive training frameworks in optimizing the implementation of OLP. In practice, addressing educational disparities through adaptive training not only fosters inclusive capacity-building but also enhances overall program resilience by ensuring that all participants can competently fulfill their roles, regardless of their educational background.

Through well-defined roles and active resident participation, CFAG's organization and structure are scalable and adaptable to local community contexts, enhancing fire safety preparedness and response and successfully supplementing official fire protection services.

Community Fire Auxiliary Groups (CFAGs) have been identified as playing a critical role in improving fire safety, lowering the number of fire incidents, and promoting community resilience through education, prevention, and response activities. CFAGs play a significant role across different areas, demonstrating the effectiveness of community-based strategies in disaster risk reduction.

Community Fire Auxiliary Group is part of the official fire protection system, where it undergoes training under the Bureau of Fire Protection (Pineda et al., 2025). Research indicates that the structured organization of CFAG improves response speed and coordination among the community members when addressing any form of fire problem. Nevertheless, resource constraints, leadership issues, and irregular attendance may be among the limitations facing the CFAG units. As a result, the organizational structure of CFAG can significantly influence its effectiveness in fire safety preparedness among the community.

CFAG's organizational structure is significant in ensuring the effectiveness of the group in preparing the community for fire safety issues. CFAG is structured hierarchically and functionally, whereby its organizational structure is composed of the chief, assistant chief, and different units such as communication, evacuation, search and rescue, medical, and security (Capalonga Fire Station, 2024). Studies have shown that CFAG is a community organization that uses bayanihan in its operations, meaning it is decentralized and encourages community participation (Baguio et al., 2023).

Moreover, structured CFAG programs have proven to be effective in improving fire safety preparedness, but with the challenge of sustainability because of the turnover of members (Delos Reyes, 2024). According to Flora (2024), the organizational structure improves the efficacy of the program in terms of fire prevention and community fire safety management. Training programs help to improve the organizational structure of CFAG by giving clearer roles and improving the capabilities of the members (Licudine et al., 2025).

As discussed in the article, the training process and integration with the BFP are critical factors that enhance this system. Through training, individuals acquire the necessary skills required to undertake their duties efficiently, while enhancing the coordination among the members. Research shows that this form of organizational structure improves preparedness levels in the community.

The importance of organizational structure of CFAG is highlighted in the articles by stating that it is a key factor in determining the success of the organization. With proper leadership, training, and community participation, the structure of CFAG ensures that it functions efficiently as an important partner in the fight against fires.

Research by Santiago (2020) on the performance of fire personnel in Metro Manila found that continuous training and drills significantly improved operational readiness, situational awareness, and teamwork among firefighters, attributed to traffic congestion, lack of fire hydrants, and outdated fire trucks, which compromise the BFP's ability to effectively mitigate fire incidents.

Santiago (2020) found that continuous training and drills significantly improved operational readiness, situational awareness, and teamwork among firefighters in Metro Manila. These findings support the importance of regular capacity-building programs to strengthen the skills and efficiency of fire service personnel. Likewise, Ramos and Dizon (2022) reported that the implementation of community-based fire prevention campaigns in barangays contributed to reducing the number of fire incidents, highlighting the value of proactive fire safety education alongside reactive response strategies.

According to Delos Reyes (2024), training is among the most important elements in implementing the CFAG program. A study conducted by Kenneth Van S. Delos Reyes in Cabadbaran City found that training significantly improves the efficiency of auxiliary personnel in responding to fire incidents.

Guadamor et al. (2026) pointed out that volunteer firefighters, including community auxiliary firefighters, depend greatly on training, practice, and simulation exercises to enhance their readiness. This study revealed that adequately trained volunteers have improved effectiveness and coordination when responding to emergencies, even while juggling other duties.

As mentioned by Sedlak (2021), technologies such as virtual training systems can enhance the potential of volunteer firefighters. In addition, the research has identified that, despite having minimal time to train, volunteer firefighters benefit from the flexibility of technological training, which allows them to acquire new knowledge regardless of time constraints.

According to research conducted by Jahnke et al. (2024), trainings, such as those for physical fitness, are critical in ensuring that fire fighters perform effectively in their operations. It was discovered in the research that training exercises not only help to build technical skills but also increase physical preparedness.

The studies highlights that efficient fire management requires highly developed training systems. While traditional approaches, such as drills or community training, exist, new technologies can enhance firefighters' capabilities. The result of proper training is better coordination and quicker response times to fires.

Most efficient fire safety practices include fire safety training, fire evacuation drills, properly functioning fire alarm systems, emergency exit strategies and evacuation plans, and knowledge of fire hazards. Based on the information provided by the Philippine Department of Energy, the following activities are performed for fire safety in the Philippines: fire safety escape plan, knowledge on how to use a fire extinguisher, storing flammable materials, and checking electrical connections. The aforementioned activities will ensure proper fire safety in the country. Fire prevention will decrease the number of fires, fatalities, and damages to properties (Kurata et al., 2023).

Firefighting operations in the Philippines take too much time to finish due to the minimal resources and low upgrades in technologies in the Bureau of Fire Protection (BFP); the poor performance results in increased damage that makes it close to impossible to save all of the lives affected by the fire incident (Zadeh, et al 2021). The above-cited insights highlighted that Community Fire Auxiliary Group members played an important role. Fire responders and CFAG members must be fully equipped with firefighting equipment to effectively respond to fire emergencies and protect lives and property. Adequate equipment, such as fire hoses, extinguishers, protective gear, and communication devices, allows them to manage fires efficiently, especially in areas where professional responders might be delayed or unreachable.

The absence of these tools compromises their ability to perform their duties safely and effectively, putting both responders and affected communities at greater risk. Moreover, continuous training is essential for CFAG members to stay updated on the latest firefighting techniques, safety protocols, and emergency response strategies. With proper training, volunteers can better handle diverse situations, reduce risks, and improve their effectiveness during emergencies. Studies show that well-trained and properly equipped volunteers can significantly reduce fire-related damage, thereby enhancing community resilience.

Firefighting operations in the Philippines take too much time to finish due to the minimal resources and low upgrades in technologies in the bureau of Fire Protection (BFP); the poor performance results to increase the damage, which makes it close to impossible to save all of the lives affected by the fire incident (Zadeh, et al. 2021).

Access to firefighting equipment and firefighting resources is very important for reducing fire damage. According to Muhammad and Mogbo (2025), while basic fire safety equipment is available in buildings, the absence of more sophisticated equipment and maintenance increases the risk of fire. Likewise, Medina et al. (2025) noted that obsolete and inadequate equipment leads to inefficient fire management. Furthermore, Eslamzadeh et al. (2022) stated that the appropriate allocation of resources ensures better emergency management. Also, according to Zhang et al. (2022), the efficiency of available firefighting resources depends on personnel's skills and expertise.

It is evident from the above articles that fire safety measures involve the proper combination of availability of appropriate resources, up-to-date equipment, and trained staff. Improvements in these aspects increase the efficiency of the BFP and CFAGs, resulting in timely responses and reduced fire damage.

Coordination and collaboration difficulties reflect systemic governance challenges. The reported lack of higher government support and ineffective communication channels resonates with Kapucu et al.'s (2022) networked governance model, which emphasizes the complexity of interorganizational collaboration in disaster risk reduction and management (DRRM). These findings suggest that strengthening vertical and horizontal linkages through more precise support mechanisms and streamlined communication protocols is vital to enhance program coherence and resource sharing.

Bautista (2021) in Iloilo City revealed that strong coordination between the BFP and local government units enhanced emergency preparedness and improved the timeliness of fire response. This suggests that inter-agency collaboration is essential to ensuring the overall effectiveness of fire protection services. Taken together, local literature underscores that while the BFP has made significant strides in improving fire prevention and response, challenges such as resource limitations, outdated equipment, and logistical barriers continue to affect its overall performance. Addressing these issues through sustained modernization, training, and community engagement will be crucial in strengthening the effectiveness of BFP personnel in cities such as Roxas City.

Additionally, BFP provides CFAG members with crucial training, oversight, and technical assistance, thereby improving their readiness and capacity to manage fire emergencies safely and efficiently. Through a well-established communication system, coordination also makes it easier to share resources, equipment, and vital information, aiding prompt reporting and response during fire incidents. By offering administrative and logistical support, local government units (LGUs) help to maintain the partnership. All things considered, this coordination increases community involvement in fire safety, cultivates a culture of shared responsibility, and strengthens the community's overall resistance to fire hazards. In essence, it expands the BFP's reach and enhances fire safety results at the local level by acting as a force multiplier (BFP OLP Guidebook, 2022).

Their involvement significantly complemented official firefighting efforts, demonstrating how community-based groups like the Community Fire Auxiliary Group are a vital force multiplier in emergency situations. The joint coordination among BFP, local units, Community Fire Auxiliary Group volunteers, and other organizations ensured a comprehensive response that prioritized community safety and facilitated victim assistance and relocation after the fire was extinguished.

To protect communities through efficient fire prevention and response, the CFAG-BFP-LGU coordination is a dynamic, cooperative framework in which each component's roles and resources complement one another. For community fire safety, this collaboration emphasizes the value of shared accountability and teamwork.

Volunteer motivation is a key element of volunteer management. Gilbert et al. (2021) stated components of this volunteer commitment include purposeful, emotional, and contextual factors. Volunteering competes with work and family commitments, and it is less of a priority for those in the workforce and more of a priority for those in retirement who seek to remain active (Gilbert et al., 2021). Retention of active volunteers is important to sustain volunteer pools capable of providing this type of support (Prytz et al., 2023).

