

ALTERNATIVE LIVELIHOODS IN A COASTAL VILLAGE¹

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Abstract

This study presents a gendered case study of landless and low-income dwellers in a coastal community whose lives depend not only on fishing but a variety of income-generating activities. It looks into the possibilities of how a group of people living in a coastal environment does not necessarily have to depend on fishing as the only source of living. It also examines the gender division of labor manifested in household, income-generating and community activities. Results showed that men and women indulge in various income-generating occupations, which are either predominantly male or female. The men do the following: pump-boat operators or crew, carpenters, poultry and swine-raising, buying and selling livestock, selling agricultural products in the public market and operating neighborhood convenience stalls, driving tricycle serving as porters, furniture-makers, coco lumber cutters, noodle processors, charcoal-makers, fuel-wood vendors, livestock-raisers and fishers using indigenous and manual methods.

Most of the women have no major source of income; however, a few earn salaries as teachers. Others earn income as sari-sari storekeepers, or food, vegetable and herbal vendors. Others engage in nipa and coconut thatching, and dressmaking, cosmetology, laundry and stuffed toy-making, all year round. Lantern production is done during the Christmas season.

In fishing, the men usually produce catch from the shore and offshore as well as from fishponds. Women and children, on the other hand, forage for shells and fish in the fishponds.

The study also reveals that gender issues, which interlock with other issues, influence the attainment of the goal of sustainable and equitable development.

Introduction

It is a common perception that fishing is a major source of income for coastal dwellers. The Philippines being an archipelago is characterized by numerous coastal areas which unfortunately are inhabited by one of the country's poorest sector, the fishers' sector. Stories of poverty-stricken families who have to live on what the sea can offer are often told and retold to picture a depressing situation for this sector.

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Shall we forever condition our minds to believe that fishing can be the only source of living in a coastal community? Or are there other means of livelihood that a coastal area can offer? It is this assumption that led a group of researchers to explore one coastal community of landless dwellers with unique configurations of livelihoods extending beyond local fisheries in an island in the Philippines. It was the purpose of the study to look into the livelihood practices of men and women and to analyze how these livelihoods impinge upon the social relations of equity, posing challenges for governance and longer-term sustainability. However, for purposes of this forum, this paper was culled from the study to highlight issues related to fisheries. This paper aims to present (a) The various forms of livelihood in this kind of biophysical environment; (b) Roles of men and women and the gender division of labor manifested in household, income-generating and community activities; (c) Various income-generating occupations which are either predominantly male or female; (d) Participation in these activities; and (d) An assessment of their contribution to the sustainable development of an island.

Livelihood is commonly defined from an economic perspective as an occupation, work or other means by which one earns income to provide the necessities of life. Naldoza (1987) cites a definition of livelihood by the Bruntland Commissions' Advisory Panel on Food, Security, Agriculture, Forestry and Environment as "adequate stocks and flows of food cash to meet basic needs." He further cited the definition of the Philippine National Livelihood Program under the Social Reform Agenda, which considers livelihood as "all those schemes which aim to create sustainable employment opportunities through the provision of various services that promote the establishment of income-generating activities for poverty/marginal groups." Naldoza states further that in the Philippine context, livelihood and poverty are related concepts, for livelihood is one of the safety nets not only in alleviating poverty but also in resolving the pressure problems of population, environment and development. For our purpose, we used livelihood in the broader, social terms as defined by Sandra Wallman (Wallman 1984):

Livelihood is never just a matter of finding or making shelter, transacting money, and preparing food to put on the table or exchange in the market place. It is equally a matter of the ownership and circulation of information, the management of relationships, the affirmation of personal significance and group identity, and the interrelation of each of those tasks to the other. All these productive tasks together constitute the work of livelihood.

The original study (this paper having utilized some of the data) identified and discussed eight theoretical constructs or concepts related to gender and livelihood: (a) Access and control of resources; (b) Benefits and decision-making; (c) Productive and reproductive labor; (d) Social capital and networks; (e) Power, resistance and negotiation; (f) Politics and collective action; (g) Indigenous knowledge and discourse; and (h) Culture, ideologies, values and behaviors - which were later on grouped into three domains, the first being livelihood.

