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FRAMING DISASTER AMONG THE LOCALS IN URBAN COASTAL COMMUNITIES ALONG MANILA BAY

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ABSTRACT – This research illustrates how disturbances on the lives of the locals along the coastal communities are constructed as "disasters" as these economically disrupts their daily fishing activities. The locals who work side by side with water are considered as *vulnerable sector* since they are dependent on what the sea can offer. They are most vulnerable as they face the unpredictable water currents and storm surges in the open sea lane, as their communities experience tidal changes and flood without rain. Defining *disaster* is a complex task, trying to fit in an array of factors from social, economic, cultural, mathematical or descriptive concepts. It is characterized with the capacity to harm both people and communities. The case study method was used to critically examine how the locals make sense of social phenomena that disrupts their livelihood. The respondents are locals from the informal settlements of Barangay BASECO, Manila who are struggling to catch fish individually and those from the island of Pamarawan off the coast of Malolos, Bulacan. For the locals, disaster is a disturbance that limits their economic activities. As fishing is a nature dependent job, the locals have to abide by the rules of nature. They prefer to fish during night time, needs the calmness of the sea, and sensitive to sea water quality; or the wind direction and the Manila Bay as an overall employer of the locals dictating where to fish. Local government and institutions look at disaster on a larger scale; they failed to realize that garbage, water hyacinth, dumping of used oil could hamper the daily fishing of the locals. These occurrences as already considered disasters by the locals as they are deprived of their daily catch. This can be a factor on the vulnerability of the fisher folks in urban slums.

Keywords: Coastal Communities, Disaster, Framing, Manila Bay

INTRODUCTION

Constructing the idea of disaster is based on what the individuals perceive of such phenomena (Chipangura et al, 2016). In the study of the social construction of disaster, Café (2012) concludes that the use of constructivism as an approach in dealing with disaster as a social phenomenon capitalizes on the idea that phenomena are founded on the basis of social context, and that such an event is socially constructed. As a theory, social construction is also used as an analytical tool in social problems as it

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examines the claims, claims-makers and the claims-making (Andrews, 2012; Squire, 1999; Best, 1989). As used in this study, constructing disaster focuses on the claims of the locals. Claims are complaints about social conditions, which members of a group perceived to be belligerent and unwanted (Spector and Kitsuse, 1973). Furthermore, there are questions that should be considered in making claims, such as "What is being said about the problem and how the problem is typified?" (Best, 1989). Thus, *disaster* as used in this research is a social problem that people complain about.

The objective of this study is to analyze how the locals from urban coastal communities along the Manila Bay frames disaster as they experience hazardous events creating economic disruptions, interrupting their fishing activities; and how they make sense of their loss as effects of these perturbations. *Locals*, as used in this research, refer to the fisherfolks dependent on the waters of Manila Bay. This study is anchored on the concept of *social construction of disaster* by Kenneth Hewitt (1995).

Institutions have different ways of defining *disaster*; however, disasters are social events that impair the people and the environments (Etkin, 2016). And there are social, cultural and political dimensions of disaster as it is no longer regarded as "natural" (Weichselgartner, 2001; Quarantelli, 1989). Hazardous events like typhoons and tropical storms are commonly experienced in the Philippines. Chandra et al (2017) said that Philippines location in the ring of fire makes it highly vulnerable to climate change impacts because of their exposure to extreme disasters and constrained human capacities. Located along the typhoon path in the North Western Pacific, the Philippines a vulnerable spot, is frequently visited by extreme weather disturbance at an average of 20 typhoons a year. However, due to climate change, weather disturbances have been stronger, claiming lives and properties. Weather disturbances are natural occurrences; however, they became more destructive, as they are now commonly associated with climate change, warming of the sea water, or rising of sea level. Our location along the typhoon path in the Northwestern Pacific make us vulnerable to these natural calamities and test cases are the violent typhoons in recent years like (Ketsana) *"Ondoy"* and (Haiyan)*"Yolanda"* that brought death, displacement, and damage to properties and infrastructures. (Howe and Bang, 2017)

If weather disturbances bring disastrous effects like claiming and hurting people, as well as destroying natural environments on a larger scale, there are also disturbances that bring disastrous effects to groups of people who are vulnerable with unheard voices. This research illustrates how disturbances on the lives of the locals along the coastal communities are constructed as "disasters" as these economically disrupts their daily fishing activities. The locals who work side by side with water are considered as *vulnerable sector* since they are dependent on what the sea can offer. They are most vulnerable as they face the unpredictable water currents and storm surges in the open sea lane, as their communities experience tidal changes and flood without rain. Interest in disaster studies has been increasing this past few years as weather disturbances are getting stronger. *Disaster* means different things to many people. It means economic loss, social disconnection, and environmental disturbance. It is synonymous to cost, benefits, claiming lives and destruction.

