

Practices In Implementing Disaster Risk Reduction And Management Programs Among Elementary School Teachers In Congressional District Ii, Batangas Province

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Abstract

This study assessed the extent of implementation of Disaster Risk Reduction and Management (DRRM) programs and the level of utilization of available resources and support systems in implementing DRRM programs among elementary teachers in Congressional District II, Batangas Province. The study employed a descriptive-correlational method of research using a researcher-made questionnaire to investigate the extent of DRRM program implementation and the level of utilization of available resources and support systems in DRRM programs. The subjects of the study have a total population of 237 teachers, of which a sample of 149 respondents were gathered. Statistical tools used were frequency, weighted mean, ranking, and Pearson's correlation coefficient.

The results revealed that the DRRM programs were highly implemented in terms of prevention and mitigation, preparedness, ability to respond, and recovery and rehabilitation, while the utilization of available resources and support systems was also highly implemented in terms of training and seminars, materials, equipment and facilities, and institutional support. Furthermore, the relationship between the extent of program implementation and the level of utilization of available resources and support systems was found to be highly significant, indicating that proper utilization of training, materials, and institutional support positively influences the implementation of DRRM programs.

In conclusion, the respondents encountered different challenges in relation to the implementation of the DRRM programs such as particularly limited time to plan and conduct DRRM activities due to regular teaching responsibilities, insufficient DRRM training and seminars for teachers, and inadequate funding for DRRM programs and activities. Nevertheless, prepared enhancement program has been proposed to enhance the implementation of the DRRM programs and improve utilization of available resources and support systems.

Keywords: *Disaster Risk Reduction and Management (DRRM), program implementation, resource utilization, elementary teachers, school preparedness*

INTRODUCTION

Disaster is defined as a serious event that disrupts the normal functioning of a community and causes harm to people, property, and the environment. It occurs when natural or human-induced hazards such as typhoons, earthquakes, floods, or fires interact with human vulnerability and insufficient preparedness (UNDRR, 2023). Disasters significantly affect the education sector by damaging school facilities, displacing teachers and learners, and interrupting the delivery of instruction. When schools are destroyed or used as evacuation centers, learning is halted, resulting in academic delays and possible student dropout. Teachers also experience difficulties in continuing lessons and supporting learners during post-disaster situations.

Disaster Risk Reduction and Management (DRRM) programs in schools are essential in promoting safety, preparedness, and resilience among learners. Teachers play a crucial role as implementers by conducting safety drills, guiding learners in emergency procedures, coordinating response activities, and supporting recovery efforts. Their involvement ensures that DRRM policies are effectively translated into practice, thereby protecting learners and strengthening school community resilience.

Globally, disasters such as pandemics, earthquakes, floods, wildfires, and armed conflicts have severely disrupted education systems, affecting over 1.6 billion learners and exposing inequalities in access to learning (UNESCO, 2023; World Bank, 2022). These events highlight the need for resilient and well-prepared education systems (UNDRR, 2023).

In the Philippines, a country highly exposed to multiple hazards due to its location along the Pacific Ring of Fire and typhoon belt, education is frequently disrupted by typhoons, earthquakes, volcanic eruptions, floods, and landslides. Major events such as Typhoons Odette (2021) and Paeng (2022) caused significant school damage and learning interruptions (DepEd, 2022; UNICEF, 2022). In response, Republic Act No. 10121 institutionalized DRRM, with the Department of Education integrating DRRM programs in schools where teachers are key implementers.

In Congressional District II of Batangas Province, schools are often disrupted by natural hazards such as Taal Volcano eruptions, earthquakes, and typhoons. The 2020 eruption and 2024 volcanic smog affected thousands of learners, while recent earthquakes and frequent storms continue to cause class suspensions and damage in coastal and low-lying areas (PNA, 2020; PNA, 2024; Philstar, 2025). Despite these recurring events, many schools still face limited resources, weak facilities, and insufficient DRRM training, affecting their ability to ensure learning continuity and safety.

