

Disaster Preparedness Of Families In Plan-Covered Communities In Eastern Samar, Philippines

Apolinario John A. Bocar, Jr

apolinariojohnbocar@yahoo.com

College of Education
Eastern Samar State University-Maydolong Campus
Maydolong, Eastern Samar

ABSTRACT

Today's one of the most important issues in development in Asia and the Pacific is climate change. Any number of hazardous situations can impact rural communities (Plan International, 2015). The ability of communities to face disasters is important due to the escalation of frequent, intense and grave climate-change related events. It was the aim of the study to determine the preparedness of families in Plan-covered communities in Eastern Samar with the end in view of intensifying trainings in disaster preparedness.

Using descriptive statistics, the study found out the that the families are Often Prepared when it comes to facing disasters. The study concludes that the families need to be "assisted in participating actively in risk assessment, using fire extinguishers, knowing and identifying assembly points, conducting regular evacuation drills, discussing family preparedness plans, refraining from playing in floodwaters and determining the responsibilities of each family member when disaster strike."

Keywords: climate change, family disaster preparedness, adaptation, descriptive, Eastern Samar.

INTRODUCTION

The Philippines ranked third among all the countries with the highest risk worldwide according to the World Risk Report 2018 (World Economic Forum, 2018 quoted in

Status Report, 2019). More than half of the country's total land area is exposed to multiple hazards, and almost two-thirds of population is susceptible to their impact (GFDRR, 2017 quoted in Status Report, 2019). This is largely due to the location and geographical context as the risks involve coastal hazards like typhoons, storm surges and rising sea-levels.

The Philippines is also located on the Pacific "Ring of Fire" and belong to the Pacific typhoon belt mean that the country experiences varied forms of natural disasters like the ones mentioned above (reliefweb.international report on the Philippines, 2021). Filipinos themselves are already confronting climate change impacts. Disasters, whether natural or manmade can happen anytime with little notice. In the face of disasters, what matters most is the safety of oneself and that of the family. Having a plan ready at hand, ensure one can focus on what is important and will minimize financial impact. Being educated about disasters, its effect on the youth and adults, having a plan, practicing the implementation of the plan in an authentic and organized ways, having the supplies to support the family in the event of an emergency is a crucial part of disaster preparedness for families. Common sense dictates that preparation and practice will likely result in better success during the event of actual emergency.

Preparing families to face disasters is one of the projects of an international organization, Plan International Organization -Philippines. In Eastern Samar alone, the organization is found in the municipalities of Balangkayan, Llorente and Hernani, where typhoon Haiyan locally known as "Yolanda" wrought havoc and devastation among its inhabitants. Less than a decade after the onslaught of this force majeure, it is imperative to determine once again the preparedness of the families of Plan-sponsored children as uncertain weather patterns are created and the likelihood of climate-related disasters and crises are on the rise.

Considering these facts, the researcher intended to conduct this preliminary research to determine the preparedness of the families of sponsored children in Plan-covered communities in Eastern Samar as the same is involved in the extension programs conducted by Eastern Samar State University which serves the municipalities Balangkayan, Llorente and Hernani. With the end in view of proposing an intensified disaster preparedness programs.

Statement of the Problem

It was the aim of the study to determine the extent of preparedness of the families in Plan-covered municipalities in Eastern Samar with the end in view of intensifying trainings in disaster response. Specifically, it sought to answer the following questions:

1. How well-prepared are the families in Plan-covered communities in Eastern Samar in facing disaster?
2. What are the activities in family disaster preparedness that would need more attention?
3. What are the implications of the results of the study to Barangay and Local Government Units, schools, families and non-governmental organizations?

Significance of the Study

The results of this study would be beneficial to the following:

Barangay Local Government Units. Will serve as a guide in reviewing, planning, and executing disaster preparedness in their respective barangays.

Local Government Units. Will serve as baseline data in reviewing, planning, and executing disaster preparedness in their municipalities.

Schools. Will be provided with data as to the effectiveness of their disaster preparedness programs and activities conducted among their pupils/students.

