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Capability of the Bureau of Fire Protection of the Province of Marinduque in Response to Emergencies

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Abstract

Aim: The study determined the capability of the Bureau of Fire Protection (BFP) of the province of Marinduque.

Methodology: This study used the descriptive method of research. The primary data gathering tool used in this study is a questionnaire checklist formulated by the researchers based on the BFP Operational Procedures Manual as the basis of the identified indicators. Frequency and percentage, mean and simple linear correlation analysis were the statistical tools used to treat and interpret the data.

Results: The findings reveal that a substantial percentage of the respondents are 30 – 39 years old, males, graduates of College Degree, married and attended Fire Arson Inspection and Investigation Course training. The capability of BFP in responding to emergencies is "Very High."

Conclusion: This indicates that the Bureau of Fire Protection (BFP) of the province of Marinduque is extremely capable of responding to firefighting operations.

Keywords: Fire Safety Enforcement, Firefighting, Emergency Medical Service, Fire Operations, Disaster Management

INTRODUCTION

A fire disaster is considered a severe disaster that results in great life and financial losses. Globally, the total number of fire casualties in 2018 for 48 recorded countries reached up to 30,812. In the United States alone, fire disasters cost an estimated average of \$7.2 billion annually and recorded around 353,100 home structures fire hazards per year. Consequently, in Russia, the total number of fire incidents last year increased up to 471,425 cases from about 150,000 recorded cases annually for years 2015–2019, which caused approximately \$1 billion worth of damage over the past three years. In Asia, one of the countries that face severe fire disasters is the Philippines.

The Philippines is one of the countries in Asia known to be vulnerable to the severe effects of fire disasters as the country loses a considerable amount worth of damages due to fire disasters (Kurata et al. 2018).

Fire-related accidents often result in injuries and sometimes death, which can be prevented through fire safety training. To estimate the extent to which fire safety training should be provided, it is essential to assess the current level of fire safety knowledge within the general community (Huseyin et al. 2006).

The need for modern technologies, knowledge and special skills caters better service to cope up with the needs of human existence. But due to natural calamities and negligence of man in the guise of fire, if not prevented will lead to death, loss, and destruction of properties.



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The local government is directly responsible for the people's safety, awareness of the issue and associated resource requirements, and closeness to both the event and the resources. It features an emergency services department that can respond to crises, disasters, and other emergencies 24 hours a day, seven days a week. They are also known as emergency response workers or first responders.

The Philippines' Bureau of Fire Protection (BFP) is a government organization tasked with suppressing and preventing the spread of damaging fires, enforcing applicable laws, and providing emergency medical and rescue services. However, in a conflagration-prone country like the Philippines, the BFP has an uphill battle in carrying out its responsibilities.

The country's infrastructure, particularly electrical systems, is old and/or poorly designed or constructed, posing a considerable fire risk. Furthermore, the combination of two of the country's distinguishing traits – very hot summers and soaking rainy season periods – puts the country's insufficient systems under year-round strain. The BFP receives no relief over the Christmas season, either. The Filipinos' addiction to pyrotechnics, particularly during the Christmas season, poses an additional hazard to life, livelihood, and property.

As a result, it is safe to conclude that the BFP has its job cut out for it. To make matters worse, the BFP has been under fire for developing a reputation for corruption and incompetence since its inception. (Sanchez, 2013)

This led the researchers to investigate the degree of the BFP's capacity in reacting to emergencies in Marinduque. The study's findings will assist in evaluating which aspects of the operations are working effectively and which need to be improved. Furthermore, this would assist the municipalities and this province in developing strategies and policies that would enhance the office's services while also supporting the long-overdue BFP modernization initiative throughout the country. The Management of BFP-Marinduque, through the Office of the Provincial Fire Director and the Marinduque State College, can initiate a Memorandum of Understanding in conducting training in Emergency Medical Technician Course from the School of Allied Medicine, which would benefit them in facilitating employment in the BFP in addition to adding force multipliers, resulting in improved performance.

Research Questions

This study determined the firefighting capability of the bureau of fire protection of the province of Marinduque in responding to disasters.

Specifically, it sought to answer the following question:

1. What is the profile of the respondents in terms of;
 - 1.1 Age
 - 1.2 Sex
 - 1.3 Civil Status
 - 1.4 Educational Attainment
 - 1.5 Related Training Attended
2. What is the firefighting capability of the bureau of fire protection of the province of Marinduque in responding to emergencies along with;
 - 2.1 Fire Safety Enforcement
 - 2.2 Firefighting Operation
 - 2.3 Emergency Medical Services
 - 2.4 Special Operations
 - 2.5 Fire/Arson Investigation
 - 2.6 Disaster Management
3. What recommendation can be forwarded to boost the firefighting capability of the bureau of fire protection of the province of Marinduque in responding to disasters?

METHODOLOGY

Research Design

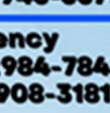
This study used a descriptive method of research. According to Sudden (1970), the method permits the observation and assessment by the researcher of the data that as certain as the nature and the incidence of objects, processes and person subjects of the method used. The descriptive method of research is best suited in the studies on factors of current conditions about the nature of a group or individuals or class of events which may involve the



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inductions, classification, analysis, enumeration or measurement. Documentary analysis, being the primary source, would excerpt from the consolidated fire statistics report of BFP Marinduque during the calendar years 2018, 2019, 2020, 2021 and 2022, particularly in their annual accomplishment reports.

