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EXTENT OF IMPLEMENTATION OF OPLAN LIGTAS NA PAMAYANAN IN SOLANA, CAGAYAN: A BASIS FOR INTERVENTION

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ABSTRACT: *This study assessed the extent of implementation of Oplan Ligtas na Pamayanan (OLP) in Solana, Cagayan, as a foundation for developing appropriate intervention strategies. The Oplan Ligtas na Pamayanan is a community-based disaster risk reduction and management program spearheaded by the Bureau of Fire Protection, aiming to promote disaster preparedness and public safety at the barangay level. Using descriptive research design, the study involved selected barangay officials, barangay health workers, and personnel from the Bureau of Fire Protection through purposive sampling. Data were gathered using a structured questionnaire focusing on key areas of the program: fire prevention education, hazard mapping, emergency planning, and community drills. The findings revealed that while certain components of the Oplan Ligtas na Pamayanan were moderately implemented, particularly public education and awareness campaigns there were significant gaps in community drills, risk assessments, and resource allocation. These gaps suggest a need for capacity building, increased logistical support, and stronger inter-agency collaboration. The study recommends the formulation of targeted intervention programs to enhance community participation and program sustainability in disaster risk reduction efforts.*

Keywords: *Oplan Ligtas na Pamayanan, Disaster Risk Reduction, Community Safety, Fire prevention, Emergency Preparedness, Public Safety Intervention, Bureau of Fire Protection*

INTRODUCTION

In a global perspective, fire prevention program has become the simplest way to save us from fire. It belongs to the precautions which taken to prevent or reduce the probability of a fire which may result in damage, injury, and even death. Fire prevention keeps people safe, without enough knowledge on it, people would have faced a lot of problems. Fire prevention programs is very important in the field of fire fighting. Preparations for every fire accident that could come in every hometown is the foundation of

being aware of it that can put our lives in danger and can damage properties. People and communities are vulnerable to disasters because of inadequate information about fire hazards, and lack of preparations.

The Philippines, a country with a tropical climate, is prone to frequent fires that can result in devastating losses of lives and properties. In response to this pressing issue, the government launched Oplan Ligtas na Pamayanan, a comprehensive program aimed at preventing fires and promoting fire safety in communities.

The fire prevention program under Oplan Ligtas na Pamayanan was designed to educate and raise awareness among the public about fire safety and prevention. The program involved various activities such as conducting regular fire drill exercises in schools, offices, and residential areas to ensure that individuals know how to respond in case of a fire emergency. Providing educational materials and workshops to teach individuals about fire hazards, prevention measures, and emergency procedures. Conducting regular inspections of buildings, homes, and establishments to identify potential fire hazards and provide recommendations for improvement. Launching public awareness campaigns to educate people about the importance of fire prevention and the consequences of reckless behavior.

To implement the fire prevention program under Oplan Ligtas na Pamayanan, various government agencies, including the Bureau of Fire Protection (BFP) and local government units (LGUs), have collaborated with private organizations and community groups. These efforts have resulted in significant improvements in fire safety and prevention.

The BFP has conducted regular fire safety inspections and issued citations to establishments that fail to comply with fire safety regulations. LGUs have established fire stations and equipped them with modern firefighting equipment. Community groups have organized volunteer fire brigades to provide emergency response services. The implementation of Oplan Ligtas na Pamayanan's fire prevention program has led to a significant reduction in fire-related incidents in the country. According to the BFP's statistics, the number of reported fires has decreased by 25% over the past three years, resulting in fewer injuries and fatalities. Additionally, the program has raised awareness among the

public about fire safety and prevention, leading to a shift in behavior towards more responsible attitudes towards fire.

Furthermore, the implementation of Oplan Ligtas na Pamayanan's fire prevention program has been a success in preventing fire-related incidents in the Philippines. The program's focus on education, inspections, and campaigns has raised awareness among the public about fire safety and prevention, leading to a reduction in fires and injuries. To continue this success, it is essential to sustain the program's efforts and expand its reach to all communities across the country. By doing so, we can ensure a safer and more secure future for all Filipinos.

