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# THE PERFORMANCE ON EMERGENCY MANAGEMENT OF DISASTER RISK MANAGEMENT OFFICE (DRRMO) OF BULAN

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Abstract:

Too often communities that experience disasters are linked to unpreparedness, causing the destruction of properties and even loss of lives. This paper attempts to evaluate the performance of MDRRMO by the employees along its four pillars: Prevention and Mitigation, Preparedness, Response and Recovery, and Rehabilitation and Recovery. It also deals with the personnel's profile, factors affecting MDRRMO while performing the mentioned pillars, and challenges encountered. A survey questionnaire was used to gather data distributed to the 50 employees as respondents. Results revealed that MDRRM Office performed Very Satisfactory in Risk Reduction Management which infers that the office functions efficiently in terms of reducing the risk of incidence (disasters or catastrophe) to save lives in the community.

Keywords- prevention, mitigation, preparedness, response, rehabilitation, recovery

#### INTRODUCTION

Disasters have always been a result of human interaction with nature, technology, and other living entities. Sometimes unpredictable, sudden, sometimes slow, and lingering. Various types of disasters continually affect the way we live. It impedes human development. The level of disaster risk prevalent in a community is linked to the developmental choices exerted by the community [1]. Historically, dealing with disasters focused on emergency response, but towards the end of the 20<sup>th</sup> century, it was increasingly recognized that disasters

are not only natural and that it is only by reducing and managing conditions of hazard, exposure, and vulnerability that we can prevent losses and alleviate the impacts of disasters [2].

When tropical storm "Ketsana", locally named "Ondoy", swept across Metro Manila in September 2009, and the entire areas of the Philippines pouring rains equal to one month in a single day, resulted in substantial flooding and affected everyone. The water rose so fast that the people living in low-lying areas were caught unaware and had to stay on the roofs of their houses to avoid being swept away by the floods. People have been displaced and have sought shelter in schools, churches, and other evacuation shelters. Electricity has been cut in submerged areas for safety reasons; generators and water systems have been damaged by floodwater as well. Public and private infrastructure and property as well as agriculture have been destroyed or damaged [3]. In evacuation centers, cramped conditions and limited water and sanitation facilities pose the risk of worsening health conditions. Nutrition is also a concern, given the irregular provision of instant food products affirmed by PDA.

During Ondoy no one was prepared for the destructive floods as they happened instantly, resulting in massive destruction of lives and properties. Normally, the first responders were the local people or volunteers who started the relief and rescue work with the help of LGU and other local organizations. The second responders like the relief agencies, NGO's usually came after the incident passed or incurred. But the response was not so much efficient because most of the volunteers and Government officials also became the victim of the typhoon. So, firstly they prefer to save their own families and after that, they reported for their assigned relief and rescue work. Combined assistance from different agencies both public and private greatly help to alleviate the situation for the victims of typhoon Ondoy.

The National Disaster Coordinating Council, an agency of the Philippine government under the Department of National Defense responsible for ensuring the protection and welfare of the people during disasters or emergencies presented the following information in their final report which is considered as most esthetical; According to their report, a total of 993,227 families/ 4,901,234 persons were affected in 2,018 barangays, 172 municipalities, and 16 cities of 26 provinces in 12 regions. There were 464 deaths, 529 injured, and 37 missing as a result of Ondoy [4], [5].

Typhoon Tisoy (international name Kammuri) made landfall in Gubat, Sorsogon at around 11 pm on December 2, 2019. With maximum sustained winds of 175 kph, gustiness reached 240 kph and moving westward at 15kph, it left trails of devastation in many parts of the Bicol Region, including areas in the provinces of Sorsogon, Albay, Camarines Sur, and Catanduanes. Based on the Department of Social Welfare and Development [6] Region V DROMIC Report #7 dated December 4, 2019, the total number of affected families is 55,640, (232,208 persons) coming from 669 barangays in the 6 provinces of Bicol Region. The total number of established evacuation centers reached 1,021 which catered to 49,034 families (201,308 persons). Meanwhile, the displaced families outside the evacuation centers were recorded at 5,362 families (22,702 persons). Two (2) deaths due to hypothermia and drowning

in Sta. Magdalena and Bulan were reported during the Sorsogon PDRRMC meeting conducted on December 4, 2019 [6].

