



---

## **Disaster Risk Reduction and Management in Times of Calamities**

*James O. Oyando, Ph.D*

University of the Cordilleras, Baguio City, Philippines, [jamesoyando@yahoo.com](mailto:jamesoyando@yahoo.com)

DOI: <https://doi.org/10.55248/gengpi.2022.3.4.4>

---

### **ABSTRACT**

The nation's concern of strengthen the country's disaster reduction system. It seeks the reduction and better management of disaster risk. This research aimed to determine the level of readiness and responsiveness of Municipality of Balaoan on the implementation of different programs and projects on Disaster Risk Reduction and Management along the areas on prevention, preparedness, response, recovery and rehabilitation. The researcher used descriptive-developmental design with 250 respondents. Developmental design was based on the constraints gauged use in the preparation of functional program and research made survey containing items along readiness, preparedness and responsiveness of the respondents. Mean and Frequency counts were used as the simple statistical tools. The researcher found that 36 Barangays in Balaoan with regards to the implementation of their programs and projects in terms of prevention and mitigation, preparedness, response, recovery and rehabilitation was described as much ready. The total grand mean for the categories was 3.69 described as much ready. A well – managed program on disaster risk reduction shall be organized by the DRRMO. This is necessary to improve the disaster risk reduction management program of the Barangay and make sure that their constituent attains the full benefits of the programs and projects that they implement towards the disaster resiliency of their barangay. More intensified training program should be designed, formulated and implemented to upgrade the skill and competence of DRRM Barangay coordinators in managing disaster risk reduction in the Barangay; the evaluated program can be use by future researchers as benchmark if they plan to replicate the study in their respective areas of specialization.

**Keywords:** Disaster Risk, Reduction, Management Program, Prevention and Preparedness, Recovery and Rehabilitation.

---

### **I. INTRODUCTION**

Disasters are unfavorable aspects that bring risk in life safety, livelihood, shelter, buildings and infrastructure of the people in the community. The Philippines is prone to all kinds of natural hazards because of its geographical location and physical environment. Common hazards associated with these are heavy rains, strong winds, strong surge, flood and landslide. Life is the most important thing that God gave us. In case of calamities, life should be the first priority to be saved due to the fact that we don't have a second chance to live in this world when life lost. Aside from life, livelihood of the people are also important in order to support their basic needs in life, when disaster occur it is difficult for them to have their basic needs since their primary source of income was destroyed. Furthermore, disasters denude shelter, buildings and infrastructure in the community. In 2010, the government passed Republic Act No. 10121 known as an act strengthening the Philippine Risk Reduction and Management system, providing for the national disaster risk reduction and management framework and institutionalizing the national risk reduction and management plan, appropriating funds therefore and for other purposes. In fact, the Municipal Disaster Risk Reduction and Management Council said 7,663 families from all of the 36 Barangays of the municipality were affected by typhoons. Damages to infrastructures were estimated at more than P120 million, while loses to agriculture reached more than P 200 million. However, the researcher observed that the issues on the readiness, responsive and implementation of Disaster Risk Reduction and Management Program in Municipality of Balaoan is less prioritized because of the fact that even the government mandate different programs still the community experienced lack of trainings and seminar in relation to DRR that can educate and empower them. The researcher wants to know more about the level of implementation of disaster risk reduction and management programs in Balaoan. Hence, this study. Generally, Municipality of Balaoan was being rated based on the following specification; 1. Preparedness of Municipality of Balaoan with regards to the implementation of thier programs and projects in terms of 1.1 Prevention and Mitigation, 1.2 Preparedness, 1.3 Response, 1.4 Recovery and Rehabilitation 2. Preparedness of Municipality of Balaoan with regards to the availability and capacity of the facilities to respond to the needs of the projects. 3. Preparedness of Municipality of Balaoan with regards to the availability and capacity

---

### **II. METHODOLOGY**

Descriptive research design was used. It illustrates present conditions, practices, situations, or any phenomena based on impressions or reactions of respondents. In this method, the respondents answer the survey questionnaire in the easiest way that they could understand the questions well on the level of their comprehension. Municipality of Balaoan, La Union, 36 selected Barangays with 250 (families) respondents.

The main source of data was the survey questionnaire. Those data taken from the National Disaster Risk Reduction and Management Council as well as from the Municipal Disaster Risk Reduction and Management Office of Balaoan. Percentage Weighted Mean and Ranking was used.