Population and Sampling

The respondents are the 73 BFP personnel in the six (6) municipalities of Marinduque. The profile of the respondent's is determined through the use of frequency and percentage. The survey covered 73 respondents representing whole personnel strength of Marinduque BFP particularly the Commissioned Officers and Non-commissioned Officers (NCO's) ranging from the rank of Superintendent to Fire Officer 1 assigned in the stations including the personnel of the Office of the Provincial Fire Marshal of this province.

Instrument

The questionnaire was formulated by the researchers based on the BFP Operations Manual 2015. The questionnaire will be shown and pre-tested in six (6) municipal fire stations and the personnel from the Office of the Provincial Fire Director (to determine its reliability and validity. After these were established, some corrections and suggestions were incorporated and finally reproduced and distributed to the chosen respondents of the study. After which the researchers distributed the survey questionnaire and retrieved it on the following day.

Data Gathering

Permission was sought from the BFP Provincial Fire Director and Municipal Fire Marshals through a letter request.

Data Analysis

The collected fire incidents data were analyzed, tabulated, and interpreted as the basis of the study.

Ethics in Research

The researcher asked permission from the Office of the Provincial Fire Marshal located at Tampus, Boca, Marinduque.

RESULT AND DISCUSSION

Table 1. Profile of the Respondents

Variables	Frequency	Percentage
AGE:		
below 30 years old	26	30.23 %
30-39 years old	35	40.70 %
40-49 years old	8	9.30 %
50-59 years old	4	4.65 %
60 years old and above	-	-
SEX:		
Male	58	67.44 %
Female	15	17.44 %
CIVIL STATUS:		
Single	22	25.58 %
Married	51	59.30 %



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Widow	-	-
EDUCATIONAL ATTAINMENT:		
Doctorate Graduate	-	-
Master Graduate	-	-
College Graduate	71	82.56 %
Vocational Graduate	2	2.33 %
High School Graduate	-	-
RELATED TRAINING ATTENDED:		
Fire Arson Inspection and Investigation Course		
Fire Basic Recruit Course	9	21.95%
Basic Rescue Technique Course	8	19.51 %
BFP Orientation Training	1	2.44%
Fire Officer Orientation Program	7	17.07%
40 hours Enhancement Training for Building Plan Evaluation	2	4.88%
40 hours fire safety Inspection	1	2.44%
SRV	2	4.88%
PSBRC	2	4.88%
FPSC	1	2.44%
	1	2.44%

In Table 1 of the study, it shows the age, gender, civil status, educational attainment, and related training attended by the respondents. The findings of the research reveal that a substantial percentage of the respondents are 30 – 39 years old, males, graduates of College Degree, married and attended Fire Arson Inspection and Investigation Course training.

According to Aquino, Quilana and Avila (2017), the lower the income, the higher the BFP's competency in responding to emergencies. It implies that if they have a lower income, they must do better as responders. This is due to their desire to remain skilled in their field in order to be retained and promoted to a better position. Further study indicates a negative relationship between respondents' abilities to respond to crises, particularly fire operations, and income. It suggests that responders, particularly those who have just been hired and are paid less, have a higher degree of expertise in responding to emergencies, notably fire operations. They have gone through training since they are new to the service and keen to learn. It implies that if they had a lower income, they would perform better as fire fighters. This is because they want to be retained and promoted to a higher level by remaining capable in their profession, particularly during fire operations. It also demonstrates that the other variables had no significant relationship with the BFP's capability in responding to emergencies, implying that respondents have the same capability



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in responding to emergencies whether they are young or old, married or single, have a master's degree or a college diploma, have a permanent or temporary appointment status, and have or do not have training.

Table 2. The capability of the Bureau of Fire Protection of the province of Marinduque in response to emergencies

Norms:

Range	Item Descriptive Rating	Overall Descriptive Rating
4.21 – 5.0	Always (A)	Very High (VH)
3.41 – 4.20	Often (O)	High (H)
2.61 – 3.40	Sometimes (So)	Moderate (M)
1.81 – 2.60	Seldom (Se)	Low (L)
1.00 – 1.80	Never (N)	Very Low (VL)

Table 2.0 represents the indicators in determining the capability of the province of Marinduque in terms of range as explained by 4.21-5.0 with an equivalent descriptive rating of Always (A) and equivalent to overall descriptive rating of very high. The range between 3.41-4.20 with an equivalent item descriptive rating of often (O) with High overall descriptive rating. The range of 2.61 – 3.40 with Sometimes (So) in its item descriptive rating and the overall descriptive rating of moderate (M). The 1.81-2.60 with seldom (Se) in its descriptive rating has an overall descriptive rating of low (L) while the last one ranging 1.0-1.8 with a never (N) item descriptive rating and with overall descriptive rating of very low (VL)

Table 2.1 present the capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Fire Safety Enforcement