In other countries like Japan has a well-established fire prevention program, with a strong emphasis on community-based initiatives. The Fire and Disaster Management Agency (FDMA) is responsible for implementing fire safety measures, including inspections and education campaigns. Japan has a high-tech fire prevention system, with advanced sensors and monitoring systems to detect fires early. Also, South Korea has a comprehensive fire prevention program, with a focus on education and public awareness. The National Fire Agency (NFA) is responsible for implementing fire safety measures, including inspections and training programs. South Korea has implemented a "Fire Safety Certification System" to ensure that buildings and establishments meet fire safety standards. In addition, China has a rapidly expanding fire prevention program, with a focus on urbanization and industrial development. The National Fire Fighting Corps (NFFC) is responsible for implementing fire safety measures, including inspections and education campaigns. China has implemented a "Fire Safety Law" to ensure that buildings and establishments meet fire safety standards. Also, Thailand has a well-established fire prevention program, with a focus on community-based initiatives. The Department of Disaster Prevention and Mitigation (DDPM) is responsible for implementing fire safety measures, including inspections and education campaigns. Thailand has implemented a "Fire Safety Act" to ensure that buildings and establishments meet fire safety standards. Moreover, Vietnam has a comprehensive fire prevention program, with a focus on industrial and commercial establishments. The Ministry of Public Security (MPS) is responsible for implementing fire safety measures, including inspections and training programs. Vietnam has implemented a "Fire Safety Law" to ensure

that buildings and establishments meet fire safety standards.

In the Philippines, the Bureau of Fire Protection(BFP) was established under the Department of Interior and Local Government, DILG and by virtue of Republic Act 6975, otherwise known as DILG Act of 1990, is primarily to perform and be responsible for the prevention and suppression of destructive fires on buildings, houses and other structures, forest lands, land transportation vehicles and equipment, ships and vessels docked at piers or wharves anchored in major seaports, petroleum industry installations, plane crashes and other similar activities. Its mission is to prevent and suppress destructive fires; investigate its causes; enforce fire code and other related laws; respond to human-caused and natural disasters and other emergencies. The agency is responsible for executing national policies associated with firefighting and protection. BFP is in duty of the administration of fire and emergency services. BFP also host different programs and activities regarding fire prevention to lessen the rate of fire in the entire region.

With this, the Bureau of Fire Protection (BFP) implemented the "Oplan Ligtas na Pamayanan" capacitating volunteer firefighters who will function as force multipliers in fire protection-related activities at the grassroots level. “Oplan Ligtas na Pamayanan,” is a massive fire prevention campaign nationwide, targets to conduct series of fire safety trainings in the villages. Under the campaign, the local fire brigade will function as the first responding unit at the barangay level in case of emergencies/fire. Each barangay should organize a Community Fire Auxiliary Group (CFAG) wherein the members will be the one to respond immediately before the BFP men arrived at the site. Under the CFAG is the Community Fire Defense Unit wherein each member will have a cluster of around one hundred households to monitor, guide them about basic firefighting for the safety of all. In addition, the "Oplan Ligtas na Pamayanan," is composed of four stages: Handang Pamayanan (ready community), Bayanihan Program (cooperative undertaking), Kaagapay Program (companion), and the Lingap Program (protective care). Under the Handang Pamayanan, the barangay will create a community fire protection plan and establish a community hazard map to identify the hazard areas, and such plans will lay out in case of fire incidents. The Bayanihan Program focused on neighborhood initiatives in creating fire plans and an expansion of abilities and skills taught to the volunteer fire brigade who will

then considered as members of CFAG. Meanwhile, the Kaagapay Program gives emphasis to the capacity building of firefighters, wherein the BFP personnel conducted barangay visits for basic fire safety awareness among the household members. The Lingap Program, on the other hand, recognized villages that conducted intensive house-to-house fire safety surveys in densely populated neighborhood and fire-prone areas.

Pursuant to Section 389 paragraph "f" of the Local Government Code, it is the mandate of the Punong Barangay to "organize and lead an emergency group whenever the same may be necessary for the maintenance of peace and order or on occasions of emergency or calamity within the Barangay" subsequently transcending the mandate of the barangay as the basic political unit of the government. Furthermore, under Section 21 and 22 of the Republic Act No. 10121, the barangay council mandated to implement programs and projects aimed at the prevention and mitigation of human-caused disasters and natural hazards through its Local Disaster Risk Reduction and Management Fund (LDRRMF). As such, the state recognized the responsibility and the capabilities of the barangay units to mobilize resources and immediately respond to localized natural hazards and human-induced disasters. To help barangays fully attain self-reliance, they may assist in developing strategies and initiative-taking approaches in addressing emergencies and calamities in organizing and leading an emergency response group and promoting community and citizen participation. The Bureau of Fire Protection, by virtue of both Republic Act No. 6975 otherwise known as the DILG Act of 1990 and the Republic Act No. 9514 otherwise known as the Fire Code of the Philippines of 2008, has the mandate to prevent and suppress destructive fires at all costs with the active participation of the community. In its desire to institutionalize fire prevention initiatives at the grassroots level, it initiated the creation of the OPLAN LIGTAS NA PAMAYANAN, BFP's response to the ever-growing demand for a more adaptive, comprehensive, and immersive fire protection program for the communities, rural and urban villages, and barangays. Moreover, the OPLAN lays down a series of interconnected activities focused on capacitating the barangays with systematic, comprehensive methodologies and tactical procedures to prevent and respond to fires with the goal of providing a "Quality of Life through a Fix Safe Community with Proactive, Responsive, Resilient, Self-reliant and Empowered People". The BFP recognizes the

significant role of the barangays, duly represented by their barangay officials, in ensuring a successful and effective implementation of the program as it will directly benefit them and their constituency, hence this circular.

