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**Governance Issues on Disaster Risk Reduction of LGUs's Controlled Social Services  
of Selected Barangays in the Province of Bukidnon**

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*Abstract*

Disaster Risk Reduction Management (DRRM) concepts are difficult to get across to the community leaders, especially to the residents themselves. In the past, competence in disaster preparedness cannot take off in the barangay level due to an apparent lack of education as noted by the Department of Interior and Local Government (DILG). Local government units (LGUs) recognize the importance of disaster risk reduction management. However, issues on policies that have bearing on the pre- implementation, implementation, and post-implementation activities are deemed important. Thus, the study explored the governance issues on disaster risk reduction of local government units' basic social services of selected barangays in the Province of Bukidnon. Focus Group Discussion (FGD), interviews, and checklist were used in gathering the data to answer the following objectives: (1) assess the pre-implementation, during the implementation, and post-implementation of the disaster risk reduction management policies focusing on the basic social services such as food, water, electricity, and health in the identified barangays; (2) identify issues on the implementation of the DRRM based on the pillars of good governance; and (3) recommend appropriate measures to respond to governance issues. Findings reveal that the local government units of the Province of Bukidnon showed preparedness in disaster risk reduction in pre-implementation, during the implementation, and post-implementation of the disaster risk reduction management policies. Governance issues were identified, namely, distribution of basic services, relocation site, list of households in the community, and accessibility of information. However, appropriate measures were recommended to respond to the identified governance issues.

*Keywords:* Governance issues, disaster risk reduction management, local government units, basic social services

## *Introduction*

Good governance is weak in the management of disaster risk reduction in the Philippines. Participation, transparency, accountability, efficiency, and responsiveness toward DRR are lacking. UNDP (2010) defined governance as the exercise of political, economic, and administrative authority to manage a country's affairs at all levels. It comprises the mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences. Governance not only encompasses but also transcends, government. It encompasses all relevant groups, including the private sector and civil society organizations.

Managing disaster risk governance involves many actors depending on the country's priority. For instance, in Bangladesh, some of the projects seek to promote sustainable development in the face of climate change associated with disaster risk reduction, climate change adaptation, sustainable livelihoods, and good governance. The approach, which is considered as a key technique, include community mobilization, capacity building, connecting communities to government services, establishing sustainable livelihood practices at the community level such as tree planting, securing non-saline water supply, and sharing knowledge between all stakeholders. Consequently, the findings will be shared widely across the field of disaster management (UNISDR, 2015).

While in Japan, disaster-resilient urban infrastructure is another development concept added based on the lessons learned from earthquakes and tsunamis. Based on the concept of "Building Back Better," there are high expectations on the Taganishi Eco-Town projects as a symbol of the recovery. It has been selected as model eco-town under Sendai City's Earthquake Disaster Reconstruction Plan. Moreover, it has been singled out by the UNISDR, introduced as an example of disaster-resilient urban development.

With the passing of Disaster Management Law 24/2007, the Indonesian government made DRR one of its nine national development priorities and substantially increased its funding. The law includes specific language on direct disaster protection and response services and outlines the rights of individuals to information, education, and training on DRR. UNDP continues to support the government of Indonesia through various programs at national and provincial levels to integrate the Disaster Management Law principles into community development activities and to address the structural causes of disasters (UNDP, 2010).

Similarly, India has integrated DRR into the curricula. The Central Board for Secondary Education was first to introduce DRR into the schools' syllabi in social sciences for grades 8, 9, and 10. A committee of teachers, UNDP personnel, and academics designed and developed the contents of textbooks, including chapters on hazards, the development of preparedness and response plans, search of rescue, first-aid and mock drills in schools. This was accompanied by the skills to carry out the drills.

Meanwhile, Republic Act (RA) No. 10121, otherwise known as the "Philippine Disaster Risk Reduction and Management Act of 2010" (PDRRM-2010) was promulgated to strengthen the Philippine disaster risk reduction system. It specifically provides for the development of policies and plans and the implementation of actions and measures about all aspects of disaster risk reduction and management, including good governance, risk assessment and early warning, knowledge building, and awareness-raising, reducing underlying risk factors, and preparedness for effective response and early recovery. DRRM framework and the national DRRM plans are also provided (Domingo, 2014) with its important component, creating the DRRM council, both national and local levels. A separate office is created that will principally be responsible for the implementation of disaster risk reduction

and management programs.