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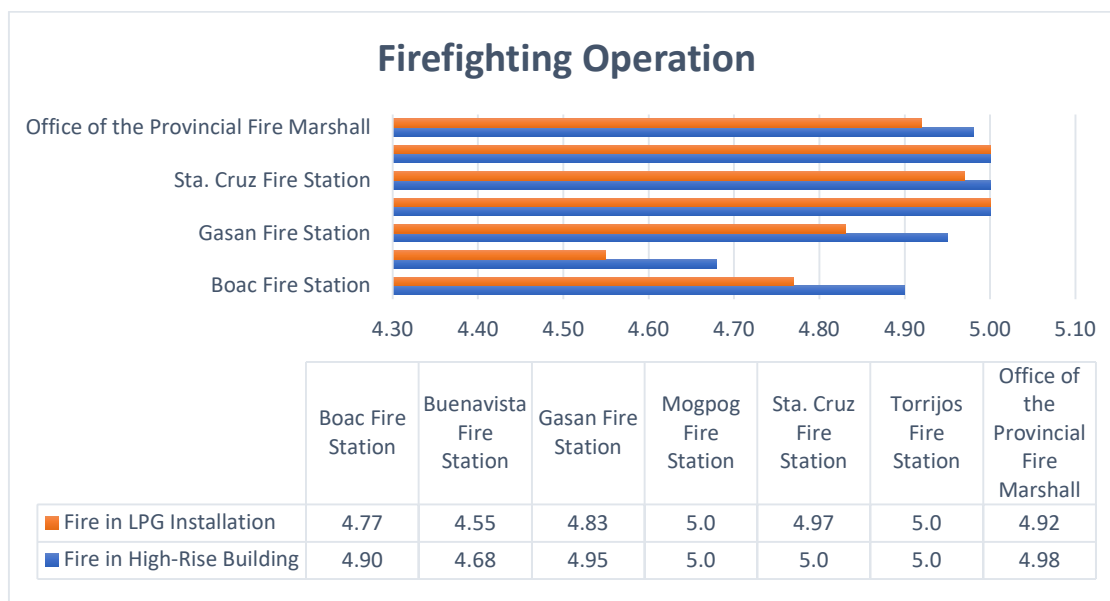


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In Table 2.1. Fire safety enforcement as one of the indicators being analyzed of the six (6) municipalities of the province of Marinduque. The municipality of Mogpog has the highest score with a rating 5.0 regarding the implementation of the Fire Safety Enforcement which covers the Fire Safety Inspection (Pre-construction Phase), Fire Safety Inspection (Construction Phase) and Posting of Warning Signs bearing the statement "This Business Establishment/Building is a Fire Hazard". The highest rating of Mogpog is because of the personnel diligence, personnel training in fire safety inspection and the strict implementation of their work schedules for weekly, monthly and quarterly. Perhaps they are the Best Municipal Fire Station in the Province as per validated performance in the submission of reports, accomplishments, station orderliness and cleanliness as well as readiness to respond to crisis, disasters and other emergencies. This unit also has a complete tools, gears and equipment with a newly constructed Fire Station boosting the morale of its personnel. The municipality of Boac ranks 2nd in this indicator with a mean rating of 4.96 followed by the OPFD with a mean rating of 4.95. The municipality of Santa Cruz ranks 4th with 4.79 and ranking last is the municipality of Buenavista with a rating of 4.44.

In accordance with Section 14.0.0.3 of its Implementing Rules and Regulations (IRR), guidelines are prescribed to promote public safety relative to application and approval/acceptance of alternative and/or remedial fire safety measures for existing public or private buildings, facilities or structures and their premises or portion thereof. These implementing guidelines shall apply to all existing private or public buildings, facilities, or structures, as well as their premises or portions thereof, erected or constructed prior to the effective date of RA 9514 and its IRR, where compliance with the fire safety requirements specified in RA 9514's IRR would jeopardize the structural stability/integrity of the said buildings, facilities, or structures (Fire Safety Enforcement Manual, 2013).

Table 2.2 present the capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Firefighting Operation