Non-Governmental Organization like Plan International. Will be assisted in evaluating, preparing, and executing disaster preparedness programs for families.

Families. Will be assured of client- focused family disaster preparedness programs to be rolled out in their communities.

Research Design

The study utilized descriptive statistics where it collect data that were used to answer a wide range of what, when and how questions pertaining to a particular population or group. In this study, the researcher tried to find out the level of preparedness of the families of Plan-sponsored children in facing disasters.

Locale of the Study

The study was conducted in Plan-covered communities in Plan-covered communities in Eastern Samar, Philippines as found in the following table.

Table 1. Respondents of the Study

Name and Address of Plan-covered communities	Total number of sponsored children
1.Balangkayan, Eastern Samar	1050
2.Llorente, Eastern Samar	651
3.Hernani, Eastern Samar	691
TOTAL	2392

Sampling Procedure

Of the 2392 Plan-sponsored children as respondents of the study, only 790 were made to answer the survey questionnaire. The sample population was obtained using the Slovin's formula as found in Table 2.

Table 2. Sample Number of Plan-sponsored children

Name and Address of Plan-covered communities	Total number of sponsored children	Sample population
1.Balangkayan, Eastern Samar	1050	290
2.Llorente, Eastern Samar	651	247

3.Hernani, Eastern Samar	691	253
Total	2,392	790

Research Instrument

In order to find out the preparedness of families of Plan-sponsored children, the researcher formulated a questionnaire. It was adapted from the Family Guide on Disaster Preparedness of Plan International Organization-Philippines (2019).

The questionnaire contained 33 items. Each item was rated by the respondents using the five point scale:

5 = Always which denotes that the specific item is indispensable at all times

4 = Often which denotes that the specific item is indispensable most of the time

3 = Occasionally which denotes that the specific item is indispensable sometimes

2 = Seldom which denotes that the item is rarely indispensable

1 = Never which denotes that the item is unnecessary

It was first tried with the college students of a State University in the central part of Eastern Samar, Philippines. After taking into consideration its reliability and validity, the same instrument was given to the respondents.

Research Procedure

Permissions were sought from the Plan Focal persons of the municipalities under study, the School Principals where the pupils/students were enrolled, and the Campus Administrator of Eastern Samar State University-Maydolong to conduct the study. Once permissions were given, the researcher requested the teacher-advisers of

the sponsored children to distribute the questionnaire using the lottery method. The questionnaires were retrieved right away and measures were taken to ensure the full participation of the respondents.

Treatment of Data

The questionnaire was provided with specific instructions to facilitate scoring of results.

The items were provided a scale with its adjective rating as discussed earlier. The data were tallied and tabulated.

The weighted mean was computed using the following formula:

$$\text{Weighted Mean} = \frac{\sum Efx}{n}$$

where: E = total,

f = frequency,

x = degree of preparedness and

n = number of respondents.

A hypothetical mean range was set up:

4.21 – 5.0	Always
3.41 – 4.20	Often
2.61 – 3.40	Sometimes
1.81 – 2.60	Rarely
1.00 – 1.80	Never

Results and Discussion

Table 3 presents the results on the disaster preparedness of the families of Plan-sponsored children in the communities of Eastern Samar where the item “prioritizing the safety of children, the sick, those with special needs, the elderly and pregnant or lactating mothers with a new-born baby, infants and toddlers” got a weighted mean of 4.16 interpreted as Often. When a disaster strikes or a crises breaks out, one’s first thoughts are often of the little ones, the elderly and those with babies. They need to be protected being the most vulnerable among in the community in times like that (Save the Children, n.d.) Climate-instigated disasters often have disproportionate impacts on children’s human rights, health and education. It may also augur

malnutrition as seasonal changes affect food security, higher mortality from extreme weather events, susceptibility to induced diseases and a disruption to their education (Plan International, 2015). The elderly are especially vulnerable to disaster and emergency events. It is even more challenging if they live alone or are bereft of the support of family and friends. People who are frail or who experience mental or physical disability may need special assistance from family members, friends or other agencies (Dept. of Disaster Mgt., n.d.) The rating only goes to show that the implied objective of the government and other agencies such as Plan has already seeped into the consciousness of its citizens and recipients as evidenced by this rating.