Particularly in underserved or remote areas where official fire services may be scarce, volunteer firefighters and community volunteers are essential to expanding fire prevention and response efforts. Research shows that volunteers play a major role in public education, awareness campaigns, early fire detection, and initial fire suppression.

One of the most important benefits of having volunteer firefighters is their strong connection with the community. Many of the volunteers have been Evansdale residents for a long time, giving them a vested interest in protecting their hometown. This strong connection fosters trust and reliability, as the community knows it can rely on familiar faces during times of need.

Community participation is well fostered in the BFP, as this department has adopted numerous strategies to enhance public awareness and participation in fire safety matters. This can be achieved through fire safety seminars, education on fire safety at schools, fire drills within the community, as well as open house events at local fire stations where people can engage with fire fighters and learn more about what they do. Through such community participation activities, BFP fosters community resilience and builds trust with the community.

The strong connection with the community is not limited to fire protection. Many of the volunteer firefighters are involved in public education, teaching fire safety and prevention to the schools and the community.

Additionally, volunteering increases the resilience and sustainability of fire prevention initiatives by fostering a strong sense of community ownership and responsibility for fire safety. Initiatives for skill development and training improve the efficacy and retention of volunteer-based programs. Research suggests policies to support volunteer recruitment, retention, and well-being, while acknowledging issues such as burnout and resource scarcity.

Community Fire Safety Preparedness

Community readiness for fire safety is an important aspect of disaster risk reduction, especially for fire-prone communities. Several studies have shown that preparedness is influenced by awareness, training, and community participation. The Community Fire Auxiliary Groups are important players in improving community preparedness through fire prevention activities, training, and response readiness. Communities where Community Fire Auxiliary Groups have been more active show higher levels of preparedness, faster response times, and fewer fire-related losses. It should, however, be noted that challenges such as resource limitations, insufficient training, and poor public awareness prevent the attainment of higher levels of readiness.

The Bureau of Fire Protection is efficient in its response time when handling emergencies. The bureau places great emphasis on efficiency to ensure that its interventions are effective and efficient. In addition, quick and dependable services help reduce property damage and the risk of death from fires. Positive perceptions by the community indicate that they expect services to be delivered quickly and efficiently, and that the BFP can be relied upon to provide them.

Fire incident responsiveness is essential for mitigating fire impacts and ensuring life safety. According to Van der Werf et al. (2025), increased response times are directly associated with the likelihood of fire destruction. Additionally, Manes and Rush (2022) noted that quick response increases the chances of successful evacuation and decreases injuries. Additionally, Buffington and Ezekoye (2019) noted that delayed response times increase fire intensity and property damage. Other researchers have shown that variables like training, preparation, and resource allocation affect response effectiveness (Anfone et al., 2025).

In emergencies, the speed at which emergency services respond is a critical element that influences the effectiveness of their actions and the eventual outcome. Quicker response times generally lead to better results, as they reduce the likelihood of severe injuries and deaths (Wang et al., 2019). Moreover, the response time of the Bureau of Fire Protection (BFP) in the Philippines is crucial, as it determines how quickly it can control fires and ensure public safety (Santos & Dela Cruz, 2022). Although response time is vital, BFP personnel face numerous challenges when dealing with emergencies. The two main obstacles affecting firefighting efforts are the lack of water supply and heavy traffic caused by poorly maintained roads (Haque, 2019).

Community fire auxiliary organizations have proven indispensable during fire outbreaks, especially where access to professional firefighting organizations is limited. According to Guadamor et al. (2026), the responsiveness of volunteer firefighters is heavily reliant on their training and preparation. In addition, Eslamzadeh et al. (2021) showed that although volunteer firefighters increase emergency coverage, they may not always be available.

These articles also emphasize the importance of the Community Fire Auxiliary Group (CFAG) and volunteer firefighters in enhancing coverage, particularly in areas where professional firefighters may be delayed by

factors beyond their control. Although the Community Fire Auxiliary Group improves emergency response in the community, the efficiency of its service depends heavily on its level of training and preparedness for action.

Studies indicate that well-implemented policies that prioritize risk assessment, public education, and resource allocation significantly mitigate the damage and loss of life during natural disasters Samuel (2024) Disaster management policies are critical frameworks designed to mitigate the adverse impacts of natural disasters through structured preparation, response, recovery, and mitigation strategies. Four prevalent disaster management policies include preparedness planning, early warning systems, resilient infrastructure development, and community-based disaster risk management. Preparedness planning involves the development of emergency plans and training programs to ensure communities are equipped to handle disaster scenarios effectively (Perry & Lindell, 2020, cited in Samuel, 2024).

In conclusion, based on the information presented by the sources above, it can be noted that effective fire response requires a proper combination of speed, well-trained professionals, sufficient resources, and efficient community systems to address such emergencies.

By conducting seminars, drills, and campaigns, the Community Fire Auxiliary Group (CFAG) can give the residents necessary knowledge on fire prevention and risk, thus forming the basis of their involvement. Since a well-informed community is more likely to detect potential dangers early and cooperate with the auxiliary group, this will directly enhance the efficiency of the CFAG Mechanism in community fire safety preparedness. Studies conducted in fire-prone areas, such as the Philippines, have shown the impact of this type of education in promoting active behavior, thereby multiplying the overall impact of the CFAG.

The study by Muico et al. (2024), which yielded high mean values across all indicators, underscores the community's commitment to fire safety, with residents demonstrating a proactive approach to understanding, implementing, and raising awareness about safety measures. These findings emphasize the importance of community-wide awareness and active participation in preventing fire incidents. The residents' keen attention to community safety, procedures, and awareness reflects a positive, engaged approach to fire safety measures, underscoring the effectiveness of educational programs and interventions.

Jaldell and Sund (2021) emphasized the critical importance of evacuation training, including drills, in reducing casualties during fire incidents by improving "reaction time" — the interval between recognizing danger and taking action. Their research shows that regular, well-structured evacuation training speeds up evacuation processes, enabling individuals to respond more quickly and effectively in fire emergencies. This directly contributes to minimizing harm by ensuring people do not hesitate or delay in evacuating.

Evacuation drills help individuals become familiar with escape routes, proper evacuation procedures, and safe assembly points, increasing their confidence and preparedness during actual emergencies. The improved reaction time from training translates into more efficient evacuations, reducing bottlenecks and chaos.

Overall, effective evacuation training provides critical behavioral conditioning that enhances community resilience by shortening the time between hazard awareness and protective action, which is essential for saving lives during fire incidents.

This finding supports the broader understanding that evacuation drills are essential in preparing building occupants, testing evacuation routes and systems, and identifying weaknesses in emergency plans. Regular drills not only save lives but also enhance readiness by ensuring occupants can react promptly and navigate to safety effectively.

Ramos and Bautista (2021) found that institutions that incorporate fire drills into their safety policies achieve more efficient emergency teams and exhibit faster coordination with fire responders. Their study highlights that regular drills enhance the preparedness and operational readiness of emergency teams, fostering smoother communication and collaboration during actual fire incidents. By integrating drills in organizational safety

frameworks, institutions foster disciplined responses, reducing confusion and delays when coordinating with local fire departments.

This aligns with broader literature emphasizing that embedding fire drills as a core part of safety policies strengthens emergency team dynamics and boosts coordination with fire responders. Such institutionalization ensures that drills are practiced consistently, improving team cohesion and effectiveness in fire response scenarios. Additionally, the synergy between trained emergency teams and professional firefighters facilitated by these drills contributes to quicker containment and mitigation of fire hazards, thereby protecting lives and property more effectively.

Several studies highlight the effectiveness of fire safety measures, including fire-related training, fire evacuation drills, functional fire alarms, designated emergency exits, and fire hazard awareness programs. Schools are particularly high-risk environments due to the presence of combustible materials and multiple ignition sources (Hassanain et al., 2022). Proactive measures are crucial in maintaining a safe learning environment for students and employees. The possibility of a fire occurring in a school puts thousands of lives at risk, making reactive measures equally vital in emergency situations.

Fire prevention practices within the community can be achieved through processes that involve hazard recognition, safety awareness, and proactive behavioral changes to mitigate the risks of fire incidents. Community programs emphasize the importance of educational, preparedness, and participation measures in reducing fire hazards (Blanco et al., 2025).

Moreover, the involvement of CFAG in training programs enables the group members to perform the task more efficiently. Nevertheless, there are some obstacles in the way of CFAG's effective functioning in terms of promoting fire prevention practices. In some cases, there may be insufficient resources and poor community participation, which may limit the success of the initiatives undertaken by CFAG (Baguio et al., 2023).

The articles further highlight the significant contribution of the Community Fire Auxiliary Group (CFAG), an effective tool for enhancing fire prevention efforts within the barangay community. The CFAG conducts inspections, fire awareness programs, and training exercises to increase public awareness and minimize fires.

Effective fire prevention measures hinge on education, community involvement, and institutional support. The combined efforts of CFAGs and the local community can improve community safety.

Community Fire Auxiliary Groups (CFAGs) are volunteer community groups founded as part of the Bureau of Fire Protection (BFP) of the Philippines's fire safety programs. In his research conducted in La Trinidad, Benguet, Flora (2025) revealed that the CFAGs play a crucial role in fire safety through better early detection, quick response, and community involvement, leading to lower levels of fires and their negative impact. It should be noted that locals felt CFAG helped reduce losses and increase preparedness through educational and training events (Flora, 2025).