Livelihood as an umbrella concept suggests the layering and overlapping features of social life. Livelihoods was examined through a number of observable features associated with patterns of work and interaction (livelihood as occupation and as social capital). The research team operationalized livelihood through an investigation of such concepts as division of labor by gender, household resources and questions of access and control of resources; productive and reproductive labor; and forms of social capital and networks.

Since gender is central to any human activity, it is therefore highlighted in this study in order to see its influence on livelihoods and other forms of social relations in the community.

The Community

Barangay Rizal is a coastal area in the municipality of Buenavista in the island-province of Guimaras. Guimaras is part of the Western Visayas Region which is located in Central Philippines. Barangay Rizal is bounded in the north by Barangay Sto. Rosario, in the northeast by the Iloilo Strait, in the east by the Daliran River, in the southeast by Barangay Daragan, and in the southwest by Barangay Montpiller. It

has a total land area of 98.34 hectares divided into three *sitios* but later on subdivided into seven *puroks*. It is four and a half kilometers away from the new town proper and can be reached by any form of vehicle.

The island-province of Guimaras is rich in coastal/marine and terrestrial resources. The municipality of Buenavista, which was established in 1775 during the Spanish colonization of the Philippines, is just as rich being bounded by the sea in three directions. Plains, hills and mountains form its boundaries with other municipalities. Farming is a primary source of income while fishing is an alternative source.

Barangay Rizal being a coastal area is prone to typhoons and huge waves but despite being close to the sea, the people are not much interested in fishing. However, some of their livelihoods are still associated with the sea and waters. Some of these are jobs such as boat-making repair, model toy boat-making, pump-boat operation as operator or crew, and porters in the nearby wharf. The sea as well as the nearby Daliran river and the fishponds provide a good source of food for the table and income for some members of the community. Interviews with residents reveal that the deeper areas of the sea contained *gingao, bisugo, alum-alum, asuos, abo, alatan, mannggagat, lapu-lapu, lison-lison, salmonite, and latab*. The river produces *alimusan, lison-lison, ugdok, danio, manggagat, parangan, palu-palo, sap-sap* and *baptist* while the fishponds produce *lison-lison, ugdok, and danio*. The sea also abounds with green sea weeds; clams and other edible shells, shrimps and crablets.

In 1999 Barangay Rizal had a total of 180 households, and 59 household- respondents were included in the study. Out of these, 40 households or 77% were female-headed. According to wealth ranking techniques, the residents consider themselves *kasarangan* (literally just enough, though implying middle class) when he or she can eat three square meals a day, earns a fixed salary or income, a daily income as a boat crew, carpenter or *trisikad* driver.

The survey of 59 households showed that a typical barangay household was composed of five members, with a father, a mother and three children. Extended members of the family were usually grandchildren or female relatives. The highest educational attainment that most family members obtained was secondary education (with 10 years of schooling); many, however, only reached the elementary level (with 6 years of schooling).

Various kinds of vehicles could reach the village, but residents usually took a tricycle or *trisikad* (there are more than 20 of these from the barangay) from the nearby port area, or from the main road connecting to the other municipalities of the island province for Php 3.00 or less than US\$ 0.10 (1999). With the construction of a more permanent bridge, bigger vehicles can now enter the main road of the *barangay*, but only motorcycles utilized by men can gain access to the upland portions of the community. Feeder roads and trails are still major venues to reach the upland portion of the area.

The barangay has the following public facilities: the mini plaza and basketball court, the primary school classrooms, a barangay hall, a day care center for the children and the Barangay Rizal Yacht-makers Association (BRYMA) building which show cases their products. There are *sari-sari* stores (a very minimal form of convenience store), a bakery, a dry dock area, and a tanod outpost. It also has a newly-constructed *Aglipayan* church, warehouse and a two-classroom building to house the third and fourth grades by the school year 2001.

The mini plaza is a venue for several barangay activities: for community dancing, coronation ceremonies during fiesta, political rallies, basketball tournaments (though there are basketball courts in some *puroks*), solar drier for *palay* and toy boat wood materials.

Research Methods

To gather qualitative data, the researchers, consisting of professors from various academic disciplines together with the community team, utilized rapid rural appraisal and participatory research methodologies

and techniques such as direct and participant observation, interview of key informants and focus group discussions with community members. Quantitative data were gathered through an interview schedule of 59 households as well as secondary data related to the area. Other studies and written materials on the study provided a broader perspective for the researchers. A research associate was fielded in the research site for six months for a direct experience with the community.