---

### III. FINDINGS

On the level of resiliency of Municipality of Balaoan with regards to the implementation of Programs and Projects, garnered weighted mean of 4.01 out of 5 which is equivalent to an interpretation of very satisfactory. On the other hand level of resiliency of Municipality of Balaoan with regards to the capacity of 490heir equipments respond to the needs of the people, the weighted mean is 3.47 out of 5 which denotes that the level of resiliency is satisfactory. Lastly, on the level of resiliency of Municipality of Balaoan with regards to capacity and responsiveness of their rescue and relief is very satisfactory.

---

### IV. CONCLUSIONS

Based on the following findings, the researcher concluded that the level of resiliency of Balaoan, La Union with regards to the implementation of their programs and projects, are relatively capable to prevent and mitigate the possible effects of calamities with regards to casualties and damages to properties, to be prepared for the possible harmful effects, to be responsive enough in times of calamities had struck the Municipality. The Municipality has provided the enough evacuation areas to the citizens where the relief goods, enough space, electricity, water supply, sanitation and other vital requirements are also available; there is none yet a functional hospital which is now under construction. The availability and capacity of the equipments to respond to the needs of the people in times of calamity, with regards to light equipments such as power saw, generator, rubber boat, oxygen tank, tower light, command tent and other light equipments as well as the heavy equipments such as dump truck, tanker, road graders, telescopic crane and other heavy equipment, are not absolutely available and capacitated. The Municipality of Balaoan has enough manpower to employ in times of rescue and reliefs such as police department which is already devolved to Barangay level, the fire department is relatively capacitated responsive to needs of the people, and the city has enough volunteers to be employed in times of relief operations.

---

### IV. RECOMMENDATIONS

On the onset of conclusion, these recommendations were being formulated: first, the municipality shall continuously implement their existing programs and projects accompanied by efficient and effective implementation with proper fund and allocation thereof; Second the Municipality of Balaoan shall provide additional facilities especially the hospitals since there is none yet provided with enough medical facilities and medical experts; third, additional budget shall be allocated the Municipality's Disaster Risk Reduction and Management in order to purchase additional equipments to be used in times of calamities; fourth, further research shall be conducted for the purpose of more comprehensive Municipality's Disaster Risk Reduction and Management focusing on specific calamity such as earthquake, tsunamis, typhoons, storm surge, tornados, and other calamities: and lastly, other local government units may replicate the existing Disaster Risk Reduction and Management of Municipality of Balaoan or even improve it depending on how it suit their existing situation for the development of their own disaster preparedness measure.

---

### REFERENCES

- Barcia, R. (n.d). Albay is 2012 Gawad Kalasag hall of famer for best PDRRMC practices.
- Bicol Mail: Bicolandia's Ony Regional Newspaper. Retrieved June 26, 2013 from [www. Bicolmail. Com](http://www.bicolmail.com)
- Bendimerand, F. (n.d). Disaster Risk Reduction of Highly Vulnerable Urban Areas through Urban Re- Development Case study of Barangay Rizal, Makati, Philippines Active Learning Network for and Performance in Humanitarian Action. Retrieved June 26, 2013 from [www.alnap.org/pool/files/rsurp- mkt-usmaca2010 pdf](http://www.alnap.org/pool/files/rsurp-mkt-usmaca2010.pdf)
- Campaign Policies of World Cities. (n.d). Tearfund Organization Retrieved February 24, 2013 [www.tearfund.org/webdocs/website/campaign/Policy DILG Files](http://www.tearfund.org/webdocs/website/campaign/Policy_DILG_Files) Retrieved February 1, 201 [www.dilg.gov.ph/PDF\\_file/resources /DILG-Resources](http://www.dilg.gov.ph/PDF_file/resources/DILG-Resources).
- Disaster Preparedness. Google Retrieved March 13, 2013 [www.google.com.ph/url?sa=t&rct=j&q=institutionalize case study on disaster preparedness](http://www.google.com.ph/url?sa=t&rct=j&q=institutionalize%20case%20study%20on%20disaster%20preparedness).
- Disaster Risk (IRDR) ICSU. Latest news; International council for science. [http://www.icsu.org/what we do/interdisciplinary-bodies](http://www.icsu.org/what-we-do/interdisciplinary-bodies)
- Guzman, J.I Project Noah to strengthen Marikina's disaster management plans, programs.
- Lasco, R. Local Government Initiatives to Climate Change Adaptation: A Case Study of Albay, Philippines.
- MDRR Education in the Philippines. National Disaster Coordinating Council Retrieved February 24, 2013.
- Rabonza, G. (2009, October 9), Final Report on Tropical Storm Ondoy and Typhoon Pepeng, National Disaster Risk Reduction and Management Council.
- Rood, S. , Ondoy Onslaught: Philippines Battered by typhoon| in Asia. The Asia Foundation. Retrieved June 25, 2013.