In the same way, in her research, Delos Reyes (2025) indicated that the use of CFAGs increased the program's effectiveness in high-risk barangays due to the presence of training and community involvement. It is essential to note that, through the efforts of trained members of CFAG, the loss could be reduced by preventing fire from spreading (Delos Reyes, 2025).

Studies have shown that reducing fire damages is possible through the adoption of effective fire prevention approaches. As mentioned by Al-Hajj et al. (2022), the importance of 4E's approach in ensuring fire safety and reduction of fire-related losses can never be overstated. Likewise, Seyedin et al. (2019) argued that changing the environment, passing safety regulations, and changing behavior are important factors that contribute to the minimization of fire hazards. In the workplace setting, according to Samrain et al. (2023), training and preparedness are key for reducing fire damage. Lastly, Ma et al. (2025) concluded that fire alarms and extinguishing devices reduce fire-related losses and deaths.

Generally, it can be observed that for effective reduction in fire-related losses, there is a need to integrate robust community-level action with effective fire prevention technology. With an appropriate blend of these factors, the loss from fires can be significantly reduced.

As stated by Jannatul Ferdous et al. (2024), the trust of citizens in their local administrations depends greatly on the effectiveness of their service provision, the existence of fairness, and the responsiveness of the administration. It was discovered that mistrust among citizens could be attributed to the following factors: delay in services, lack of fairness, and poor communication.

Citizen trust in local government is important for making community fire auxiliary groups effective. Trust depends on service quality, service fairness, and responsiveness, according to Ferdous et al. (2024). Also, according to Mahmud (2024), social capital and social relations significantly influence public trust. In the context of fire prevention and management, Kraha and Njume (2020) indicated that public trust is a critical element in making a community-based fire program successful, as it promotes cooperation and shared responsibility.

Additionally, Vega-Ortega et al. (2025) noted that community-government relations facilitate resilience and cooperation in the event of fires. Furthermore, Kobes et al. (2023) demonstrated that public trust affects people's compliance with safety advice during emergencies.

Citizen satisfaction and trust in local government bodies are critical aspects considered in this thesis, as they significantly determine the level of citizen participation in CFAG activities. A higher degree of trust among citizens will lead to higher compliance with safety regulations and attendance of training sessions on how to handle fire-related situations. In addition, a high rate of citizen satisfaction implies that the citizens hold the local government in high esteem because they see their performance as favorable and therefore support such programs. These factors make an essential contribution to ensuring that there is improved coordination between the local government and the citizens.

Communication barriers have been shown to greatly influence the effectiveness of Community Fire Auxiliary Groups. According to Baguio et al. (2023-2024), ineffective coordination and poor information exchange between members and fire agencies result in operational inefficiencies. In a similar vein, Fischer-Presler et al. (2020) stated that crisis communication is largely constrained by information overload and poor coordination among responding bodies.

More studies analyzing the operations of CFAGs found inefficiencies in communication systems between local governments and volunteer groups, resulting in poor decision-making and poor implementation of actions. Technical communication barriers, such as radio interference, could also disrupt firefighting processes.

Based on studies of communication systems used by firefighters, communication breakdowns due to technical issues such as interference, radio problems, or signal loss usually affect firefighting operations.

The review indicates that an efficient response to fires hinges largely upon effective communication channels. Enhancements in the communication network infrastructure, improved coordination strategies, and overcoming any technological constraints are vital for effective firefighting operations.

The studies have also discussed problems at the local level, due to financial constraints and poor institutional support from LGUs, that could hinder the success of CFAG efforts. Another issue is that compliance with fire safety requirements and other processes could delay their preparedness. It illustrates how, despite the fact that regulations and policies are vital for promoting safety, responsibility, and appropriate training, there might also be restrictions arising from their implementation. Coordination, resource distribution, and regulatory process improvements are needed to ensure an optimal balance between these two aspects.

RESEARCH METHODOLOGY

This chapter presents the research design to be used, the respondents of the study, sources of data, research

instrument, data gathering procedures, and statistical treatments employed in the current study.

Research Design

The researcher employed a descriptive-correlational method. The descriptive term refers to the type of research question, design, and data analysis that is applied to a given topic.

Research methodologists such as Bhat (2023) describe descriptive correlational design as a non-experimental strategy that describes variables in their natural context while analyzing correlations between them without suggesting causality or manipulation. The purpose of this design is to find out the effectiveness of the community fire auxiliary group mechanism in community fire safety preparedness.

Respondents of the Study

The respondents of this study were seventy-five (75) CFAG members, ten (10) BFP personnel, ten (10) LGU, and 75 community members in the Municipality of Rizal, Laguna. These respondents were the source of information of the researcher.

Table 1. Frequency and Percent Distribution of the Respondents

Barangay	CFAG MEMBERS	BFP Personnel	LGU	COMMUNITY
Antipolo	15	10	10	15
Laguan	15			15
Pauli 2	15			15
Pook	15			15
Tala	15			15
Total	75	10	10	75

Research Instrument

The present study on the “effectiveness of community fire auxiliary group mechanism in community fire safety preparedness” used an adapted survey questionnaire based on the reviewed studies. Based on the collection of questions, the researcher developed a set of questions. The questionnaire, validated by experts in gathering the needed data to find out if the role of the community fire auxiliary group has a significant impact and/or relationship to the local disaster preparedness and public safety, is as follows:

Part I. Community Fire Auxiliary Group Mechanism. It is composed of twenty- five items (25) statements intended to determine the respondents' perception of the community fire auxiliary group mechanism. It consists of three (5) sub-variables: organization and structure, training and capacity building, resource and equipment availability, coordination with BFP and LGU, and coordination with BFP and LGU. These sub-variables have five items and use the 5- very highly practiced, 4- highly practiced, 3- practiced, 2- moderately practiced, and not practiced.

Part II. Community Fire Safety Preparedness. This part comprises fifteen (15) statements intended to determine the respondents' perception of community fire safety. It has five (5) sub-variables: responsive to fire incidents, public awareness and education, fire prevention practices, reduction in fire-related losses, and citizen satisfaction and trust in local authorities. The respondents are asked to choose from a scale of 5: 5 - Very Highly Practiced, 4 - Highly Practiced, 3 - Practiced, 2 - Moderately Practiced, 1 - Not Practiced.

Part III. Respondents' Perception about the challenges that exist in the coordination and collaboration between CFAGs, BFP, and LGU that affect the efficiency of fire safety programs. This part comprises ten items (10) statement to determine the respondent's perception. The respondents are asked to choose from a scale of 5, with 5- Strongly Agree, 4- Agree, 3- Moderate Agree, 2- Disagree, 1- Strongly Disagree.

Research Procedure

For the administration and distribution of the instrument, the researcher sought approval and permission from the Municipal Mayor and the Acting Municipal Fire Marshal in Rizal, Laguna, where the study was conducted.

Upon the approval of the permits for the data gathering, questionnaires were given to the respondents of the study. The questionnaires were personally distributed to and collected from each barangay under study. After the retrieval of the questionnaires, the data were tabulated for statistical analysis with the help of her statistician. The collected data was treated as confidential and used only for the study.

Statistical Treatment

The data gathered from the instrument were subjected to statistical analysis and interpretation. The assistance of an able statistician was sought to process the data collected using the appropriate statistical tool.

Frequency of distribution, mean, and standard deviations are utilized in the analysis and interpretation of data.

Pearson Correlation Coefficient

Guilford developed the Pearson Correlation Coefficient "R" test in 1956 to quantify and analyze the linear relationship between two variables. It is used to determine whether a linear relationship between two variables exists and how strong it is (as indicated by the p-value and the coefficient r , respectively). This test is used only when the underlying assumptions are true.

The Rule of Thumb presented by Guildford (1973) was adopted to interpret relationship strength.

Table 3.1 summarizes Guildford's (1973) Rule of Thumb for interpretation of correlation coefficient (r).

Guildford's (1973) Rule of Thumb for Interpretation of Correlation Coefficient

r	Interpretation
< .20	Slight, almost negligible relationship
.20 - .40	Low correlation, definite but small relationship
.40 - .70	Moderate correlation, substantial relationship
.70 - .90	High correlation, marked relationship
> .90	Very high correlation, very dependable relationship

Presentation, Analysis, And Interpretation of Data

This chapter concentrates on presenting, analyzing, and interpreting data based on the study's formulated problems to derive relevant conclusions and recommendations.

Table 1.1 Level of Perception in Terms of Organization and Structure

Indicator	M	SD	Interpretation
The structure of the Community Fire Auxiliary Group is well-defined.	4.47	0.64	Very highly practiced
Members have clearly defined roles and responsibilities.	4.55	0.60	Very highly practiced
The CFAG has efficient and well-coordinated leadership.	4.57	0.61	Very highly practiced
The group's decision-making procedures are well-organized and transparent.	4.58	0.58	Very highly practiced
The CFAG's current organizational structure encourages accountability and efficiency.	4.51	0.64	Very highly practiced

Overall	4.54	0.51	Very highly practiced
Note. N=150. The mean is interpreted as follows: 4.21–5:00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.			

Table 1.1 shows that perceptions of the organization and structure were quite high, with a total mean of 4.54 and a standard deviation of 0.51, indicating that it was “very highly practiced.” From the figures obtained, it can be observed that the Community Fire Auxiliary Groups appear to be extremely well-structured in terms of their structure, role clarity, effective leadership, decision-making, and accountability. This is evident from the consistently high ratings the group has received across all criteria mentioned, indicating a firm organizational base for the successful achievement of its goals.