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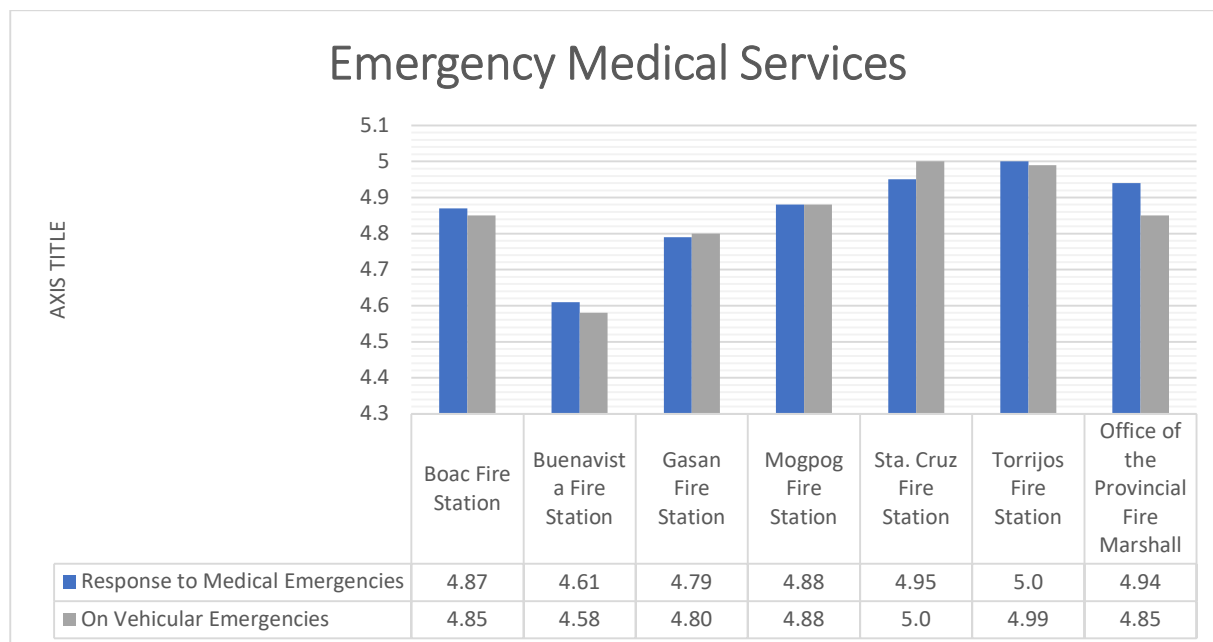
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Table 2.2 presents the Firefighting Operation of the six (6) fire station stations including the Office of the Provincial Fire Director. Record shows in Fire LPG Installation, the municipalities of Mogpog and Torrijos garnered the number 1 spots because of their training in the Operation of Liquified Petroleum Gas (LPG) followed by municipality of Santa Cruz with a rating of 4.97, OPFD with a rating of 4.92, municipality of Torrijos with 4.83 rating, Boac with 4.77 and the least is municipality of Buenavista with 4.55 rating. For Fire in High-Rise Building, the municipality of Mogpog and Torrijos maintained its consistencies in the number 1 spot and adding the municipality of Santa Cruz with a 5.0 rating followed by OPFD with a rating of 4.98, municipality of Gasan with a rating of 4.95, municipality of Boac with 4.90 and the municipality of Buenavista with 4.68. It was noted that every municipality has a high rating because this province has a limited number of high-rise buildings present.

Because firefighters are frequently subjected to significant heat buildup when a fire starts between the concrete floor slabs, their time on the scene is sometimes limited to 10-15 minutes. This implies that relief crews should be ready for deployment from the advance command so that they can arrive on the fire floor and at the nozzle ahead of schedule. In order to develop an optimal response and intervention model for high-rise tower fires, it is necessary to assess and prioritize the command roles and tactical objectives that are attainable based on the weight of attack from a staffing and command standpoint. Grimwood (2015)

According to Gainey (2015), communication in the fire service allows all instructions provided at the highest level of command to follow downward to the right level necessary to carry out the aim, while everyone in the chain is aware of the actions and their influence on the entire situation.

Table 2.3 presents the capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Emergency Medical Service.





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Table 2.3. As to Emergency Medical Service of the six municipalities including the Office of the Provincial Fire Director in response to Medical Emergencies, Municipalities recorded the highest rating with 5.0 followed by the municipality Santa Cruz with 4.95 rating. The Office of the Provincial Fire Director comes next after the municipality of Santa Cruz with a rating of 4.94. A rating of 4.88 for the municipality of Mogpog, 4.87 for the municipality of Boac and the last is the municipality of Buenavista with a rating of 4.61. While responding to a vehicular accident, the municipality of Santa Cruz ranks with the highest rating followed by Torrijos with 4.99 followed by municipality of Mogpog with 4.88 rating. The municipalities Boac with rating of 4.85, Gasam with 4.80 and Buenavista with a rating of 4.58. Although very high ratings were obtained, all stations are lacking transport vehicles to transport patients to the nearest hospital.

As stated by Murtua (2017), a new strategy is being implemented to strengthen the BFP's ability to respond as a first responder to both fire alarms and other medical emergency calls. A plan presented by House leaders asks for certified paramedics to be on duty at all times at fire stations. The bill was designed to improve the BFP's training and equipment for responding to accidents, medical emergencies, and even terror attacks. It would provide selected training as licensed paramedics or emergency medical technicians to the nation's next generation of firefighters.

Table 2.4 present the capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Special Operations



Table 2.4 shows the performance of stations in the conduct of Special Operations in which the municipalities of Mogpog and Torrijos recorded the highest rating followed by Santa Cruz with 4.98 rating, Bac with 4.96, Buenavista and Gasan with both 4.91 ratings and the Office of the Provincial Director ranks last with 4.85 rating. The station