Indeed, all local government units, especially the barangay councils and the city/municipal local governments shall adopt and facilitate the implementation of OPLAN LIGTAS NA PAMAYANAN (OLP) in close partnership with the Bureau of Fire Protection. The Barangay council shall prioritize along with other disaster preparedness initiatives the implementation of the OLP as they are to endeavor the reduction or mitigation of destructive fires in their communities. Also, the BFP served as primary facilitators and coordinators of the OLP in the barangays and expected to render all necessary training and assistance to the local councils in their implementation of the component activities of the OLP. Finally, the BFP and all local government units and barangay councils shall incorporate into their annual budgets the implementation of the OLP.

This study gives deeper understanding and knowledge about risk reduction. Hence, fire prevention programs are an important aspect that everyone must be aware of. The purpose of fire prevention programs is to eliminate injuries during disaster and be always prepared. It helps everyone in preventing damage or loss of equipment, preventing human suffering, casualties, injuries, and exposure to hazardous atmospheres.

With this, the barangay officials must have sufficient knowledge on fire prevention practices to assist the community residents during an unexpected fire disaster. Proper training and programs must be conducted and educate every official for them to be aware of the DO's and Don'ts during circumstances. Also, the barangay officials should educate the public to update on different techniques and safety precautions during fire. There should be a proper dissemination of information in every community about fire prevention and safety programs to avoid such danger.

Over the years, the growth in technology used to educate about fire safety has increased greatly. We now have diverse ways to reach people of all ages. This information includes the increased importance of the smoke detector, fire safety houses, fire safety videos, educational websites, high school cadet programs, and fire education equipment. All

of these are immensely helpful and successful ways of teaching fire prevention and safety programs.

Moreover, fire prevention program provides information regarding the responsibilities of the public, potential fire hazards, ignition sources and control measures, fire elements fire protection systems, and housekeeping. These practices and programs play a critical role in the community that they served. The prevention or self-mitigation of an emergency is a win-win situation for all parties involved. Fire prevention needs to be a year-round and ongoing process that focuses on all hazards.

Solana Fire Station of the Bureau of Fire Protection of Region 2 is committed to prevent and suppress destructive fires, investigate its causes; enforce Fire Code and other related laws; respond to human-caused and natural disasters and other emergencies. Solana, Cagayan is a first-class municipality in the province of Cagayan, Philippines. According to the 2020 census, it has a population of 88,445 people. Therefore, the demand for fire safety practices and services in the whole municipality is high. In addition, the fire station is committed to undertaking different programs and activities regarding fire prevention programs which aim to prevent fire incidents that would cause damage and loss of property and the lives of the people. The fire station undertook fire prevention practices in connection with the Celebration of Fire Prevention Month which happens every month of March where most of the fire incidents are being transpired in the month of March. The fire prevention practices conducted by the fire station are the fire safety awareness campaign and fire safety inspection campaign.

Hence, the main objective of this study is to assess the Extent of Implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan for 2019-2024.

Statement of the Problem

This study aims to assess the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan for the C.Y. 2019-2024. Specifically, it will seek to answer the following questions:

1. What is the profile of the respondents in terms of:

    1.1. Barangay Officials and Community Residents

        1.1.1. Age

1.1.2. Sex

1.1.3. Civil Status

1.1.4. Highest Educational Attainment

1.1.5. Years in Service as CFAG

1.1.6. Number of Trainings related to CFAG

1.2. Bureau of Fire Personnel

1.2.1. Age

1.2.2. Sex

1.2.3. Civil Status

1.2.4. Highest Educational Attainment

1.2.5. Position

1.2.6. Length of Service

2. What is the extent of implementation of the Oplan Ligtas na Pamayanan in Solana, Cagayan in terms of:

2.1. Handang Pamayanan

2.2. Bayanihan

2.3. Kaagapay

2.4. Lingap

3. Is there a significant difference on the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan as assessed by the three groups of respondents?

4. Is there a significant relationship between the profile variables of the three groups of respondents on the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan?

5. What are the problems or challenges encountered by the respondents in the implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan.