According to the Department of Agriculture, the initial estimate of losses caused by typhoon Tisoy to the agriculture sector is some Php 2.9 billion which damaged high-value crops like mango, bananas, and papayas, while affecting the lives of 40,000 farmers in five regions. Nevertheless, 14,600 hectares of land in CALABARZON and Bicol Region were damaged, with an estimated production loss of some 18,500 MT.

As one of the most disaster-prone areas, local authorities in Bicol Region have made a significant investment in disaster preparedness in the last few years. With pre-emptive evacuations and effective early warning systems, the region achieved its main objective of minimizing the number of casualties. Nevertheless, with 80% of the population living in rural areas and the largest component of the region's economy being agriculture as well as commercial fishing, livelihood and resilience have been affected by the typhoon.

Assessments largely confirmed at present most humanitarian needs and any gaps could be covered within the current capacity of the local governments at the moment as well as that the government coordination structure from national to local levels had proved to be efficient in providing early warning and employing response preparedness measures. Immediately in the aftermath of typhoon Tisoy, regional and local governments activated relevant services to respond to the most pressing needs of those affected, including debris clearing to enable access and assistance delivery like food assistance; water distribution, and restoration of power and telecoms. In a few areas having difficulty with road access, sea access is available. It was recommended that relief items be given priority in the use of ferry services, especially in Matnog Port, Sorsogon, where some backlogs are causing a queue of 9 km. Forty-eight (48) hours after landfall, businesses and government services had largely resumed, including electricity and telecommunications in the cities. In the municipalities and barangays, it took almost a month to restore electricity and telecommunications fully but businesses and government services resumed almost the same time as the cities.

The primary purpose of this study is to evaluate the level of performance of the Municipal Disaster Risk Reduction Management Office of Bulan, Sorsogon. This study is being conducted to be able to see if there are changes in mitigating programs and projects, to be able to validate if the changes in mitigating programs and projects are at par with the actions and responses that are currently given or provided. With this study, the researcher will be able to compare if there are improvements in the performance and response level of the Municipal Disaster Risk Reduction Management Office of Bulan, Sorsogon.

Effective policies for Disaster Risk Reduction (DRR) can greatly reduce the loss of life and assets caused by disasters. Some governments have successfully adopted and implemented DRR policies, but others lag, leaving their citizens highly vulnerable. Many factors explain these differences in how countries adopt disaster risk reduction policies, including financial constraints, variations in the level of risk, and the significant technical and

organizational challenges inherent in DRR. However, shortcomings in disaster risk reduction are increasingly being regarded as a consequence of weak governance that combines political and economic factors. The need to gain a better understanding of disaster risk reduction has become clearer over time as experience has been gained internationally and locally in the practical implementation of DRR programs. These programs have tended to work mainly at a technical level, building capacity and organizations for disaster risk reduction and by following particular models of best practice. Good results have been achieved in many places. However, it has also become clear that many programs fail to deliver their expected benefits due to a lack of 'political will' which, despite a clear need, is reflected in the low priority and the poor level of resources for DRR. The importance of these factors is now widely recognized, but not enough attention has yet been given to the question of how political will arises, and how to strengthen it [7].

Disaster risk reduction policy and practice require knowledge for informed decision-making and coordinated action. Although knowledge production and implementation processes are critical for disaster risk reduction, these issues are seldom systematically addressed in-depth in disaster studies and policy programs. While efforts and improvements have been made concerning data and information, only limited resources are committed to improving knowledge management structures and integrating knowledge systems at different spatial levels. The recently adopted Sendai Framework for Disaster Risk Reduction 2015–2030 addresses knowledge-related issues and provides the opportunity to highlight the critical role of knowledge in disaster risk reduction [8].

During the past decade, there has been a change in funding plans and priorities of international humanitarian aid organizations (UNDP). The change indicates that economic development should not contribute to the conditions that undermine human and environmental sustainability and increase disaster risk, and emergency relief should recognize the need to build local capacity. To move forward, many of these organizations recognize that there must be a clear understanding of the interaction of emergency relief and development plans with disaster risk. At issue is the need to systematically evaluate the results of these changes [9].