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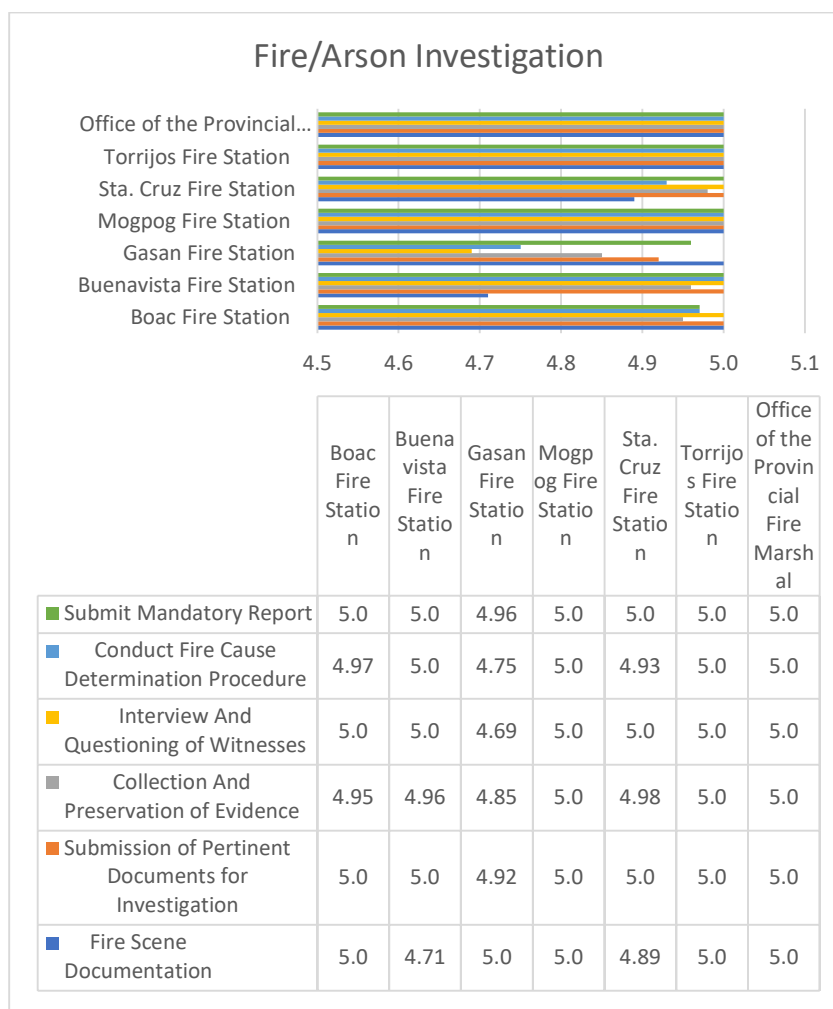


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efficiency in responding to special operations activities was due to the training and availability of BFP Personnel trained in Special Rescue Unit (SRU).

According to Sanchez (2013), the BFP uses its existing network to supplement its resources with private-sector donations. Volunteer firefighters who have been properly trained and are under the direction of the BFP fire ground commander during any conflagration are of tremendous service to the agency since they give aid where and when it is needed. In many situations, these volunteers use their own equipment, relieving substantial strain on the bureau.

Table 2.5 present the capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Fire/Arson Investigation





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Table 2.5 is a representation of the performance of the station in the conduct of Fire/Arson Investigation. It has been noted that the Office of the Provincial Fire Director, Municipality of Mogpog recorded the highest rating with 5.0 followed by Boac with 4.98, Santa Cruz with a rating of 4.97, Buenavista with 4.94 rating and Buenavista with a 4.94 rating. The mean rating was derived from submitted Mandatory Report, Conduct Fire Cause Determination Procedures, Interview and Questioning of Witnesses, Collection and Preservation of Evidences, Submission of Pertinent Documents for investigation and fire science documentation and divided in to six (6) in order to get the mean

Following the extinguishment of a fire, the officer in command of the event begins a fire investigation to determine the cause of the fire. When more time and experience are necessary, a specialized fire safety officer will take over. The information gathered is transmitted to the relevant government agency, which produces national statistics. When these numbers are evaluated, they may be used to pinpoint locations where fire protection measures can be implemented to decrease fire losses. (<https://www.firesafe.org.uk/fire-investigation/>).

Table 2.6 present the capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Disaster Management

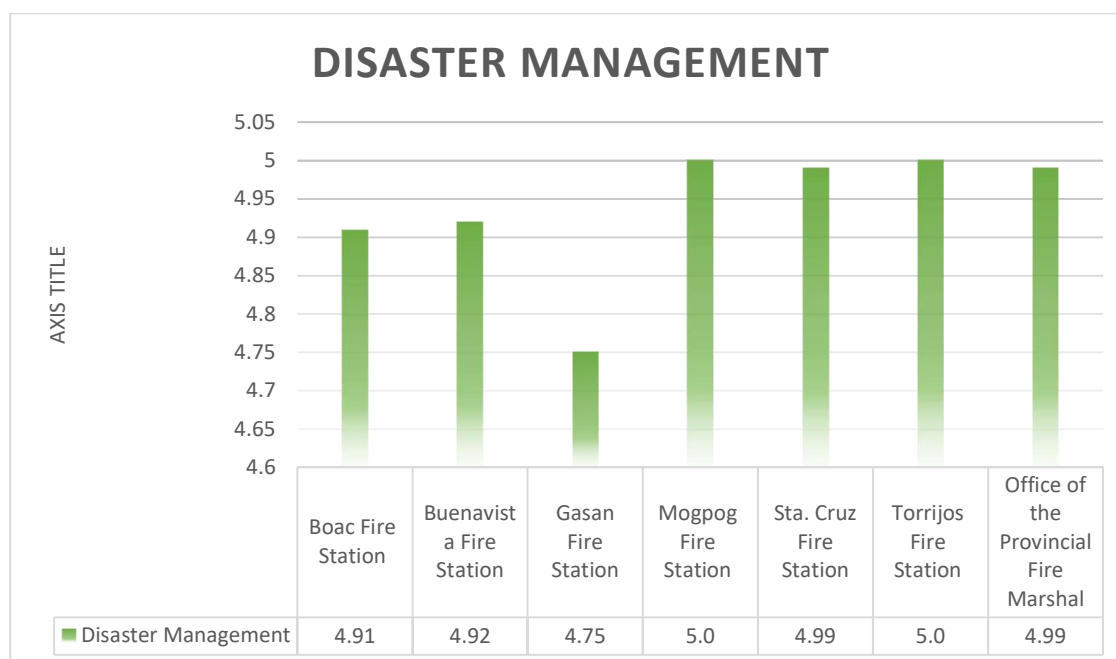


Table 6 explains the performance and management of the local fire station including the provincial fire office regarding their response to disaster management as included in the mission of the BFP. The result concludes that the municipalities of Mogpog and Torrijos have the best performing station during disaster response followed by Santa



