

# The Social, Environmental and Economic Effects of a Reclamation Project: From the Lived Experience of the Residents of an Affected Local Coastal Village in the Philippines

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**Abstract** –*One of the offshoots of urbanization is the construction of reclamation sites. In the province of Leyte, the conversion of the municipality of Baybay into a city paves the way for this development project. With this, people living in the city poblacion's coastal barangays were affected by the new development. Using the qualitative research method of hermeneutic phenomenology, this study aims to investigate the reclamation project's effects on the lives of the affected residents specifically on the social, environmental and economic aspects. This study then concludes that negative effects have been felt on the social aspect of the residents' lives as discernible in the violation of their basic human rights to information. This has caused fears and apprehensions among the affected in relation to their housing needs, availability of work and the continuance of their social inter-connectedness. Furthermore, this study concludes that the reclamation project has brought environmental degradation caused by the project's construction and has prevented the residents to enjoy the aesthetic benefits and other ecosystem services that they used to have before the start of the project. Lastly, this study concludes that the reclamation project has negatively affected the economic aspect of the residents' lives. With the degradation and change of landscape in the residents' community, the residents' have been limited and prevented in their fishing activities which have been their main source of income. This also includes the fishermen's dwindling catch and the obliteration of the residents' activity of gathering shells and crabs during low tides.*

**Keywords** – *Urbanization, Reclamation, Fisherfolk-residents, Negative Effects.*

## INTRODUCTION

In certain development projects, there are corresponding tradeoffs that affect the social, environmental and economic aspects of the lives of the people affected. These trade-offs, more often than not, refer to ways in which some phenomenon make impacts on people and the way they do things, how they affect people's means of making a living in order to make both ends meet at the end of the day and how such things affect the natural environment in such a way that they also affect the people living in the vicinity of said development projects. Development projects would seem inevitable in many parts of the country. Consequently, lives of people living in places where said development projects would be established would also be affected socially, economically and environmentally. This study would give its readers insights on the effects of a development project, in this case, a reclamation site, on the lives of people in a local coastal village. This study would give deeper

understanding to people on how to deal with the inevitable emerging development projects in the Philippines since its population is constantly growing. It has growth rate of 1.55 per cent as of 2017 while 44 per cent of the country's total population are in the urban centers [1].

The data shows that the Philippines is leaning towards urbanization. Yet, even if the Philippine countrysides are mostly rural and agricultural, the constant growth to the country's number of inhabitants is, in one way or another, leading towards the direction for the conversion of towns into cities. This is the case of Baybay, a town in the western coast of Leyte. The municipality is inhabited with 104,993 people and has a growth rate of 1.43 per cent for the past two decades. Because of the number of the town's population, it was converted into a city in 2007 and was officially granted a cityhood status with finality in April 12, 2011 by the Supreme Court of the Philippines [2]. This paves the way for the new City's increase in Internal Revenue

Allotment (IRA) which enables the city to spend on infrastructure to address the needs of the city's growing population.

One of the infrastructures that is discernible in the City of Baybay is the emergence of a reclamation site in the city poblacion's coastal barangays. Though Baybay has a total land area of 46,050 hectares (Baybay Information Office, 2012), the area in the poblacion proper is quite small for Baybay city's growing population. As years passed, Baybay as one of the commercial hubs of the province of Leyte, has to give way to urbanization. With this, for the past few years, reclamation projects were established. Due to the present scarcity of land in many coastal areas, local administrative cities have pushed the extension of their boundaries sea inward. This makes reclamation a popular tool for many local government units. Nevertheless, this expected growth and the increased popularity of land reclamation seriously endangers the remaining natural wetlands. Alternative solutions of creating artificial "human made" land by reclaiming, could be a possible direct solution for modern urbanism. As a result of the unprecedented growth, natural resources are getting rapidly depleted and sustainability is being compromised. Over the total run of history, approximately 65 per cent of the world's wetlands have been in fractioned, polluted, destroyed, altered or lost by human activities [3].

One of the coastal barangays affected in this project is Zone 15. Said barangay is home to more than five hundred residents where a number of them are fisherfolks and are dependent on the bounty of the sea to earn a living. With the reclamation sites traversing the shorelines of Zone 15, it also brings along things that cause changes in the residents' way of life. Though reclamation sites may be beneficial for the development of a city or a municipality, it has also its share of effects into the lives of people that are directly affected by the said development. It is in this aspect that this study would delve into since it aims to decipher the extent of the effects of this development project in the lives of the residents. This study then hopes to air the voices of the people from the margins, who in this case, are the residents of Zone 15, Baybay City, Leyte. More often than not, their voices are left unheard and not given due significance.