Defining *disaster* is a complex task, trying to fit in an array of factors from social, economic, cultural, mathematical or descriptive concepts. There may never be a specific commonly accepted definition of disaster but as a social event that harm people and communities are the common elements in almost all definitions (Etkin, 2016). *Disaster* is a composed of two words prefix "dis" which means *ill-favored* and suffix "aster", meaning *star*; and literally it means a calamity resulting from an unfavorable position of a star (Etkin, 2016). Defining disaster comes from different perspectives and traditionally identifies four salient features; agent description, physical damage, social disruption, and negative evaluation however, recent descriptions of disaster include social constructionism that the disasters have

formed (Etkin, 2016; Berger, 1991). However, for Ludwig Wittgenstein (2010,) *disaster* does not need an exact definition to be used efficaciously. Though disaster is institutionally defined based on the interest of the organizers, locals have different ways of framing disaster. The common view among the locals is how these events whether man-made or natural events disturb their way of life. It is essential to understand disaster, but it has no particular precise answer (Etkin, 2016).

Disasters are social phenomena (Perry, 2007). According to Anthony Oliver-Smith (1999), disasters "occur at the interface of society, technology and environment and are fundamentally the outcomes of the interactions of these features". To Gundersun and Holling, (2002) disaster characterizes a natural change of condition. It is a natural course of life, as part of natural evolution. A natural disaster as defined by the United Nations is "the consequences of events triggered by natural hazards that overwhelm the local response capacity and seriously affect the social and economic development of a region" (Ferris, 2014). Thus, if the local government is able to respond effectively to local flooding as not to disrupt the social and economic activities of the locales then it is not considered a natural disaster. (Elliot and Hsu, 2016) For Howe and Bang (2017) the government is the primary duty-bearer for good governance, which includes natural disaster risk management. According to the National Disaster Risk Reduction and Management Plan (NDRRMP), hazards become disasters only if vulnerable people and resources are exposed to them (2011). It also expresses disasters as human-induced; that they stem from political and socio-economic roots and they can cause public anxiety, loss of lives, destruction of properties, and deprivation of capital.

The Department of Education defines *disaster* in their Disaster Risk Reduction Resource Manual (2008) as a "natural or man-made emergencies that cannot be handled by affected communities who experience severe danger and incur loss of lives and properties causing disruption in its social structure and prevention of the fulfillment of all or some of the affected community's essential functions." It added that "Natural hazards may cause imperil people, structures or economic assets. However, not all hazard incidents automatically result in disasters. They only turn into disasters when they affect people who have difficulty coping with the physical and economic impacts. There are certain levels of classifying *disaster*, according to the John Hopkins and the International Federation of Red Cross and Red Crescent Societies (2008). Within the family household, it implies sickness, death and socio-economic difficulties and within the community, it is characterized by natural hazardous events, its inherent effects, and extreme social problems.

METHODOLOGY

Two case studies were examined in this research. The case study method was used to critically examine how the locals make sense of social phenomena that disrupts their livelihood. There are also locals from the informal settlements of Barangay BASECO, Manila who are struggling to catch fish individually and those from the island of Pamarawan off the coast of Malolos, Bulacan. These locals were chosen to determine their lived experiences on disaster located at different fishing points along the Manila Bay. BASECO is at the heart of the Manila port area and adjacent to the Pasig river. Pamarawan, on the other hand, is an island fully exposed to the sea waters of Manila Bay on the southern part of Metro Manila.

Purposive sampling was conducted to identify the key informants, chosen based on residence, fishing experiences, and knowledge in fishing techniques. Though guide questions are prepared, non-structured interviews were used creating lengthy and richer conversation on the experiences of the locals on natural and man-made disaster. To further investigate the framing of disaster and validate individual

interviews, a focus group discussion was conducted.

Direct observations focused on the physical environments of the two coastal communities, fishing gears, fishing practices and fishing schedules. Community observations include the fish landing in Pamarawan which is the main source of shrimp in coastal Bulacan area.