Among the indicators, the highest score was obtained from the fact that the procedures used to make decisions were well organized and clear, with a mean score of 4.58 and 0.58 standard deviation. The decision-making procedures of the Community Fire Auxiliary Group are structured and open. This openness plays an important role in trust-building and inclusion in the decision-making process. However, when it comes to the lowest score among the indicators, despite being in the same interpretation category as the other items, the clarity of the structure received a low score of 4.47 with a standard deviation of 0.64. It implies that it is important to have a clear CFAG framework in society for any fire outbreak, as such incidents may not allow time for official agencies such as the BFP to act immediately.

In general, the consistently high mean values across all parameters indicate a very good understanding of the CFAG's organizational structure. The small standard deviation values confirm that all respondents had similar ideas regarding the CFAG's structure. All this suggests that the CFAG has created a well-structured system that can ensure efficient operations. Thus, an effectively organized system and structure can help the organization operate successfully and prepare communities for emergencies.

CFAG uses a standardized and policy-guided approach to its organizational structure. It is organized into roles, hierarchy, and functional units. Organization members are organized into geographic clusters. The above organizational structures ensure coordination and communication in emergencies. The above analysis shows that there is an organizational structure of the Community Fire Auxiliary Group. Community Fire Auxiliary Guide of 2019

Table 1.2 Level of Perception in Terms of Training and Capacity Building

Indicator	<i>M</i>	<i>SD</i>	Interpretation
Adequate fire safety and response training is routinely provided to CFAG members.	4.48	0.66	Very highly practiced
Members' firefighting and rescue abilities are enhanced by the training.	4.61	0.61	Very highly practiced
Activities aimed at increasing capacity are pertinent to real-world fire and disaster scenarios.	4.56	0.61	Very highly practiced
After attending training, members feel comfortable carrying out their responsibilities.	4.53	0.62	Very highly practiced
Members of CFAG have access to opportunities for ongoing education.	4.51	0.65	Very highly practiced
Overall	4.54	0.53	Very highly practiced
Note. N=150. The mean is interpreted as follows: 4.21–5:00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.			

Table 1.2 shows an overall mean of 4.54 and a 0.53 SD, indicating that respondents perceive training and capacity building as “Very Highly Practiced”. It implies that CFAG members perceive an excellent level of practice in the training they receive. The trainees feel that the training greatly improves their firefighting and

rescue skills, as evidenced by the rating of 4.61. This shows that the training program enhances their practical skills, thereby improving performance at work.

The value of SD at 0.61 indicates moderate agreement among the trainees on this matter. Hence, the indicative statement “adequate fire safety and response training is routinely provided to CFAG members” has the lowest mean scores of 4.48 and 0.66 standard deviation. It shows that CFAG members perceive that proper fire safety and response training is consistently provided. This means this organization emphasizes training.

The data show that the high mean values across all indicators indicate that the CFAG has generally performed well in capacity building. This can also be attributed to the small standard deviations, indicating that the respondents were consistent in their opinions. In this case, it can be inferred that the CFAG has done well in providing the knowledge and skills its members need to perform their duties successfully. The results also reveal that continuous training plays an important role in enhancing members' preparedness and competence in dealing with fire incidents. Nevertheless, it is worth noting that the slight discrepancy noted in the frequency of training calls for improvement.

Training and capacity building play an important role in determining the efficiency of Community Fire Auxiliary Groups (CFAGs) Delos Reyes (2025). According to a survey conducted by Reyes (2025) in Agusan del Norte, participants strongly agreed that training programs enhance their preparation and responses during fire incidents.

Table 1.3 Level of Perception in Terms of Resource and Equipment Availability

Indicator	<i>M</i>	<i>SD</i>	Interpretation
The CFAG has enough supplies and equipment for fighting fires.	4.35	0.70	Very highly practiced
Every piece of protective equipment and firefighting equipment is in good working order.	4.43	0.72	Very highly practiced
For emergency coordination, there are sufficient communication tools.	4.51	0.62	Very highly practiced
There are enough resources that helps the CFAG to react appropriately.	4.41	0.68	Very highly practiced
The CFAG receives sufficient material and logistical support from the LGU and BFP.	4.48	0.68	Very highly practiced
Overall	4.43	0.57	Very highly practiced
Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.			

From the findings, it is evident that the Community Fire Auxiliary Group (CFAG) has been assessed as highly proficient in resource and equipment availability, with an average score of 4.43 (SD = 0.57). This implies that, in general, the respondents strongly agreed that there are sufficient resources, effective equipment, communication means, and support from the LGU and BFP to the CFAG. In terms of indicators, the highest score for the availability of necessary communication resources during emergencies is 4.51 (SD = 0.62), indicating that communication is the most frequently used aspect of CFAG resources. Whereas, the lowest mean, despite its very high practice level, is, "the CFAG has enough supplies and equipment for firefighting" (M=4.35, SD=0.70), which indicates that even though the supplies and equipment level is satisfactory in comparison to others, there may exist some constraints in this regard.

From the results presented, it is clear that all variables show consistently high ratings. This indicates that the resource availability and utilization is fairly high and well-supported. It should be noted, however, that although the scores for direct firefighting equipment and fire extinguishers remain relatively high, they fall short of those for communication and coordination tools. Thus, it is apparent that although the CFAG is perceived as well-prepared, this is mainly due to support from the LGU and the BFP rather than actual resources.

Given these findings, it can be deduced that improvements can be made by increasing the availability and effectiveness of the physical resources and firefighting equipment used in emergency situations. Nonetheless, the extremely high rating for communication tools demonstrates the need for further improvements in coordination systems. Therefore, based on these findings, it can be concluded that not only is the availability of the physical resources crucial but also that effective communication and coordination systems are essential for the continued success of the CFAG.

The availability of adequate resources and equipment is critical to the effectiveness of Community Fire Auxiliary Groups. As per the findings by Shahidan et al. (2022), an adequate supply of firefighting resources and equipment considerably contributes to swift responses and mitigates the adverse impacts of fires. Pineda et al. (2025) indicated that logistics and materials support provided by LGUs and BFPs facilitate CFAG preparedness.

Table 1.4 Level of Perception in Terms of Coordination with BFP and LGU

Indicator	<i>M</i>	<i>SD</i>	Interpretation
The Bureau of Fire Protection (BFP) and the CFAG have excellent communication.	4.59	0.59	Very highly practiced
During emergency and fire operations, coordination with the LGU works well.	4.64	0.51	Very highly practiced
CFAG members receive ongoing direction and oversight from the BFP.	4.59	0.58	Very highly practiced
CFAG, BFP, and LGU regularly engage in cooperative exercises and activities.	4.57	0.58	Very highly practiced
Working together with local authorities increases the CFAG's overall efficacy.	4.59	0.57	Very highly practiced
Overall	4.59	0.44	Very highly practiced

Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.

The findings revealed an overall mean of 4.59 and a 0.44 SD, indicating that the respondents' perception of coordination with BFP and LGU was “Very Highly Practiced”. This implies that there is a very positive perception towards the Community Fire Auxiliary Group regarding communication and coordination with the Bureau of Fire Protection and the local government units. This is because all indicators have high ratings, indicating strong trust in the relationship and its impact on the success of emergency response operations. The presence of very high ratings and low standard deviations indicates a high level of trust among team members in their team effort, highlighting the significance of collaboration.

This shows that there is a high perception by respondents on the effective implementation of coordination among CFAG, BFP, and LGU. In terms of indicators, the highest average score was for “coordination of CFAG, BFP, and LGU in emergency and fire situations works well,” with an average of 4.64 and an SD of 0.51. This means that during actual emergencies and fires, coordination becomes the most emphasized aspect of cooperation among all three entities. The lowest average score was also quite high at $M = 4.57$, $SD = 0.58$ for “CFAG, BFP, and LGU often conduct cooperative exercises.” It implies that training together helps boost preparedness, coordination, and role clarity for those involved in emergency operations. The federal emergency management agency says that interagency training and cooperation help to make the response process efficient and boost the capability of the responders to cope with the situation.

As can be seen from the above results, efficient coordination with governmental agencies plays a key role in making the work of CFAG more efficient. First, such coordination greatly increases the speed of response to a situation and decision-making process. Second, it should be noted that the highest rate was obtained for inter-agency coordination during emergencies. This means that timely collaboration during fire emergencies is one of the system's strengths. Nevertheless, the moderate rate of joint exercises suggests that additional simulations and training would improve the system and better prepare the system for a crisis.

Coordination between Community Fire Auxiliary Groups (CFAG), the Bureau of Fire Protection (BFP), and Local Government Units (LGUs) is essential for effective fire response and program implementation. Baguio et al. (2024) found that weak coordination between CFAG members and government agencies leads to delayed response and communication gaps. Similarly, Tangkua et al. (2026) emphasized that interagency coordination significantly improves firefighting efficiency and resource deployment.

Delos Reyes (2025) further noted that coordination gaps between LGUs and CFAGs affect program effectiveness and data reliability in evaluation studies. The BFP Community-Based Fire Safety Masterplan (2026) also highlights the importance of structured coordination systems between barangays and fire stations. These findings suggest that coordination is vital not only for operational efficiency but also for the accurate interpretation and analysis of CFAG data in research studies.

Table 1.5 Level of Perception in Terms of Volunteer Participation

Indicator	<i>M</i>	<i>SD</i>	Interpretation
Volunteers from CFAG actively take part in operations, training, and meetings.	4.55	0.63	Very highly practiced
Members are inspired to voluntarily serve the community.	4.48	0.65	Very highly practiced
The community expresses gratitude and support for CFAG volunteers.	4.52	0.62	Very highly practiced
Members have a strong sense of cooperation and teamwork.	4.65	0.58	Very highly practiced
Participation from volunteers greatly enhances community safety.	4.67	0.58	Very highly practiced
Overall	4.57	0.48	Very highly practiced

Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.