6. What action plan can be proposed based on the result of the study.

Hypotheses

This study was guided by the following hypotheses that:

1. There is no significant difference on the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan as assessed by the three groups of respondents.
2. There is no significant relationship between the profile variables of the three groups of respondents on the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan.

RESEARCH METHODOLOGY

This study made use of descriptive-quantitative research design. It is an approach that aims to collect and analyze both descriptive and numerical data to answer a research question. Moreover, this design will be used for it to describe the significant difference in the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan as assessed by the three groups of respondents and the significant relationship between the profile variables of the three groups of respondents on the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan. The participants in this study comprised three distinct groups, purposively selected to provide relevant data for the research. These groups included: Fifteen (15) Bureau of Fire Protection (BFP) personnel from the Solana Fire Station in Solana, Cagayan. These personnel were specifically chosen as they are primarily responsible for the section in charge of implementing fire prevention and safety programs within the municipality. Their roles in the administration and execution of fire safety initiatives make them key informants for the study. Ten (10) barangay officials from seven (7) identified fire-prone barangays within the municipality; These officials are specifically chosen as the nature of work, and their roles require physical strength and administration and execution of fire safety initiatives making them a key informant for the study. Seven (7) Barangay Health Workers from the municipality. These individuals were selected due to their leadership roles in the community, particularly in areas related to health and safety, and their ability to provide relevant perspectives on fire safety awareness and preparedness within their respective barangays. The necessary data was gathered using a questionnaire checklist crafted from the Bureau of Fire Protection Oplan Ligtas na Pamayanan revised

comprehensive implementing guidebook. The questionnaire checklist was divided into two sections. Part I elicited respondents' personal information including their age, sex, civil status, highest educational attainment, number of years as Community Fire Auxillary Group member, number of trainings related to Community Fire Auxillary Group, position, and length of service. Part II examined the degree to which respondents viewed the extent of implementation of Oplan Ligtas na Pamayanan in terms of Handang Pamayanan (Ready Community), Bayanihan Program (Cooperative undertaking), Kaagapay Program (Companion), and Lingap Program (Protective Care). Each item was rated using the following scale. Part III will be an open-ended question and will be treated through thematic analysis. As a partial requirement for the Master in Public Administration at the University of Cagayan Valley, the researcher will write a letter to the University President thru the IRB Director explaining that she is currently enrolled in Thesis Writing titled "Extent of Implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan."

To make sure the study complies with the ethical standards and safeguards the rights and welfare of participants, the researcher will incorporate Initial Findings from the Institutional Review Board (IRB). Once the initial findings have been revised, the researcher will be granted the Certificate to Collect data. This will be followed by data collecting, analysis and producing the study's draft article. The IRB will review a copy of the manuscript to make sure it complies with the requirements outlined in the Certificate to collect data. When an ethics clearance certificate is issued, it means that the study has met all requirements prior to the final defense. The researcher collects the data directly. The researcher writes to the Municipal Fire Marshal of Solana Fire Station to perform a study. The researcher personally distributes the questionnaire when it has been approved. The surveys will be distributed and collected by the researcher in person. They will receive a thorough explanation of the questionnaire's contents. The objective of the study is to make sure that the respondents are aware of the study's goals, and any private information they voluntarily provide will be treated with the highest confidentiality and in accordance with the Data Privacy Act. The data obtained on the profile variables of the respondents will be analyzed using frequency

count and percentage distribution, while data on the extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan will be analyzed using weighted mean.

Weighted mean will be interpreted using the modified 5-point scale below.

Numerical Value	Range	Descriptive Scale
5	4.21-5.00	Fully Implemented
5	3.41-4.20	Highly Implemented
3	2.61-3.40	Moderately Implemented
2	1.81-2.60	Partially Implemented
1	1.00-1.80	Not Implemented

Moreover, t-test/one-way ANOVA will be used to analyze the difference in the implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan as assessed by the barangay

Lastly, Chi-square Cramer's V will be used to test the relationship between the profile variables of the barangay officials and their assessment of the implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan. Also, the problems or challenges encountered by the respondents in the implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan will be narrated.

RESULTS AND DISCUSSIONS

Frequency and Percentage Distribution of Respondents According to Age

Age	Frequency	Percent
21-30	8	10
31-40	25	33
41-50	21	27
51-60	20	26
61 above	3	4
Total	77	100.00

As reflected on the table 2a.1 most of the respondents (32.47%) belong to the 31–40 age group, followed by those aged 41–50 (27.27%) and 51–60 (25.97%). Only a small percentage are within the 21–30 age range (10.39%) and 61 years and above (3.90%). This age distribution suggests that the barangay health workers and barangay officials are predominantly in their middle adulthood, which may imply a balance between energy, experience, and a sense of responsibility—factors that are crucial in leadership and governance roles.