Participatory research (PR) approaches were utilized in data gathering to enable local people to have an active role in their own development as the data gathered in this research would be of use in making them aware of the status of their environment and living conditions.

Results and Analysis

Sustainable livelihoods is not a static concept due to both internal and external dynamics. To be sustainable, a livelihood requires the capability to respond to changes and to continually renew and develop adaptive strategies. It is in this framework that studies on the gendered livelihood practices, coping strategies and adaptive strategies of residents of Barangay Rizal, Guimaras, were studied.

The discussion of livelihoods includes productive and reproductive activities, occupations in the formal and informal economy, and the division of labor both in the household and in the workplace.

Livelihoods/Occupations

A study of production and reproduction activities revealed the following occupations as sources of income.

Model or toy boat-making is the community's major source of income. Despite its being a coastal area, most of the village residents are not active in capture fishing nor aquaculture. The main or secondary source of income for both men and women are derived from the production of model boats which is tied up with market exchange. Though functional boats are also locally produced, the main activity of the people since the Spanish period had been the making of model boats. Lately, the products are wooden handicrafts in the form of miniature decorative boats, patterned after yachts, galleons, frigates, clippers and sailboats. These are sold to local and foreign tourists, local distributors or any lover of decorative items.

The model boat production process is a family affair with the male and female children and other household members participating in various stages of production. Caliling citing a study of David and Patricio in 1996 shows that, out of the toy boats as a livelihood activity, a family could gain an average monthly income of Php 4,651 (US\$ 114). But a recent study by the researchers of the declared income of 17 model boat makers shows that the average monthly income is only Php 2,172.87. One gave an extremely high income of Php16,000 for 15 days but this is not regular. Discussions with a group revealed that the presence of the US Navy before the closure of the US bases helped in raising their sales. Nowadays, they have to rely on tourists going to the island or to Boracay island.

Some men and women of the area obtain wages or salaries by working with government agencies or companies mainly located at Iloilo City across the straits or as barangay officials. Others rely on their wages as pump-boat operators or crew members (locally referred to as "sailors"). Others are active in income-generating activities such as poultry and swine-raising, buying and selling livestock (goats, swine, cows, poultry), selling agricultural products in the "*mercado*" (public market) and, operating neighborhood convenience stalls (*sari-sari* stores) within the barangay or at the "*mercado*" or nearby commercial lineup of the adjacent village of Santo Rosario. Other incomes are obtained from overseas labor of one or more family members and/or incomes as tricycle (or *pedicab*) or *trisikad* drivers, porters at the Buenavista wharf, boat makers, furniture-makers, coco lumber cutters, noodle (*miswa*) processors, carpenters, charcoal-makers, fuel-wood vendors, livestock-raisers and fishers using indigenous and manual methods.

Most of the women have no major source of income; however, a few earn salaries as teachers at the local primary school or as day-care workers. Others are active in small businesses such as sari-sari storekeepers or derive income through selling cooked food, vegetables, medicinal herbs and forest products. While the women sell their cooked food or vegetables, it is the men or their male children who carry the goods. Still others employ their skills in nipa and coconut thatching which are done during non-rainy days, and dressmaking, cosmetology, laundry and lately, stuffed-toy making, all year round. Lantern production is done during the Christmas season.

The residents do not rely on only one income source. Many of them work for a secondary or tertiary income at other times or at the same time. For example, N. a dressmaker is at the same time a nipa or coconut thatcher, a lantern-maker depending on the season's need or availability of materials. Family members contribute their labor to the family income, but it is acknowledged that the father has the largest contribution in the family coffers; in fact for some families, he has 100% share. (e.g. J. carves the wood while his daughter sands some parts but the income is attributed to the father). Food vendors can earn an income of Php40 (US\$ 1) while a store owner can earn from Php100 (US\$ 2.5) to Php300 (US\$ 7.5) a day.

Some households obtain financial assistance from close relatives, usually females working outside the locality, like in the city of Manila, who sent an average of Php 1,000 to Php 1,500 (US\$ 25 to US\$ 37.50) a month. Others who work abroad, usually females in other Asian countries, would send a monthly average of Php 3,000 (US\$ 75) plus packages which usually contains used and unused clothing, soap or canned goods.