The data presented in Table 1.5 on perceptions of volunteer participation show a mean of 4.57 (SD = 0.48), indicating “very highly practiced.” In other words, it suggests that participants perceive volunteer participation in CFAG as highly active and productive in providing assistance for community fire safety. In relation to the items listed under the category of volunteer participation, the one with the highest mean value is “participation from volunteers greatly enhances community safety” with mean of 4.67 and 0.58 standard deviation. This result shows that participants strongly recognize the benefits of volunteering in ensuring community safety.

However, the mean score for the item that scored lowest, even though it was still a very highly implemented practice, is “members are motivated to serve the community voluntarily,” with a mean score of 4.48 and a 0.65 standard deviation, indicating that motivation was high but slightly lower than teamwork and perceived safety impacts.

The overall high ratings across all indicators indicate that volunteer engagement and involvement in the CFAG's various activities, such as its operations, training, and meetings, are indeed high. The small distance between the mean scores suggests that the volunteers' engagement is strongly motivated by both their intrinsic reasons and the support and admiration they receive from community members. This helps to ensure that volunteer participation is not only high but also productive in terms of enhancing the communities' readiness for dealing with fire emergencies.

From the above findings, we can deduce that volunteer participation can be considered as an essential component when striving to increase the effectiveness of the CFAG's work. High ratings for cooperation and contribution to safety imply that volunteerism is crucial for both emergencies and preventive response. However, the relatively low motivation-to-serve score indicates that additional efforts are needed to further promote volunteerism.

Volunteer participation is a critical factor in determining the effectiveness of Community Fire Auxiliary Groups. Pineda et al. (2025) found that active participation in training, fire drills, and emergency response activities significantly improves CFAG performance in reducing fire incidents. Similarly, Baguio et al. (2024) emphasized that higher participation levels lead to better coordination and operational capability, while low

participation results in response gaps. Research on volunteer engagement patterns shows that not all members participate equally, which should be considered when interpreting data.

Table 2.1 Level of Perception in Terms of Response to Fire Incidents

Indicator	<i>M</i>	<i>SD</i>	Interpretation
The community responders respond quickly when a fire occurs.	4.59	0.60	Very highly practiced
Fire response teams arrive on time to control fire situations.	4.57	0.57	Very highly practiced
CFAG members are well-prepared to act during fire emergencies.	4.46	0.62	Very highly practiced
Emergency communication systems function effectively during fire incidents.	4.61	0.58	Very highly practiced
The response coordination between the CFAG, BFP, and LGU is efficient.	4.61	0.59	Very highly practiced
Overall	4.57	0.49	Very highly practiced

Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.

The data presented in Table 2.1 indicate an overall weighted mean of 4.57 and a standard deviation of 0.49, suggesting that “perception was very highly practiced.” This indicates that respondents generally believe the CFAG, together with other agencies, is highly effective in responding to fire emergencies. Among the indicators, the highest mean is shared by “emergency communication systems function effectively during fire incidents” with a mean score of 4.61 and 0.58 standard deviation, and “the response coordination between the CFAG, BFP, and LGU is efficient” 4.61 mean score and 0.59 SD, it implies that communication and inter-agency coordination are the strongest aspects of emergency response.

This is followed by “the community responders respond quickly when a fire incident occurs” mean of 4.59 and 0.60 SD, indicating strong perceived speed of initial response. On the other hand, the lowest mean, although still very highly practiced, is “CFAG members are well-prepared to act during fire emergencies,” with a 4.46 mean score and 0.62 standard deviation, suggesting that preparedness, while still rated highly, is slightly weaker compared to response speed and coordination systems. The data clearly show a consistent trend of high ratings across all indicators, indicating an efficient firefighting process within the community. An efficient communication system, along with collaboration among the CFAG, BFP, and LGU, is crucial for effectively responding to fires in the community.

The implications of these results are that communication and coordination improve the efficiency of fire response operations. Since both received very good evaluations, this shows that management and organizational systems play an important role in handling emergency situations. Nevertheless, since preparedness received a slightly worse evaluation, this suggests that CFAG members need to have more training and be involved in more drills and other activities, which will increase their preparedness for dealing with fire situations.

The literature to date consistently supports the Bureau of Fire Protection's findings on response time, emphasizing that fast, effective emergency services are essential for reducing casualties and property damage, as well as the broader impacts of disasters. Much research emphasizes that communities depend heavily on how promptly fire services respond, and any delay increases the risk, exacerbates loss, and lessens public confidence in emergency response agencies (Ermagun et al., 2025).

Prepared fire units, complete with functional tools and strategically located stations, have been shown to enhance operational effectiveness, enabling quick access to affected areas, including narrow streets, informal settlements, and remote locations. In addition, studies indicate that effective preparedness and consistent performance of fire services are associated with high levels of public trust and confidence, reinforcing positive community attitudes toward the agency (Menzemer et al., 2024).

According to van der Werf et al. (2025), response time is one of the most critical determinants of fire incident outcomes. Their study found that shorter response times significantly reduce fire spread, property damage, and casualty rates, while delays increase the severity of fire incidents. The authors emphasized that every minute of delay increases the risk of total structural loss.

Table 2.2 Level of Perception in Terms of Public Awareness and Education

Indicator	M	SD	Interpretation
The community is knowledgeable about safety precautions and fire prevention.	4.45	0.59	Very highly practiced
The CFAG members regularly hold campaigns to raise awareness of fire safety.	4.43	0.66	Very highly practiced
Residents know what to do in the event of a fire.	4.34	0.64	Very highly practiced
Fire safety education is promoted by CFAG members.	4.47	0.64	Very highly practiced
Programs for public education successfully lower dangerous fire-related behaviors.	4.57	0.57	Very highly practiced
Overall	4.45	0.49	Very highly practiced
Note. N=150. The mean is interpreted as follows: 4.21–5:00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.			

From Table 2.2, the respondents share their perceptions regarding public awareness and education. The overall mean score of 4.45 with a standard deviation of 0.49, interpreted as “Very Highly Practiced”. This indicates that fire safety awareness and education among community members have proven highly effective. The Community Fire Auxiliary Group is very important for public education and safety. Among the indicators, the indicator that “residents know what to do in the event of a fire.” has the lowest mean scores of 4.34 and 0.64 SD and verbally interpreted as “very highly practiced” it means although everything seems to be going on at its best, some changes are needed to be done for making sure everyone is aware about how to act during the fire incident and conducting awareness campaigns continuously.

The findings demonstrate that public awareness and education efforts are relatively successful across all indicators, which receive high scores. Thus, there is an indication of CFAG members' involvement in organizing educational campaigns and fire safety education, which helps raise people's awareness levels. Nevertheless, there is a slightly lower evaluation regarding people's awareness concerning their actions in case of fires. This means awareness may be incomplete regarding practical actions taken during emergencies.

The research indicates that although public education is useful in raising awareness among the public about fire dangers and how people can engage in activities that can cause fires, it is imperative to provide practical training for residents on what to do during fire outbreaks. Improving the practical activities in learning fire prevention can enable a better understanding of how one should behave in the event of a fire. In summary, the study highlights that public education plays a crucial role in fire prevention, but it can be enhanced through practical means.

The results in Table 2.2 are supported by the existing literature, underscoring the critical role that active engagement initiatives play in fostering community awareness and preparedness among fire safety agencies (Montoya et al., 2025). Many studies have shown that agencies with structured public information campaigns, education programs, and community-based preparedness activities secure much higher levels of community participation and responsiveness (Panagiotou & Nikezis, 2024). Public awareness programs, including information campaigns, seminars, and campaigns using social networking sites, have been evidenced to enhance perception of risk, increase knowledge about fire hazards, and motivate proactive behavior—all these pointedly align with the very high engagement observed for the programs conducted by the BFP.

Community Fire Auxiliary Groups will not be successful without public awareness and education. As indicated by Flora (2024–2025), educational programs on fire safety conducted by CFAGs have contributed to increased preparedness within the community.

Also, there have been more recent findings highlighting the significance of raising public awareness and education in preparing for disasters. A finding published in *Safety Science* (2024) found out that education and fire evacuation practices contribute significantly to increasing familiarity and preparedness levels. Raising awareness and educating individuals lead to an increase in family disaster preparedness and resilience.

Table 2.3 Level of Perception in Terms of Fire Prevention Practices

Indicator	<i>M</i>	<i>SD</i>	Interpretation
To avoid fires, CFAG members routinely inspect appliances and electrical connections.	4.43	0.68	Very highly practiced
In homes and workplaces, flammable materials are stored appropriately.	4.31	0.72	Very highly practiced
Most homes have fire extinguishers or other fire-suppression equipment.	4.07	0.85	Highly practiced
Locals abide by the rules and ordinances pertaining to fire safety.	4.38	0.70	Very highly practiced
Regular fire drills and prevention activities are held by the community.	4.44	0.67	Very highly practiced
Overall	4.33	0.59	Very highly practiced

Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.

The table shows that fire prevention activities within the community are “Very Highly Practiced,” with an average mean score of 4.33 and a standard deviation of 0.59. This demonstrates that these measures are widely practiced and that their acceptance is relatively high. The data reveals that “Regular fire drills and prevention activities are held by the community” with the highest mean scores 4.44 and 0.67 standard deviation. This implies that the community actively participates in drills and preventive programs, thereby strengthening preparedness and reinforcing proper responses during emergencies.

