



Fishing for the Future: Education for Sustainable Development

After an hour stroll, Julius reached his favorite spot in the white sand shores of Bilangbilangan Island, Philippines. With sweat dripping down his face, he stopped by a Talisay tree thinking he might calm down the rush in his veins. The morning breeze was soothing to the soul. Leaning on the tree, he was enjoying the horizon, counting the seconds it took for the sun to rise. Suddenly, there was a huge explosion in the sea. The sound startled him and then made him angry. Again, he felt the rush in his veins.

"This is really worsening," Julius thought. "How can they do this on Sunday with my two eyes on them?"

As a permanent resident and the principal of the elementary school in Bilangbilangan, Julius was well aware of the various illegal fishing activities on the island. Of these, the more serious threat that could not be halted even by enforcement of national laws and local ordinances was dynamite fishing.

i Bilangbilangan Island is one of the island communities of the municipality of Getafe which has two barangays, the smallest political unit in the Philippines.

ii Its scientific name is Terminalla catappa. There a number of these trees in the shores and in the sandy soil of the island.



Published by WDI Publishing, a division of the William Davidson Institute at the University of Michigan.

© 2015 Bernabe M. Mijares Jr. This case was written by Bernabe M. Mijares Jr., Undergraduate and Graduate Professor and Director of the Regional Center of Expertise Bohol, at the Bohol Island State University. This case was designed for academic purposes to simulate a scenario that could occur. While secondary research was performed to accurately portray information about the situation, this is a hypothetical scenario, and representatives were not involved in the creation of this case. This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement #AID-492-A13-00011. Its contents do not necessarily reflect the views of USAID or the United States Government.

Countless times, he had raised the problem with local officials who implemented preventive measures, but to no avail. The fishermen stopped when reminded, but only for a while. When it seemed that no one was on the lookout, they resumed their dynamite fishing with added intensity and vigor.

A visitor to the island would find it easy to observe that dynamite fishing had become an ordinary means to catch fish. And Julius' protest was in fact called for because neither an authority (not even a principal), nor a special day (not even Sunday)ⁱⁱⁱ could hinder the illegal activity.

"But who are these people?" Julius pondered. They were his people; some of them were even his relatives. As islanders, most of them did not know of employment except fishing. It was through fishing that they put food on their plates and bought everyday necessities. "Should I be more concerned about the environment or about the livelihood of my people?" Julius wondered. His steps were heavy as he headed toward the *Bantay Dagat*^{iv} post.

Poor with a "Bank"

Bilangbilangan was an island community under the territorial jurisdiction of the Local Government Unit of Getafe, a 4th class municipality located in the northern part of the province of Bohol. The island had two Barangays within it, namely Bilangbilangan Daku and Bilangbilangan Diot with a combined population of 2,765 as of 2010.¹ Bilangbilangan shared the typical characteristics of island communities in the country. Fishing was its predominant source of employment mostly engaging males who were required to be actively productive even into their 70s and 80s. Like many communities in the archipelago, the majority, if not all of its households belonged to the lower income bracket where residents had only attained a low level of education and families were large. As a community in the Philippines its residents were predominantly Roman Catholic.²

The finding that Bilangbilangan belonged in the lower socio-economic bracket affirmed the results of the Poverty Database Monitoring System (PDMS) generated through a survey in 2004. PDMS revealed that Bilangbilangan Daku and Bilangbilangan Diot ranked as 1st and 2nd, respectively, in the Ranking of "Barangays by Average Level of Deprivation." This implied that Bilangbilangan was the most deprived among the 15 barangays of Bien Unido measured through the 12 indicators of poverty (see **Appendix A**).

Despite the unpleasant socio-economic data, however, Bilangbilangan Island could anchor pride, and even hope in being a rich marine resource. The Danajon Double Barrier Reef also known as "The Danajon Bank," was just a 15-minute distance by a motorized boat from the island. In one of the online articles of Bohol Chronicle, Danajon Bank was described as:

"A Double Barrier Reef is composed of several units up to 23 kilometres long each. The Inner barrier is 2 km wide and separated from the littoral by an inshore channel 28 kilometres deep at the most. The

iii Sunday is supposed to be a day of rest, since the majority of the local residents are Roman Catholics who are required to attend mass and perform good acts on this day.

iv The Bantay Dagat, which is literally translated as "sea guard," is a squad or group organized by local government units in the Philippines, which have coastal areas, to catch illegal fishers and monitor the condition of marine sanctuaries. In Getafe and nearby municipalities, the squad is mainly composed of police officers. They patrol their sea of jurisdiction on a motorized boat.

v The Poverty Database Monitoring System (PDMS) was devised by the Provincial Government of Bohol to track the poverty incidence in the province. With 12 indicators of poverty, surveys were conducted in each municipality to generate data which was processed through a computer system. This gave any interested party the ability to view the data through regulated access.

bank's bounty goes beyond its coral structures. Its extensive sea grass bed serves as critical feeding areas and nursery for bottom dwelling marine life. The mangroves, found mostly on the coastal areas, cover 5,250 ha. In Danajon lies one of Southeast Asia's largest human-made mangrove forest." (See **Appendix B**).