This study examines the DRRM practices of elementary teachers in Congressional District II, Batangas Province. It specifically assesses prevention and mitigation, preparedness, response, and recovery and rehabilitation, as well as the utilization of resources and support systems. It also analyzes relationships between DRRM practices and resource use, identifies challenges, and proposes enhancement program to strengthen DRRM implementation in schools.

RESEARCH QUESTIONS

This study aims to investigate the practices in the implementation of DRRM programs by elementary teachers in Congressional District II, Batangas Province, and its relationship to the availability of resources and support systems. Specifically, it seeks to answer the following research questions:

1. What is the extent of implementation of DRRM programs, as practiced by the teachers, be assessed by themselves relative to:
 - 1.1 Prevention and mitigation
 - 1.2 Preparedness
 - 1.3 Ability to respond
 - 1.4 Recovery and rehabilitation
2. How may the level of utilization of available resources and support systems in implementing DRRM programs be assessed by the respondents in terms of:
 - 2.1 Training and seminars
 - 2.2 Materials, equipment, and facilities
 - 2.3 Institutional support
3. Is there significant relationship between the assessment on the extent of implementation of DRRM programs and of the level of utilization of available resources and support systems?
4. What are the constraints faced by the teachers in implementing DRRM Programs?
5. Based on the analysis, what enhancement program may be proposed?

METHODOLOGY

The study utilized a descriptive-correlational research design to determine the practices in the implementation of Disaster Risk Reduction and Management (DRRM) programs among elementary teachers in Congressional District II, Batangas Province, and to examine the relationship between the extent of DRRM program implementation and the level of utilization of available resources and support systems.

PARTICIPANT

The participants of this study were composed of 237 teachers from the selected schools, of which 149 respondents were selected as the sample size. The selection of respondents was carried out using the stratified random sampling technique with proportionate allocation per sub-office. The sample size was determined through Slovin's formula at a 5 percent margin of error.

RESEARCH INSTRUMENT

The study utilized a researcher-made questionnaire and an unstructured interview to gather data on the implementation of Disaster Risk Reduction and Management (DRRM) programs among elementary teachers.

DATA COLLECTION PROCEDURE

The researcher first sought approval from the Schools Division Superintendent (SDS) of the Schools Division Office of Batangas Province. Upon obtaining SDS approval, permission letters were forwarded to the school principals requesting authorization to administer the questionnaire to the selected teachers. Only after securing the consent of the school administration were the questionnaires distributed to the respondents. Prior to data collection, informed consent was obtained from all participants, which clearly explained the objectives of the study, data collection procedures, possible risks and benefits, confidentiality measures, voluntary participation, and the right to withdraw at any time without consequences. The research protocol was also submitted to the appropriate ethics review committee to ensure compliance with research standards. The study adhered to the Data Privacy Act of 2012 to protect the personal information of the respondents. The researcher personally supervised the distribution, retrieval, verification, and scoring of the questionnaires, and ensured that all responses were kept confidential and used only in aggregated form for analysis.

DATA ANALYSIS

The data collected were analyzed using frequency, weighted mean, ranking, and Pearson's r coefficient of correlation. Frequency was used to determine the number of responses per item, while weighted mean measured the extent of DRRM program implementation, availability of resources, and challenges encountered. Ranking identified the most common DRRM practices, major challenges, and priority areas for improvement. Pearson's r was used to determine the relationship between the extent of DRRM implementation and the level of utilization of available resources and support systems.

RESULTS

1. Extent of implementation of DRRM programs

1.1 Prevention and Mitigation

Table shows that the overall composite mean is 3.72, with a verbal interpretation of "Highly Implemented." This means that, in general, teachers demonstrate a strong level of engagement in disaster risk reduction and management (DRRM) practices related to prevention and mitigation. This finding suggests that the school has already established a culture of safety where teachers actively participate in reducing risks before disasters occur.