It is evident that the community maintains high levels of fire safety practices, with CFAG's participation very active. Preventive measures such as inspections, storage, and drills are also consistently practiced. Among the indicators, the indicator that “most homes have fire extinguishers or other fire-suppression equipment” has the lowest mean scores of 4.07 and 0.85 SD and is verbally interpreted as “highly practiced”. This small difference indicates that even though there are adequate awareness and practice concerning fire safety measures, the equipment itself might not be easily available to everyone.

The overall data show excellent adherence to fire prevention procedures, with the majority of indicators scoring in the “very highly practiced” category. The findings imply that the community places great emphasis on activities geared toward preventing fires. This could be seen in activities such as inspections, drills, and adherence to fire safety guidelines/ordinances. On the other hand, the relatively low score for fire extinguisher/suppression availability reflects a gap between the level of prevention practices and their practicality regarding the provision of the necessary firefighting equipment.

These findings imply a need to increase the availability of firefighting materials. Offering financial assistance to raise awareness of the importance of having at least one fire extinguisher will help overcome this challenge. Generally, fire prevention methods are quite effective, especially on the educational side of the problem. It is also shows that the measures related to fire safety have been effectively applied by the community. This is due to such practices as conducting inspections, abiding by fire safety ordinances, handling hazardous material correctly, and performing fire drills. The application of these measures leads to increased community safety and reduced fire hazards.

It is important to note that fire prevention is critical for reducing fire incidents and ensuring community safety. As Flora (2024-2025) stated, Community Fire Auxiliary Group are crucial for fire prevention through safety drills and campaigns. In addition, Kobes et al. (2023) assert that adopting fire safety behaviors leads to a significant reduction in fires.

Table 2.4 Level of Perception in Terms of Reduction in Fire-Related Losses

Indicator	<i>M</i>	<i>SD</i>	Interpretation
There have been fewer fire incidents in the community.	4.45	0.62	Very highly practiced
Programs for fire safety have contributed to a decrease in property losses.	4.55	0.57	Very highly practiced
The number of casualties and injuries is decreased by the community's readiness.	4.63	0.55	Very highly practiced
In the event of a fire, prompt action reduces the amount of damage to residences and commercial buildings.	4.57	0.55	Very highly practiced
The community's overall fire-related losses are within reasonable bounds.	4.49	0.66	Very highly practiced
Overall	4.54	0.47	Very highly practiced

Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.

Table 2.4 reveals that all parameters are marked "Very Highly Practiced" with a mean score of 4.54 and a very small standard deviation of 0.47. It implies that not only are the fire safety measures undertaken in the community very successfully implemented, but they have also yielded very good results. Among the variables, the highest mean score is for "the number of casualties and injuries is reduced due to the community being prepared," with a mean of 4.63 and a standard deviation of 0.55, suggesting that preparedness and prompt action are considered very effective in saving human lives from fires. Among the indicators, "there have been fewer fire incidents in the community" has the lowest mean scores of 4.45 and 0.62 SD, indicating that, despite the highly favorable results from the perspective of damage and deaths, the decline of the incidence of fires is somewhat less impressive.

The findings overall indicate high performance across all areas, with very high confidence in the efficiency of the systems used to prevent fire-related losses. The findings indicate that community preparedness, quick response, and fire safety are particularly effective in controlling casualties and minimizing losses from fire accidents. The lower number of fires found is an indication that, although the efficiency of loss mitigation is evident, fires may still be occurring despite preventive measures.

From these findings, it can be observed that fire prevention and management have been quite effective in minimizing the impact of fire outbreaks, particularly on human life and property. It underscores the importance of having adequate preparation and response systems in place in the community. Nevertheless, it also underscores the need to improve preventive measures to reduce the incidence of fire outbreaks. In summary, although the impact of fire outbreaks has been effectively managed, there is still room for improvement in preventive measures.

Fire-related loss is an essential factor in assessing the effectiveness of CFAGs. According to Van der Werf et al. (2025), quick fire intervention can reduce the level of damage and fatalities caused by fires, whereas delay increases overall losses. In turn, according to Flora (2024–2025), fire prevention efforts led by the CFAGs result in fewer fires and less community damage. Also, Kobes et al. (2023) found that the effectiveness of emergency interventions, as well as public cooperation, affects the degree of fire occurrence and loss extent.

Table 2.5 Level of Perception in Terms of Citizen Satisfaction and Trust in Local Authorities

Indicator	<i>M</i>	<i>SD</i>	Interpretation
The Bureau of Fire Protection's (BFP) services are deemed satisfactory by the public.	4.63	0.57	Very highly practiced
Initiatives for fire safety are actively supported by the Local Government Unit (LGU).	4.59	0.59	Very highly practiced
Locals have faith that local authorities will act quickly in the event of a	4.61	0.59	Very highly practiced

fire.			
Local fire safety initiatives are seen as successful by the community.	4.55	0.60	Very highly practiced
Public trust is strengthened when citizens and local authorities work together.	4.65	0.56	Very highly practiced
Overall	4.61	0.51	Very highly practiced
Note. N=150. The mean is interpreted as follows: 4.21–5.00=Very Highly Practiced, 3.41–4.20=Highly Practiced, 2.61–3.40=Moderately Practiced, 1.81–2.60=Less Practiced, 1.00–1.80=Not Practiced.			

Table 2.5 shows that all indicators are Very Highly Practiced, with an average score of 4.61 and a standard deviation of 0.51. This means there is a high degree of public trust, satisfaction, and confidence in fire safety agencies, especially the BFP and LGUs, and in their working together with the community. The small standard deviation suggests that respondents' perceptions are uniform and favorable. The data reveal that “public trust is strengthened when citizens and local authorities work together,” with the highest mean scores of 4.65 and 0.56 standard deviation. This means that it is very important for the community to engage in collaboration with local governments in order to ensure that there will be public trust. Citizens can be engaged in their participation in fire safety measures, while at the same time ensuring effective communication on the part of the local authorities.

This demonstrates the good collaboration and joint effort required to ensure fire safety. Hence, the indicative statement “local fire safety initiatives are seen as successful by the community” has the lowest mean score of 4.55 and the lowest standard deviation of 0.60. Although this indicator has the least mean score, it is still considered to be “very highly practiced.” This implies that people in the community have confidence in the effectiveness of fire safety programs such as drills, awareness campaigns, and inspections. It can therefore be seen that there is a very high level of functionality regarding safety procedures, backing, and confidence. This consistent high performance means that all efforts have been very effective and worthwhile.

The implications indicate that high levels of trust and satisfaction can greatly affect the efficiency of fire safety programs and systems in place, influencing their success. Cooperation among community members, BFP, and LGU builds confidence and facilitates a fast, efficient response in the case of fire emergencies. The only drawback of this research is the relatively low rating in citizens' assessment of the program's success, suggesting that additional effort could be put into improving public communication about the program's results and achievements.

Citizen satisfaction and trust in local authorities are key indicators of how effective CFAGs can be in practice. According to Ferdous et al. (2024), satisfaction levels rise due to the responsiveness, efficiency, and transparency of public services, resulting in greater trust in institutions. Similarly, Kobes et al. (2023) note that citizen satisfaction is highly dependent on trust in emergency authorities. Community members feel confident in the bureau's ability to prevent, manage, and respond to any fire emergency. The community members perceive the BFP as capable, there are fast responses to calls, up-to-date equipment, awareness programs, and proactive programs.

Table 3.1 Correlations Between the Community Fire Auxiliary Group Mechanism and Community Fire Safety Preparedness

Community Fire Auxiliary Group Mechanism	Community Fire Safety Preparedness				
	Responsiveness to Fire Incidents	Public Awareness and Education	Fire Prevention Practices	Reduction in Fire-Related Losses	Citizen Satisfaction and Trust in Local Authorities
Organization and Structure	0.648* moderate <.001	0.628* moderate <.001	0.685* moderate <.001	0.528* moderate <.001	0.545* moderate <.001

Training and Capacity Building	0.683* moderate <.001	0.602* moderate <.001	0.569* moderate <.001	0.618* moderate <.001	0.531* moderate <.001
Resource and Equipment Availability	0.655* moderate <.001	0.656* moderate <.001	0.638* moderate <.001	0.661* moderate <.001	0.536* moderate <.001
Coordination with BFP and LGU	0.734* high <.001	0.606* moderate <.001	0.623* moderate <.001	0.574* moderate <.001	0.580* moderate <.001
Volunteer Participation	0.622* moderate <.001	0.621* moderate <.001	0.619* moderate <.001	0.670* moderate <.001	0.563* moderate <.001
<p>Note. Cell contains Pearson r correlation coefficient, interpretation of its strength, and its corresponding p value. Degree of freedom is 148. *p<.05.</p>					

The findings of the correlation analysis reveal that all aspects of the Community Fire Auxiliary Group Mechanism correlate significantly and positively with all dimensions of Community Fire Safety Preparedness, with all p-values being below .001. In general, the correlation coefficients range from moderate to high, indicating consistent relationships among the mechanisms and outcomes. The strongest correlation is seen between Coordination with BFP and LGU and Responsiveness to Fire Incidents ($r = 0.734$, high), signifying that efficient coordination among agencies plays a key role in enhancing fire response.

The next-highest correlations are between Organization and Structure and Fire Prevention Practices ($r = 0.685$, moderate) and between Training and Capacity Building and Responsiveness to Fire Incidents ($r = 0.683$, moderate). These results indicate that organization and training have significant contributions to fire preparedness and prevention. In all other indicators, including resource availability and volunteer involvement, the correlation coefficients are moderately strong ($r = 0.528-0.670$), indicating that all components of the CFAG framework are important for enhancing fire safety preparedness.