“Finding an open space when outdoors during an earthquake and staying away from building, trees, power poles and other structures that may collapse” was rated Often (4.10) by the respondents. As an earthquake is a tremor caused by the sudden movement of the earth’s tectonic plates or volcanic eruption. It is an unpredictable disaster and as such, everyone must be prepared for it (Rimando, et.al., 2016, Arcilla-Serapio, 2016). In a community disaster preparedness guide (n.d.), when one is caught in an earthquake while outside, one has to get into the open and stay away from buildings and utility wires (NDRRMC, n.d.; City Government of Marikina, 2007). Item 20 on “dropping, covering and holding” when one is inside a building when earthquake occurs obtained a rating of 3.42 (Often). The mentioned activities are the suggested ones by the experts when inside a building during an earthquake. Although, no major earthquake activity had been felt by these Plan-covered communities, such a level of awareness is bought about by the participation of the families of sponsored children during earthquake drills.

One of the most important tools for emergency preparedness is the Disaster Supply Kit, also known as Go Bag. This item was rated by the respondents 4.05 interpreted as Often. Such a kit should contain supplies

such as canned foods, flashlights, candles, matches, whistle, radio

Table 3. Disaster Preparedness of Families in Plan-covered Communities

Item	Weighted Mean N = 775	Interpretation
1.We always prioritize the safety of children, the sick, those with special needs, the elderly and pregnant or lactating mothers with a new-born baby, infants or toddlers.	4.16	Often
2.We find an open space if we are outdoors during an earthquake and stay away from buildings, trees, power poles and other structures that may collapse.	4.10	Often
3.We prepare an emergency kit/bag or bucket for the family including the equipment that can be useful in case of evacuation.	4.05	Often
4.In case of fire, we know the emergency exits of our house.	4.00	Often
5.We maintain personal and environmental hygiene.	3.97	Often
6.We regularly monitor radio, television and social networking platforms.	3.96	Often
7.We increase our immune system by eating proper food and getting adequate rest.	3.92	Often
8.We are familiar with the layout of our house so we can remember the dangerous and unsafe areas that we should avoid when disaster strikes.	3.90	Often
9.We follow evacuation advisories and other policies and rules in our area.	3.85	Often
10.During a flood, we make sure that the gutters are unobstructed.	3.68	Often
11.We save the emergency numbers on each family member's cellphone and put the printed contacts in our wallets and in the family emergency kits.	3.67	Often
12.We know the disaster preparedness of our school when a disaster strike.	3.63	Often
13.During a storm, we evacuate to an evacuation center if there is warning from the barangay captain or from the MDRMO.	3.62	Often
14.We know how to use fire extinguishers.	3.57	Often
15.During a storm, we do not cross running water.	3.55	Often
16.5 We know the disaster preparedness of our work before a disaster strike.	3.54	Often
16.5 We cover our mouth and nose when coughing or sneezing.	3.54	Often

18.In the new normal, we wear face mask and face shield when we are outside the house.	3.51	Often
19.When there is a storm surge, we move to a higher ground when we notice an unusual rising or falling of seawater in the coastal areas.	3.50	Often
20.In case of an earthquake, we do “drop, cover, and hold.”	3.43	Often
21.We keep refreshing the preparedness of the materials by explaining the cause and effect of a catastrophe to family members,	3.42	Often
22.We do not live along the seashore or in no-build zones.	3.41	Often
23.We know the disaster preparedness of our church before a disaster strike.	3.4	Often
24.We discuss the responsibilities of each family member in case of evacuation, especially the children, based on their capacity.	3.38	Often
25.5 We familiarize ourselves with the members of the Barangay Disaster Risk Reduction Management Committee or local officials and the committees they belong to.	3.32	Sometimes
25.5. We stay indoors until the earthquake is over and it is safe to get out of the building.	3.32	Sometimes
27.We participate actively in the barangay meetings especially in finding the safety procedures and early warning systems of the barangay.	3.29	Sometimes
28.We refrain from playing in floodwaters or walk in the floods.	3.14	Sometimes
29.We always close gas tanks.	3.09	Sometimes
30.We spend time as a family at least once or twice a month to discuss family preparedness in facing a disaster.	3.07	Sometimes
31.We discuss the assembly points of our family ensuring everyone knows how to get there and decide on at least two places to gather when disaster strikes.	3.01	Sometimes
32. We participate in the risk assessment and community planning process on disaster preparedness.	2.69	Sometimes
33. We conduct regular evacuation drill with my family so everyone can be ready.	2.62	Sometimes
GRAND WEIGHTED MEAN	3.52	Often