#### **OBJECTIVES OF THE STUDY**

The goal of this study is to understand the effects of a reclamation project to the lives of the residents of an affected community – Barangay Zone 15, Baybay City,

Leyte. Specifically, this study aims to decipher the social repercussions brought about by the said project to the lives of the affected residents, assess the reclamation project's effects to the natural environment and evaluate the economic consequences that the reclamation project has brought to the residents of the affected community.

#### **MATERIALS AND METHODS**

This study is qualitative in nature and employs the method of hermeneutic phenomenology in trying to understand the effects of a reclamation project to the lives of the residents of Zone 15, a coastal barangay in Baybay City, Leyte. This study utilizes the phenomenological method in the aspect that it delves into the experiences of the research respondents as expressed in their lived and told stories as starting points [4]. The phenomenological method employed in this study aligns with Martin Heidegger's interpretative approach that focuses on researcher involvement through on going interpretation [5]. Hence, this method, in one way or another, contends that it is impossible to bracket researchers' assumptions and reflections from their research. Instead, in the hermeneutic approach, it is possible to bridle researcher assumptions through scrutinizing by continually questioning and critically reflecting upon one's pre understanding and involvement in the Phenomenon [6]. The focus is toward illuminating details and seemingly trivial aspects within experience that may be taken for granted in people's lives with a goal of creating meaning and achieving a sense of understanding [7].

Hermeneutic phenomenology also aims at producing rich textual descriptions of the experiencing of selected phenomena in the life world of individuals that are able to connect with the experiences of people collectively. From identification of the experience of phenomena, a deeper understanding of the meaning of that experience is sought [8]. Hence, in order to have a full understanding of what this study's respondents want to convey, the use of any language that the respondents are most comfortable with is utilized. According to Langdridge (2005), to understand the life world, people need to explore the stories that others tell of their experiences. It is then the researchers' task to come up with meaningful insights so that what the respondents are saying or expressing would be interpreted and deciphered properly to give justice to the realities that the respondents are trying to express or convey [9].

### Research Procedure

This study had strictly followed the basic fundamentals of research ethics. This study adhered to the Belmont Report of published in 1979 which provides the ethical foundations for ethics regulations which lay the three primary ethical principles as autonomy, beneficence and justice [10]. In the process of determining and understanding the effects of Baybay City reclamation project to the lives of the residents of Zone 15, Baybay City, Leyte, the researcher had approached the residents of who were living near the reclamation project site. In narrowing down the respondents who had been greatly affected with the said development project, purposive sampling was utilized. The researcher had identified 10 respondents who had gracefully accepted the researcher's request for an interview. Yet, before the interview, the respondents were made to understand that it was always their prerogative to determine what activities they will or will not participate in. They were made to understand the basic principle of autonomy which required them to comprehend what they were being asked to do, make a reasoned judgment about the effect their participation will have on them, and make a choice to participate free from coercive influence. This gave the respondents an idea that the protection of their autonomy took the form of their informed consent process, whereby the researcher would provide them a full disclosure about the nature of the study, the risks, benefits and alternatives, and an extended opportunity to ask questions before deciding whether or not they would participate in the interview [10].

Moreover, the respondents were also informed about the principle of beneficence which referred to the obligation on the part of the researcher to maximize benefits for the research respondents, while minimizing risk of harm to the individuals. In this case, the researcher informed the respondents that their responses to the interviews would make their voices heard by proper authorities if they gave their consent to have them aired by allowing their responses published through a journal article which they had freely consented to. This research had also strictly followed the principle of justice since this study had ensured that those who undertake the burdens of research must benefit from the study since it gave them a chance to air their voice to the proper authorities [10].

In the process, key informant interviews with open-ended questions relating to the lived experiences of the respondents were employed. In doing so, the researcher went to the individual respondent one after the other

and set up interviews according to the respondents' most comfortable and convenient schedules. The interviews were unstructured, casual, and conversational. Conversational interviewing had generated a first person description of the experience [11] since interviews had elicited a variety of types of rich data that manifested how participants interpreted and used language as well as how participants explained their decisions or actions or narrative data [12].

