

## ASSESSING THE LEVEL OF DRRM PREPAREDNESS OF DEPED BINAN CITY: BASIS FOR DIVISION DRRM PLAN



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### ABSTRACT

The Philippines has already experienced an inexhaustible number of deadly typhoons, earthquakes, volcanic eruptions and other natural hazards (Wingard and Brändlin, 2013). Salceda (2014) also noted that according to the Philippine Red Cross, at least 31,835 Filipinos have reportedly been killed and 94,369,462 have been affected by natural disasters and calamities in the past 20 years.

In 2015, the Department of Education (DepEd) issued the Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework to guide DRRM efforts in the basic education sector towards resilience-building in offices and schools, and to ensure that quality education is continuously provided and prioritized even during disasters and or emergencies. This framework shall institutionalize DRRM structures, systems, protocols and practices in DepEd offices and schools. Further, this shall provide common understanding and language in the implementation of DRRM in basic education at all levels. (DepEd Order No. 37, s. 2015)

The purpose of this study is to find out the level of DRRM preparedness of the Department of Education Division of Binan City in the Implementation of Disaster Risk Reduction Management in elementary and secondary schools in the division. It will be used to verify the needs of the schools in assessing the level of disaster DRRM preparedness. It is also an evidence-based paper that could give solutions to the present situations of the learners, teachers in different schools in their respective barangays.

The mixed-methods design was used in this study. The quantitative data was collected from 135 respondents (80 teachers and 55 learners from the public schools). Data collection was done using questionnaire, focus group discussion and individual in-depth face-to-face interviews. To determine the differences in the perception of the teacher and learner respondents, the researchers utilized the descriptive method.

The researchers found out that some respondents have very low disaster risk preparedness in terms of skills. It was revealed that integration of the concepts about hazards, hazard maps, disaster preparedness, awareness, mitigation, prevention, adaptation, and resiliency in the science curriculum could possibly affect the knowledge and understanding of students on DRR.

**Keywords:** *DRRM, hazard, preparedness, resilience, protocols*

## INTRODUCTION

As climate change begins to manifest itself—in the form of increased frequency and intensity of hazards such as floods, storms, heat waves, and drought—the need for communities to address climate risks is becoming urgent. Binan City is susceptible to Floods due to its topographical location and earthquake due to the west valley fault. Natural and human induced hazards are rampant not just in the Philippines, but also globally.

Over the past several years, the country has gained a lot of attention and momentum in disaster risk reduction. Numerous projects and activities have been undertaken by various Philippine stakeholders and agencies in Disaster Risk Reduction Management (DRRM). However, sustaining the positive results and scaling them up to effect rippling positive changes in the lives of the people have been constant challenges. Threats remain. Disasters and people's risk to disasters are still present. This is because the underlying causes of people's vulnerability have yet to be fully recognized and addressed. For years, DRR has focused more on efforts around disaster preparedness and response and not so much in identifying the hazard prone areas and other factors which contribute to people's exposure to disasters; incorporating risk analysis to development plans; building people's capacities towards sustainable livelihood options; and the like. Although DRR has been gaining attention among peoples and institutions, complete paradigm shift from "disasters as an immediate product of hazards" to "disasters as a function of people's vulnerability" has not yet fully happened. Also, converging DRR (Disaster Risk Reduction) and CCA (Climate Change Adaptation) remains to be a challenge, both in understanding, mainstreaming into plans and policies, including institutional mechanisms. Lastly, gaps in terms of increased knowledge, understanding and capacities remain and cause a big challenge for the country in terms of DRRM (National Disaster Risk Reduction and Management Plan, 2011).

The enactment of Republic Act 10121 otherwise known as the Philippine Disaster Risk Reduction and Management Act of 2010 has laid the basis for a paradigm shift from just disaster preparedness and response to disaster risk reduction and management (DRRM). The National DRRM Plan serves as the national guide on how sustainable development can be achieved through inclusive growth while building the adaptive capacities of communities; increasing the resilience of vulnerable sectors; and optimizing disaster mitigation opportunities with the end in view of promoting people's welfare and security towards gender-responsive and rights-based sustainable development (National Disaster Risk Reduction and Management Plan, 2011).

In addition, the Republic Act (RA) No. 10121 entitled *The Philippine Disaster Risk Reduction and Management Act of 2010*, which mandates all national government agencies to institutionalize policies, structures, coordination mechanisms and programs with continuing budget appropriation on Disaster Risk Reduction and Management (DRRM) from national to local levels and DepEd Order No. 50, s. 2011 entitled *Creation of Disaster Risk Reduction and Management Office (DRRMO)*, which mandates the said office to initiate and spearhead the establishment of mechanisms which prepare, guarantee protection and increase resiliency of the Department of Education (DepEd) constituents in the face of disaster, the DepEd issues the enclosed Coordination and Information Management Protocols for the schools, schools divisions offices (SDOs) and regional offices (ROs) and coordinators to establish the system of coordination and information management and provide guidance to DepEd field offices, schools and DRRM coordinators on their respective roles and functions relative to DRRM implementation.