The study of Ahrens and Rudolph (2006) reported that institutional failure is one of the root causes of underdevelopment and susceptibility to disasters and explored their interdependent relationship. It confirmed that sustainable livelihoods can be achieved, and susceptibility to disasters be reduced only if a country's governance structure enables the implementation and enforcement of public policies conducive to a country's economic and social development. The identified key features of a governance structure that fosters the development and supports risk reduction include accountability, participation, predictability, and transparency.

In the Philippines, the direction of DRRM is towards the goal of the NDRRM Plan, which is to create "safer, adaptive and disaster-resilient Filipino communities towards sustainable development" (NDRRMP, 2011). The role of barangays (the smallest administrative division in the Philippines) in disaster management is equally recognized. Its new law on disaster risk reduction, i.e., Republic Act No. 10121 (RA 10121) or the "Philippine Disaster Risk Reduction, and Management Act of 2010," establishes 41,956 Barangay Disaster Risk Reduction and Management Committees (BDRRMCs) but only as committees under Barangay Development Councils (BDCs).

BDRRMCs, just like their counterparts at the provincial, city, and municipal levels, are mandated by RA 10121 to "set the direction, development, implementation, and coordination of disaster risk management programs within their territorial jurisdictions. As observed by the Department of Interior and Local Government (DILG), competence for disaster preparedness cannot be grounded in the barangay level due to an apparent lack of education. While trainings and seminars on disaster preparedness may have been regularly conducted in the barangay level, an evaluation of the effectiveness of such activities may not have been done to measure the extent

of understanding. Given their limited technical know-how and financial means, are barangays, as communities on their own, up to the challenges?

Thus, this study explored the governance issues on the pre-implementation, implementation and post-implementation activities on DRRM policies of selected barangays in the province of Bukidnon.

### *Framework of the Study*

The study is anchored on RA 10121 or the Philippine Disaster Risk Reduction and Management (PDRRM) Act. Specifically, it focuses on the law on DRRM that considers the common goals and objectives: (1) to increase the resilience of vulnerable communities and the country against natural disasters; and (2) to reduce damage and loss of lives and properties due to disasters. In particular, RA 10121 provides for the development of policies and plans and the implementation of actions and measures about all aspects of DRRM, including good governance, risk assessment and early warning, knowledge building, and awareness-raising, reducing underlying risk factors, and preparedness for effective response and early recovery.

The law acknowledges that there is a need to "adopt a disaster risk reduction and management approach that is holistic, comprehensive, integrated, and proactive in lessening the socioeconomic and environmental impacts of disasters including climate change, and promote the involvement and participation of all sectors and all stakeholders concerned, at all levels, especially the local community" (RA 10121 of 2010, Sec. 2 (d)).

Hyogo Framework for Action (2005 – 2015) indicated that supportive governance is necessary to ensure coping capacities in societies and that issues and challenges must be jointly addressed to reduce disaster risks in the locality. Efforts to reduce disaster risks must be systematically integrated into policies, plans,

and programs for sustainable development and poverty reduction. Sustainable development, poverty reduction, good governance, and disaster risk reduction are mutually supportive objectives, and to meet the challenges ahead, accelerated efforts must be made.

Governance generally refers to the set of instruments through which people living in a state, believing in common core values, govern themselves using laws, rules, and regulations enforced by the state apparatus. It denotes a system of values, policies, institutions by which society manages its economic, political, and social affairs through interaction among the state, civil society, and the private sector (Cadribo, n.d.). It has three components: economic, political, and administrative. Appropriate governance for disaster risk management is a fundamental requirement if risk considerations are factored into development planning and if existing risks are successfully mitigated (UNDP, 2004, p. 89).