After the data were gathered from several sessions of key informant interviews, thematic analysis was done with the use of the hermeneutic circle of reading, interpretation, and reflective writing in order to identify phenomenological themes that were essential to represent the structure of experience. The process began with the immersion in the data through reading and re-reading in order to engage with the meaning of the texts for interpretation that facilitated coding (Van Manen, 1990). After the process of data interpretation, the researcher assessed the trustworthiness of the data analysis by presenting the study's interpretation to the respondents.

### RESULTS AND DISCUSSION

#### Social Effects of Baybay City Reclamation Project

The residents of Barangay Zone 15, a coastal fishing community had been affected by negative social effects by the on-going development project of the City of Baybay in the Province of Leyte. First, the residents of the barangay were not informed of the implementation of the project nor were they given holistic information of its pros and cons. According to the residents, public consultation with regards the reclamation project was not done in such a way that they had not been made aware of the direction of the project, how the project would affect them in the long run, and what were the things that they ought to prepare during the implementation phase of the project. According to Jose Gusinalem, a 64-year-old resident:

*The residents of Zone 15, in Baybay, Leyte were never consulted about the nature of the upcoming reclamation project. First we thought that our barangay would not be affected. But as the years past, we just had noticed that our barangay was already included. During the course of the reclamation's implementation, we, the residents, were left in the dark as to how we would cope with the changes brought about by*

*this infrastructure. We just heard from other people that once the project would be completed, we would be ejected from our individual homes and relocated somewhere else.*

Thus, looking at the claim of the affected residents about the local government's failure to consult the people that have been directly affected by the reclamation project, it is already discernible that the residents' right to information has been violated. Any citizen's basic right to information is recognized in Article 2, Section 7 and Section 28 of the 1987 Philippine Constitution: "*The right of the people to information on matters of public concern shall be recognized. Access to official records, and to documents, and papers pertaining to official acts, transactions, or decisions, as well as to government research data used as basis for policy development, shall be afforded the citizen, subject to limitations as may be provided by law*" [13]. With the absence of consultation, one of the negative social effects experienced by Zone 15 residents refers to the violation of their basic rights to information.

Moreover, this human rights violation has also triggered another fear which caused anxiety to a number of residents. Since no official consultation was made by the Local Government Unit, rumours usually float in the community which, many times, bring fear and anxiety to the residents. One of the said rumours is the possibility for the residents to be relocated in a still unidentified relocation site. One of their fears refers to their concern on the shelter that they will have in the relocation area. Many residents are currently living with extended families. With this fear, unofficial information has reached them that the houses that will be given to them in the relocation sites would be small and only for the immediate families of the residents concern. According to Danilo Caidlang, a 59-year-old fisherfolk resident:

*As the reclamation project nears its completion, we often hear rumours from other residents that we will be relocated in a small house in a still undetermined relocation area. This brings discomfort to many of us since we usually have big, and sometimes, extended families. This in a way is a burden on our part since it would bring great inconvenience to many of us. Aside from that, this reclamation project would also destroy our bonds with neighbours. If the relocation would push*

*through, we will be transported to a place that will be totally new to us.*

The sentiment of Danilo Caidlang manifests that a couple of his rights in relation to his right to live have been violated. First, his right to adequate housing would be violated if he will be forced to be relocated in a relocation site in which he has no idea where. According to *Uchenna Emelonye, a Senior Human Rights Advisor for the Office of the High Commissioner for Human Rights (OHCHR) of the United Nations Habitat for a Better Future, the right to shelter or adequate housing goes beyond the act of just providing a house for the evicted residents.* The right to adequate housing is about security of tenure, affordability, access to services and cultural adequacy. It is about protection from forced eviction and displacement, fighting homelessness, poverty and exclusion. It is a right for all regardless of social status and origin or the type of housing and land tenure and ownership. To promote the right to adequate housing and other human rights, urbanization processes and policies cannot be solely based on economic and financial data that disregard the human reality behind those numbers [14].

Not only that, the residents' rights to participate in the consultation process of the establishment of the relocation site have also been neglected by the authorities. As *Uchenna Emelonye (2015) further stress: Sustainable urbanization must ensure the free, active and meaningful participation of the beneficiaries of development, and in particular of the most marginalized.* It must follow a rights-based model that ensures the accountability of duty-bearers and the entitlements of rights-holders and must also address the root causes that violate the principles of non-discrimination and equality and prioritize the need of the most marginalized. Finally, sustainable urbanization must incorporate strategies for the political and economic empowerment of people. These things have just been taken for granted in the process of the establishment of the relocation sites in the City of Baybay.