Archival records were used to supplement the information gathered from the field. To determine the background of the barangays, Barangay profiles were used as reference. Barangay reports were also taken into consideration, as well as local ordinances. Analysis of data include the systematic organization of narratives into matrices. Codes were drawn from the narratives and several themes were extracted from the transcripts.

Study Site

Manila Bay is a playing field to millions of fisher folks, traders, informal settlers, investors, businessmen, tourists who make a living out of its natural amenities. It is the employer of people from various sectors as it provides food, livelihood and shelter. Manila Bay is synonymous to food security, tourism, trade and commerce providing people money, jobs and enjoyment. However, through time its coastal waters were reclaimed as fishing ground moves farther into the open area.

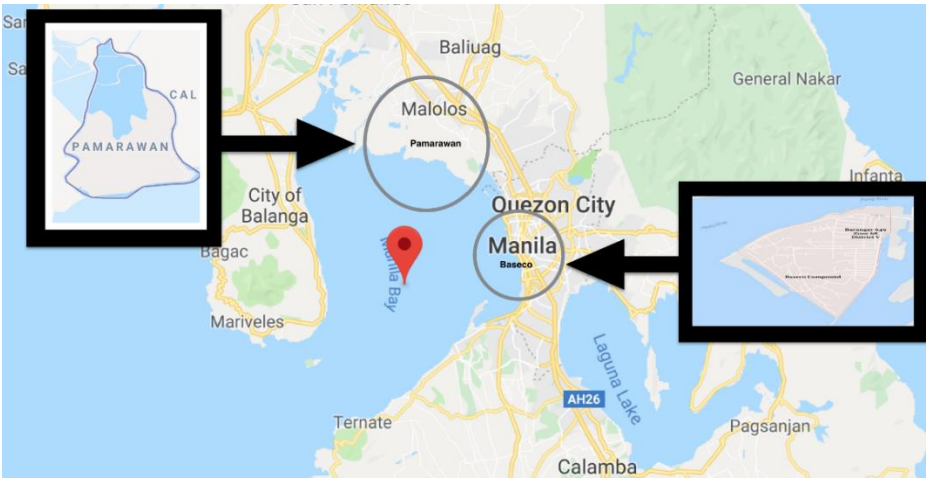

Figure 1. Map of the Manila Bay with the emphasis on the study sites (Pamarawan and BASECO)

Baseco in Tondo, Manila is located in Port Harbor of the Port Area of Tondo. This reclaimed area is fully exposed to the wind and water currents of Manila Bay. The shorefront is literally occupied by informal settlement families dependent on the Manila Bay sea water, which is adjacent to the Pasig River and the fishing ground off the coast of BASECO. Pamarawan Island, which is off the coast of Malolos, Bulacan is fully exposed to the water and wind currents of Manila Bay. A river connects Pamarawan with mainland Malolos, which has fish landing and fishing ground from various parts of Bulacan.

RESULTS

The Two Cases of Constructing Disaster

Framing disaster in BASECO. Barangay 649 Zone 68, District V, Bataan Shipping and Engineering Company or BASECO is situated along the reclaimed area in Port Area, Manila and classified as an urban poor community. Bounded by the Pasig River one side and surrounded by the waters of Manila bay on the tree sides, it is triangular in shape with a land area of 54 hectares (Brgy profile, 2013) and a population of 56, 380 (Brgy profile, 2013). However, the study site of this research is the *aplaya* area or the shorefront area as it is vulnerable to tidal changes, strong currents, garbage and water hyacinths; it is mainly occupied by the fisherfolks, who are the key informants interviewed in BASECO. The figure below shows the map of BASECO Compound.

Figure 2. Map of Baseco Compound

BASECO bounded by Delpan bridge, Port area, Intramuros and the Manila Bay. The barangay started as a shipyard but was gradually expanded and reclaimed. Shipyard workers became the first inhabitants. Gradually, building materials and financial assistance for the construction of public faucets followed by an electrification program that was built through the Depressed Area Electrification Program (DAEP). School buildings construction followed until a community was declared as one of the *KALAHI* area or *Kapit-Bisig Laban sa Kahirapan* by the Department of Social Welfare and Development (DSWD). Barangay 649 or popularly known as BASECO in Zone 68, was proclaimed by former President Gloria Macapagal Arroyo, under the Presidential Proclamation no.145, declaring as open for disposition to actual residents of the community (Barangay Profile of Brgy. 649).