Frequency and Percentage Distribution of Respondents According to Gender

Gender	Frequency	Percent
Male	54	70
Female	23	30
Total	77	100.00

As seen in the table 2a.2, a significant majority of the respondents are male (70.13%), while only 29.87% are female. This indicates a gender disparity among the barangay health workers and barangay officials, reflecting possible cultural or societal norms that favor male leadership in local governance. Such findings underscore the importance of gender-inclusive initiatives that promote equal opportunities for leadership and decision-making roles within the community.

Frequency and Percentage Distribution of Respondents According to Civil Status

Civil Status	Frequency	Percent
Single	11	14
Married	61	79
Widowed	5	7
Total	77	100.00

The table 2a.3 shows that most of the respondents are married (79.22%), with only 14.29% identifying as single and 6.49% as widowed. This implies that a large proportion of barangay health workers and barangay officials are likely to manage both family and public responsibilities. Their marital status may influence their leadership priorities, potentially fostering more family-oriented policies and community programs.

Frequency and Percentage Distribution of Respondents According to Highest Educational Attainment

Highest Educational Attainment	Frequency	Percent
Elementary	21	27
High School	36	47
College	20	26
Total	77	100.00

As seen in table 2a.4, nearly half of the respondents attained a high school education (46.75%), followed by those who completed elementary education (27.27%) and college education (25.97%). This indicates that while many officials have basic educational qualifications, there remains a considerable portion who may benefit from further education and training. The data highlights the need for continuous professional development to enhance the competencies of local officials in policy implementation and service delivery.

Frequency and Percentage Distribution of Respondents According to Number of Trainings

Number of Trainings	Frequency	Percent
1-5	66	86
6-10	9	12
Above 10	2	2
Total	77	100.00

As indicated in the table 2a.5, a vast majority of the respondents (85.71%) have attended 1–5 trainings, while only 11.69% and 2.60% attended 6–10 and more than 10 trainings, respectively. This suggests that although most officials have undergone some form of capacity-building, their exposure remains limited. Increasing training opportunities could help improve their effectiveness and adaptability in addressing community concerns.

Frequency and Percentage Distribution of Respondents According to Number of years as Community Fire Auxillary Group member

Number of Years as Community Fire Auxillary Group (CFAG)	Frequency	Percent

member		
1	75	98
2	1	1
3	1	1
Total	77	100.00

Table 2a.6 reveals that almost all respondents (97.40%) have been part of the Community Fire Auxillary Group (CFAG) for only one year, with very few having two or three years of experience. This implies that involvement in CFAG is relatively recent among the officials, indicating the need for further orientation, mentorship, and sustained engagement to ensure long-term success of the program.

Table 2b.1

Frequency and Percentage Distribution of Respondents According to Age

Age	Frequency	Percent
21-30	5	33
31-40	7	47
41-50	3	20
Total	15	100.00

The table 2b.1 shows that the largest age group among BFP respondents is 31–40 years old (46.67%), followed by those aged 21–30 (33.33%) and 41–50 (20.00%). This age distribution suggests that the Bureau of Fire Protection personnel are predominantly in their early to middle adulthood, indicating a workforce that balances energy, experience, and maturity. This age range is conducive to effective firefighting and emergency response duties, where both physical capability and decision-making skills are essential.

Frequency and Percentage Distribution of Respondents According to Gender

Gender	Frequency	Percent
Male	6	40
Female	9	60
Total	15	100.00

As seen in table 2b.2, there is a relatively balanced gender distribution within the BFP, with 60% of respondents being female and 40% male. This gender representation suggests a

more inclusive approach within the organization, highlighting that the BFP may be fostering greater opportunities for women in typically male-dominated fields, such as firefighting. The increased participation of women in this sector is a positive indicator of gender equality in public safety and emergency response roles.

Frequency and Percentage Distribution of Respondents According to Civil Status

Civil Status	Frequency	Percent
Single	5	33
Married	10	67
Total	15	100.00

Table 2b.3 shows that most respondents are married (66.67%), while 33.33% are single. This implies that most BFP personnel are likely managing family responsibilities in addition to their professional duties. The prevalence of married individuals could influence workplace dynamics and priorities, with family-oriented policies or support structures potentially being emphasized within the organization.

Frequency and Percentage Distribution of Respondents According to Highest Educational Attainment

Highest Educational Attainment	Frequency	Percent
College	15	100
Total	15	100.00

Table 2b.4 shows that all respondents (100%) have completed college education. This indicates that the BFP maintains a relatively high standard of educational qualification among its personnel. The emphasis on college education suggests that the Bureau of Fire Protection values intellectual preparedness, which is essential for tackling the complexities of fire safety, emergency management, and leadership roles in the department.