In conclusion, the findings indicate that the CFAG strategy shows strong correlations with enhanced fire safety preparedness in communities, including responsiveness, awareness, preventive activities, loss reduction, and confidence in the authority. This is shown by the fact that the correlation values obtained were always relatively moderate to high. This shows that fire safety preparedness is a function of several factors rather than just one.

The implications of this study are highly relevant, as it demonstrates a direct link between improvements in CFAG systems and their impact on community preparedness against fire-related issues. First, high relevance of the coordination with BFP and LGU should be mentioned, since this factor demonstrates that institutional cooperation makes a difference in terms of the effectiveness and speed of the reaction to fire incidents. Second, it is important that a positive connection was established across all the factors analyzed, indicating that improvements in each component of the CFAG process will result in enhanced safety levels among community members.

Table 4.1 Level of Challenge in Terms of Communication Barriers

Indicator	<i>M</i>	<i>SD</i>	Interpretation
Information about fire safety policies and programs is communicated promptly between CFAGs, BFP, and LGUs.	4.52	0.64	Slight challenge
There are clear and standardized communication channels among CFAGs, BFP, and LGUs.	4.54	0.65	Slight challenge

Joint meetings or briefings between CFAGs, BFP, and LGUs are frequent and productive.	4.55	0.67	Slight challenge
All agencies are equally informed about updates, changes, or developments in fire safety programs.	4.54	0.59	Slight challenge
The current communication system allows for smooth coordination during fire emergencies.	4.60	0.57	Slight challenge
Overall	4.55	0.52	Slight challenge
Note. N=150. The mean is interpreted as follows: 4.21–5.00=Slight challenge, 3.41–4.20=Moderate challenge, 2.61–3.40=Serious challenge, 1.81–2.60=Very Serious challenge, 1.00–1.80=Extremely serious challenge.			

The data presented in Table 4.1 show an overall weighted mean of 4.55 and a standard deviation of 0.52. That described the level of challenges in terms of communication barriers as “slightly challenging”. The mean indicates that the communication barrier is only a little difficult. It implies that the communication process between CFAGs, BFPs, and LGUs is functioning well, although there are some minor aspects that can be improved to enhance coordination. The data reveal that “the current communication system allows for smooth coordination during fire emergencies” with the highest mean scores of 4.60 and 0.57 standard deviation. This is a clear indication that the communication process within the agency is considered quite capable of coordinating the emergency management processes during fire outbreaks. An efficient communication network is important in ensuring the exchange of information takes place effectively. In summary, this suggests that communication in the agencies has been effective in coordinating emergencies.

There is usually no problem coordinating when an urgent need arises. “Slight challenge” implies only minor difficulty, so the communication system can be improved. Hence, the indicative statement “information about fire safety policies and programs is communicated promptly between CFAGs, BFP, and LGUs” has the lowest mean score of 4.52 and the lowest standard deviation of 0.64. This implies that most respondents seem to be in agreement about the prompt exchange of information among various agencies. The slight challenge rating suggests that while there may be occasional small delays, communication remains prompt in most cases.

The findings indicate a clear trend of high average scores across all indicators, suggesting effective and organized communication systems between CFAG, BFP, and LGU. The meaning of ‘slight challenge’ as seen across all indicators implies that although some challenges are evident in the communication systems, they are minor and have no effect on the process's effectiveness.

Based on these observations, it is possible to conclude that communication obstacles do not significantly affect the effectiveness of fire safety work within the community. Excellent results in coordination during emergencies demonstrate that current communications are effective and well-functioning. Still, the slightly poorer result in the prompt dissemination of information and updates indicates that improvements can be made to increase efficiency and coordination. Thus, the conclusion may be drawn that further improvements in communication are vital to maintaining efficiency.

As stated by Baguio, Colminero, and Glemão (2024), four factors affect the operations of the CFAG. These include poor communication between the LGU and the BFP, delay in reporting fire incidents, and miscommunication during emergency situations.

Table 4.2 Level of Challenge in Terms of Policy and Regulatory Constraints

Indicator	<i>M</i>	<i>SD</i>	Interpretation
National and local fire safety policies are clearly communicated and understood by all agencies.	4.49	0.61	Slight challenge
Bureaucratic procedures and regulatory requirements do not delay the implementation of fire safety programs.	4.55	0.59	Slight challenge
Existing laws and policies clearly define the roles and responsibilities of CFAGs, BFP, and LGUs in fire safety.	4.55	0.59	Slight challenge

Changes in fire safety policies are promptly shared and followed by all relevant agencies.	4.58	0.58	Slight challenge
Regulatory constraints do not hinder effective collaboration and coordination among CFAGs, BFP, and LGUs.	4.61	0.55	Slight challenge
Overall	4.55	0.50	Slight challenge
Note. N=150. The mean is interpreted as follows: 4.21–5.00=Slight challenge, 3.41–4.20=Moderate challenge, 2.61–3.40=Serious challenge, 1.81–2.60=Very Serious challenge, 1.00–1.80=Extremely serious challenge.			

From Table 4.2, the respondents provide perceptions of the level of challenges posed by policy and regulatory constraints. The overall mean score was 4.55, with a standard deviation of 0.50. It implies that there is little difficulty in implementing fire safety policies and regulations. The systems are already well-structured, efficient, and coordinated; however, some adjustments are necessary, especially in communication and policy explanation, minimizing bureaucracy, and establishing clear responsibilities.

Among the indicators, the indicator that “regulatory constraints do not hinder effective collaboration and coordination among CFAGs, BFP, and LGUs” has the highest mean scores of 4.61 and 0.55 SD and verbally interpreted as “slightly challenge”. It indicates that respondents believe regulation is not a major hindrance to cooperation among CFAGs, BFPs, and LGUs. This is an indication of good interagency coordination, despite small regulatory constraints.

The indicator “national and local fire safety policies are clearly communicated and understood by all agencies” has the lowest mean score of 4.49. This implies that although communication and understanding of policies are good, there is a small gap or inconsistency across organizations. This is because of the relatively high standard deviation (0.61), which implies that some organizations might have greater difficulty in understanding policies than others.

The findings reveal a clear trend of similarity among the indicators' means, indicating an effective policy and regulatory framework. The “small difficulty” rating for all questions implies that even if there are minor obstacles, they have not hindered the implementation of the policies. This implies that the policies are clear, roles are defined, and there are no delays due to bureaucracy.

From the above results, it may be deduced that the current policy and regulatory environment is conducive to CFAG functions and to coordination among various agencies. The slightly low score in policy clarity and orientation indicates a need to improve communication, orientation, and training on policies to ensure that all stakeholders have an in-depth understanding of what they are supposed to do. Improving the above will minimize other minor obstacles in the future and make it more efficient to execute fire safety programs.

According to the Bureau of Fire Protection (BFP) Community-Based Fire Safety and CFAG guidelines (2026), CFAG operations are guided by national policies requiring standardized training, coordination, and reporting systems. While these policies aim to improve safety and accountability, they also introduce procedural requirements that must be strictly followed, such as certification, documentation, and approval processes.

Table 5.1 Summary of Multiple Regression Analysis for Variables Predicting Challenges in Terms of Communication Barriers

Predictor	<i>B</i>	β	<i>SE</i>	<i>t</i>	<i>p</i>	Remarks
Intercept	0.664		0.3045	2.180	0.031	
Organization and Structure	0.251*	0.2441	0.0975	2.570	0.011	Significant
Training and Capacity Building	0.128	0.1293	0.0880	1.449	0.149	Not significant
Resource and Equipment Availability	0.352*	0.3840	0.0765	4.607	<.001	Significant
Coordination with BFP and LGU	-0.115	-0.0962	0.1233	-0.931	0.353	Not significant
Volunteer Satisfaction	0.248*	0.2289	0.0870	2.855	0.005	Significant

Note. N=150. The model is statistically significant, $R^2 = .611$, $F(5, 144) = 45.2$, $p < .001$. The remarks are based on .05 level of significance.
 * $p < .05$.

The findings from the multiple regression analysis indicate that the model is statistically significant ($F(5,144) = 45.2$, $p < .001$) and explains a substantial proportion of the variance in communication barriers, with an R^2 value of 0.611. This means that approximately 61.1% of the variation in communication barrier challenges can be accounted for by the predictor variables in the model. This implies that the components of the Community Fire Auxiliary Group (CFAG) mechanism collectively have a strong influence on communication effectiveness within the system.

Among the predictors, resource and equipment availability ($\beta = 0.3840$, $p < .001$) is the strongest and most significant factor, indicating that the adequacy of communication tools and related resources plays a major role in influencing communication barriers. This is followed by organization and structure ($\beta = 0.2441$, $p = 0.011$) and volunteer satisfaction ($\beta = 0.2289$, $p = 0.005$), both of which are also significant predictors. These findings suggest that clear organizational systems and motivated, satisfied volunteers contribute to more effective communication, while weaknesses in these areas may lead to increased communication challenges.

In contrast, training and capacity building ($p = 0.149$) and coordination with BFP and LGU ($p = 0.353$) are not significant predictors, indicating that they do not independently influence communication barriers when other variables are considered. Notably, coordination shows a negative but non-significant coefficient, suggesting a possible inverse relationship, although it is not strong enough to be considered meaningful in this model.

Overall, the data imply that the communication barriers have more to do with structural and resource issues and satisfaction levels rather than training. The fact that these barriers exist means that despite all the efforts taken towards coordination and training, some problems remain if there is lack of resources, structural disorientation, or dissatisfaction among volunteers.