Residents in BASECO depends on fishing, vending, scavenging, tricycle and pedicab driving and piling hands while secondary livelihood is mainly composed of construction worker, OFWs, government or private employee, truck employees and security guards (Barangay profile Brgy. 649). *Aplaya* is located near the mouth of the Pasig River facing the Manila Bay. It is considered as the poorest

area in BASECO and the farthest block from the Barangay hall. The area is sandy and soil unstable due to wave movement. Most of the fisherfolks occupy the sandy shorelines residing in shanties and the area is open to natural hazards such as typhoon, strong winds and floods. During the rainy season, *Aplaya's* shoreline is full of water hyacinth carried by the water current from the Laguna Lake through the Pasig River. The aplaya looks like a small dumpsite full of garbage from the Manila Bay. Small fishing boats are docked along the shores of the *Aplaya*, while big ships are dock at the other side of the sea wall spilling oil along the shores. The Manila Bay is considered the main source of their catch; and they are doing this on a daily basis. Fishes are perishable hence they have to be sold as soon as possible. However, the fisherfolks limit their fishing activities near the shores as big ships occupy the wider space. The catch of the fisherfolks is enough to sustain their daily life. They harvest a significantly small amount of catch of fish, mussel, crabs, and oysters since the shoreline is like a dumpsite with tons of waste lying on the shoreline (Barangay Profile of BASECO, 2010). Common catches are: tilapia, flower crabs or *alimasag*, mussel or clams or *tahong*, shrimps or *hipon*, threadfin salmons or *mamale*, *pikaw*, sardines or *salinyasi*, and milk fish or *bangus*.

Framing disaster in PAMARAWAN. Pamarawan is an island barangay off the coast of Malolos, Bulacan. The island is named *Pamarawan* as it describes the abundance of "paraw" or shrimp in the area. It is a small island of fisherfolks fully dependent on the Mania Bay waters. The main source of transportation is a motorized banca that connects to mainland Malolos; and it is one of the islands situated between the river delta of Malolos and the Manila Bay. Its distance from the capital city of Manila is 25 kilometers. The map of Pamarawan Island is seen in the Figure 2.

Figure 3. Map of Pamarawan Island.

According to the 2016 Barangay Profile, the island has a lot area of 264 hectares, including fishponds. It has a population of 4,003 consisting of 804 households, which main sources of livelihood are from fishing and salt-making and is considered as one of the poorest barangays in the province of Malolos, as per the 2011 census data of the Malolos City Government. With only the barangay captain as the chief authority, the island lacks major physical, human support, natural and infrastructure facilities

that would be the major components in making the place a livable environment. The island has 1 public elementary school, 1 public high school, a single floor health center, a 2-kilometer cemented road, 2 churches and a fish port.

The only main access is through a 45 minute *banca* ride from the Panasahan Port of Malolos. Coastal communities were established in Bulacan as a way for the community to maximize their aquatic resources. Fisherfolks in Pamarawan believe that the biggest disaster in their area is flood; since during strong rainfall, they can no longer go to the sea to catch what they will sell in the market such as prawn, fish, seashells and the like. Majority of the fisherfolks said, even in times of rain they will have to do *"pakikipagsapalaran"* (or adventure). They would opt to face the harm of the sea because of the nature of their livelihood. Most of the fisherfolks have enough earnings to suffice their daily needs, so instead of staying in their house for safety, they would rather risk the possible harm in the sea than being hungry. This is despite the fact, that there were many fishermen who already encountered dangers in the sea.

DISCUSSION

The researchers gathered 21 key informants in the mentioned study sites and Table 1 shows their age group of the respondents. The table shows that majority of respondents are with the age group of 51-60, which shows that fisherfolks are commonly in the older age group. The researchers discovered that the younger generations rarely wanted to acquire this form of livelihood.

Table 1. Age group of the respondents.

Age	Count	Percentage
Below 30	1	4.8%
30-40	5	23.8%
41-50	4	19.0%
51-60	9	42.9%
Above 60	2	9.5%
TOTAL	21	100%

To ensure the reliability of the results, the key informants have the following characteristics: (1) had been in the said area for more than five (5) years and (2) fishing is the main source of their livelihood. Table 2 below shows the length of residency of the respondents.