Frequency and Percentage Distribution of Respondents According to Position

Posirion	Frequency	Percent
Fire Officer 1-Fire Officer 3	12	80
Senior Fire Officer 1-Senior Fire Officer 4	3	20
Total	15	100.00

As shown in the Table 2b.5 Fire Officer 1 (FO1) position chart, 85.71% of respondents fall under this category with the respondents who indicated they are Senior Fire Officer 1 (SFO1) making up only 11.69%. This shows that Bureau of Fire Protection employs a workforce dominated by Junior Officers with very few in senior roles. The distribution demonstrates the firefighting organization's command structure where a higher number of officers are likely being stationed at the frontline of emergencies and carrying out essential duties. Fire Officers' ranks, from Fire Officer 1 to Fire Officer 3, are usually given to personnel actively engaged in field operations which include firefighting, rescue, and emergency services. On the other hand, Senior Fire Officer 1 to Senior Fire Officer 4 ranks are placed in a relatively higher class and are more administrative in nature supervising the staff, enforcing rules, and managing the operational framework. Such a system enables the organization to be active in operations while having the required command and management functions.

Frequency and Percentage Distribution of Respondents According to Length of Service

Length of Service	Frequency	Percent
1-5	7	47
6-10	3	20
11-15	3	20
16-20	2	13
Total	15	100.00

Table 2b.6 shows that the largest group of respondents (46.67%) have between 1 to 5 years of service, followed by those with 6 to 10 years (20.00%), 11 to 15 years (20.00%), and 16 to 20 years of service (13.33%). This indicates that a substantial portion of the BFP workforce is relatively new to the service, with less than five years of experience. The relatively low number of long-serving personnel suggests that there may be a higher turnover rate or a younger workforce within the BFP, which may influence mentorship programs and career development initiatives within the organization.

2. Extent of Implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan

2.1 Handang Pamayanan

Table 3a

Mean Assessment of the Respondents on Extent of Implementation of Oplan Ligtas na Pamayanan

Indicators	Mean	Description
1.Facilitate the creation of the Community Fire Protection Plan, its component field survey and workshop assisted by the BFP	4.77	Fully Implemented
2.Print and post in conspicuous areas in the barangay the Community Fire Hazard-Vulnerability Map and the Community Evacuation Map.	4.61	Fully Implemented
3. Establish in every barangay a fire response data as mandated by the OPLAN beneficial for the conduct of an effective fire operation	4.68	Fully Implemented
Total	4.69	Fully Implemented

Table 3a shows that the indicators related to the Handang Pamayanan program are all fully implemented, with the overall mean score of 4.69. The highest-rated indicator, "Facilitate the creation of the Community Fire Protection Plan," has a mean score of 4.77, indicating robust participation and support in developing fire safety plans. Other indicators, including the creation of fire hazard maps and the establishment of fire response data, also received high ratings (4.61–4.68), signifying that these initiatives are being effectively carried out. These results suggest that the community is well-prepared in terms of planning and organizing fire protection and emergency response measures.

2.2. Bayanihan

Table 3b

Mean Assessment of the Respondents on Extent of Implementation of Oplan Ligtas na Pamayanan

Indicators	Mean	Description
1. Assist the BFP in the inspection and removal of fire hazards in the community and household	4.61	Fully Implemented
2. Assist the BFP in delivering the message of fire safety and fire prevention through their own activities	4.67	Fully Implemented
3. Develop Fire Prevention programs and plans of action for companies and organizations to address the fire safety situation in the community.	4.63	Fully Implemented
4. Conduct evaluation of necessary precautionary measures in the barangay.	4.68	Fully Implemented
5. Assist the BFP responding teams in the discharge of other duties and responsibilities	4.62	Fully Implemented
6. Responsible for the immediate administration of first-aid or immediate medical intervention of injured people and stabilizing victims and bringing them to the hospital or treatment facility.	4.60	Fully Implemented
Total	4.64	Fully Implemented

As seen in the table, the Bayanihan program also shows full implementation, with a total mean score of 4.64. The indicators related to assisting the BFP in fire safety tasks, such as inspecting fire hazards, delivering fire safety messages, and developing fire prevention programs, received mean scores ranging from 4.60 to 4.68. The highest-rated indicator, “Assist the BFP in delivering the message of fire safety,” scored 4.67, reflecting the community's active role in disseminating important fire safety information. Overall, these results suggest that the community is highly engaged in collaborative efforts with the BFP to improve fire prevention and safety measures.