Extent of Implementation of DRRM Programs as Practiced by Teachers as assessed relative to Prevention and Mitigation

I. Prevention and Mitigation	Weighted Mean	Verbal Interpretation	Rank
1. Identifying potential hazards in classrooms and school grounds.	3.78	Highly Implemented	2
2. Participation in planning for disaster risk reduction initiatives.	3.72	Highly Implemented	6
3. Displaying evacuation routes and emergency instructions clearly.	3.67	Highly Implemented	7.5
4. Observation of safety protocols and preventive measures in classrooms	3.75	Highly Implemented	4.5
5. Organizing classroom furniture and materials to reduce accident risks.	3.76	Highly Implemented	3
6. Demonstration of proper use of fire extinguishers and safety tools.	3.67	Highly Implemented	7.5
7. Implementing school safety policies and guidelines.	3.79	Highly Implemented	1
8. Dissemination of disaster preparedness information for students	3.75	Highly Implemented	4.5
9. Participating in school hazard mapping activities.	3.66	Highly Implemented	9
10. Integration of disaster risk reduction strategies into school activities and program	3.64	Highly Implemented	10
Composite Mean	3.72	Highly Implemented	

Legend: 3.50-4.00 = Highly Implemented, 2.50-3.49 = Moderately Implemented, 1.50-2.49 = Slightly Implemented, 1.00-1.49 = Least Implemented

1.2 Preparedness

Table presents that the overall composite mean is 3.68, with a verbal interpretation of “Highly Implemented. This indicates that teachers generally demonstrate a strong level of readiness for disaster situations, especially in activities that require routine school-based action, coordination, and learner safety orientation. In practical terms, the results suggest that

preparedness is already embedded in school operations, although some components are stronger than others.

Extent of Implementation of DRRM Programs as Practiced by Teachers as assessed relative to Preparedness

II. Preparedness	Weighted Mean	Verbal Interpretation	Rank
1. Conducting regular drills for emergencies such as earthquakes, and fires	3.83	Highly Implemented	1
2. Participation in school disaster preparedness planning and meetings.	3.74	Highly Implemented	2
3. Attending training, and workshops, or seminars on disaster response and preparedness.	3.52	Highly Implemented	10
4. Orientation of learners about evacuation routes and safety zones.	3.70	Highly Implemented	5
5. Organizing simulation exercises for disaster scenarios	3.66	Highly Implemented	7
6. Preparation of classroom and school for possible disaster scenarios.	3.72	Highly Implemented	3
7. Integrating DRRM concepts into classroom discussion.	3.62	Highly Implemented	8.5
8. Identification and preparation of emergency kits and supplies.	3.62	Highly Implemented	8.5
9. Recording and reporting results of disaster drills and preparedness activities.	3.69	Highly Implemented	6
10. Ensuring availability and updating of learners' emergency contact information for disaster response purposes.	3.71	Highly Implemented	4
Composite Mean	3.68	Highly Implemented	

Legend: 3.50-4.00 = Highly Implemented, 2.50-3.49 = Moderately Implemented, 1.50-2.49 = Slightly Implemented, 1.00-1.49 = Least Implemented

1.3 Ability to Respond

The table indicates that teachers' ability to respond during disasters is highly implemented, with a composite mean of 3.65. This suggests that the respondents generally perceive teachers as capable of performing key response functions during emergency situations.

Extent of Implementation of DRRM Programs as Practiced by Teachers as assessed relative to Ability to Respond

III. Ability to respond	Weighted Mean	Verbal Interpretation	Rank
1. Providing assistance to learners in need during disasters.	3.69	Highly Implemented	2.5
2. Coordination with school authorities during emergencies	3.67	Highly Implemented	4.5
3. Administering basic first aid during emergencies	3.59	Highly Implemented	9
4. Utilization of available emergency equipment correctly when needed.	3.60	Highly Implemented	8
5. Reporting incidents immediately to school authorities.	3.69	Highly Implemented	2.5
6. Participation in emergency response activities in the school.	3.66	Highly Implemented	6.5
7. Guiding learners safely to evacuation areas during disaster.	3.70	Highly Implemented	1
8. Communication with teachers, staff, and authorities during disasters.	3.66	Highly Implemented	6.5
9. Provision of guidance and instruction to learners during drills and emergencies.	3.55	Highly Implemented	10
10. Application of disaster response knowledge and skills during emergencies.	3.67	Highly Implemented	4.5
Composite Mean	3.65	Highly Implemented	