The greatest challenge to promoting disaster resiliency is to adapt strategies that map with the great variety of types of community vulnerabilities. Communities of refugees, indigenous people, women, children, minorities, and others within a society have different needs and opportunities for developing sustainable, disaster-resilient places. They vary in their capacity to deal with disasters as well as the strength of their ties with outside aid delivery systems. As noted these communities are routinely labeled by external aid organizations as "vulnerable" populations or worse as in a "state of helplessness," rather than as active participants capable of taking self-directed development initiatives. Because all social systems have very different vulnerabilities and capabilities, they have different strategies to cope with vulnerability. Stereotypical generalizations are not only ineffective but are part of a discourse of disempowerment, wherein "they" are viewed as needing outsiders' help to plan for them and take care of them [10];11]-[12],[13]. Oversimplified blanket representations of vastly

different communities, through the use of labels such as "the poor," has long been acknowledged in the discourse of humanitarian aid delivery organizations as [14] recently summed up the situation:

Studies revealed, that there are different types of approaches in the scientific research of hazard-related human behaviors. One such approach mentioned has been directly associated with disaster preparedness with age-related demographic variables (e.g., age, civil status), socio-economic-related demographic variables (e.g., highest educational attainment, income, home ownership), and psychosocial-behavioral variables (e.g., training, risk assessment) [15].

A researcher at UP summarized the role the community plays in disaster management related to preparedness, adaptation, and mitigation. The community should establish and organize planning and response teams during the pre-disaster and post-disaster phases. A basic requirement is to develop an emergency or evacuation plan such as routes, protective shelters, and food provisions in case of disaster [16].

Based on vulnerability studies, the most vulnerable regions to tropical cyclones in the country are the National Capital Region (NCR), Southern Tagalog, Cagayan Valley, Central Luzon, the Cordillera Administrative Region, and Bicol Province and Mindanao are likewise becoming more at risk due to an increasing number of tropical cyclones entering the southern part of the country [17].

Since the 1970s, the Philippines has updated legal foundations for disaster risk reduction and management, emphasizing response-centric interventions, along with disaster prevention preparedness, and mitigation activities. This has been complemented by local risk governance legislation since 2003 to enable the use of local calamity funds for disaster preparedness and mitigation. However, these were considered insufficient to support change at the local level of the GOP. [18]

This acknowledgment led to the enactment of the Philippine Disaster Risk Reduction and Management Act of 2010 (or Republic Act 10121), as the country's foremost legal instrument and guiding policy framework driving DRRM momentum across various governance levels. In terms of institutional arrangements, the National Disaster Risk Reduction and Management Council (NDRRMC) serves as the highest decision-making body, comprising members from different departments, government agencies, LGUs, Civil Society Organizations, and the private sector. The architecture of DRM consists of multi-tiered bodies down to the Barangay (community) level, comprising Disaster Risk Reduction and Management Office (DRRMO) in every province, city, and municipality, and a Barangay Disaster Risk Reduction and Management Committee (BDRRMC), which are responsible for operations requiring vertical coordination, as mandated by the DRRM Act. In the attempt to strengthen risk governance at the local level, the Guidelines for the Establishment of Local Disaster Risk Reduction and Management Offices (LDRRMOs) or Barangay DRRM Committees (BDRRMCS) in Local Government Units (LGUs) have been issued in 2014

through a Joint Memorandum Circular between the NDRRMC, Department of the Interior and Local Government (DILG), Department of Budget and Management, and Civil Service Commission (JMC No. 2014-1) JMC [19]. The government is also contributing significantly to capacitating local government units (LGUs) by developing a checklist of actions to be taken and supplies to be procured together with providing communications and contingency templates for disaster preparedness [20]. Community involvement in local DRRM (at the Barangay level) takes place through CBOs and private sector operators who are key stakeholders of the DILG in joint training and projects under the auspices of the Local Government Academy (LGA).

To address fiscal challenges, the Department of Finance of the Philippines has elaborated a national Financial Protection Strategy to enhance resilience to disaster and climate risks with priority actions identified at the national, local, and individual levels (ADB) [21]. This builds on a country-specific catastrophe risk model carried out by the Department of Finance with the support of the World Bank and the Global Facility for Disaster Reduction and Recovery [22].

As comprehensive and as well-researched as the literature and related studies of local and foreign disaster risk reduction and management practices are today, presently there is also a growing threat in the increasing magnitude and frequency of disasters and disaster risks that the nations and communities of this world are painfully beginning to realize. As such, the level of preparedness of local communities must be evaluated in terms of degree and direction with utmost urgency.