2.3. Kaagapay Program

Table 3c

Indicators	Mean	Description
1. Assigned Bumbero sa Pamayanan	4.95	Fully Implemented
2. Ensure the conduct of regular neighborhood-based fire prevention activities such as lectures, drills, and seminars.	4.55	Fully Implemented
3. Organize and facilitate the training of CFAG members and fire safety teams in his/her area of responsibility	4.65	Fully Implemented
4. Facilitate the conduct of joint regular house-to house hazard evaluation abatement and mitigation in identified high risk areas in coordination with the local barangay officials.	4.58	Fully Implemented
5. Facilitate the creation of Community Fire Protection Plan (CFPP) in his/her Area of Responsibility and its component activities	4.61	Fully Implemented
6. Ensure BFP visibility in the community through conduct of the activities under this program at least once a month	4.72	Fully Implemented
Total	4.68	Fully Implemented

The table indicates that the Kaagapay Program is also fully implemented, with an overall mean of 4.68. Notable indicators like “Assigned Bumbero sa Pamayanan” (4.95) and “Ensure BFP visibility in the community” (4.72) reflect strong commitment to local fire safety leadership and the consistent presence of the BFP in the community. The program’s activities, including regular fire prevention activities, fire safety training, and hazard evaluations, also received high scores, all above 4.55. This demonstrates the successful integration of fire safety programs within the community, ensuring continuous engagement and preparedness.

2.4. Lingap Program

Table 3d

Indicators	Mean	Description
1. Conduct of house-to-house Fire Safety Surveys according to the established hazards zones in the area	4.55	Fully Implemented
2. Conduct of fire drills according to the established hazards zones in the area	4.61	Fully Implemented
3. Distribution of Fire safety information materials	4.67	Fully Implemented
4. Conduct of intensive lectures according to the established hazard zones in the area.	4.61	Fully Implemented
Total	4.61	Fully Implemented

As indicated in the table, the Lingap Program is fully implemented, with an overall mean score of 4.61. The indicators related to house-to-house fire safety surveys, fire drills, and distribution of safety materials all received high ratings (4.55–4.67). The consistent implementation of fire drills and the distribution of fire safety information materials shows a proactive approach to mitigating fire risks. The overall success of this program suggests that the community is actively involved in maintaining fire safety standards through education and regular drills in fire hazard zones.

3. The extent of implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan as assessed by the three groups.

Table 4

Test of difference between the assessment of the three groups on the extent of implementation of Oplan Ligtas na Pamayanan in Solana

GROUP	*M*	*F (2,89)*	*P*
Barangay Health Workers	4.77	2.632	.103
Barangay Officials	4.58		
BFP Personnel	4.93		

Using a one-way ANOVA analysis, the data compares the mean scores of three groups: BFP Personnel (4.93), Barangay Health Workers (4.77), and Barangay Officials (4.58). The obtained p-value is.103 and the F-value is 2.632. Since this p-value exceeds the generally

recognized cutoff point of 0.05, it may be concluded that there is no statistically significant difference in the mean scores of the three groups. In other words, even while Bureau of Fire Protection employees have the highest mean score, barangay officials, and barangay health workers follow, these differences are probably random and not significant enough to indicate that there is a real population difference.

Table 5

Test of relationship between the profile variables of the three groups on the extent of implementation of Oplan Ligtas na Pamayanan in Solana

	Cramer's V	P-value	Interpretation
Age	.018	.018	Not Significant
Gender	.300	.300	Significant
Civil Status	.004	.004	Not Significant
Highest Educational Attainment	.147	.147	Not Significant
Years in Service as Community Fire Auxillary Group member	.995	.995	Not Significant
Number of trainings related to Community Fire Auxillary Group	.649	.649	Not Significant
Position	.605	.605	Not Significant
Lemgth of Service	.232	.232	Not Significant

Using Cramér's V and p-values, the data above summarizes the association between a dependent variable and several demographic and service-related variables. The p-value denotes statistical significance, and Cramér's V quantifies the strength of correlation. As indicated by their p-values being greater than 0.05, most of the variables, including age, civil status, highest educational attainment, years of service as Community Fire Auxillary Group, number of Community Fire Auxillary Group -related trainings, position, and length of service, did not exhibit a statistically significant relationship with the dependent variable, based on the results. The corresponding p-values were not significant, indicating that these associations could have happened by chance, even though some of these variables showed relatively higher Cramér's V values (0.649 and 0.605 respectively), suggesting a moderate to strong association.