The Philippine Government, specifically members of the NDRRMC, the country's focal point for disaster response, steps to shift from the focus on relief and response to DRRM. International and national non-government organizations (NGOs) saw an ally in government as it took on projects with a comprehensive approach to disasters. Foreign-assisted projects provided opportunities where the government could take a proactive role in identifying hazards, assessing risks, mapping, informing, and communicating with community residents, working with local government units (LGUs) and LDCCs devising early warning system (EWS) and mainstreaming operation.

Issues on the pre-implementation, during the implementation, and post-implementation of disaster risk reduction management with the pillars of good governance through participation, transparency, and accountability, responsiveness, sustainability, equity, effectiveness, and efficiency need to be examined. These principles are interdependent

and mutually reinforcing. For *participation*, it involves three pillars: (1) public access to information; (2) public participation in decision-making processes; and (3) public access to judicial and administrative redress. Laws, regulations, and codes of conduct should be fair and enforced impartially.

*Transparency and accountability* of decision-makers and all stakeholders are deemed necessary. The accountability of local authorities to their citizens is a fundamental tenet of good governance. Similarly, there should be no place for corruption in cities. It can undermine local government credibility and can deepen urban poverty. Transparency and accountability are essential to stakeholders' understanding of local government and benefiting from decisions and actions. Access to information is fundamental to this understanding and good governance. Laws and public policies should be applied in a transparent and predictable manner. Elected and appointed officials and other civil servant leaders need to set an example of high standards of professional and personal integrity. Citizen participation is a key element in promoting transparency and accountability.

Accountability, participation, predictability, and transparency are identified as the key features of a governance structure that foster development and support risk reduction. Collaboration in disaster risk management is deemed necessary to be undertaken by all government and non-government organizations across levels to address disasters and calamities. Hyogo Framework for Action (2005) on disaster risk reduction management stipulates fundamental principles emphasizing collaboration in early warning, awareness, information education communication, local resilience, and preparedness.

Sustainability in all dimensions balances the social, economic, and environmental needs of the present and future generations. This includes a clear commitment to urban poverty reduction. Leaders of all sections of urban

society must have a long-term strategic vision of sustainable human development and the ability to reconcile divergent interests for the common good.

The sharing of power leads to equity in the access to and use of resources. Women and men participate as equals in all urban decision-making, priority-setting, and resource allocation processes. Local governments provide everyone (be it the poor, the young or older persons, religious or ethnic minorities, or the disabled) with equitable access to nutrition, education, employment and livelihood, health care, shelter, safe drinking water, sanitation, and other basic services.

Efficiency in the delivery of public services and in promoting local economic development is significant. Local governments are financially sound and cost-effective in managing revenue sources and expenditures, the administration and delivery of services, and enablement, based on comparative advantage, of government, the private sector, and communities to contribute formally or informally to the urban economy.

### *Objectives of the Study*

This paper assessed and explored the issues on disaster risk reduction program (DRRM) of LGUs and non-LGU controlled social services of flood-prone areas in the selected barangays in the Province of Bukidnon. Specifically, this study aimed to:

1. Assess the pre-implementation, during the implementation, and post-implementation of the disaster risk reduction management policies focusing on the basic social services such as food, water, electricity, and medicine in the identified municipalities.
2. Identify issues on the implementation of DRRM based on the pillars of good governance; and,
3. Recommend appropriate measures to respond to governance issues.

### *Methodology*

The study utilized a quantitative method of research. Focus group discussion (FGD) and in-depth interviews were conducted with the participants who were purposively selected at the local, municipal, and provincial levels, particularly those who were members of the DRRM. Unstructured questions were developed as a guide for the conduct of the FGD. In-depth interviews were done among representatives from other agencies such as Water District, Bukidnon Second Electric Company (BUSECO), DSWD, and City Health Office (CHO).

The research was conducted in the barangays of the different municipalities and cities of the Province of Bukidnon. These were the flood and landslide-prone barangays, namely, Aglayan (Malaybalay), Batangan (Valencia), Guihean (Impasug-ong), Palacapao (Quezon), Magsaysay, and Sampaguita (both in Kibawe).