This Protocol as well as the roles and responsibilities of the DepEd region, school division and schools, including the DRRM coordinators are being articulated here with the following objectives:

- a. provide guidance to regions and schools divisions, including DRRM coordinators on how to act before, during and after disasters;
- b. capacitate the DRRMO coordinators and other DepEd constituents to disasters and emergencies; and facilitate immediate and efficient information flow during disasters and emergencies. (DepEd Order no. 21 s, 2015)

In line with this, the Department of Education (DepEd) issues the enclosed Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework to guide DRRM efforts in the basic education sector towards resilience-building in offices and schools, and to ensure that quality education is continuously provided and prioritized even during disasters and or emergencies. This framework shall institutionalize DRRM structures, systems, protocols and practices in DepEd offices and schools. Further, this shall provide common understanding and language in the implementation of DRRM in basic education at all levels. (DepEd Order No. 37, s. 2015).

The frequency of natural hazards that the world has witnessed is increasing. Whether the causes of these hazards are anthropogenic or natural, there is no doubt now that these hazards have turned into disasters that have put an immense strain at all levels even on the most developed governments in the world. (www.apjor.com Vol: I. Issue XL, June 2016). The Philippines has experienced an inexhaustible number of deadly typhoons, earthquakes, volcanic eruptions and other natural hazards (Wingard and Brändlin, 2013). Salceda (2014) also noted that according to the Philippine Red Cross, at least 31,835 Filipinos have reportedly been killed and 94,369,462 have been affected by natural disasters and calamities in the past 20 years. According to Beck, M. et. al (2012) out of 173 countries assessed for their exposure to hazards, the Philippines placed third. For instance, Typhoon Haiyan, which is described as one of the world's strongest to ever hit in the history claimed thousands of lives and billions worth of

infrastructure in the central Philippines in 2013. More than one year later, the devastated parts of the country continue to struggle the effects brought about by the onslaught of this mega disaster. The United Nations Refugee Agency (UNHCR) reported that 20,000 of the 4.1 million people displaced by the disaster still live in 56 displacement sites across typhoon-affected areas after a year since the onslaught. The Asian Disaster Risk Reduction Center. (www.apjor.com Vol: I. Issue XL, June 2016).

The purpose of this study is to find out the level of DRRM preparedness of the Department of Education Division of Binan City in the Implementation of Disaster Risk Reduction Management in elementary and secondary schools in the division. This paper will be the tune up for the division office to verify the needs of the schools in assessing the level of disaster DRRM preparedness. It is also an evidence-based paper that could give solutions to the present situations of the learners, teachers in different schools in their respective barangays.

## **METHODOLOGY**

The mixed-methods design was used in this study. The quantitative data was collected using questionnaire and, simultaneously, focus group discussion and individual in-depth face-to-face interviews with a random sample of the respondents was conducted to gather the qualitative data. Both data used to find out if they validate each other.

There were 80 teachers and 55 learners from the public schools with a total of 135 respondents. The purposive sampling technique was used in this research, that would mean the whole population was taken singly to gather the needed data objectively. A purposive sampling is a non-probability sampling that is selected based on characteristics of a population and the objective of the study. This type of sampling can be very useful in situations when you need to reach a targeted sample quickly, and where sampling for proportionality is not the main concern.

Qualitative data was coded, organized, compared, analyzed, and major themes were identified. The themes arrived after the analysis and presented to the students for cross-checking and validation. Thereafter, the themes were presented, analyzed, interpreted, and linked with literature.

For quantitative data, the statistical tool was used the frequency distribution, percentage and mean, to determine the level of disaster preparedness of the respondents. The results were presented in table form, analyzed, interpreted and linked with literature. In both analyses and reports, the researchers were also write their insights and reflections on the findings to be generated, using their field notes as additional inputs. Qualitative data was coded, organized, compared, analyzed, and major themes were identified. Statistical tools were used in analyzing quantitative data.

## **RESULTS**

The responses of teacher respondents in this study reflect the appropriateness of DRRM plan in the Division and for the student respondents, how is the K-to-12 curriculum and other educational programs of DepEd are effective in addressing DRRM. DepEd implements the comprehensive DRRM in the Basic Education Framework which seeks to protect students and education staff (teachers and nonteaching personnel) from death and injury in schools, promotes risk reduction and resilience through education, and plan for a steady educational program despite of imminent natural hazards. Schools should be guided by this Framework for an effective assessment, planning, and implementation of DRR, prevention, mitigation, preparedness, response, and rehabilitation. The DRRM in the basic education framework is fully reinforced by the present curriculum. School and community stakeholders are engaged and are asked to participate in the integration of DRR in the educational programs. Based on the School DRRM Manual of DepEd, the children or the

youth should have a great involvement in educational activities that promote DRR awareness.

## **DISCUSSION**

Based on these focus group discussion and interview, the teacher respondents have no definite plan in the occurrence of the Big One and or any devastating hazards may arise, they do not have plan where to meet their families after the event of natural hazards. They do not have the emergency kit, go bags, or the basic needs for them to survive for 3 days after the event of disaster.

The teacher respondents understand some disaster-related concepts and ideas, and are prepared, adapted, and aware on the risks inflicted by these natural hazards. Which is opposite with the student respondents because the basic knowledge they have acquired would not suffice to deal with different types of disasters. Low level of preparedness on disaster risks are evidently observed among the respondents. The responses could be based on the efficiency and impact of integration of DRR education in the schools' curriculum. Specifically, integration of the concepts about the hazards, hazard maps, disaster preparedness, awareness, mitigation, prevention, adaptation, and resiliency in the science curriculum possibly affect the knowledge and understanding of students on DRR.

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