with fresh and extra batteries, first aid kit with remedies for fever, LBM, minor wounds and pain, and maintenance medicines, items for special needs of young and older members of the family, including persons with disabilities, spare cash including coins, easy-to-serve,

ready-to-eat food enough for three days, drinking water in sealed containers enough for three days, mobile phones, powerbanks and chargers, ropes, old newspapers and ecobags made of strong materials, clothing, raincoat, boots and sanitary supplies and sleeping bags or mats and blankets (NDRRMC, n.d.; Ministry of National Security, n.d.; American Red Cross, n.d.; Department of Disaster Management, n.d.) The high rating obtained from the respondents only goes to show the importance these sponsored children place upon the importance of a Gobag in cases of emergencies.

Fire is a destructive burning event caused by the rapid and its uncontrollable spread. It can be caused by broken power cords, appliances that were left plugged in, lighted candles left to burn, gas stoves, and other items that can be a source of fire (Plan International, 2015; Rimando, et.al., 2016). Knowing the fire exits of one's house was rated Often (4.00) by the respondents. Basic knowledge on fire prevention and on what to do in case of fire is very important (NDRRMC, n.d.) Knowing and familiarizing the exit routes in one's home can mitigate the dangers fire pos to human life, people's investments, properties and livelihood (Ministry of National Security, n.d.; Arcilla-Serapio, 2016). Although getting caught on fire happen rarely, the result is an indication of the high regard of the sponsored children on the pros and cons of getting caught on fire. The same can also be said with item number 8 which obtained a rating of 3.90 which means this particular item is of paramount importance to the children knowing the dangerous and unsafe areas in their houses they are to avoid when disasters happen.

Maintaining personal and environmental hygiene got a weighted mean of 3.97 interpreted as Often. Even in the face of disaster, it would help much if one is conscious of one's physical cleanliness and the orderliness of the surroundings as it might breed more diseases. Ensuring the ample supply of water is a key part of development and humanitarian interventions during disasters (Oxfam, n.d.). It is imperative then to conduct

health promotion activities such as advising the general population to strongly adhere to healthy practices (National Task Force against COVID 19, 2020). As the world is still emerging from the negative impact COVID had on the populace, the high rating of the respondents is a testament that to some extent the stringent health rules and protocols enforced during the height of the global pandemic worked.

Monitoring the news on radio, television and social networking platforms was rated Often (3.96) by the respondents. Staying tune to a radio or television to get the latest emergency situation is one way to monitor the latest news and whereabouts. It is a way to become informed of weather updates, warnings and advisories. As netizens of the digital world, the obtained rating only goes to show that these sponsored children have access to these available and affordable means of communicating.

Although during disasters, many experience loss of appetite due to an array of factors caused by the current experience, the item on eating proper food and getting adequate rest got an Often rating from the respondents. Common sense dictates that one has be conscious of obtaining adequate food not only for oneself but also for the family. The common experience, though, during disasters, relief packs are distributed but most of its canned goods contain a generous amount of sodium and preservatives which might affect the health of its takers. This particular item was probably brought about by the emergence of newly discovered diseases such as COVID 19.

Following the evacuation advisories and the policies and rules in the area was rated Often (3.85) by the respondents. Staying alert and keeping safe during disasters should always be on one's mind. This can be only made so when the residents of the area adhere to the advisories of pertinent authorities mandated by law to serve and protect its citizens (NDRRMC, n.d.) The purpose of the warning process is to provide efficient warnings and alerts of an actual or impending emergency

situations to all members of the household and to the community as well (Ministry of National Security, n.d.; City of Marikina, 2007).