### *Results and Discussion*

Many areas in the municipalities in the Province of Bukidnon for the past five (5) years have experienced natural disasters such as landslide and flooding. These municipalities have set various activities to mitigate the effects of natural disasters such as disaster prevention and mitigation, disaster preparedness, disaster response, disaster rehabilitation, and recovery. These activities are embedded in the Local Disaster Risk Reduction Management Plan (DRRMP) of every barangay. The following steps or system adopted by the barangays include:

#### *Assessment on pre-implementation, implementation and post-implementation policies on disaster risk reduction*

Municipalities and barangays have already coordinated and initiated activities to respond

to disasters in their respective localities based on the assessment. Pre-implementation of disaster risk reduction management involves disaster prevention and mitigation. In the Province of Bukidnon, checklists were used to ascertain the potential areas before and during disasters. The assessment of basic social services of the pre-implementation phase is shown below (in Matrix 1).

Matrix 1. Assessment of Basic Social Services on the Pre-implementation Phase

Basic Social Services	Pre-implementation phase
<ul style="list-style-type: none"> <li>• Food</li> <li>• Water</li> <li>• Electricity</li> <li>• Medicines</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation of a well-coordinated pre-implementation plan</li> <li>• Preparedness of the barangays was done by the actors</li> <li>• Provided with directives to follow in times of disasters</li> <li>• Coordinated among the agencies involved such as the Provincial Health Office, Water District, Bukidnon Electric Company, and the LGUs</li> <li>• Conducted information drive</li> <li>• Provided checklists on what to follow in case of disasters</li> <li>• The Signing of Memorandum of Agreement between the LGUs and other agencies involved</li> </ul>

In the pre-implementation, both the city and the barangay convene to assess their level of preparedness that included identifying pre-emptive evacuation areas using Geographical Information System (GIS). A well-coordinated pre-implementation plan is geared towards disaster risk reduction. This contrasts with Mendoza, Bruno, and Olpenda’s (2016) study which found a lack of more comprehensive DRRM plans and more strengthened DRRM. This limits the implementation and wide-ranging initiatives in the eight provinces and municipalities in Compostela Valley and Davao Oriental. The coordination and collaboration support the Sendai Framework for Disaster Reduction (2015-2030) which states that disasters can be substantially reduced if individuals are well-informed and motivated towards a culture of disaster prevention and

resilience. This consecutively requires the collection, compilation, and dissemination of relevant knowledge and information on hazards, vulnerabilities, and capacities (UNISDR, 2015).

The municipalities used the sectoral and inter-agency approach which involved the Provincial Health Office (PHO), Department of Social Welfare and Development (DSWD), Provincial Engineer’s Office (PEO), and Department of Public Works and Highways (DPWH). The Water District and Bukidnon Second Electric Company (BUSECO) is also closely coordinating with the LGUs in disasters. A memorandum of agreement (MOA) was signed between the local government units (LGUs) and the suppliers such as grocery stores, pharmacies, food suppliers, and alternative energy sources (solar panels) in preparation for disasters.

This is a good practice and commendable initiative done by the LGUs to ensure that the basic services of the affected areas are addressed and duly assisted. Bayanihan, and to Heal-as-one Program, are evident. The local barangays also regularly conducts information drive on disaster preparedness. The residents are encouraged to listen to PAGASA advisories from both radio and television broadcasts. They were also informed to prepare emergency supplies such as food, water, electricity and medicines, and other immediate and primary household supplies. Also, the Mines and Geosciences Bureau (MGB) provides data on the hazard-prone areas.

The above-mentioned pre-implementation assessment highlighted that the local government units in the province of Bukidnon, together with other agencies and sectors, showed evidence of preparedness and well-coordinated activities, which are the first phase whenever disaster strikes. This affirmed the LGU’s roles as the prime mover in the locality in times of disaster. The local government plays an integral role before, during, and after disasters because they do not only have direct jurisdiction over their constituents, but they are also expected to

know the community's needs (Col, 2007).

*Phase 2: Assessment during the implementation*

Based on the focus group discussion (FGD), it was mentioned that a DRRM team is tasked to conduct an adequate and prompt assessment of the affected areas. The advisory and warning system of PAGASA plays a very important role during a disaster because it determines the response of the team and the affected communities. This includes advising the residents to vacate and bring them to the evacuation areas. Although some residents do not like to leave their homes because of their belongings such as things, plants, and animals, they are encouraged and properly informed to leave and vacate for their safety. The assessment of basic social services of the implementation phase is shown below (Matrix 2).