Legend: 3.50-4.00 = Highly Implemented, 2.50-3.49 = Moderately Implemented, 1.50-2.49 = Slightly Implemented, 1.00-1.49 = Least Implemented

1.4 Recovery and rehabilitation

The extent of implementation of DRRM programs relative to recovery and rehabilitation is highly implemented, with a composite mean of 3.67. This indicates that teachers generally

perform recovery-related roles at a strong level after disaster-related disruptions. In school DRRM, recovery and rehabilitation do not only refer to rebuilding damaged facilities; they also include restoring learning continuity, supporting affected learners, coordinating with stakeholders, and revising plans based on lessons learned.

Extent of Implementation of DRRM Programs as Practiced by Teachers as assessed relative to Recovery and Rehabilitation

IV. Recovery and Rehabilitation	Weighted Mean	Verbal Interpretation	Rank
1. Participation in the repair and rehabilitation of school facilities	3.54	Highly Implemented	10
2. Providing emotional support to learners.	3.67	Highly Implemented	4
3. Application of lessons learned from disasters to improve preparedness and safety.	3.66	Highly Implemented	7
4. Monitoring learners' academic progress following disaster-related disruptions	3.66	Highly Implemented	7
5. Implementation of alternative learning delivery during class suspension.	3.74	Highly Implemented	1
6. Assisting in assessing the needs of affected learner	3.66	Highly Implemented	7
7. Collaboration with parents and stakeholders for classroom recovery.	3.66	Highly Implemented	7
8. Reporting classroom and school damages to authorities.	3.73	Highly Implemented	2
9. Participation in school recovery planning.	3.66	Highly Implemented	7
10. Reviewing and updating the school's DRRM plan based on lessons learned from past disasters	3.68	Highly Implemented	3
Composite Mean	3.67	Highly Implemented	

Legend: 3.50-4.00 = Highly Implemented, 2.50-3.49 = Moderately Implemented, 1.50-2.49 = Slightly Implemented, 1.00-1.49 = Least Implemented

2. Level of Utilization of Available Resources and Support System

2.1 Training and seminars

Table shows that the overall composite mean is 3.61, with a verbal interpretation of “highly utilized”. This means that teachers generally apply, transfer, and operationalize what they gain from DRRM training into classroom and school practices. The result suggests that training initiatives are not merely attended for compliance; rather, they appear to influence teacher behavior in school safety, preparedness, and response-related activities.

Level of Utilization of Available Resources and Support System in terms of Trainings and Seminars

I. Trainings and Seminars	Weighted Mean	Verbal Interpretation	Rank
1. Participation in DRRM trainings provided by the school	3.58	Highly Utilized	9.5
2. Engaging in simulation exercises organized by training programs	3.59	Highly Utilized	7.5
3. Application of knowledge gained from DRRM trainings in classroom or school activities	3.66	Highly Utilized	1
4. Practicing emergency response procedures learned from trainings	3.64	Highly Utilized	2.5
5. Integration of DRRM concepts in classroom teaching	3.58	Highly Utilized	9.5
6. Conducting regular disaster drills using strategies from trainings	3.64	Highly Utilized	2.5
7. Utilization of guidance from DRRM resource persons	3.60	Highly Utilized	5.5
8. Sharing DRRM knowledge and skills from training with colleagues	3.62	Highly Utilized	4
9. Incorporation of classroom safety tips from DRRM workshops into seating arrangements and furniture layout.	3.60	Highly Utilized	5.5
10. Leading a classroom drill using step-by-step procedures learned from a DRRM seminar.	3.59	Highly Utilized	7.5
Composite Mean	3.61	Highly Utilized	

Legend: 3.50-4.00 = Highly Utilized, 2.50-3.49 = Moderately Utilized, 1.50-2.49 = Slightly Utilized 1.00-1.49 = Least Utilized

2.2 Materials, Equipment and Facilities

The table shows that the utilization of DRRM-related facilities, equipment, and safety resources is highly utilized, with a composite mean of 3.61. This indicates that teachers generally make substantial use of available school safety resources during drills, emergencies, and routine classroom risk reduction.