The item “making sure that gutters are unobstructed during flood” got a rating of 3.85 (Often. Flood or flooding is an overflow of water that submerges lands brought about by continuous rainfall, wave or storm surge, tsunami and high tide (Plan International 2015). It can also be caused by human activities such as mismanagement of sewers, cutting down of trees, or releasing waters from a dam (Arcilla-Serapio, 2016; Rimando, et.al. 2016). This can be mitigated by clearing all drains, gutters and down pipes (Ministry of Security, n.d.; Arcilla-Serapoi, 2016.) Item number 28 mentions about playing in floodwaters or walking in floods. This item was rated by the respondents Sometimes (3.14). This can be explained by the prior knowledge of the respondents on the diseases brought about by floodwaters such as scabies and worst, leptospirosis (Department of Disaster Mgt, n.d.)

Saving the emergency numbers on each family members’ cellphones and putting a printed contacts in wallets and emergency kits got a rating of 3.67 (Often). This only goes to show that names and contacts for all family members and other persons is of great importance. Contacts may also include not only the immediate family members but also that of the extended family who can be contacted in case the former would not be available. All emergency contact information such as the police, fire, ambulance services may come in handy during disasters (Ministry of National Security, n.d.) As almost every home and every family member possess already an electronic gadget, the result can be explained by the availability of such which brings updated information and stored information which can be of great help when disaster strike (Bilbao, et.al., 2019).

Item numbers 12, 16 and 23 speaks about knowledge of disaster preparedness of school, work and church respectively. Of the first, it obtained a rating of 3.

63 (Often), while the second got a weighted mean of 3.35 and the last was rated Often (3.4) by the respondents. As disasters are here to stay, what one can do could just be to prepare when it strike. Disaster preparedness is defined as the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from the impacts of imminent or current hazard events or conditions (Rimando, et.al., 2016). As disaster risk reduction is everyone's business (Arcilla-Serapio, 2016) it is not only the family that is supposed to prepare mitigation measures. Schools, work places and even churches are mandated by RA10121 to take the lead in reducing underlying risk factors and strengthening preparedness for effective response. The ratings obtained for these three numbers clearly indicate the effect of the posting of announcements, tarpaulins and the distribution of information and education materials on disaster preparedness in schools, in workplaces and in churches. With the all-out participation of the fire drill, earthquake drills and the like, the respondents have in one way or the other assimilated the very purpose of such activities geared towards minimizing loss of life and limb.

Getting into an evacuation center if there is a warning from the barangay captain or the MDRMO (item number 13) and not crossing into running water (item number 15) got a rating of 3.67 (Often) and 3.55 (Often) respectively. Storms are disturbances of the atmosphere with strong winds that hits the ground. It is characterized with heavy and prolonged rainfall and lightning (Plan International, 2015; NDRRMC, n. d.). The Philippines is the most frequently visited country by tropical cyclones with an annual average of 19 entering the area of responsibility of the Philippines. Northern and Central Luzon and Eastern Visayas where the Plan-covered communities are located are the areas in the Philippines most affected by the action of the tropical cyclone (Rimando and de Belen, 2016). The experience of typhoon Yolanda and the succeeding typhoons which passed Eastern Visayas are still fresh in the minds of the

respondents and their families, hence this obtained rating.

Knowing how to use fire extinguishers was rated by the respondents 3.57 interpreted as Often. Fire extinguishers are the first line of defense when fire breaks out. Being familiar with how it works and the intricacies of operating it would be a boon to the user experiencing such a disaster. As the breaking out of fire cannot be detected, one has to be cautious of things that can cause it and be adept at putting it out the soonest time possible (Plan International, 2015). The same can be said with Item number 29 on closing gas tanks. This particular item was rated by the respondents 3.09 interpreted as Sometimes. As fire sometimes breaks out because of gas leaks, caution has to be observed. The low rating obtained by this latter item is a warning call for intensive training in fire response especially those that are caused by chemicals and gas.