This study serves to amplify the level of performance of the MDRRMO of Bulan, Sorsogon along with the four (4) Emergency Management (Ems) which is one of the questions under the statement of the problem anchored on several related theories about the factors that affect the performance of MDRRMO of Bulan, Sorsogon. As reflected in the Researcher's Theory, this falls on the affecting factors, specifically on the performance of the MDRRMO of Bulan. It is in this area that the individual worker's / office's capabilities, skills, and abilities as well as behavioral inclinations are matched to greatly perform their tasks or requirements.

#### **OBJECTIVES OF THE STUDY**

This research evaluated the performance of MDRRMO by the employees along its four pillars: Prevention and Mitigation; Preparedness; Response and Recovery; and Recovery and Rehabilitation. It also deals with the personnel's profile, factors affecting MDRRMO while performing the mentioned pillars, and challenges encountered.

#### MATERIALS AND METHODS

A survey questionnaire was distributed to the 50 MDRRM Office employees as respondents of the study who are responders, drivers, administrative officers, and staff. This research aimed to determine the performance of the MDRRMO of Bulan along its four pillars.

The researcher used the descriptive method which constitutes the gathering, analyzing, summarizing and interpreting of the data. This method describes or characterizes the data of the researcher's subject, respondents, or population. The required and relevant information will not be obtained without the aid of any tool. Before gathering information from the respondents, the researcher ask permission from the Graduate School Dean, the Mayor of Bulan, Sorsogon to distribute the questionnaire to the respondents of the study and other concerned parties to be sure that cooperation will be obtained from the target respondents.

Part I was the profiling of the respondents in accordance to their gender, educational attainment, position held and years of experience, basic training required and other training and seminars attended related to Disaster and Risk Reduction Management; Part II dealt with identifying the level of performance in terms of the Emergency Management; Part III dealt with the factors affecting the facilitation of Emergency Management; Part IV dealt with the challenges met by the Disaster Risk Reduction Management Office of Bulan, Sorsogon.

The statistical tools frequency count, percentage, ranking, and weighted mean were used to treat the data on the profile of MDRRMO employees, weighted mean is applied to determine the level of values, measures, or scores according to some bases such as the magnitude of worth, quality, importance or chronology. The survey used is the 5-point scale to measure the level of performance applied in MDRRMO of Bulan, Sorsogon: **4.51 -5.00** Excellent; **3.51 - 4.50 Very Satisfactory**; **2.51 - 3.50 Satisfactory**; **1.51 - 2.50 Fair**; **1.00 - 1.50 Poor.** Data gathered from the questionnaires were tallied to finally produce descriptive tables with frequencies, percentage responses, ranking, performance ratings numerical values, and descriptions. Published and unpublished materials were reviewed including journals, online articles, and research.

This study applies both qualitative and quantitative approaches. The collected data of this research were edited, coded, and analyzed descriptively with aid of relevant statistical tools.

**Part I – The Profile of Respondents** 

Table I-A **Age and Sex** 

Age	Male		Fen	nale	Total		
Range	(f)	%	(f)	%	(f)	%	
20-25	8	18.18	2	33.33	10	20	
26-31	10	22.73	0	0	10	20	
32-37	3	6.81	0	0	3	6	
38-43	5	11.40	2	33.33	7	14	
44-49	9	20.45	1	16.67	10	20	
50-55	3	6.81	1	16.67	4	8	
56-61	3	6.81	0	0	3	6	
62-67	3	6.81	0	0	3	6	

Total	44	100	6	100	50	100

Table I-B **Educational Attainment** 

Educational	N	<b>Iale</b>	Fen	nale	Т	otal
Level	(f)	%	<b>(f)</b>	%	<b>(f)</b>	%
College Graduate	24	54.54	5	83.33	29	58
College Undergraduate	11	25	0	0	11	22
Vocational Course	3	6.82	0	0	3	6
Secondary School	6	13.64	1	16.67	7	14
Graduate						
Secondary School	0	0	0	0	0	0
Undergraduate	\ /	_		-		
Elementary School	0	0	0	0	0	0
Graduate	/		-			
Total	44	100	6	100	50	100