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Cruz and Office of the Provincial Fire Director with 4.99 rating, Torrijos 4.92 rating, Buenavista and Boac with 4.92 and 4.91 ratings respectively.

According to Felipe (2011), preparation is essential. Legislators encouraged homes and communities, as well as local and national governments, to prepare for natural and man-made disasters at all levels. It is confirmed by the responses of those interviewed, who stated that most of the time they can see or see BFP employees traveling to the barangay before the typhoon to warn residents and prepare them for the typhoon's arrival. The BFP performs rescue and evacuation operations in flood-prone areas. They generally disseminate information about fire safety and disaster preparedness, especially during Disaster Preparedness/Awareness Month in July.

The summary of the capability of the BFP in responding to crises, disasters, and emergencies

Table 7. Summary of the capability of the Bureau of Fire Protection (BFP) of the province of Marinduque in response to crises, disasters and emergencies.

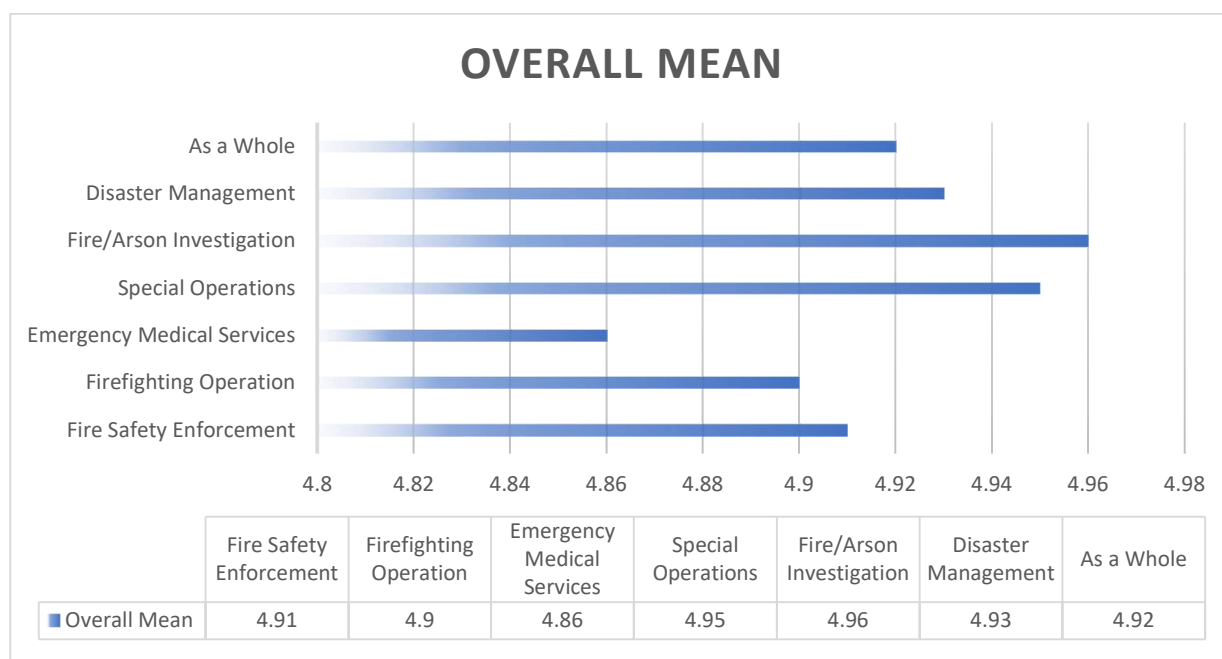


Table 7 represents the overall mean capability of the Bureau of Fire Protection in the Province of Marinduque. The six (6) stations include the Office of the Provincial Fire Director. As a whole, the overall indicators give a 4.92 rating. For the purpose of specification of the itemized criteria: disaster management has a rating of 4.93, fire arson investigation has an overall mean with 4.96 rating because this is of the specialized training offered to every firefighter. Special Operations has an overall rating of 4.95. Emergency Medical Services has the lowest overall mean with rating

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of 4.86 which means that firefighter in the whole province needs training in the Emergency Medical services which can be tie-up to Marinduque State College, School of Allied Medicine to all firefighters. Another contributing factor is that the composition of the personnel in the province has a limited number of nurses which affects the Emergency Medical Service by all stations. Firefighting Operations recorded an overall mean of 4.90 and fire safety with 4.91 overall mean rating.