Matrix 2. Assessment of Basic Social Services on the Implementation Phase

Basic Social Services	Implementation Assessment
<ul style="list-style-type: none"> <li>• Food</li> <li>• Water</li> <li>• Electricity</li> <li>• Medicines</li> </ul>	<ul style="list-style-type: none"> <li>• Prompt assessment of the affected areas</li> <li>• Tracking of PAG-ASA report</li> <li>• Distribution of food, water, and relief goods</li> <li>• Provision of shelter and clothing to the affected areas</li> <li>• Monitoring and coordination of the residents in the affected areas</li> </ul>

There is an immediate implementation of mechanisms for basic social services that include the distribution of relief goods, and provision of shelter, and clothing to the affected residents. The sectoral groups assist the residents of the affected areas. For instance, DSWD provides food; PHO provides the medicines; WASH provides water, and BUSECO provides electricity. This is an indication that different agencies, both public and private support the affected residents.

Many organizations from different institutions like private and public schools/ universities are raising funds and soliciting goods to help the victims, such as giving

food, clothing, and other relief goods. Other organizations like the NGOs, the Civil Society, and magnanimous private citizens also give food and clothing. This ensures that food and other essential goods are adequately provided for the affected residents during disasters. During this phase, relief goods and food are distributed with proper coordination with the DRRM team to ensure that the residents are assisted. This would be a big help to the residents so that the early recovery of the affected communities would be observed.

The pooling of resources across families and other agencies are observed during disasters. These are done and initiated by the LGUs and the DRRM team. Local institutions are integral in influencing community responses against disasters. They help determine the effects of the impacts, develop the capacity of the household to respond and adapt practices, and choose different external interventions (Agrawal, McSweeney, & Perrin, 2008).

*Phase 3: Post Implementation*

Post-implementation is an equally important phase in disaster risk reduction management implementation. This involves recovery and rehabilitation. During this stage, continuous assessment is undertaken, and various aspects are being considered. First, psychological problems and issues of affected residents are given attention and appropriate intervention such as psychological debriefing is provided by the psychological first aid team comprising of barangay health workers and social workers.

The implementation of social services also focuses on vulnerable sectors such as the elderly, pregnant women, children, and persons with disabilities. As part of the recovery and rehabilitation process, restoration of infrastructures and road networks, basic utilities such as electricity supply, water systems, and communication lines are prioritized by the agencies concerned.

With the effects of disasters on specific

areas, the local government units review policies and guidelines on disaster risk reduction management for prevention and control measures of possible adverse effects such as looting, sexual harassment, and other crimes. LGUs review the existing conditions in the locality and identify the readiness of the community, such as the opening of business establishments, reopening of schools, and resumption of work. Consistent improvement in the implementation of policies of the government in disasters prone areas is evident. This is because of the implementation of RA 10121 even though the cascading of policy from the national down to the local government levels remains a challenge.

The assessment of basic social services of the post-implementation phase is shown below (Matrix 3).

Matrix 3. Assessment of Basic Social Services on the Post-implementation Phase

Basic Social Services	Post Implementation
<ul style="list-style-type: none"> <li>• Food</li> <li>• Water</li> <li>• Electricity</li> <li>• Medicines</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct of psychological debriefing</li> <li>• Conduct of monitoring of vulnerable groups such as the elderly, pregnant women, children, and persons with disabilities</li> <li>• Restoration of infrastructures such as electricity, water systems, and communication lines</li> <li>• Revisitation of the disasters guidelines and policies</li> <li>• Identification of the readiness of the community for the opening of business establishments and resumption of work</li> </ul>

*Issues on the implementation of DRRM based on the pillars of good governance*

The DRRM plays a very important role in local governance as the country is confronted with various types of calamities and disasters, particularly the localities, where the study was conducted. Problems arise, especially after the occurrence of disaster despite the planning and

preparations. Both physical and psychological damage are noticeable despite the preparation before, during, and after the disaster. With these, various issues on the implementation of DRRM were based on the pillars of good governance that includes accountability, participation, predictability, and transparency.