Covering one's mouth when coughing or sneezing obtained a rating of 3.5 interpreted as Often while wearing face mask and face shield was rated Often (3.51) by the respondents. Such activities are under the protocols for the management of emerging infectious diseases (COVID 19) for example (National Task Force against COVID 19, 2020). COVID 19 is an infectious disease caused by a newly discovered coronavirus that has been spreading all over the world. It affects different people in different ways. Most infected people may develop mild to moderate illnesses and recover without hospitalization but to some it can be severe and fatal. Covering one's nose and mouth with a disposable tissue or if no tissue is available, using upper sleeve or elbow can mitigate the spread of airborne diseases such as COVID 19 (Ministry of National Security, 2019; Plan International, n.d.)

Item 20 on "dropping, covering and holding" when one is inside a building when earthquake occurs obtained a rating of 3.42 (Often). The mentioned activities are the suggested ones by the experts when

inside a building during an earthquake. The same can also be said for item 25.5 which obtained a rating of 3.32 (Sometimes). One has to stay indoors until the shaking stops by staying alert for potential threats such as glass windows, shelves, and heavy objects (NDRRMC, n.d.; Rimando and Belen, 2016). Although, no major earthquake activity had been felt by these Plan-covered communities, such a level of awareness is bought about by the participation of the families of sponsored children during earthquake drills.

Discussing the responsibilities of each family member in case of evacuation especially the children based on their capacity was rated 3.38 (Often) by the respondents. As the family is vulnerable to a number of hazards, each family member must know what he/she can contribute so that all will be accounted for in cases of disasters. There has to be a decision on who is in charge of which tasks during an emergency, taking into consideration that disasters might strike while one is at home or far away from it. Household members need to agree on and share essential tasks as contacting family members who are not at home, collecting children at schools and attending to elderly members of the family (Ministry of National Security, n.d.). The rating only tells that to some extent there are assigned responsibilities of the family members of Plan-sponsored children before, during, and after a disaster.

Familiarizing ourselves with the members of the Barangay Disaster Risk Reduction Management Committee and local officials and committees they belong to obtained a rating of 3.32 interpreted as Sometimes. This is related to the score of the item "participating actively in the barangay meetings especially in finding the safety procedures and early warning systems of the barangay which was rated 3.29 (Sometimes). As the government is bent on participative decision-making at the barangay level, assemblies are conducted and most often concepts and practices of disaster preparedness as included (Local Government Academy, 2018). The low ratings obtained by the two

numbers can be explained by saying that such activities as participating in risk assessment, familiarizing with the members of the BDRRMC are redundant to the ones conducted by Plan International and the schools where the sponsored children are enrolled. Yet, they need to be coaxed to join and actively participate as the decisions made at the barangay level are contextualized.

The items “spending time as a family at least once a month to discuss family preparedness in facing a disaster” obtained a rating of 3.07 interpreted as Sometimes and “discussing the assembly points of the family making sure everyone has to know how to get there and deciding on at least two places to gather when disaster strikes” got a rating of 3.01(Sometimes). Such valuable time could have been utilized in discussing that each family member must know how to turn off utilities such as water, gas, electricity at the main switch, stocking emergency supplies and assembling emergency kits, determining the best escape route in the home and finding at least two ways out of each room, finding safe places in the home for each type of hazard and conducting fire and emergency evacuations (Ministry of National Security, n.d.) . The obtained rating can be attributed to the lack of time in the family to conduct it as the sponsored children are burdened with school work even on weekends much so that face-to-face classes are in full swing. Their parents too are busy making both ends meet, taking a job or two in order to put food on the table and being able to sustain the other needs of the sponsored children.

The item “conducting regular evacuation drill with the family so everyone can be ready” got the rating of 2.62 interpreted as Sometimes. Drills such as for earthquake and fire are usually done on a whole community approach especially in July and in March respectively. The government had been leading the nationwide earthquake and fire drills to put into practice the learned concepts during trainings. The low rating can be attributed to the burden of family members to involve and organize themselves in having drill on their own.