Table I-C **Designation** 

Designation	Male		Fen	nale	Tota	al
	(f)	%	(f)	%	(f)	%
1. Administrative	10	22.72	3	50	13	26
2. Radio Operation Staff	4	9.09	2	33.33	6	12
3. Radio Operation Staff /						
Responder	1	2.28	0	0	1	2
4. Ambulance Drivers	6	13.64	0	0	6	12
5. Responder/ Drivers	6	13.64	1	16.67	7	14
6. Responders	17	38.63	0	0	17	34
Total	44	100	6	100	50	100

Table I-D **Length of Service** 

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Length of	N	Male	Fe	male	Total		
Service	( <b>f</b> )	%	<b>(f)</b>	%	<b>(f)</b>	%	
6 yrs. and above	4	9.09	0	0	4	8	
3 yrs. & 1mo	18	40.91	1	16.67			
5 yrs.					19	38	
1-3yrs.	15	34.10	4	66.66	19	38	
Less than a year	7	15.92	1	16.67	8	16	
Total	44	100	6	100	50	100	

#### RESULTS AND DISCUSSION

Table 1-A presents the age and sex of the respondents. Out of 50 employees, there are 44, or 88% males, and 6, or 12 % females. Results imply that the majority of the males belong to the age ranges 26-31 and 44-49. These ages mean that they are fit for the job to perform MDRRMO tasks, however, women were given lighter tasks inclusive of MDRRMO preference.

Educational attainment is shown in Table B. Data connotes that most of the Employees in the MDRRM Office are college graduates capable to handle emergencies and understand instructions well on the information given to them by the head of office or representatives.

Table I-C presents the designation of MDRRMO employees, frequencies of male and female, and their total and equivalent in percent. Results revealed that the majority of the employees were emergency responders, and their special tasks are needed most by the community. Further, most of the employees are assigned as administrative staff, most likely drivers in ambulance vehicles and emergency vehicles. Radio operators are considerably needed by the office for communication response purposes.

Table I-D presents the length of service by the employees, frequencies of males and females, and their total equivalent in percent. Results specify that the majority of the MDRRMO employees rendered services from five (5) years to 3 months and 3 years to 1 year. Those who rendered services of 6 years and above belonged to the administrative staff.

Table I-E shows the Training and Seminars attended by MDRRMO employees, males' and females' frequencies, and their total frequencies and equivalent in percent. Results entail that the majority of the identified training attended by MDRRMO employees involved in basic life-saving support systems in times of emergency are Basic Life Support, Emergency Operations, Community First Responders, CPR, and Firefighting Preparations. This training is of utmost importance in DRR Management focused on active responding constituents since the province of Sorsogon lies in the prevailing disaster-prone area whose lives are at risk and needs assistance in case disaster/calamities to occur.

Some training was attended on Basic Incident Command Systems, Risk Reduction Management Planning, and Water Survival. They have something to do with emergency and risk reduction when victims are to be rescued and responders to take care of themselves when their lives are at risk likewise. Participation in Basic Rappel Training is intended for males.

Emergency Response and Medical Emergency Training were basically to respond specifically to incidents that require their ultimate response and save the lives of victims. Only a handful of participants were sent by the office on training about All Hazard Incident Management and Rapid Assessment of Damage and Needs Analysis since it focused on the aftermath of incidents. Both Executive Emergency Command System and Emergency Operation Center Training is participated in by the head of the office and or his representatives., which means that the office functions effectively for the sake of the constituents and his personnel who are tasked to perform their jobs well.