Conclusion

Based on the findings from the previous chapter, the following conclusions were drawn:

The firefighting capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Fire Safety Enforcement, the respondents had a "Very High" level of capability in reacting to crises and enforcing fire safety regulations, as seen by the overall mean of 4.91. This implies that the responders are capable of implementing fire safety by conducting fire safety inspections during the pre-construction, construction, and warning posting phases. In terms of fire safety inspection (pre-construction phase), respondents said that the plan assessor "always" conducts an ocular examination of the building/structure/facility ($x=4.96$). On fire safety inspection (construction phase), respondents indicated that the Chief, Fire Safety Enforcement Section (FSES) "Always" countersigns the IO and forwards it to the City/Municipal Fire Marshal for approval, and the City/Municipal Fire Marshal signs the IO ($x=4.88$), and on posting of warnings, respondents "Always" ensure that there is a corresponded. According to the findings, following the procedure in their operations such as planning, transmission of signed orders, and posting of warnings such as signs assures the delivery of excellent public service. This is supported by the findings of the community interview, which revealed that BFP personnel always conduct an ocular inspection during the pre-construction phase because it is a requirement for obtaining a building permit, and as stated by the community, they usually visit the construction site to ensure the safety of the residents and laborers.

In accordance with Section 14.0.0.3 of its Implementing Rules and Regulations (IRR), guidelines are prescribed to promote public safety relative to application and approval/acceptance of alternative and/or remedial fire safety measures for existing public or private buildings, facilities or structures and their premises or portion thereof. These implementing guidelines shall apply to all existing private or public buildings, facilities, or structures, as well as their premises or portions thereof, erected or constructed prior to the effective date of RA 9514 and its IRR, where compliance with the fire safety requirements specified in RA 9514's IRR would jeopardize the structural stability/integrity of the said buildings, facilities, or structures (Fire Safety Enforcement Manual, 2013).

1. The firefighting capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Firefighting Operation, according to the overall mean of 4.90, responders had a "Very High" level of capability in reacting to situations involving firefighting operations. This indicates that the employees are extremely capable of responding to firefighting operations because it is their primary job, and that they have received six months of training before being assigned to the agency. Further examination reveals that, during high-rise building operations, responders "Always" ensure that the Incident Commander (IC) interacts with management for initial information collection and begins command transfer ($x = 4.94$). Respondents stated that in the event of a fire in an LPG facility, the Highest-Ranking Personnel (HRP) "Always" assumes charge as Incident Commander (IC) and activates the Incident Command System (ICS) ($x = 4.87$).

Because firefighters are frequently subjected to significant heat buildup when a fire starts between the concrete floor slabs, their time on the scene is sometimes limited to 10-15 minutes. This implies that relief crews should be ready for deployment from the advance command so that they can arrive on the fire floor and at the nozzle ahead of schedule. In order to develop an optimal response and intervention model for high-rise tower fires, it is necessary to assess and prioritize the command roles and tactical objectives that are attainable based on the weight of attack from a staffing and command standpoint. Grimwood (2015)



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According to Gainey (2015), communication in the fire service allows all instructions provided at the highest level of command to follow downward to the right level necessary to carry out the aim, while everyone in the chain is aware of the actions and their influence on the entire situation.

1. The firefighting capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Emergency Medical Services, the aggregate mean of 4.86 indicates that responders have a "Very High" level of capacity in terms of emergency medical care. It implies that the responders are extremely capable of handling emergency medical situations. This is due to the fact that the people assigned to emergency medical services are registered nurses or graduates of allied health courses who have received training in basic first aid, basic and advanced life support, and basic rescue methods.

In addition, in response to medical emergencies, respondents stated that the team leader or assigned crew "Always" gathers all initial information from dispatch ($x = 4.95$) on exact location/address to include reference to landmarks such as public infrastructure/building, restaurants, park, school, etc. and nature and severity of injury, illness, or accident ($x = 4.92$), information of possible treatment options, etc.

On vehicular emergencies, respondents stated that the team leader or assigned crew "Always" gathers all initial information from dispatch ($x = 4.96$) on exact location/address, including reference to landmarks such as public infrastructure/building, restaurants, park, school, etc; ($x = 4.94$), nature and severity of injury, illness, or accident ($x = 4.93$), information of potential victims/patients. It means that respondents may elicit fundamental information from a caller, such as the caller's location/address, because they understand that this is the most important information collected for correct and prompt response.

As stated by Murtua (2017), a new strategy is being implemented to strengthen the BFP's ability to respond as a first responder to both fire alarms and other medical emergency calls. A plan presented by House leaders asks for certified paramedics to be on duty at all times at fire stations.

The responders are extremely competent in providing high-quality fire-fighting methods. They are capable of investigating all causes of flames. They are firemen who have been appropriately trained to respond to situations. They are also accountable for the correct actions to be followed for fire prevention and any other suppression measures necessary to ensure safety.

2. The firefighting capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Special Operations, having an overall mean of 4.95, responders had a "Very High" level of capability in responding to situations involving special operations, especially fire ground rescue operations. It indicates that the responses are capable of performing safe activities during a fire ground rescue operation. During the operation, the first team to arrive coordinates with the Incident Commander, the entry team checks and marks all searched areas and provides updates to the team leader, and if the victim is found, the entry team checks for signs of life, provides respiratory protection if possible, and transports the victim to a safer location ($x=4.92$). This indicates that the responses are competent of performing their duties as rescuers during specific operations such as fire ground rescue. They carry out the Incident Commander's orders, and when casualties are located, they conduct lifesaving treatments such as preserving the airway and transporting the patients to a safer location. They are able to carry out such measures since they have received necessary training and seminars on rescue operations.