Summary

The study aimed at determining the preparedness of the families of sponsored children in Plan-covered communities in Eastern Samar, Philippines. Specifically it sought to find out the disaster preparedness activities that would need more attention. The results of the study will serve as a basis for formulating an intensified disaster preparedness training for the sponsored children of Plan International.

Findings

The findings showed that families of sponsored children in Plan-covered communities in Eastern Samar, Philippines are Often Prepared when facing disasters. They need to be assisted in “participating actively in risk assessment, using fire extinguishers, knowing and identifying assembly points, conducting regular evacuation drills, discussing family preparedness plans, refraining from playing in floodwaters and determining the responsibilities of each family member when disaster strike.”

Conclusions

The study discovered that the families of sponsored children in Plan-covered communities are Often Prepared when facing disasters. They need assistance in “participating actively in risk assessment, using fire extinguishers, knowing and identifying assembly points, conducting regular evacuation drills, discussing family preparedness plans, refraining from playing in floodwaters and determining the responsibilities of each family member when disaster strike.”

Recommendations

In the light of the findings and conclusions of the study, the researcher strongly recommends that an intensified disaster preparedness program for families of sponsored children in Plan-covered communities be formulated so they can be ready to face any hazard that would come their way.

Preparing families for disasters can reduce risks, if not entirely prevent loss of lives, properties, livelihoods and destruction of the environment. Preparedness builds resolve to rise above a tragedy and capacity to adapt, face and recover quickly from disasters (Plan International, n.d.).

BIBLIOGRAPHY

American Red Cross (n.d.) Ang Iyong Pampamilya Plano Laban sa Sakuna

Arcilla-Serapio, Maria Perpetua (2016). Disaster Readiness and Risk Reduction for Senior High School. Mindshapers Co., Inc: Intramuros, Manila.

Bilbao, Purita, Ma. Asuncion Christine Dequilla, Daisy Rosano, Helen Boholano (2019). Technology for Teaching and Learning. Lorimar Publishing: Quezon City.

City Government of Marikina (2007). Disaster Management Handbook. Kwikprint Business Form Inc.: Marikina City.

Department of Disaster Management (n.d.). Community Disaster Preparedness Guide. Department of Disaster Management: Government of Virgin Islands

Habitat for Humanity (n.d.). Habitat for Humanity's Disaster Risk Reduction and Response. Habitat for Humanity: GA.

Local Government Academy (2018). Local Government Unit Disaster Preparedness Manual For City and Municipal LGUs. Department of Interior and Local Government: Pasig City.

Ministry of National Security (n.d.). Family Emergency Plan. Office of the Disaster Preparedness and Management : Trinidad West Indies

National Disaster Risk Reduction Management Council (n.d.) Disaster Preparedness Guidebook. Office of Civil Defense: Quezon City.

National Task Force against COVID 19 (2020). OPERATION LISTO Protocols for the Management of Emerging Infectious Diseases An Interim Guide for Local Chief Executives and the Local COVID 19 Task Forces. Department of Interior and Local Government: Pasig City.

Oxfam (n.d.). Introduction to Disaster Risk Reduction: A Learning Companion. Programme Resource Center: UK.

Plan Asia Regional Office (2015) Act to Adapt The next generation leads the way! Plan Asia Regional Office: Bangkok, Thailand.

Plan International Organization (n.d.) Family Guide Disaster Preparedness starts with the Family.

Reliefweb international report on the Philippines 2021.

Rimando, Rolly and Josefina Belen (2016). Disaster Readiness and Reduction. Rex Bookstore:Manila.

Save the Children (n.d.). Family Emergency Preparedness Plan. (downloaded from [https://www. Savethechildren.org/what-we-do/disaster-relief-in-america/preparedness kit](https://www.savethechildren.org/what-we-do/disaster-relief-in-america/preparedness-kit))

UN Office for Disaster Risk Reduction (2019). Disaster Risk Reduction in the Philippines. StatusReport 2019. United Nations Office for Disaster Risk Reduction: Bangkok, Thailand.