

Disaster and Risk Reduction Preparedness Evaluation of the 6th District schools of Lapu-Lapu City

Maria Mariza Maglangit¹, Angelita D. Pagobo¹, Allan S. Adem¹, Ed.D,
Ray Ferdinand M. Gagani², PhD. (cand), Ritzel Montalban²

¹(Public schools district supervisor, District 6, Lapu-Lapu City Division)

¹(Principal I, Science and Technology Education Center, Lapu-Lapu City Division)

¹(Master teacher II, Science and Technology Education Center, Lapu-Lapu City Division)

²(Master teacher II, Science and Technology Education Center, Lapu-Lapu City Division)

²(Cebu Normal University)

Corresponding author: Ray Ferdinand M. Gagani

ABSTRACT: Disaster risk reduction preparedness is one of the programs that the Department of Education is promoting. This program monitoring evaluation survey utilizing the tool that is aligned with the Hyogo framework for risk reduction and produces an endorsement measure ranging from 1 (not observed) to 4 (highly observed) from the 285 informants and evaluates the Lapu-Lapu city 6th district schools of Lapu-Lapu City disaster risk reduction preparedness implementation for the disaster risk reduction program. Using the evaluation tool outlined by the framework reported moderate reduction preparedness on the preparation of disaster and risk reduction plan, the organization of risk reduction group, the implementation of the disaster risk reduction measures, on ensuring the safety of DepEd school site and building, and school records in all schools. The focus group discussion was done with the disaster and risks reduction program coordinators and the disaster risk reduction overall chairwoman written notes support the findings. The researchers recommend on the adherence to preparing schools resiliency and preparedness to natural and manmade-induced disaster.

KEYWORDS: Disaster preparedness; evaluation research; Hyogo framework; humanmade calamity; natural calamity; systems model risk reduction

I. INTRODUCTION

The Philippines is a disaster-prone country (Tobin, UNICEF representative). In a natural calamity or a man-made induced disturbance, it is the children that are the most vulnerable. For catastrophes are most often unpredictable, and school children stay an average of eight hours in school; it necessitates all schools to ensure high precautionary measures to provide school children's safety.

The Department of Education has responded to the responsibility of ensuring a safe and hazard free learning environment by promoting the disaster and risk reduction program. Similarly, the Department of education Lapu-Lapu city division has responded to this mandate.

Lapu-Lapu City is surrounded by bodies of water and could be very vulnerable to water disasters. As a prevention initiative, the local government, the DepEd Lapu-Lapu city division, and other stakeholders have conducted training and orientations to schools and to the DRRM coordinators on how to act before, during and after disasters.

Thus, this preparedness evaluation is done to know the extent of the disaster risk reduction preparedness of the schools within the 6th district of the Department of Education Lapu-Lapu City Division. The result of this research can be valuable for action planning for the improvement of the implementation of the disaster risk reduction program.

II. CONCEPTUAL FRAMEWORK

Methodology

There are two approaches for evaluation research [1]: the action research approach; and the systems model approach. Furthermore, classifications of evaluation researches are needs assessment evaluation; program monitoring evaluation, outcome and impact evaluation; cost-benefit; and cost-effective analysis [1].

This evaluation of the disaster and risk reduction program implementation is a program monitoring form of evaluation research that utilizes a systems model approach. In a system model of evaluating a policy or a program, attention to all parts (inputs, activities/process, results, and outcomes) of the program is necessary [1].

In a program, input includes resources, guidelines, and operating procedures but not limited to the clientele of the program, money, the agencies that provide the service, and the general guidelines of the program [1]. The activities are the services of the program or the operation of what is facilitated by the program input. Sometimes, it is called the program process. The effect of the event is its direct result while the outcomes refer to the achievement of the programs desired goal/s.

Similar to this model is the Context, Input, Process, and Product (CIPP) model of Stufflebeam [2]. CIPP model is for evaluating curricular programs [3], [4]). The CIPP evaluation model focuses on the context of a program, its input, the process within the program, and the product of the program. In the CIPP evaluation model, the results serve the basis for program improvement. The current program monitoring evaluation adheres the systems model approach [1].

Methods and design

This study considers the following before commencing: the problem, the research instrument, and its design [1]. The objective is to know the extent of preparedness of disaster risk reduction through the implementation of the guidelines of the DRRM program and its goal. It focuses on examining how prepared are the schools within district 6th if a natural or a human-made induced disaster occurs during class days. The primary instrument used was directly from the DRRM manual for evaluating the said program. The design in gathering data involves survey, FGD employing unstructured interview, and a participant constructed response note.

Instrument

The instrument from the manual evaluates the said program. It evaluates the preparedness of the 6th district schools disaster and risk reduction preparedness in terms of the school preparation of disaster and risk reduction plan, the schools organization of risk reduction group, the schools implementation of the disaster and risk reduction measures; and lastly, on ensuring the safety of DepEd properties like school site and building and school records [5].

This tool helps achieved the evaluation on the program input, the activities and its results, and the outcome. The program input is the program guideline and risk reduction manual patterned from the Hyogo framework [6] for disaster risk reduction; the activities are the dissemination of the disaster risk reduction manual; the creation of school reduction plan, the formation of risk reduction group, the implementation of risk reduction measure/s, and on ensuring the DepEd properties and records. The desired results here are the information dissemination of the implementation guidelines through training, drills, orientation, and seminar; the school DRRM team created, the contingency plan including hazard mapping, but not limited to exercises and workshop. The output evaluated is the overall preparedness of the school when a disaster or a human-made induced disturbance arises.

Participants

There are 285 informants in the 6th district of Lapu-Lapu city division who answered the survey questionnaire (198 elementary Teachers and 87 High School Teachers). The FGD included 9 DRRM coordinators and one overall chairwoman that provided a written note.