The researchers generated the information thru FGD with the members of the DRRM both in the Province of Bukidnon and the City of Malaybalay and the participants from the different municipalities and barangays. It was participated by the heads of the DRRM in the Province of Bukidnon, the City Government of Malaybalay, and Valencia City. Data gathered during the FGD are presented below (Matrix 4).

Matrix 4. Issues on the Implementation of DRRM Based on the Pillars of Good Governance

Pillars of governance	Issues
Efficiency and effectiveness	<ul style="list-style-type: none"> <li>• Delayed distribution of basic services to the affected communities</li> <li>• Food distribution and complaints on the given goods during disasters</li> <li>• Limited accessibility of information in far-flung communities</li> </ul>
Participation	<ul style="list-style-type: none"> <li>• Delayed distribution of basic services to the affected communities</li> </ul>
Transparency	<ul style="list-style-type: none"> <li>• Food distribution and complaint on the given goods during disasters</li> </ul>
Accountability	<ul style="list-style-type: none"> <li>• Location of Barangay Magsaysay in the fault line</li> <li>• Inappropriate relocation site</li> </ul>
Responsibility	<ul style="list-style-type: none"> <li>• Incomplete/not updated list of households in the community</li> <li>• Conflict arising in the use of schools as evacuation center</li> </ul>

Pillars of good governance that came out during the FGD are identified with the corresponding issues experienced by the residents of barangays in flood-prone and land slide prone areas in the province.



### *Delayed Distribution of Basic Services to the Affected Communities*

One of the primary issues raised during the FGD was the distribution of basic services to the affected areas/community. Inasmuch as the barangay personnel and volunteers want immediate delivery of these services to the areas affected by the disaster, it was generally observed that there had been delays in the distribution of basic services to areas that were geographically isolated, and terrain not easily accessible to transportation. The compulsory stock of relief goods of five hundred packs is mandatory for each municipality. Memorandum of Agreements (MOA) was established between the local government, grocery stores, water refilling stations, and pharmacies. However, the availability of vehicles that will transport these goods may be a problem for each barangay if the scope of the disaster or the percentage of households which are affected is big. The household population affected may be too large and difficult to handle by the staff and volunteers. In which case local government units may outsource vehicles and more volunteers for relief distribution.

Another reason is the accessibility to the affected areas hinders the delivery of basic services. For example, in terms of interruption of water supply in affected areas due to natural calamity, immediate restoration may be difficult. To initially solve this issue, the local government units signed memorandum of agreements with water refilling stations in their localities. Also, water districts have initiated a mechanism of rationing water supply to those affected areas while awaiting the restoration of pipelines for water connection.

In most cases, areas that can be reached only by foot will most likely experience a delay in the distribution of the basic services. The affected areas will have to wait for some time before services are restored. However, water supply can also be sourced from deep wells and springs in some of the barangays. Most of the barangays have utilized water pumps, wells,

and springs as water sources. The residents made use of managing the available natural resources for the benefit of the public. They use these resources efficiently and effectively. This is a good indicator of initiative and self-reliance among the local members of the communities. This can be further sustained by giving training to the residents on how to make drinking water safe, hygienic, and potable in emergency cases. There are methods that can be employed by the public in making water safe during disasters to prevent water-borne diseases like diarrhea and typhoid fever, which would further cause complications.

Assuming that the area affected is geographically isolated and landslides may affect the roads, this would mean that the roads will be cleared first to make it passable. This requires heavy equipment and bulldozers, and more personnel to do the job. This needs proper coordination to fast track clearing operations so that basic services like food and water supply could be delivered to the victims. Moreover, disaster areas with low connectivity to communication satellites may cause further delays because communication to the municipal DRRM from the disaster area will take some time. The delays could be mitigated if the different localities have a sufficient supply of emergency goods like food and medicine. This has an implication on the disaster preparedness of LGUs.