### **Environmental Effects**

Since the establishment of the Baybay City reclamation project in the past few years, environmental changes had been felt and experienced by the residents of Zone 15. First, the residents were no longer able to enjoy the aesthetic aspect of ecosystem service that they used to enjoy before the reclamation was established. Before the reclamation traversed the

shorelines of Zone 15, the residents, young and old alike used to enjoy the *hunasan* (a large space that emerge along the shoreline during low tides). This space had served as a playground for the residents' children for years and it also served as a space where adults used to relax and enjoy the breeze from the sea. With the reclamation project implemented, the *hunasan* was gone since it blocked the seas from its natural pathway. In the case of Zone 15, the reclamation project was only partially complete. With this, water that went into the neighbourhood during high tide could not get out of the vicinity during low tide causing the water to be stocked near the residents' home. This caused great inconvenience to the residents since the sands near their homes were transformed into mud that were caused by the residues of the filling materials used in the reclamation project. This also brought non-biodegradable trash of all kinds to the community. Not only that, large amounts of *lumot* (algae) were also flashed to their homes causing their neighbourhood to have a smell of *langsa* (pungent smell caused by marine organisms) that lingered to exist unless they gave efforts to remove them. According to Carmelita Dela Cruz, 38 years old, a mother and wife of a fisherman:

*The reclamation project had caused a lot of changes in our neighbourhood. First, the hunasan (a large space that emerge along the shoreline during low tides) was gone. When we were young, we used to play and enjoyed in the shoreline during low tides. Our older children were also able to enjoy it too. But because of the reclamation project, the hunasan was transformed into just a memory since the reclamation project took it away from us. Second, the reclamation project also brought mud and langsa or a bad and pungent smell to our neighbourhood. Large amounts of lumot (algae) can be found in our doorsteps and immediate vicinities.*

Moreover, the Baybay City reclamation project had also made the lives of the citizens more prone to diseases. With this, it was quite convenient to connect environmental degradation to health problems. For instance, waste water from the city's sewage system had its catch basin within the boundary of Zone 15. With the reclamation project implemented, dirty water tended to linger within the barangay's vicinity for a longer period of time. Such environmental problem

also included inadequate sanitation, lack of rubbish disposal, and industrial or commercial pollution. Unfortunately, reducing the problems and ameliorating their effects on the urban population were expensive. Hence, these problems were seldom immediately addressed by authorities. The health implications of these environmental problems included respiratory infections and other infectious and parasitic diseases [15]. Ging-ging Cadiz, 40 years old, a wife and a shell gatherer has this to say:

*Before the reclamation project was established, we could freely take a bath in the sea near our homes without any worries. With the reclamation blocking the water flow from the sewage to the sea, we then became prone to diseases because the water near us became dirty. Mud residues from the filling materials and the dirty water from the city canals contributed to this problem. Itching was rampant among children who ventured into the dirty waters near our shores. Some of them had acquired parasites or bituk within their system.*

Furthermore, the reclamation project had also caused soil erosion within the vicinity of Zone 15. This was evident in the homes of the residents. Their homes were designed to have certain degrees of elevation from the ground. The lower parts of their houses after the slight elevations were referred to them as *silong*. With the establishment of the reclamation project, the residents' houses elevations from the ground became bigger because of the constant erosion of the soil. According to Juanito Caidlang, 50 years old, a fisherfolk and a long-time resident of Zone 15:

*The reclamation project had caused the faster pace of erosion in the vicinity of Zone 15. I can say that the pace of erosion was faster than it used to be because the distance from the ground to our floors have widened at faster pace. Before, we use to bend a lot if we tried to get the things that fell from our floors to the ground. After the reclamation project was established, there was no more need to bend since the gap from the ground to the floor was already big and wide.*

Hence, from the observations of the respondents, it is quite discernible that the reclamation project has caused environmental degradation within the vicinity

of Zone 15. The natural make-up of the barangay's environment has deteriorated due to the large quantities of soil dumped in the area as filling materials as well as the locking of site's vicinity with concrete sea wall in order to reclaim the land. This cuts the sea's natural pathway as well as the sea's entry and exit points and locked the water that enters the area during high tides and prevents it to return to the sea during low tides. The water that stagnates in the area are dirty since it also receives the water from the city canals which also brought large amount of non-biodegradable trash. The sand which used to be the flooring of the beach was replaced with mud from the residues of the filling materials. This leads to health related problems as well as the faster pace of erosion in the area.