Table I-E
Seminars /Training Attended

Seminars / Training	I	Male	Fem	nale	Total	Total
	<b>(f)</b>	%	<b>(f)</b>	%	<b>(f)</b>	%
1. Basic Life Support	41	93.18	4	66.66	45	90.00
2. First Aid	42	95.45	5	83.33	47	94.00
3. Ambulance Management	21	47.72	1	16.67	22	44.00
4. CPR	33	75.00	2	33.33	35	70.00
5. Water Survival	27	61.36	1	16.67	28	56.00
6. Emergency Medical Training	9	20.45	0	0	9	18.00
7. Fire Fighting Preparation	36	81.81	2	33.33	38	76.00
8. Rappel Tower & Basic	r	7	100			
Training	16	36.36	0	0	16	32.00
9. Emergency Response	1	29.54	0	0	13	26.00
10. Community-Based Disaster						
Risk Reduction						
&Management	29	65.90	3	50	29	64.00
11. Local Disaster Risk Reduction						
& Management	30	68.18	3	50	33	66.00
12. Contingency Planning	7	15.90	1	16.67	8	16.00
13. Risk Communication	9	20.45	2	33.33	11	22.00
14. Basic Incident Command						
System	29	65.90	4	66.67	33	66.00
15. All Hazard Incident						
Management Team	6	13.63	0	0	6	12.00
16. Rapid Damage Assessment &						
Needs Analysis	6	13.63	0	0	6	12.00
17. Post-Disaster Needs						
Assessment	5	11.36	0	0	5	10.00
18. Community First Responder	36	81.81	2	33.33	38	76.00
19. Emergency Operations Center	40	90.90	3	50.00	43	86.00
20. Training for Instructors	5	11.36	1	6	6	12.00
21. Incident Command System						
Executive Training	2	4.54	0	0	2	4.00
22. Emergency Operations Center						
Executive Training	2	4.54	0	0	2	4.00
23. Public Service Continuity						

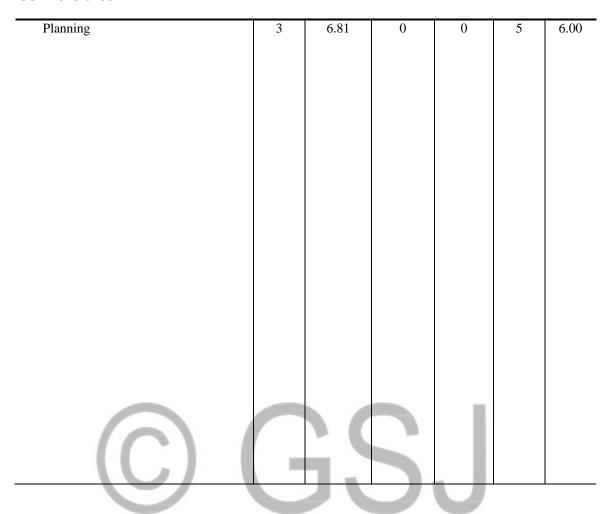


Table I-F presents other training and seminars attended by MDRRMO employees, the number of males and females, and the percent equivalent not included in the list. Results revealed that the majority of the males attended Radio Land Mobile training and only a few attended Basic Occupational Safety and Health which are needed by MDRRMO employees.

Table I-F
Other Seminars /Training

Seminar	Male					Female			Total			
/Training	Y (f)	%	N (f)	%	Y f	%	N (f)	%	Y (f)	%	N (f)	%

-		1	1	1			1					1
<ol> <li>Radio Land</li> </ol>	15	34	29	65	2	33	4	67	17	33.3	33	66
Mobile												
2. Safety												
Officer	1	2.3	43	97	0	0	6	100	1	2	49	98
3. Scan												
International												
Ultimate												
Survival	1	2.3	43	97	0	0	6	100	1	2	49	98
4. Traffic												
Enforcer												
5. Basic	1	2.3	43	97	0	0	6	100	1	2	49	98
Occupational												
Safety and												
Health												
6. Marine	3	6.8	41	93	0	0	6	100	3	6	47	94
Basic Course												
	1	2.3	43	97	0	0	6	100	1	2	49	98

Legend: Y - Yes N - No

#### Part II- The Level of Performance in Terms of The Emergency Management

Table II presents the performance of MDRRMO as perceived by the employees concerned in terms of Prevention and Mitigation, Preparedness, Response and Recovery, and Recovery and Rehabilitation. Likewise, shown are their respective means, average weighted mean, and performance ratings.

#### RESULTS AND DISCUSSION

Along with **Prevention and Mitigation** shown in Table II-A, data reveals that MDRRMO through its personnel is rated **Very Satisfactorily** with weighted means of 4.46 due to their effective information dissemination by applying varied channels of communication. The head of the office with its staff spearheads the analysis, impacts, and effects of policies with the LGU Bulan Sorsogon, which states that "an office functions well if funds are properly utilized.

Table II-B shows MDRRMO's performance is rated **Very Satisfactory** with weighted means of **4.41** along with **Preparedness** in line with proper coordination with its auxiliary organizations. Data reveals that, since funds are utilized properly, the head of the office allows its personnel to regular checks and test equipment in case eventualities occur, putting packages/equipment in place in case of emergency to rescue constituents. Moreover, the office personnel/representatives regularly check the Barangay Disaster Risk Reduction Management office whether programs/policies are being implemented through effective information dissemination.