### *Inappropriate relocation site*

The relocation site for the evacuees has been a problem during disasters. In some barangays, which are landslide-prone, for example, in Sampaguita and Magsaysay, Kibawe, Bukidnon, the relocation site offered by the government is located in a landslide-prone area. The choice of evacuation centers should involve proper planning regarding land use development among the local government concerned. If the evacuation centers are found in a disaster-prone area, it may add further problems to the safety of the victims. Schools located in landslide-prone areas should not be designated as evacuation

centers as they pose more harm than good in the long run.

The victims still manage to stay in the evacuation site and are vigilant if ever there will be a disaster in the area. They are somehow cooperative with the government despite the fear of staying in the relocation site. They give full participation and cooperation for the safety of their families because they understand the dire situation. Government authorities like the Department of Environment and Natural Resources, Mines and Geosciences Bureau, the Municipal Planning and Development Office, and the Local Disaster Risk Reduction and Management Office are important offices during these times. They are involved in proper zoning and land use which conform to established rules and requirements. Solway (2004) included in his outline the basic roles of the local government in facilitating the community during a disaster. One of these is the building of evacuation centers and determining safe locations for those affected. With the situation experienced by the victims, the local government units ensure the safety of the families affected.

#### *Food distribution and complaints on the goods given during disasters*

Food is a basic necessity, especially in times of disaster. It is reported that packs of food are readily available in the barangay and distributed to the affected areas. However, it has been observed that some of the distributed food lack proper nutritional value during disasters. Nutrition is supposed to be observed even during disasters, and this means proper food planning and preparation. Planning includes meals suited for various persons with varied needs such as children, the sick, the elderly, lactating mothers, etc. But this is understandable because during disasters there is shortage of food in the market. Farmers cannot deliver their harvests to the market. Business people like those delivering the fish and other commodities have difficulty transporting the goods due to flooding and landslide blockades.

Consideration of religious and cultural

beliefs and practices must be respected. Some of the displaced persons belong to indigenous groups whose religious practices may include *halal*-prepared food. Also, proper food handling must be ensured to maintain good hygiene and to avoid diseases and their spread in the evacuation centers. People understand the predicament they are in, and they also find ways and means to obtain food. Transparency in food distribution however maybe a problem.

Profiling among disaster victims is a must. It should be properly coordinated among the workers in charge of food planning and preparation. In times of disasters, ready to cook foods and easy-open tabs goods are preferred by victims because of the lack of utensils, especially immediately after a disaster. Ensuring potable water supply in evacuation centers is also a consideration. A system in food distribution should be established, disseminated, observed, and followed by the workers and the victims. This ensures that disaster victims have adequate access to food and that their food intake is safe.

Also, complaints about the distribution of goods have been identified as one of the problems, especially during disasters. Based on the FGD, the key informants mentioned that a system is being followed for the distribution of basic services such as the delivery of food. However, some individuals still claimed that they failed to receive goods. This means that the sufficiency of food supply must be considered. The efficiency of food distribution through profiling and inventory on the number of households affected and the number of meals to be prepared for the number of days of stay in the evacuation areas must be planned and coordinated.

#### *The use of schools as evacuation center has created conflict*

During disasters, the LGUs usually negotiate with the school officials for the schools to be used as evacuation centers for the affected families. LGUs and DepEd are very good partners anywhere in the country. The schools in the local areas or neighboring community

serve as a relocation center for the residents affected by a disaster. Conflict occurs when the school complains about the evacuees leaving the classrooms with chairs, tables, and other things destroyed. These issues may have sprung from a lack of information dissemination, orientation, implementation, and follow-up done by concerned officials and the evacuees.

There is a need to understand that house rules are vital for the orderly implementation of disaster management/ governance. Without these, sanitation in the sleeping quarters, comfort rooms, and other spaces, including orderly distribution of food and relief supplies, may be hampered. Properties be of the government or private institutions should be properly handled to avoid further losses in terms of money and other resources. Evacuees must perform roles or responsibilities to ensure the care and maintenance of evacuation centers. It would be beneficial if there is a memorandum of agreement regarding the accountabilities and responsibilities of each office to minimize the problem.