**Level of Utilization of Available Resources and Support System
in terms of Materials, Equipment and Facilities**

II. Materials, Equipment and Facilities	Weighted Mean	Verbal Interpretation	Rank
1. Checking and using first aid kits in classrooms and offices during drills and emergencies	3.57	Highly Utilized	7.5
2. Utilization of emergency alarm or warning systems	3.63	Highly Utilized	4.5
3. Displaying and referring to DRRM signages and evacuation maps during drills and orientations	3.58	Highly Utilized	7.5
4. Provision of emergency exits and evacuation routes	3.63	Highly Utilized	4.5
5. Using megaphones and whistle to assist in orderly evacuation during drills	3.56	Highly Utilized	9
6. Observation of classroom furniture arrangement to minimize accident risks	3.68	Highly Utilized	2
7. Ensuring fire extinguishers in school hallways and classrooms is accessible and functional	3.60	Highly Utilized	6
8. Utilization of safe evacuation zones in the schoolyard or open spaces	3.70	Highly Utilized	1
9. Using the school budget allocated for DRRM activities or equipment	3.52	Highly Utilized	10
10. Documentation of any damaged or missing DRRM materials and reporting to school authorities	3.66	Highly Utilized	3
Composite Mean	3.61	Highly Utilized	

Legend: 3.50-4.00 = Highly Utilized, 2.50-3.49 = Moderately Utilized, 1.50-2.49 = Slightly Utilized 1.00-1.49 = Least Utilized

2.3 Institutional Support

Table presents that the overall composite mean is 3.57, with a verbal interpretation of “Highly Utilized”. This indicates that teachers effectively utilize school- and community-based support mechanisms in implementing DRRM programs.

Level of Utilization of Available Resources and Support System in terms of Institutional Support

III. Institutional Support	Weighted Mean	Verbal Interpretation	Rank
1. Collaboration with local authorities and community stakeholders in DRRM programs	3.61	Highly Utilized	1
2. Participating in school DRRM committees for planning and decision-making	3.54	Highly Utilized	9
3. Utilization of school budget allocated for DRRM programs and resources	3.58	Highly Utilized	4.5
4. Reporting of defective or missing DRRM materials for maintenance	3.57	Highly Utilized	6
5. Application of recommendations from external DRRM experts in classroom practices	3.52	Highly Utilized	10
6. Participating in school-organized DRRM trainings and capacity-building activities	3.58	Highly Utilized	4.5
7. Coordination with external agencies through school-supported DRRM partnerships	3.56	Highly Utilized	7
8. Receiving technical assistance from DRRM coordinators during drills and emergencies	3.55	Highly Utilized	8
9. Participation in school-organized DRRM trainings and capacity-building sessions	3.60	Highly Utilized	2.5
10. Including DRRM priorities in school improvement planning	3.60	Highly Utilized	2.5
Composite Mean	3.57	Highly Utilized	

Legend: 3.50-4.00 = Highly Utilized, 2.50-3.49 = Moderately Utilized, 1.50-2.49 = Slightly Utilized 1.00-1.49 = Least Utilized

3. Relationship between the assessments on the extent of implementation of DRRM programs and the level of utilization of available resources and support systems

Relationship Between the Assessments on the Extent of Implementation of DRRM Programs in terms of Training and Seminars and on the Level of Utilization of Available Resources and Support Systems

Training and Seminars	r- value	p- value	Decision Ho	Verbal Interpretation
A. Prevention and mitigation	0.676	0.00	Reject	Highly Significant
B. Preparedness	0.740	0.00	Reject	Highly Significant
C. Ability to respond	0.694	0.00	Reject	Highly Significant
D. Recovery and rehabilitation	0.756	0.00	Reject	Highly Significant

Correlation is at 0.01 level (2-tailed test)

The table presents the relationship between the extent of implementation of DRRM programs and the utilization of training and seminars. The results show that all four areas, prevention and mitigation, preparedness, ability to respond, and recovery and rehabilitation have p-values of 0.000, which are below the 0.01 level of significance. This leads to the rejection of the null hypothesis, indicating that relationships are statistically significant.