#### **Prevention and Mitigation**

<b>Employees Perception</b>	Weighted	Description
	Means (x)	
1. Conduct public information dissemination through	5.00	Excellent
varied channels of communication		
2. Analyze impacts and effects of Disaster Risk	4.35	Very Satisfactory
Reduction Management policies within the Local		
Government Unit of Bulan, Sorsogon	4.85	Excellent
3. Always involved in local weather updates and		
climate change information.	3.65	Very Satisfactory
4. The feedback loop functions efficiently		
5. Prevention and Mitigation funds are properly	4.45	Very Satisfactory
utilized		
Weighted Means Average	4.46	Very Satisfactory

Table II-B
Preparedness

Preparednes	SS	
Employees' Perception	Weighted Means (x)	Description
1. Food packages/equipment have been put in place by the respective agency or individual or group	3.20	Satisfactory
<ol><li>MDRRMO coordinates properly with its auxiliary organizations</li></ol>	4.85	Very Satisfactory
3. Checks Barangay Disaster Risk Reduction Management Offices and the implementation of their programs.	4.35	Very Satisfactory
<ul><li>4. Regularly checks and tests equipment available and their preparedness</li></ul>	4.85	Very Satisfactory
5. Funds allocated for preparedness are properly utilized	4.80	Very Satisfactory
Weighted Means Average	4.41	Very Satisfactory

Table II-C
Response and Recovery

	Weighted	Description
Employees' Perception	Means $(\bar{x})$	

1. Quickly respond to incidents reports	5.00	Very Satisfactory
2. Responders acquire assistance from the nearest		
medical team during incidents	2.70	Satisfactory
3. Manageable task environment within Emergency		
Operation Center	4.75	Very Satisfactory
4. Responders are physically fit in terms of		
responding to any form of incidents	3.50	Satisfactory
5. Funds allocated for response and recovery are		
properly utilized	4.90	Very Satisfactory
Weighted Means Average	4.17	Very Satisfactory

Table II-D **Recovery and Rehabilitation** 

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Employees' Perception	Weighted	Description
	Means (x)	
1. Involve stakeholders in the process of	3.80	Very Satisfactory
rehabilitation		Very Satisfactory
2. Acquires a list of target beneficiaries from	3.95	
different		Excellent
Barangays	5.00	Excellent
3. Incident Command System is properly utilized by		
the Municipal Disaster Risk Reduction		
Management Office of Bulan, Sorsogon	3.65	Very Satisfactory
4. Resilience on calamities in terms of	3.03	
infrastructures such as evacuation centers, roads,		Poor
buildings, etc.	1.35	1 001
5. Funds allocated for recovery and rehabilitation		
are properly utilized		
		Very
Weighted Means Average	3.55	Satisfactory

Table II-E
Summary of Performance of MDRRMO Emergency Management

Employees' Perception	Weighted Means (X)	Description
A. Prevention and Mitigation	4.46	Very Satisfactory
B. Preparedness	4.41	Very Satisfactory
C. Response and Recovery	4.17	Very Satisfactory
D. Recovery and Rehabilitation	3.55	Very Satisfactory
<b>Overall Weighted Means Average</b>	4.15	Very Satisfactory

Table II-C shows MDRRMO's performance along with **Response and Recovery**. The weighted mean average under Response and Recovery is 4.17 is rated **Very Satisfactory performance**. Data discloses that MDRRMO is a quick response to incident reports due to the proper utilization of funds allocated for the purpose. Assigned responders are physically fit to perform the task within the manageable environment for the emergency operations center set by the LGU through MDRRM Office.

Table II-D presents MDRRMO's **Recovery and Rehabilitation** performance. Weighted mean of each statement as reflected and the average weighted mean and performance rating. The average weighted mean of such statements is 3.55 is rated **as Very Satisfactory** by the employees.

Data tells that the incident command system is effective in utilizing funds properly. However, acquiring a list of target beneficiaries is done lately when incidents of calamities/disasters happen. Resiliency in calamities is quite implemented since the only task focuses more on responding rather than recovery and rehabilitation.

Table II-E presents the summary of the performance of MDRRMO based on employees' perception, their weighted means, performance rating, and overall weighted means average.