### **Economic Effects**

Aside from environmental degradation, the Baybay City reclamation project had also affected the economic aspect of the lives of the fisherfolk residents of Zone 15. As small scale fisherfolks, the residents used small paddle powered or small-engine driven fishing boats that could accommodate a maximum of 2 persons as they fish in the open sea. One of the problems that these fisherfolk-respondents had in common was the difficulty for them to park their fishing boats. Before the reclamation project was established, they could safely park their fishing boats just beside their homes. Since its establishment, the sea wall that used to reclaim the land had already blocked the fishing boats' pathways forcing the fisherfolks to park their fishing boats at a distance. This prevented the fisherfolks to safeguard their boats which, more often than not, had served as objects of undesirable human activities like the stealing of engines and other fishing equipment. Aside from that, the distance of the fisherfolks' parking area had also prevented them to bring their boats to safer grounds in times of emergencies like thunder storms and big waves brought about by southwest monsoon winds or *habagat*. This brought destruction to their boats which entailed spending money that they seldom had for boat repairs. According to Babelon Cuyno, 63 years old and a fisherfolk:

*One of the things that bother us most was our inability to park our fishing boats near our homes. With the shorelines blocked by the sea wall that served to reclaim the land, we were left with no choice but to park our boats away from our homes. This disturbed our peace of mind since unscrupulous people had that habit of*

*stealing our engines when given the chance as well as other fishing implements. Many times, our fishing boats had been destroyed by big waves due to thunderstorms since we could not attend to our boats immediately since they were park or placed quite far from our homes. With this, we had to repair our boats. This prevented us not to fish for a period of time since we seldom had enough money for repairs.*

Not only had that, Raul Vega, 49 and a fisherfolk resident of Zone 15 also added that the establishment of the reclamation site had also driven the fishes far from the shorelines. He also noticed that their catch for the past few years after the reclamation project's establishment had also dwindled significantly which posed an undesirable economic challenge to their lives. For Mr. Vega:

*When the reclamation project was implemented, I noticed that my daily catch of fish had significantly dwindled. I usually had plenty of catch in any given fishing day before the start of the reclamation project. One of the reasons of my dwindling catch was that fish were no longer found in the areas near the shorelines. Before the reclamation project, I used to catch fish just a few hundred meters from the shores. The noise in the construction work of the reclamation site might have affected the fish habitat in the area causing them to move to other places.*

This narration of undesirable economic effects brought about by the reclamation project was also shared by Michelle Cuyno, 32 years old and a fisherfolk herself because she used to pick up shells, crabs, and other sea organisms that were construed eatable in the *hunasan* (a large space that emerge along the shoreline during low tides). This small economic activity enabled her to provide viand for her family or a little income from the sales which enabled her to acquire her basic necessities. With the reclamation project implemented, Michelle was no longer able to do this small economic routine for a variety of reasons. First, the sand that used to serve as the sea floor was transformed to mud due to the residues of the reclamation project's filling materials. This made the shells, crabs, and other eatable sea organisms like small octopus and sometimes shrimps to vanish since their habitat were greatly altered by the reclamation filling materials residue. Aside from that, water that enters from the sea during high tide was stocked in the area because of the

reclamation's sea wall compounded by the waste water poured into the area from the city's canal system. This made the neighbourhood's surroundings a bit polluted that prevented the sea's living remaining living organisms in the area to survive. For the fisherfolks that depended on the bounty of the sea during low tides, that economic opportunity was no longer available. It was already a thing of the past because progress had also its trade-offs. Unfortunately, the ones very affected were the ones who would benefit less from this development project. As Michelle Cuyno had asserted:

*Life had been very difficult for us when the reclamation project was implemented. As a resident living near the shoreline, I used to live in relation to the generosity of the sea to my life. In the afternoon, when the tides were low, I used to gather shells, crabs, and other eatable sea organisms in the hunasan (a large space that emerge along the shoreline during low tides) just near my home. This activity, though small scale gave me considerable income since I also sold the surplus of the things that I had gathered to my neighbours, not to mention the viand that I was able to provide for my family. During the times when the reclamation project was still non-existent, one could survive and gets his or her fair share of goodness from the sea if one only had that attitude to work for his or her keep. But when the reclamation project was established full blown, most especially the sea wall, everything vanished and we were economically left hanging.*