Table 2 Length of residency of the respondents

Age	Count	Percentage
6-10 years	1	4.8%
11-15 years	2	9.5%
16-20 years	2	9.5%
21-25 years	3	14.3%
Above 25 years	13	61.9%
TOTAL	21	100%

The key informants at BASECO are the fisher folks residing in Block I, Aplaya, ages ranging from 30 to 70 years old, all married with at least 2 to 9 members in the household, has been residing in the area for at least 6 to 25 years, where primary source of livelihood is fishing. The group of fisherfolks is composed of men and women helping their husbands catch fish. These fisherfolks use the traditional fishing gear as they cannot afford to own a fishing boat. They use tire (*boya*) as a fishing gear; a thin and

sharp-tipped metal similar to an arrow, called (*pana*); fishing rods (*kawil*), and nets (*lambat*), and fishing boats; from time to time they simply dive into the waters to collect their catch.

On the other hand, locals in Pamarawan are skilled fisherfolks, mostly male and married while women are in charge of the marketing. Fishing is done in the midnight up to early morning. Shrimp and fish catch are brought to the Pamarawan fish landing where "*baculero*" (capitalist) are waiting for the fisherfolks. They have their own fishing tools to facilitate catching shrimps and fishes; though like the locals in Baseco they are also gatherers. Fishing tools used are *panti* (gillnets), *sudsud* (dredging tool), and *baklad* (fish corral). Gillnets are used in catching fish; sudsud is used in catching *alamang* (shrimp), *kapac* (crabs); while shrimps and crabs are trap in the fish pens. Fishing is done both in inland and sea water. Locals have different fishing schedule but mostly do it at midnight to early morning. Fish catch are brought to Pamarawan landing area as they bid by whispering. Inland fishing is possible during rainy months but converted into salt beds during dry months. Table 3 summarizes the distinct social characteristics between two communities. It shows the nature of each fisherfolk, fishing practices, fishing schedule, fishing disruptions and finally the constructing views.

Table 3. Summary of Social Characteristics of BASECO and Pamarawan Island.

Social Characteristic	BASECO	Pamarawan Island
FISHERFOLKS	30 to 70 years old; All married with at least 2 to 9 members in the household; Residing in the area for at least 6 to 25 years	25 to 60 years old; mostly male and married residing in the area for 30-60 years
FISHING PRACTICES	Use of tires as floating device, or locally named *boya*; Thin and sharp-tipped metal similar to an arrow, called *pana*; Use of fishing rods *kawil*, nets *lambat*, and fishing boats; Use their bare hands in gathering crabs or shrimp called *kapa* or from time to time simply dive into the dirty sea water to catch fish.	Use their own fishing tools to facilitate catching shrimps and fishes; Use of *panti* (gillnets), *sudsud* (dredging tool), and baklad (fish corral). Use of gillnets in catching fish; *sudsud* is used in catching alamang, shrimp, kapac, crabs; while shrimps and crabs are trap in the fish pens.
FISHING SCHEDULE	Some catch fish in the evening using their boats while others during daytime using *boya* or *pana*. Fisherfolks would catch fish that only resurface seasonally such as the "*mamale*" or threadfin salmon.	Locals have different fishing schedule but mostly do it at midnight to early morning. Inland fishing is possible during rainy months but converted into salt beds during dry months.

Table 3 (Continued). Summary of Social Characteristics of BASECO and Pamarawan Island.

Social Characteristic	BASECO	Pamarawan Island
FISHING DISRUPTIONS	Water hyacinth and garbage along the shoreline are already considered disastrous. These hyacinth and garbage are disturbances that hinder them from catching more fish. Hindrances such as large clusters of garbage or water lilies located along the coast of Manila Bay that consequently block the fisher folks' boats.	Water spouts or *buhawe* are dangerous and hazardous occurrence in the Manila Bay. *Anlig* (chemical waste from industrial establishments and container ships) is another perilous element affecting water quality in the shoreline of Manila Bay. The *anlig* causes *masamang tubig* or polluted waters, resulting in fish kill and fish migration to deeper area. Uncollected garbage is a major concern in the island that are trap in the fish corrals.
CONSTRUCTING VIEWS	Amidst such risky and unsafe conditions, the locals continue to catch fish since this is their main source of livelihood. The locals in order to earn their daily wages are *nakikipagsapalaran* (risk taking) into the polluted waters of the Manila Bay.	The locals' definition of disaster centers on the idea of deprivation, as the loss of livelihood. The presence of *anlig*, *basura*, water hyacinth make their fishing difficult that they have to take a risk (*pakikipagsapalaran*). Loss of daily earnings means no food for the day.