Prevention and Mitigation, Preparedness, Response and Recovery, and Recovery and Rehabilitation of MDRRMO were rated **Very Satisfactory** in their performance having their respective weighted means of **4.46**, **4.41**, **4.17**, and **3.55** with an overall weighted average means of **4.15**.

#### Part III- Factors Affecting the Facilitation of Emergency Management

Table III presents the factors affecting MDRRMO in Facilitating Risk Management, identified factors, total frequencies, and rank.

### Table III Factors Affecting Facilitating Emergency Management

Factors		Total	Rank
		Frequencies	
1.	The educational Qualifications of responders and		
	administrative employees have a bearing on their engagement with emergency	48	3.5
2.	The training acquired by the team/individuals contributes to the execution of the actual response	50	1
3.	The physical fitness of an individual is essential in the delivery of their tasks	49	2
4.	The ages of individuals have to be considered in their involvement in the particular operation.	48	3.5
5.	Organizational charts and structures have to be adhered to and be functional to achieve the goal of the operation	40	7.5
6.	Administrative personnel of the MDRRMO needs to be		
	supportive in terms of the skills development of their responders	40	7.5
7.	Facilities are enhancing to be at pace with the modern technologies	40	7.5
8.	Operational and general funds need to be utilized for the	40	7.5
	development of the Disaster Risk Reduction Management Office	9	
9.	Responders are fully equipped with their respective uniforms and attire for clear identification	40	7.5
10	. Collaborative and Meaningful relations with other	711	
	auxiliary agencies.	40	7.5

#### **RESULTS AND DISCUSSION**

The entire fifty (50) respondents acknowledged that the training they acquired contributed to the execution of the actual response, this factor ranked first in facilitating emergency response.

Physical fitness is essential in the delivery of their tasks is the second factor recognized by the 49 employee-respondents. Both the Educational qualification of responders and administrative employees have a bearing on their engagement towards emergency operations and the ages of individuals have to be considered in their involvement in the particular operation were identified challenges by 48 employees of which 3.5 are their ranks.

**Challenges Encountered in Emergency Response Management** 

	Challenges Encountered	Total Frequencies	Rank
1.	Insufficient fund	41	5
2.	Limited Training	45	3
3.	Passive Stakeholder	34	7
4.	Timely dissemination of information	25	8
5.	Availability of equipment and		
	materials for emergency response	42	4
6.	Insufficient emergency	48	1
	vehicle/transportation		
7.	Insufficient manpower in Emergency	47	2
	Operation Center		
8.	Client dissatisfaction from client feed	38	6
	form.		

Analysis of the data can be adhered to on the three major factors in facilitating MDRRMO Emergency Management which focus on manpower capability enhancement, training acquired which contributed to the execution of the actual response and is essential in the delivery of their tasks, physical fitness, and ages that are to be considered also with their involvement in a particular operation especially saving lives to responders in times of rescue to victims.

## Part IV - Challenges met by the Disaster Risk Reduction Management Office of Bulan, Sorsogon.

Table IV shows the problems encountered by the MDRRMO personnel, the total frequencies of the identified problems, and the ranking.

Analysis entails that MDRRMO has insufficient emergency/ vehicles to rescue constituents at the location of incident/occurrence of any form, similarly, there is not enough manpower in the emergency operation center. Geographically, Bulan lies in a calamity-prone area, consequently, it is necessary to provide equipment/materials for the efficient delivery of tasks as well as information and rescue victims of the community.

#### CONCLUSIONS AND RECOMMENDATIONS

#### **Conclusions:**

Age, physical fitness, educational attainment, and training acquired needs to be considered in hiring MDRRMO employees.

The performance of the MDRRMO of Bulan is under the four pillars.

There are several factors affecting the performance of the MDRRMO employees.

Sufficient vehicles and manpower are of great importance in an Emergency Operation Center.

#### **Recommendations:**

Standard qualifications are adhered to by MDRRMO applicants.

The performance of the MDRRMO of Bulan be enhanced following the four pillars which are: Prevention and Mitigation, Preparedness, Response, and Recovery; and Recovery and Rehabilitation.

The factors affecting the performance of MDRRMO employees be addressed by their importance.

Additional emergency/ vehicles are provided by the Local Government Unit of Bulan, Sorsogon.

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