Gender is interestingly classified as "significant" with a p-value of 0.300 and a Cramér's V of 0.300. As the p-value of 0.300 is not statistically significant, since it is more than 0.05. Given that none of the variables, including gender, reach the conventional threshold for statistical significance, this points to a discrepancy in the table's interpretation.

Given the circumstances, the evidence points “not significant” or statistically sound no connections between the variables in the list and the outcome under investigation. And none of the factors are strong enough to be deemed statistically significant, even though several may show mild relationships.

5. Problems encountered by the respondents in the implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan.

The respondents identified several key problems encountered in the implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan. One of the most pressing issues highlighted was the narrow alley streets within barangays, which pose a challenge for emergency access and response. Additionally, the lack of consistent financial assistance from higher offices and the limited availability of personnel hinders the program’s continuity. A recurring concern was the instability of implementation due to changes in barangay leadership, as newly elected officials often restart the program rather than continuing existing efforts. These challenges imply the need for strengthened inter-agency coordination, sustained funding support, and the institutionalization of disaster preparedness programs to ensure continuity regardless of leadership transitions.

6. Proposed Action Plan for the Enhanced Implementation of Oplan Ligtas na Pamayanan in Solana, Cagayan

Key Issue Identified	**Proposed Action**	**Responsible Entity**	**Timeline**	**Expected Outcome**
1. Narrow alley streets hindering	Conduct a **barangay-level hazard mapping** and	Barangay Local Government Units, Bureau of	3–6 months	Improved access routes for emergency

emergency response	**accessibility audit** to identify critical zones. Coordinate with local government for road widening or alternative emergency paths.	Fire Protection, Municipal Engineering Office		response
2. Inconsistent financial support from higher offices	Develop a **formal proposal and funding request system** and regularly submit reports to the municipal and provincial governments for sustained budget allocation.	Barangay Officials, Bureau of Fire Protection, Municipal Disaster Risk Reduction Management Council	Quarterly	Secured and regular funding support
3. Limited number and availability of trained personnel	Launch **community volunteer recruitment** and **fire safety training** initiatives in partnership with local institutions and Non-Government Offices.	Bureau of Fire Protection, Community Fire Auxillary Group leaders, Barangay Local Government Units	Continuous	Increased manpower and better program coverage

CONCLUSION

The implementation of **Oplan Ligtas na Pamayanan** in Solana, Cagayan, has demonstrated remarkable success, with strong participation from barangay health workers, local officials, and Bureau of Fire Protection personnel. The program's emphasis on community engagement through fire protection planning, safety dissemination, and frequent drills has contributed significantly to its effectiveness. Notably, the Bureau of Fire Protection personnel have played a vital role in ensuring its continuity and impact.

While the program is well-executed, certain areas require attention to enhance sustainability and efficiency. Factors such as civil status appear to influence participation, highlighting the need for more inclusive approaches. Additionally, the limited experience of both the Community Fire Auxiliary Group and Bureau of Fire Protection personnel underscores the importance of reinforced training, mentorship, and orientation programs. Operational challenges, including infrastructure limitations, financial constraints, and leadership transitions, must be strategically addressed through improved coordination and secured funding.

Overall, **Oplan Ligtas na Pamayanan** has laid a strong foundation for fire safety initiatives, fostering shared commitment among stakeholders. Moving forward, continuous capacity-building, structural reinforcements, and sustained community engagement will be crucial in ensuring long-term success and resilience in fire prevention efforts.

RECOMMENDATIONS

To enhance the implementation of the Oplan Ligtas na Pamayanan in Solana, Cagayan, several suggestions can be considered:

1. To the BFP Personnel Measures must introduce to improve recruitment and retention over turnover of BFP and community staff, particularly at the entry level. This will include continuing education and professional development opportunities.

2. Annual research should be undertaken too, to assess the long-term impact of the program, enabling ongoing improvement and responsiveness to the changing needs of the community and the fire protection industry.

Barangay Officials and Barangay Health Workers

1. Mentorship schemes must be created for newly elected or less experienced barangay and community leaders, especially those engaged in Community Fire Auxillary Group, to enhance their competence and facilitate their professional growth.
2. Additional support for education and skills training must be provided to barangay and community leaders with limited formal schooling to enhance their capacity to enforce fire safety policies and manage community programs effectively.
3. Regular and ongoing monitoring and follow-up of Oplan Ligtas na Pamayanan should be implemented for sustainability and to strengthen its implementation role, particularly when current issues or challenges arise in the community.
4. More advanced training sessions should be provided to further the capacity of barangay and community personnel to manage complicated fire cases and enhance fire safety outreach. The concerted participation of members of the community, barangay officials, and Bureau of Fire Protection personnel must be maintained and augmented to foster mutual accountability in fire prevention initiatives.

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