Coastal areas are contested space; it is used for various functions as communities, fishing ground, disposal areas, source of livelihood rolled into one. Fisherfolks are sea keepers but food insecure. They have access to the source of livelihood but incapable of big catch due to disastrous events both natural and man-made. Fisherfolks along the Manila Bay are dependent on the generosity of the bay area and the calmness of the weather condition. Their jobs are dangerous as they go out into the sea in the evening and early morning, bracing the cold breeze, the dark surroundings engulfing them as they struggle to catch fish. They work hard in the evening as the majority rest at home. Though the sea provided them free livelihood, yet they are dependent on the behavior of the vast body of water that can claim lives if they are not privy to the sudden change of temperature, wind direction and sea current. Hence, the sea means many things to the fisher folks as it gives them food on the table, at the same time claim their fishing boats and even their lives.

The fisher folks go out into the sea to fish like regular employees who go to work every day. Their job is dangerous as they face the water and wind current; their lives are at risk as they are exposed to the daily battles in the Manila Bay. For them, mundane interventions on their daily fishing is

considered disastrous as it hampers their livelihood to earn money and buy food on the table. The fisher folks in Baseco is focused on food security as they will not have food on the table for the day without fish catch. The locals were studied on how they construct everyday disaster that creates economic disruptions. Aside from their dangerous exposure to strong rains and wind in the open sea, they framed that *"masamang tubig" or "anlig", basura,* and water lily as economically disastrous. The occurrence of these environmental conditions underscored the vulnerability of the locals who are dependent on the Manila Bay. They have creative fishing tools unlike the fisherfolks in Pamarawan. In Baseco, fisher folks can fish using *styrofoam.*

Framing economic disruptions as disasters

Common to all fisher folks that economically disrupted their fishing activities are the following: *maduming tubig* (polluted water); *basura* (floating garbage); and floating and rotting water hyacinth. The floating garbage in Pamarawan blocks the fishing nets from catching fish and shrimps, the same with the water hyacinth in Baseco. Polluted water poisons the fishes or drive them away from the shore. The fisher folks worry about their fish catch for the day if fishing is disrupted by these environmental problems. The key informants have one mantra which is *walang huli; walang kita and walang pambili ng pagkain at* gasoline (No catch, no income, no food on the table). The fisher folks are people vulnerable to daily changes of the tides, the sudden appearance of the water hyacinth, and accumulation of the garbage due to water current. For the locals, disaster is a disturbance that limits their economic activities. As fishing is a nature dependent job, the locals have to abide by the rules of nature. They prefer to fish during night time, needs the calmness of the sea, and sensitive to sea water quality; or the wind direction and the Manila Bay as an overall employer of the locals dictating where to fish.

Fishing follows a certain time schedule and they cannot go into the sea as much as they want. They have to be sensitive to the phasing of the moon, seasons of the year, or weather disturbances as varied fishes are caught depending on the season. They cannot fish freely if the water quality is not favorable such as red tide for the shellfishes. The study reveals the complexities of coastal lived experiences. Fisher folks working in the open sea is already a dangerous job and still they prefer to live closer to the sea, which make them doubly vulnerable at work and at home. They are actually working and residing on dangerous ground; but they are seldom consulted or not consulted at all on water and sea currents. They are actually the best teachers in disaster management as they live side by side with disastrous events.

Hazardous events

Manila Bay has been a witness to many hazardous events, storm surges, garbage surges, tidal changes that floods shorefront areas, aside from the red tide, oil spill and fish kill. Natural hazard as defined is "those elements in the physical environment harmful to man and caused by forces extraneous to him" (Etkin, 2016). Moreover, hazardous events such as typhoons and fire outbreaks also interrupt the daily earnings of the locals. According to Baseco locals, "*bigas at ulam, kasi wala magiging baon yung mga anak namin"* (rice meal [what's important] otherwise our children has no food). For the locals, a day of interruption in their daily fishing would mean loss of income or no food on the table.