Danajon Bank had been providing an abundant supply of marine products for household consumption and commercial demands. It could sustain the livelihood of the larger portion of Bilangbilangan's population and could potentially improve its local economy if properly managed. Unfortunately, it was under threat due to dynamite fishing and other forms of illegal fishing.

Education for Sustainable Development

Sustainable development is a model that challenges conventional development. The latter, as Susan Baker, Professor in Environmental Sciences of Cardiff University, points out, speaks of progress "primarily in terms of increase domination over nature and the use of her resources solely for the benefits of humankind." It is in this context that man simply exploits nature for his advantage without giving due regard to the possibility of its extinction. This is demonstrated in the use of dynamite in fishing to extract a greater volume of catch, which implies that each succeeding fishing activity requires a greater volume of dynamite for maximizing extraction of the remaining marine resources. Eventually, this renders precarious the economic condition of the fishermen and may lead to poverty. This is aptly expressed in the Report on the United Nation's Decade of Education for Sustainable Development by the Government of Japan as it says: "...the world is currently faced with issues such as climate change, loss of biodiversity, depletion of resources and the spread of poverty. Every year, mankind is losing the environment that ensures the basis for ensuring a rich lifestyle which can be enjoyed by future generations."

On the other hand, sustainable development, seeks to replace the old development paradigm. Its objectives of sustainability require the protection of the natural resource base upon which future development depends.⁵ In other words, it encourages responsible use of resources as the basis of all forms of progress. Moreover, sustainable development also seeks to reconcile the ecological, social, and economic dimensions of development, now and into the future, and adopts a global perspective in this task.⁶ In other words, sustainable development integrates the economy, society, and environment for a development that is not just for the present but for the future as well. Instead of dynamite fishing that destroys the very source of the fish catch, a fisherman should think of fishing methods that would preserve the marine ecosystem to sustain its use.

But how should the concept and process of sustainable development be introduced to the fishermen of Bilangbilangan? The Japan Report suggests that "In order to achieve sustainable development, each person living on this planet needs to understand environmental as well as developmental issues more deeply, and transform their behavior in everyday life and economic activities. Hence, education for sustainable development can be a key for achieving sustainable development."

To Be or Not to Be ... A Teacher

Julius was in deep thought while he was heading toward the *Bantay Dagat* Post. He was sure of what he was going to do, since he was acting as a concerned citizen of the island. The dynamiting fisherman had to be stopped. But he was more pressed by a responsibility accorded to him as a teacher.

Fishing for the Future: Education for Sustainable Development

Duty commanded that he should educate the people about sustainable development to change their paradigm.

But he was a basic education teacher. Did he have any business with adult education? Was he constrained by the age and maturity of the students? Did it really matter?

Conclusion

After talking to the head of the *Bantay Dagat*, Julius passed by the house of the *barangay* captain to discuss his plan of conducting *purok*^{ri} assembly for an information/education campaign. Convinced that what he did was for the good of everyone and for the environment; that it could be, to his mind, a win-win solution, he delightfully went home. When he was about to enter the gate of his house, he heard five shots, presumably from a pistol. Then a scream from a woman echoed as an aftermath. "Hold it, hold it," the woman cried. A voice then roared saying, "Why don't you mind your own business? Be confined to your pathetic little school!"

A member of the *Bantay Dagat* must have warned one of those involved in dynamiting, Julius thought, while trembling not knowing whether it was due to fear or anger. "What have I done to deserve this?" His mind was shouting, too.

Endnotes

- 1 National Statistics and Coordinating Board of the Philippines. 2010.
- 2 Mijares, Bernabe Jr. "Installing Religious Images in the Seawaters of Bien Unido, Bohol: A Saving Act or a Sacrilege?" March 2015. 3 Baker, Susan. Sustainable Development. Routledge, 2006.
- 4 The Government of Japan. United Nation's Decade of Education for Sustainable Development (2005-2014): Japan Report, 2014.
- 5 Baker.
- 6 Baker.
- 7 The Government of Japan.