Understanding the common issues associated with urbanization is critical in developing a better food supply model that is customized to large and smaller urban regions. Supposedly, urbanization is strongly correlated with economic growth and better standards of living. Urbanization provides considerable advantages, including economic growth, centralized infrastructures, and government, political, education, social, and health services. However, urbanization has also resulted in many issues, such as urban poverty, food and nutrition insecurity, and health disparities (Knorr, Chor Chan, and Agustin, 2018) [16]. Yet, in relation to the lives of the fisherfolk residents of Barangay Zone 15, most, if not all, of them have experienced urbanization and reclamation project's negative ill effects, most especially, in the aspect of

their economic well-being. Francisco Vega, a 48-year-old resident fisherfolk has this to say:

*I heard a lot of people say that Baybay City reclamation project would bring progress to our place. Yet, on the contrary, it brought lots of hardships to our lives. Primarily, the reclamation project changed the direction on our means of making a living. For me, as a fisherfolk, I had decided to leave fishing for the mean time since I could no longer bear the inconvenience that the development project had brought to me personally. The sea wall used to reclaim the land had prevented me to take care of my fishing boat and my fishing equipment however great my intention was to take care of those things. Yet, the new situation of my life in relation to my means of making a living in which I had to park or place my fishing boat and equipment far from home would only slowly but surely drain my limited resources.*

From the experience of Francisco Vega, it was quite obvious that the poor resident fisherfolks of Zone 15 had been the very vulnerable group of the negative effects of the reclamation project. The fisherfolk residents had contended with food insecurity challenge in their place which had been slowly converted into an urban community. There was food insecurity to the families of the fisherfolks in the sense that the said project altered the landscape of their means of making a living. For the fisherfolk residents, even if development projects had already reached their doorsteps, they were, more often than not, excluded from the opportunities that came from it.

With all of these things said, it can be construed that the reclamation project of the Local Government Unit of Baybay City has failed to alleviate the lives of the residents who are directly affected by the project. On the contrary, the families of the fisherfolk residents of Zone 15 have been economically disadvantaged due to the negative environmental effects brought about by the said development project. Looking at the goal of the reclamation project, it is quite ironic that though said project aims to bring economic benefits to the city as a whole, it negatively affected the residents who are directly hit by the project's implementation. It is true that there are trade-offs in implanting infrastructures for development. Yet, people who are at the receiving end of the negative effects of the project have to be also given consideration since they also have the right to

live, to have an economically afloat life, as well as the right to reap the economic benefits of any development project there is in any given society.

#### CONCLUSION AND RECOMMENDATION

This study concludes that the reclamation project has negatively affected the social well-being of the residents of the coastal fishing community of Barangay Zone 15 in Baybay City, Leyte. In the process of the reclamation project's implementation, a number of the residents' basic rights have been violated through the authorities' neglect of giving importance to the rights of the poor. This neglect has been very evident in the authorities' failure to inform the affected residents through public hearings with regards to the direction of the project. Said neglect has caused fears and apprehensions among the affected in relation to their housing needs, availability of work, as well as the continuance of their social inter-connectedness with each other.

Moreover, Baybay City's reclamation has also affected the environmental well-being of the affected community since the coastal poblacion barangay, Zone 15, has undergone environmental degradation due to the on-going development project. With the coastal barangay's change of landscape, the residents have not been able to enjoy the aesthetic benefit of the ecosystem function that they used to have before the construction of the reclamation site. This environmental degradation has also made the residents prone to diseases since the project altered the water pathways to the sea causing the water to stagnate in the area bringing mud, algae, and undesirable and pungent smell.

Lastly, this study also concludes that the Baybay City Reclamation project has also negatively affected the economic aspect of the lives of the residents. The infrastructure of the project has prevented the fishermen to park their boats near their homes resulting to the destruction of their boats and other fishing implements. Aside from that, the fish catch in the area has also significantly dwindled causing the fisherfolks to have lesser incomes. Not only that, the environmental degradation brought about by the reclamation project has also changed the habitat of the marine life found in the sea shores, and thus, prevented the residents to acquire an alternative source of income through gathering and picking of eatable marine creatures such as shells, crabs, and small octopus during low tides.

Nevertheless, this study recommends that a study that would delve into the effects of the reclamation project to the biodiversity make-up of the involved coastal barangay has to be also undertaken. This study has to be also accompanied by an in-depth investigation on the physico-chemical characteristics of the water found within the parameters of the involved poblacion coastal barangay. The results of this study could further explain the negative environmental effects brought about by the reclamation project to the residents involved.

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