Locals in BASECO are bold in facing natural calamities as this is the primary means of their livelihood. They have to go out in the highly polluted shorefront to get what the sea can offer. They painstakingly cope with such catastrophe unless they borrow money to repair their fishing boats or gears.The anticipated disruptions in the daily fishing activities is a slow onset that makes the locals even.

poorer. Failure to catch fish magnifies poverty among the locals. The combination of disrupting events such as man-made and natural makes the lives of the fisher folks miserable

Locals' sense of loss

Disasters have direct (stock losses) economic losses and indirect losses (flow cost) (Etkin, 2016). Most of the losses are quantifiable and measurable such as destruction of infrastructure, houses, fatalities, or properties. But there are also losses that are subjective and difficult to measure because people value them differently (Krüger, 2015; Etkin, 2016). For the fisherfolks, disastrous events interrupt their daily livelihood thus losing opportunity to buy food and fuel. No fish catch for the day is stressful. They feel more marginalized with no food on the table and fuel to run their fishing boats. The damage of the fishing gears by floating garbage is stressful to the fisherfolks in Pamarawan as they will stop fishing to mend their fishnet; and this loss of opportunity is not in the disaster database.

Framing when at risk

When people sense that their environment is at risk, they modify their behavior to go well with the environment (Jobe, 2014; Etkin, 2016). People do not directly react to the risk they are exposed to; rather they act in response to their perception of those risks (Etkin, 2016). Risk is also a social construct (Etkin, 2016) proposing that nothing is a risk in itself, but it is rather a product of cultural, political, social and historical sense of viewing (Ferris, 2014; Etkin, 2016). Consequently, fisher folks look for other jobs when fishing is not possible due to weather conditions. Some venture into the sea using "*boya*" while others stay put during risky times. Research suggests that people most strongly take action to a single identifiable individual victim but become insensitive to enormous events (Etkin, 2016). Disaster can lead to social disruptions, it's a state of uncertainty (Gilbert, 1998). It is an event concentrated in time and space (Dombrowsky, 1998). Four common usages of *disaster* – agent description; physical damage; as disruption; negative evaluation (Dynes, 1998). *Disaster* is an effect of an event where people or communities were not able to cope with or lack of capacity to cope with and adapt (Keneally, 2014). The poverty, marginalized and socially excluded, are the first to experience disastrous events especially slow-on set events (Brook, 2014). People and communities are vulnerable if their livelihood depends on natural resources with limited options for diversifying their income; when they have little or access to insurance; low levels of education; inadequate access to health services with less support from the local government.

Baseco fishing practices is characterized by backward, scattered and small-scale production reflecting low level of technology, further compounded by garbage, oil spill, and vulnerable coastal communities making life of the fisher folks more miserable. Fisher folks as direct resource users or sea keepers are vulnerable due to lack of access to financial markets. Their major concern is livelihood and food security as they continue to struggle between the changing tides, garbage current and unpredictable weather and unholy fishing schedules

CONCLUSION

Disaster can mean destructive effects of natural calamities such as storms, typhoons, storm surges, volcanic eruptions, tsunami, earthquakes, or man-made induced hazardous events such as fires. Disaster also identified vulnerable groups like women, children, and the elderly as helpless individuals who need assistance. *Disaster* is a social construct based on the experiences of the fisher folks. It means anything that would disrupt the food security, safety and income of the fisher folks. The local people

frame it from their lived experiences and as they live side by side with hazardous events; they claim that they can do away with these. Hence given the various perspectives, disaster should be studied holistically to address the social cultural environmental and economic issues surrounding the event. The issues in disasters are food, safety, water, and shelter that all boils down to poverty. The locals along the Manila Bay are at risk to natural calamities, residing in geographically vulnerable, and economically poor. The frequency and severity of water pollution, floating garbage and tidal changes have been disrupting the local's way of life. Local government and institutions look at disaster on a larger scale; they failed to realize that garbage, water hyacinth, dumping of used oil could hamper the daily fishing of the locals. These occurrences as already considered disasters by the locals as they are deprived of their daily catch. This can be a factor on the vulnerability of the fisher folks in urban slums.

Typhoons, storms, volcanic eruptions, flooding, even climate change are natural social phenomena. They are labelled as disasters by people affected by these events. Some people can easily cope with these events, some are resilient while others are vulnerable losing lives and properties. Therefore, these natural phenomena have layers of implications to the society. Varied response to these natural phenomena is constructed based on how people make sense of their experiences. Some have direct loss while others have indirect loss to these social events.

STATEMENT OF AUTHORSHIP

The first author served as the adviser who determined the scope of the study, identified the framework, methods, objectives and provided direction in linking the study towards sustainable development. The other authors identified the study site, did field work, interfaced with the key informants and assisted in constructing the journal article.

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