Relationship Between the Assessments on the Extent of Implementation of DRRM Programs in terms of Materials, Equipment and Facilities and on the Level of Utilization of Available Resources and Support Systems

Materials, Equipment and Facilities	r- value	p- value	Decision Ho	Verbal Interpretation
A. Prevention and mitigation	0.716	0.00	Reject	Highly Significant
B. Preparedness	0.712	0.00	Reject	Highly Significant
C. Ability to respond	0.640	0.00	Reject	Highly Significant
D. Recovery and rehabilitation	0.749	0.00	Reject	Highly Significant

Correlation is at 0.01 level (2-tailed test)

The findings shown in table presents the relationship between DRRM program implementation and the availability and utilization of materials, equipment, and facilities. The

results show that all areas of DRRM implementation are significantly associated with these resources, as indicated by p-values of 0.000 across all indicators, which are below the 0.01 level of significance. The correlation values further demonstrate a strong positive relationship, suggesting that the adequacy and accessibility of physical resources greatly influence the effectiveness of DRRM implementation.

Relationship Between the Assessments on the Extent of Implementation of DRRM Programs in terms of Institutional Support and on the Level of Utilization of Available Resources and Support Systems

Institutional Support	r- value	p- value	Decision Ho	Verbal Interpretation
A. Prevention and mitigation	0.642	0.00	Reject	Highly Significant
B. Preparedness	0.692	0.00	Reject	Highly Significant
C. Ability to respond	0.644	0.00	Reject	Highly Significant
D. Recovery and rehabilitation	0.676	0.00	Reject	Highly Significant

Correlation is at 0.01 level (2-tailed test)

The table presents the relationship between DRRM program implementation and institutional support. Findings reveal that all key components: prevention and mitigation, preparedness, ability to respond, and recovery and rehabilitation are significantly associated with institutional support, as evidenced by p-values of 0.000, which are lower than the 0.01 level of significance. This indicates a highly significant relationship across all areas. In addition, the correlation coefficients reflect a moderate to strong positive relationship, suggesting that increased institutional support corresponds to a higher level of DRRM implementation. This implies that administrative backing, school policies, and established organizational systems are essential factors in strengthening and sustaining the effective execution of DRRM initiatives among teachers within the school setting.

4. Constraints in Implementing DRRM Programs.

The constraints in implementing DRRM programs are generally present and acknowledged by the respondents, as reflected in the composite mean of 2.89, verbally interpreted as Agree. This means teachers do experience notable barriers in carrying out DRRM activities, even if earlier tables showed that implementation and utilization levels were generally high. In other words, DRRM is functioning, but not without operational difficulties. This pattern is consistent with recent literature showing that schools may demonstrate active DRRM practice while still struggling with implementation gaps related to time, training, resources, guidance, and institutional support.

Constraints in Implementing DRRM Programs

I. Challenges in Implementing DRRM Programs	Weighted Mean	Verbal Interpretation	Rank
Limited time to plan and implement DRRM activities due to regular teaching duties.	3.13	Agree	1
Insufficient DRRM training and seminars for teachers.	3.07	Agree	2
Unavailability of emergency equipment and supplies for emergencies. (fire extinguishers, first aid kits, etc.)	2.85	Agree	5
Limited collaboration among teachers, staff, and community stakeholders in DRRM initiatives.	2.77	Agree	10
Difficulty in keeping students' discipline and orderly during emergency drills.	2.82	Agree	7
Low confidence and skills in using emergency equipment.	2.79	Agree	9
Insufficient funding for DRRM programs and activities.	2.90	Agree	3
Limited knowledge of current DRRM policies and procedures.	2.81	Agree	8
Short duration of drills that prevents proper practice.	2.89	Agree	4
Unclear roles and responsibilities of teachers during emergencies.	2.83	Agree	6
Composite Mean	2.89	Agree	

Legend: 3.50-4.00 = Strongly Agree, 2.50-3.49 = Agree, 1.50-2.49 = Disagree 1.00-1.49 = Strongly Disagree

5. Proposed Enhancement Programs

The proposed enhancement programs were designed to address the gaps and challenges identified in the implementation of Disaster Risk Reduction and Management programs in schools.