Data Gathering

The participants were oriented about the purpose of the study and were ask for their voluntary participation. The participants were given the questionnaire and were retrieved a month after.

The DRRM coordinators were assembled for the focus group discussion after the data was analyzed. Before the discussion started, the coordinators were asked to share how they feel about the day. The unstructured FGD began then by first asking the question: How they work with the DRRM implementation manual? Then let them share their experiences about the implementation. On a separate occasion, the overall chairwoman of the school's division DRRM management team was asked to answer the following questions in the form of notes: 1. To what extent have you assisted the schools in the implementation of the DRRM? Moreover, 2. What are the problems and challenges encountered in the implementation of the disaster risk reduction and management preparedness program of the schools in district 6?

Data Processing

The data were transformed into a percentage that depicts their endorsement on the disaster risk reduction preparedness. The information generated from the FGD and the written notes were used to compare the findings.

III. RESULTS AND DISCUSSION

The informants reported moderate observation on the implementation of the risk reduction management program. It means that the utilization of the manual is not optimal. In return, its desired activities were moderately performed in terms of creating risk reduction group, contingency planning, checking of the contingency measures if it works, effective and productive training, drills, and workshop, and hazard mapping. Hence, the activities were not wholly followed; the results also were moderately observed. Moreover, based on the informant's view, the goal of the disaster risk reduction program is moderately achieved.

The results from the focus group discussion together with the disaster and risks reduction program coordinators intensify these findings by sharing that even though they are DRRM coordinators, they do not necessarily know of what to do during emergencies. Hence they do not have rigid technical training to implement contingency measures. Furthermore, their exercises are limited, and sometimes, other teachers were sent in training instead of them.

The DRRM coordinators mentioned that only earthquake drills are conducted once in a year, and they doubt if students and teachers took exercises seriously. They added that teachers also have less experience in simulated disaster search and rescue. They remembered that there is a simulation training of bomb accident, but it happened only once. Moreover, they claimed that they do not fully retain all they get from the training. They added that teachers also do not take it seriously since their primary job is to teach, and there are many demands from their work that they need to comply first.

In terms of creating a risk reduction team, the coordinators noted that seldom teachers are qualified to make technical contingency plan and measures for risk reduction. They are not oriented with the nature of the work. One coordinator added, even simple manipulation of fire extinguisher teachers lacks the technical skills. Additionally, only coordinators are given little training on it, and they do not have the luxury of time of sharing what they learned from training since they also have to do their usual work requirement.

When they are asked if the program goal was achieved, they unanimously noted that it is not due to some reasons. As pointed by the informants, only a few teachers know about technical aspects of reducing risk during a calamity. Secondly, there is no complete facilities and equipment for each possible disaster like flood, fire, or any school disturbance. The third reason is that not all can attend risk reduction training. Also, the teachers are not so much interested in being a member of the school's disaster and risk reduction member since saving their family member is their priority when disaster comes and not other people. The informants also noted that training happens only once or twice a year, so retention is not guaranteed. Moreover, not all type of calamities had training programs.

On the other hand, the overall chair of the divisions DRRM committee noted that DRRM lectures and drills are conducted. The provision of first aid kit is evident. However, several challenges were also noted like different participants for training instead of the DRRM coordinator. The DRRM lectures and training in school were not given importance. Sometimes, the DRRM coordinator will not attend during meetings and orientation. Moreover, the DRRM was not included in the school improvement plan and annual improvement plan.

IV. CONCLUSION AND RECOMMENDATION

Based on the findings of the evaluation, the disaster and the risk reduction management programs' goal was not achieved fully. The areas on preparing school-based risk reduction plan, the organization of school-based risk reduction team, the continuous implementation of the disaster risk reduction measures, the establishment of the protocol of ensuring the safety of DepEd school site and building, and school records in all schools in the 6th district needs intensification. The incomplete compliance of the disaster risk reduction program may pose a threat if actual and serious calamity happens during school hours. The safety of school stakeholders may be at risk during times of disaster.

Serious adherence to preparing schools resiliency and preparedness to natural and manmade-induced calamity is needed. The 6th district must have continuous and rigorous training and information drive about reducing and means of reducing risk in times of serious disaster. The provision of facilities for the different calamities and training of its proper use must also be implemented to ensure readiness and preparedness among the schools within the 6th district. Moreover, teachers are encouraged to support the disaster risk reduction program.

V. ACKNOWLEDGEMENTS

Funding source: Basic Education Research Fund

REFERENCES

- [1] Wolfer, L. (2007). Real research: Conducting and evaluating research in the social sciences. Boston, MA: Pearson.
- [2] Stufflebeam, D. L. (2004). The 21st century CIPP model. Evaluation roots, 245-266.

- [3] Usmani, M. A. W., Suraiya, K. M., Zamil, A. M., & Shammot, M. M. (2012). Meta Evaluation of a Teachers' Evaluation Programme Using CIPP Model. *Archives Des Sciences*, 65(7), 230-252.
- [4] Zhang, G., Zeller, N., Griffith, R., Metcalf, D., Williams, J., Shea, C., & Misulis, K. (2011). Using the Context, Input, Process, and Product Evaluation Model (CIPP) as a Comprehensive Framework to Guide the Planning, Implementation, and Assessment of Service-Learning Programs. *Journal of Higher Education Outreach and Engagement*, 15(4), 57-84.
- [5] Disaster risk reduction resource manual: Safer school resource manual. Department of Education. (2008). Philippines.
- [6] International Strategy for Disaster Reduction, (2007). Hyogo Framework for Action 2005-2015. Retrieved January, 2007, from <http://www.unsdr.org.hfa>. Philippine Institute of Volcanology and Seismology, (1990). Earthquake and Tsunami. DOST: Philippines