According to Sanchez (2013), the BFP uses its existing network to supplement its resources with private-sector donations. Volunteer firefighters who have been properly trained and are under the direction of the BFP fire ground commander during any conflagration are of tremendous service to the agency since they give aid where and when it is needed. In many situations, these volunteers use their own equipment, relieving substantial strain on the bureau

3. The firefighting capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Fire/Arson Investigation, The BFP's capacity in reacting to emergencies during fire/arson investigations is "Very High," as evidenced by a mean of 4.96. It indicates that the respondents are competent of performing fire/arson investigations such as fire scene recording, evidence collection and preservation, witness interviews and questioning, and fire cause determination procedures. When investigating a fire scene, the Fire Arson Investigator "Always" prepares a list of papers that must be completed/submitted by the fire victim/s, building occupant/s, and other parties affected by the fire. Form



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FAI-02: Required Papers for Investigation contains a list of the required documents. The documents to be acquired from the fire victim differ depending on the kind of occupancy or the involved structure that was destroyed by fire ($x = 4.96$). It implies that staff must ensure that all essential papers and checklists for the investigation are filled out completely and accurately in order to declare the cause of the fire. Furthermore, when it comes to the collection and preservation of evidence, respondents stated that "always," the evidence recovery staff and custodian collaborates with the Fire Scene Sketch. Prepare drawings of the position and placement of all pieces of evidence gathered, and FAI completely records/documents and collects and itemizes all recovered pieces of evidence in detailed format using the Evidence Collection and Recovery Record ($x = 4.97$). It indicates that the employees must collect sufficient, accurate, and valid data to use as the foundation for determining the outcome of the inquiry. This is corroborated by the responses of those questioned, who stated that after the fire was declared under control, the fire inspector remained on the scene to conduct additional investigation to establish the origin of the fire, casualties, and cost of damage.

Following the extinguishment of a fire, the officer in command of the event begins a fire investigation to determine the cause of the fire. When more time and experience are necessary, a specialized fire safety officer will take over. The information gathered is transmitted to the relevant government agency, which produces national statistics. When these numbers are evaluated, they may be used to pinpoint locations where fire protection measures can be implemented to decrease fire losses. (<https://www.firesafe.org.uk/fire-investigation/>).

4. The firefighting capability of the Bureau of Fire Protection of the province of Marinduque in responding to emergencies along with Disaster Management, according to the overall mean of 4.93, respondents had a "Very High" level of capability in reacting to crises and disaster management. It means that the BFP is extremely capable of doing disaster management operations before to, during, and after catastrophes, and it is mandatory that they do so since they are active members of the City or Municipalities' Disaster Risk Reduction and Management Council.

Further, on disaster management, the respondents answered that the fire marshal or his duly authorized representative "Always" formulate contingency plan for typhoon and floods and orients his personnel about the said plan, advises disaster response team with its equipment to standby, attends to LDRRMC meeting, coordinates with other government agencies in the conduct of disaster response and operation/support needed, updates the mayor/LDRRMC/IC on the availability of resources for response or SAR operations, and coordinates with the Mayor/LDRRMC/IC on the availability of BFP personnel for possible deployment ($\bar{x}=4.97$).

According to Felipe (2011), preparation is essential. Legislators encouraged homes and communities, as well as local and national governments, to prepare for natural and man-made disasters at all levels. It is confirmed by the responses of those interviewed, who stated that most of the time they can see or see BFP employees traveling to the barangay before the typhoon to warn residents and prepare them for the typhoon's arrival. The BFP performs rescue and evacuation operations in flood-prone areas. They generally disseminate information about fire safety and disaster preparedness, especially during Disaster Preparedness/Awareness Month in July.



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Recommendations

The following recommendations are made based on the findings of the study. 1. The very high firefighting capability of the Bureau of Fire Protection (BFP) of the province of Marinduque in response to crises, disasters and emergencies should be maintained by continuously attending updates or skill training and assessment, especially for new staff to broaden and deepen their expertise as firefighters. 2. The BFP's Special Rescue Unit should get specific training to enable them to perform rescue operations and the creation of additional decision naming the Special Rescue Force (SRF), allowing them to respond to crisis, disasters and other emergencies. 3. The Bureau of Fire Protection-National Headquarters will see to it the strict implementation of the Fire Protection Modernization Bill which was recently signed in to law by President Rodrigo Roa Duterte wherein procurement of firefighting equipage both in land, sea and air assets, including the construction of typical fire stations in every district, city and municipalities shall be achieved. The 80 % Fire Code Fees Collection regularly collected every year by cities and municipalities shall be properly allocated to procure the needed firefighting tools, gears and equipment and recruitment of more BFP Personnel. Local Government Units should allocate funds to be charged from their Municipal Peace and Order Council (MPOC) sharing from the local police force and other members of the peace and order council for the funding of fire prevention and fire suppression programs being implemented by the local fire stations in the country, supporting in the purchase of more modernized supplies, equipment and vehicle to significantly boost the firefighting capacity of the BFP as a whole.

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