No.	Program Title	Objectives	Target Participants	Areas of Concern	Time Frame	Enhanced Activities	Expected Output	Success Indicators
1	DRRM Integration and Hazard Mapping Workshop	To strengthen teachers' capability in integrating DRRM into instruction and to improve hazard identification in the school environment	School Administrators, Teachers, DRRM Coordinators	Prevention and Mitigation	June; August (LAC Session)	Conduct school hazard mapping activities; develop DRRM-integrated lesson plans; identify risk-prone areas; facilitate school-based vulnerability assessment	Improved integration of DRRM in classroom instruction and updated school hazard maps	Completed school hazard maps; increased DRRM-integrated activities; improved teacher awareness of school hazards; identified safe and unsafe school zones
2	Emergency Preparedness and Go-Kit Readiness Program	To promote individual and classroom preparedness during emergencies and ensure the availability of emergency supplies and go-bags	Teachers, Parents, Learners	Preparedness	July; January	Conduct go-bag preparation activities; monitor classroom emergency supplies; orient learners on preparedness essentials; check availability of emergency materials	Prepared learners and classrooms equipped with emergency supplies	Complete classroom emergency supplies; improved learner preparedness awareness; proper maintenance of emergency materials
3	SAFE HANDS: Emergency Response and First Aid Drill Program	To enhance emergency response skills in evacuation, first aid, and use of safety equipment and to improve immediate disaster response coordination	School Administrators, Teachers, Learners, DRRM Coordinators	Response Capability	Quarterly (March, June, September, and December)	Facilitate first aid training and simulation; conduct school-wide evacuation drills; conduct drill evaluation and feedback sessions	Efficient and well-coordinated emergency response system	Improved evacuation performance; proper use of emergency tools; demonstrated first aid skills; faster response during drills
4	DRRM BAYANIHAN: School Recovery and Rehabilitation Program	To support school recovery after disaster occurrences and restore safe learning environments through community participation	Teachers, Parents, Community Volunteers, and other stakeholders	Recovery and Rehabilitation	After disaster occurrences; April rehabilitation and maintenance schedule	Conduct clean-up drives; organize school rehabilitation activities; mobilize volunteers for restoration activities	Faster restoration of school operations and learning facilities after disasters	Immediate rehabilitation activities conducted; restored school facilities; increased volunteer participation; improved post-disaster recovery response