These implications indicate that there is need to focus efforts to improve the state of the communication infrastructures, organizational clarity, and volunteers. Improving these aspects would lead to improved flow of information among all parties involved in fire safety measures. In general, the findings imply that communication during fire safety is not only dependent on training and policies, but also largely on the presence and quality of resources available in the CFAG.

Table 5.2 Summary of Multiple Regression Analysis for Variables Predicting Challenges in Terms of Policy and Regulatory Constraints

Predictor	<i>B</i>	β	<i>SE</i>	<i>t</i>	<i>P</i>	Remarks
Intercept	1.003		0.2932	3.42	<.001	
Organization and Structure	0.180	0.184	0.0939	1.92	0.057	Not significant
Training and Capacity Building	0.207	0.221	0.0848	2.44	0.016	Significant
Resource and Equipment Availability	0.260	0.298	0.0737	3.53	<.001	Significant
Coordination with BFP and LGU	-0.260	-0.230	0.1187	-2.19	0.030	Significant
Volunteer Satisfaction	0.402	0.391	0.0837	4.81	<.001	Significant

Note. N=150. The model is statistically significant, $R^2=.600$, $F(5,144)=43.2$, $p < .001$. The remarks are based on .05 level of significance.
 * $p < .05$.

In the findings of the multiple regression analysis, the following mechanisms of the Community Fire Auxiliary Group (CFAG) significantly determine the predicted challenges related to policy and regulatory constraints. The value of the intercept is statistically significant at ($B=1.003$, $p < .001$), which implies that there is an inherent level of challenge perceived in the absence of predictors. As for the independent variables, volunteer

satisfaction emerges as the most significant predictor at ($\beta=0.391$, $p<.001$), resource and equipment availability at ($\beta=0.298$, $p<.001$), and training and capacity building at ($\beta=0.221$, $p=.016$).

All these predictors are positive, meaning that their variations affect the change in the dependent variable positively as well. On the other hand, coordination with the Bureau of Fire Protection (BFP) and Local Government Unit (LGU) at ($\beta=-0.230$, $p=.030$) is also a significant predictor but negatively, implying that its variations affect the dependent variable negatively. Finally, organization and structure ($p=.057$) are not statistically significant.

In general, the findings imply that both operational and human factors play an integral part in determining the experience of the policy and regulation issues in the CFAG mechanism. The high influence of volunteer satisfaction means that the perception of policies can be affected by the degree of involvement of members in terms of their mood. In addition, the importance of training and resources demonstrates that when members have sufficient training and resources, they can easily handle the regulatory issues; however, when there is a lack of training and resources, difficulties can arise.

The implications that could be drawn from these findings indicate that efforts to enhance volunteer participation, provide sufficient resources, and increase training opportunities would enable the prevention of policy and regulation problems. In addition, it would be important to increase cooperation with other organizations, since it seems to have a direct effect on the reduction of such problems. In general, the study highlights that policy-related problems are not only dependent on policies, but also on the level of support that members receive within the system.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions, and recommendations based on the gathered, analyzed, and interpreted data.

Summary

This study attempted to determine the Effectiveness of the Community Fire Auxiliary Group Mechanism

(CFAG) in Community Fire Safety Preparedness: An Assessment in the Municipality of Rizal, Laguna. This specifically aimed to assess respondents' perceptions of the community fire safety auxiliary group mechanisms regarding organization and structure, training and capacity building, resource and equipment availability, coordination with BFP and LGU, and volunteer participation. Also, the level of perception of respondents regarding community fire safety and preparedness to respond to fire incidents, public awareness and education, fire prevention practices, reduction in fire-related losses, and citizen satisfaction and trust in local authorities. Furthermore, it aims to determine if there is a significant relationship between the community fire auxiliary group mechanism and Community fire safety preparedness. And challenges exist in the coordination and collaboration among CFAGs, the Bureau of Fire Protection (BFP), and MDRRM, which affect the efficiency of fire safety programs.

The researcher employed a descriptive-correlational method. The descriptive term refers to the type of research question, design, and data analysis that is applied to a given topic. The researcher used a survey questionnaire as the primary means of collecting data from respondents to determine and interpret the effectiveness of the community fire auxiliary group mechanism in community fire safety preparedness. The questionnaire was validated by experts to gather the necessary data to determine whether the role of the community fire auxiliary group has a significant impact and/or relationship to local disaster preparedness and public safety.

The study included 150 of 170 respondents; the unreturned survey questionnaires were due to some members being burdened with responsibilities, and some questionnaires were returned to the barangay hall beyond the deadline. These respondents are the source of information for the researcher. The questionnaire employed in this study was divided into three parts. The first part was composed of indicators about the perceptions of the respondents in the community fire auxiliary group mechanism, followed by the perception of the respondents

as community fire safety preparedness, and the last part was the respondents' perception about the challenges that exist in the coordination and collaboration between CFAGs, BFP, and LGU that affect the efficiency of fire safety programs.

SUMMARY OF FINDINGS

This study determined the impact of the CFAG approach on enhancing fire safety preparedness among communities in Rizal, Laguna. In particular, it identified the relationships between organizational and operational factors that affect the development of communication barriers, which are essential to the proper implementation of fire prevention and emergency response programs.

Based on the results, the study found that, among the identified variables, resources and equipment were the strongest predictors of communication barriers. The data show that the variable has the highest standardized coefficient ($\beta = 0.3840$) with a highly significant p-value ($p < 0.001$). As such, the data suggest that limited resources are the main cause of communication barriers encountered when implementing the CFAG program.

Structure within organizations was also shown to have a significant impact on communication barriers ($\beta = 0.2441$, $p = 0.011$). In this case, the study indicates that the organization and management structure of CFAG units influence communication within the units and with external partners. Training and capacity building were also found not to be statistically significantly related to communication barriers ($\beta = 0.1293$, $p = 0.149$).

Volunteer satisfaction, on the other hand, was found to have a statistically significant impact on communication barriers ($\beta = 0.2289$, $p = 0.005$). In this case, the findings suggest that the level of volunteer satisfaction and motivation plays a part in the communication process.

Moreover, coordination with BFP and LGU had the least effect, as evidenced by its negative standardized coefficient and insignificant p-value. This means that coordination, in its current state, does not significantly contribute to communication barriers in the CFAG framework.

From the results, it appears that structural factors and resources, as well as volunteer-related variables, affect communication barriers more than training and coordination between agencies. It is also important to note that all significant variables have positive coefficients, indicating that increases in these variables are associated with higher levels of communication barriers.

CONCLUSION

The findings gathered in the study led to the formulation of the conclusion:

1. Resource and equipment availability are the most critical determinants of communication barriers within the CFAG system. Insufficient or inadequate resources directly hinder effective communication, thereby affecting the group's ability to respond promptly and coordinate efficiently during fire incidents.
2. The research has also shown that the organizational structure and the level of satisfaction of the volunteers have significant impacts on the communication process. The inefficiency of the organizational structure and low levels of volunteer satisfaction can create communication obstacles, hindering the effective functioning of the CFAG.
3. The capacity-building aspect does not have any significant impact on the communication barriers alone, meaning that training programs will not necessarily result in the best possible output without other necessary factors.
4. The research shows that there is no significant correlation between the coordination between the Bureau of Fire Protection and Local Government Unit and the barrier to effective communication in the CFAG, indicating that perhaps the coordination process is working effectively or is not a contributor to the problem of communication.

5. In conclusion, the study shows that effective communication in the CFAG model can be achieved by giving priority to resources, structures, and volunteer satisfaction, as all these have been proven to impact communication.
6. There is a significant relationship between the community fire auxiliary group mechanism and Community fire safety and preparedness, so the null hypothesis is rejected based on the significant *p-values* found in the correlation and regression table.
7. There is a significant relationship between the community fire auxiliary group mechanism and the problem encountered in the efficiency of the fire safety program; thus, the null hypothesis is rejected based on the significant *p-values* found in the correlation and regression table.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are offered:

1. It is suggested that CFAG members may continue to become more involved in organizational development activities focused on enhancing their internal communication systems. CFAG members could also become involved in feedback processes through which they can voice their issues relating to their constraints. Improving their teamwork and remaining highly committed might help overcome communication barriers related to volunteer satisfaction.
2. To the BFP members in Rizal and Laguna, it is advised to augment their support towards the CFAG by enabling access to communications equipment and firefighting apparatus. Even if coordination was not considered a significant aspect of the study, the BFP can still improve its involvement by providing technical support and ensuring a standard protocol for communication.
3. On the part of the community, greater participation in the fire safety program and the initiatives carried out by CFAG is highly recommended. The community must actively participate in their fire safety program by cooperating with CFAG, attending awareness seminars, and assisting in identifying areas needing improvement in terms of resources and readiness.
4. As far as the Local Government Unit is concerned, it is strongly suggested that more priority should be given to allocating money for purchasing and maintaining firefighting and communication equipment. It will also be wise for the Local Government Unit to work on restructuring CFAG so that roles and responsibilities within CFAG can be assigned to individuals. Furthermore, some programs should be implemented to improve volunteers' welfare.
5. Future research on this subject matter, as the factor that significantly predicted volunteer satisfaction is related to both the barrier of communication and policy constraint, further research could investigate volunteer retention within the context of Laguna based on motivational psychology theories. Also include qualitative research techniques, such as in-depth interviewing and focus group discussions, as part of their methodology. The use of in-depth interviews on individuals involved in the CFAGs, such as community leaders, CFAG members, BFP personnel, and local government officials, as well as ordinary residents, would help them understand better their perceptions, attitudes, and motivations regarding the issue at hand.

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