#### *Location of Barangay Magsaysay in the fault line*

One issue that confronts Barangay Magsaysay is its location in a fault line. This poses a big problem to the barangay where the residents are vulnerable to disasters. This would mean that the identification of areas that are in danger zones should be addressed as soon as possible. This requires coordination, identification of safe relocation areas, land use, and development with the Geo-Sciences Bureau, the local government units, and other related agencies. Residents must be informed of their situation to be aware and take appropriate actions to mitigate the harmful effects of disasters.

This is a wake-up call to the residents of the locality, particularly the LGUs. Disaster preparedness initiatives within local governments entail comprehensive planning and restructuring. Major planning documents have to be reconsidered, and previous plans

have to be revisited. Baseline assessment has to be conducted on which of the barangays are most vulnerable, considering the tenets of preparedness and the more encompassing principles of disaster risk reduction and management. A comprehensive land-use plan (CLUP) is necessary and be given priority for the safety, risk-resilience, and adaptive capacities of everybody in the locality (Domingo & Manejar, n. d.).

#### *Incomplete/not updated list of households in the community*

The key informants mentioned that the list of households in the community is incomplete. This may be the reason for the failure of other individuals to receive services such as food during the distribution. The list may not have been updated in which both the barangays and the local government units are responsible. This is because there are families who migrated to the localities and live with their relatives. These residents are not yet included in the list. This implies that barangays need to monitor and assess the new residents living in their localities. If the LGUs rely on the census, this is understandable because data are collected every three years. However, this must be given priority by the LGUs since it is their responsibility and accountability to consider the incoming residents in the barangays. The barangay can take the initiative of partnering with other organizations to help them track the new residents.

#### *Accessibility of information is limited in far-flung communities*

It has been reported that the accessibility of information is limited, especially in far-flung areas. A mechanism to increase the accessibility of information should be established. For example, installation of radio communication in far-flung areas, and the availability of hand-held radios should be provided to the barangays. Moreover, cell phones and prepaid/post paid loads may be added to the budget for communications in the barangay units as part of disaster management.

### *Findings and Conclusions*

The local government units of the province of Bukidnon showed evidence of preparedness and well-coordinated activities for the pre-implementation, during the implementation, and post-implementation of the disaster risk reduction management policies. Issues on implementing DRRM based on the pillars of good governance focused on the distribution of basic services, relocation site, list of households in the community, and accessibility of information. Appropriate measures are recommended to respond to governance issues raised by the participants. Further, the local government units of the province of Bukidnon followed the guidelines issued by the local and national bodies in the implementation of disaster risk reduction management policies with resourcefulness and initiatives. Experiences in disasters prompted the LGUs to respond with sincerity, dedication, and commitment to become more resilient to disasters.

### *Recommendations*

Appropriate measures are recommended responding to governance issues on disaster management based on the pillar of good governance which are as follows:

1. Strengthen basic services in the disaster-prone community/area by increasing the number of personnel and volunteers to facilitate the effective and efficient distribution of goods;
2. Ensure that established mechanisms on DRRM of the LGU are strictly understood, disseminated, implemented, monitored, and evaluated for efficiency and sustainability;
3. Ensure that the identified evacuation centers have adequate services such as psychosocial, medical, and information. The facilities such as comfort rooms, sleeping quarters, laundry, and kitchen areas should be based on the criteria specified in the Seal of Good Local Governance (SGLG);
4. Ensure that the provision of basic social services should be culture and gender-sensitive to be inclusive in disaster management;
5. Post-disaster activities such as relocating the community should follow guidelines established by Phivolcs and MGB in land use planning;
6. Strengthen the demographic profile of local communities through annual updating of households and other relevant information through the establishment of an updated and relevant Data Banking System for all LGUs;
7. Ensure transportation and communication accessibility of the local government for efficient delivery of basic social services;
8. Trainings on DRRM may be regularly conducted focusing on the pillars of good governance specifically, efficiency and effectiveness, participation, transparency, accountability, and responsibility; and,
9. The LGUs may include in their Development Plans, policies, programs, and activities for DRRM in multi-faceted aspects such as education, health, local governance, economic, cultural, and psychosocial. The maximum involvement of various stakeholders is vital in building resilient and sustainable communities.

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