No.	Program Title	Objectives	Target Participants	Areas of Concern	Time Frame	Enhanced Activities	Expected Output	Success Indicators
5	 Ligtas Turo: Teacher DRRM Leadership Development Program	To strengthen teachers' leadership skills in DRRM implementation and improve their confidence in managing DRRM activities	Teachers, DRRM Coordinators, School Administrators	Capacity Building and Leadership	October (INSET Week); February (Mid-Year Capacity Review)	Conduct DRRM leadership seminars; train teachers in DRRM planning and coordination; facilitate communication and decision-making exercises; develop classroom DRRM action plans	Teachers capable of independently leading DRRM activities and coordination efforts	Increased teacher leadership participation; improved DRRM planning skills; effective coordination during activities; completed classroom DRRM action plans
6	Safety Signals and Evacuation Systems Enhancement Program	To improve school evacuation systems and safety signage and establish clear and accessible evacuation procedures	School Administrators, DRRM Team, Learners, Utility Personnel	Materials, Equipment, and Facilities	July and November safety inspection schedules	Conduct school facility safety inspections; mark evacuation routes and assembly areas; install and repair evacuation signage; improve visibility of emergency exits	Organized and clearly visible evacuation systems within the school	Updated evacuation signage installed; clearly marked evacuation routes; improved accessibility of emergency exits; positive safety inspection results
7	DRRM CONNECT: Community and Agency Partnership Program	To strengthen collaboration between the school and external DRRM stakeholders and improve community participation in DRRM activities	Barangay Officials, MDRMO Personnel, and Parents	Institutional Support	June-July (Partnership Planning); January-February (Program Evaluation)	Invite DRRM agencies for school seminars; organize community-based DRRM activities; conduct stakeholder coordination meetings; establish external support partnerships	Strong school-community partnerships supporting DRRM implementation	Increased stakeholder participation; established DRRM partnerships; conducted collaborative DRRM activities; improved community support for the school DRRM program
8	Time Management and Resource Optimization Workshop	To help teachers balance DRRM responsibilities with teaching workloads and improve efficient utilization of DRRM resources	Teachers, School Administrators, DRRM Coordinators	Operational and Resource Management	October (INSET Break); January (Mid-Year Assessment)	Develop DRRM implementation schedules; conduct time management workshops; train teachers on resource allocation strategies	Improved efficiency in DRRM implementation and reduced workload difficulties	Improved scheduling of DRRM activities; better utilization of available resources; increased teacher efficiency in DRRM tasks

Discussion

The findings show that Disaster Risk Reduction and Management (DRRM) programs in schools are highly implemented across all domains: Preparedness, Ability to Respond, and Recovery and Rehabilitation. Overall, schools demonstrate strong compliance with DRRM policies and active engagement in safety practices, particularly in enforcing safety guidelines, conducting drills, and ensuring emergency readiness.

However, certain gaps remain. In Prevention and Mitigation, DRRM is not yet fully integrated into classroom instruction, indicating limited curriculum embedding. Preparedness is largely drill-based, while participation in formal training and seminars remains low, suggesting the need for stronger professional development. In Ability to Respond, teachers are effective during evacuations but show less consistency in structured drill facilitation. Recovery and Rehabilitation is strong in ensuring learning continuity but weaker in physical recovery activities.

Utilization of available resources is also highly rated across all areas, especially in applying training knowledge and using evacuation facilities. Nonetheless, weaknesses were noted in the limited use of DRRM funds and uneven application of expert recommendations, showing gaps in resource maximization and practice translation.

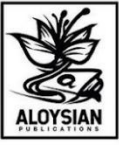
Correlation results confirm that all DRRM implementation domains are significantly and positively related to training, resources, and institutional support. This indicates that stronger support systems lead to better DRRM implementation, with training emerging as the most influential factor.

Despite these strengths, key constraints remain, particularly limited time to plan and conduct DRRM activities due to regular teaching responsibilities, insufficient DRRM training and seminars for teachers, and inadequate funding for DRRM programs and activities. These factors hinder the full effectiveness of DRRM implementation.

Conclusion

Based on the findings, the DRRM programs in schools are generally highly implemented across preparedness, response, and recovery and rehabilitation, with strong compliance to safety policies and effective use of available resources and support systems. However, prevention and mitigation still need improvement, particularly in the integration of DRRM into classroom instruction. Utilization of trainings, materials, and institutional support is also generally high, but gaps remain in training participation, fund utilization, and application of expert recommendations.

A significant relationship was found between DRRM implementation and the utilization of trainings, resources, and institutional support, indicating that stronger support systems lead to more effective DRRM practices in schools. However, challenges such as limited time due to teaching workloads, insufficient training opportunities, inadequate funding, and competing school responsibilities affect the full effectiveness of DRRM implementation.



To further enhance DRRM implementation, it is recommended that school administrators strengthen the integration of DRRM into the curriculum and provide continuous training and professional development for teachers. Schools should also improve resource allocation and maximize the use of DRRM funds to support activities and facilities. In addition, strengthening stakeholder collaboration and providing better time management support for teachers may help address existing constraints and improve the sustainability of DRRM programs. Future studies may further explore other factors that influence DRRM effectiveness in different school contexts.

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