Table 1 below shows the types of livelihood engaged in by men according to purok while Table 2 shows types of livelihood engaged in by women according to *purok*. Table 3 shows livelihood engaged in by men and women of 59 households in the barangay.

Table 1. Types of Men's Livelihood According to Purok in Barangay Rizal (No. of HH: 59).

Livelihood Type	Bounty	Vinta	Galley	Kumpit	Frigate	Yacht	Total
1. Carpentry	2						2
2. "Sailor"/Boat Crew	5	2			1		8
3. Taxi Driving	1			1	1	1	4
4. <i>Trisikad</i> /tricycle Driving	2	1		1			4
5. Boat Building	1	1					2
6. Buy and Sell	1		1				2
7. Chainsaw Operator		1			1		2
8. Brgy, Official			1				1
9. Road Construction			1				1
10. Model Boat Making			1	3	5	4	16
11. Employment			1				1
12. Noodle-making					1		1
13. Animal-raising						2	2
14. Farming						1	1
15. Multiple Jobs		1				1	2
16. Pension				1			1
17. Dependent	2	1	1		1		5
TOTAL	14	7	9	6	10	9	55²

² Only 55 out of 59 households have men as heads or respondents. One purok was not included because during the survey, a tragedy occurred which constrained the researchers from conducting the survey in the area.

Table 2. Types of Women's Livelihoods According to Purok in Barangay Rizal (No. of HH: 59).

Livelihood Types	Bounty	Vinta	Galley	Kumpit	Frigate	Yacht	Total
1. Vegetable Vending						1	1
2. Nipa Thatching					1		1
3. Storekeeping	1			2	1	1	5
4. Buy and sell					1		1
5. Beautician	1			1			2
6. Employment			1				2
7. Domestic helper		2					2
8. Laundry			1	1	1		3
9. Animal-raising		1				1	2
10. Food Vending			2				
11. Model Boat Making							1
12. Housekeeping	11	5	4	3	6	6	35
13. Pension				1			1
14. Dependent	1						1
TOTAL	14	8	9	8	10	9	58³

Table 3. Distribution of Major Livelihoods according to Gender among 59 Household Heads and Spouses in Barangay Rizal.

Type of Major Livelihood	Men Involved Total - 55		Women Involved Total - 58		Total 113	
	No.	%	No.	%	No.	%
1. Carpentry	2	3.64			2	
2. Boat Crew	8	14.54			8	7.08
3. Taxi Driving	4	7.27			4	
4. Trisikad/tricycle driving	4	7.27			4	
5. Boat building	2	3.64			2	
6. Buy and Sell	2	3.64	2	3.45	4	
7. Bgy. Official	1	1.82			1	
8. Road Construction	1	1.82			1	
9. Model Boat Making	16	29.09	1	1.72	17	15.04
10. Employment	1	1.82	2	3.45	3	
11. Noodle Making	1	1.82			1	
12. Animal-raising	2	3.64	2	3.45	4	
13. Farming	1	1.82			1	
14. Multiple Jobs	1	1.82			1	
15. Veg. Vending			1	1.72	1	
16. Nipa Thatching			1	1.72	1	
17. Store management			5	8.62	5	4.42
18. Beautician			2	3.45	2	
19. Domestic Helper			2	3.45	2	
20. Laundry			3	5.17	3	
21. Food vending			2	3.45	2	
22. Housekeeping			35	60.34	35	30.97
23. Chainsaw Operation	2	3.64			2	
24. Pension	2	3.64			2	
23. Dependent	5	9.09			5	
TOTAL	55	100.02	58	99.99	113	

³ In one household, the woman is separated from her husband and does not live in the area.

Division of Labor

Household Division of Labor

Based on the 24-hour activity profile constructed by participants in a focus group discussion (FGD) session, survey questionnaires and direct observations of daily life in the barangay, both older and young women wake up at around 5:30 A.M. to prepare breakfast and get the children ready for school or to get themselves ready for work. They leave for school or work at 7:00 A.M. Classes begin at 7:30 A.M. The older men wake up at 6:30 A.M. to look for fuel-wood, fetch water or prepare for work; the younger men wake up at 10:00 A.M., eat breakfast, and play basketball, or laze around. Others assist their mothers the whole morning. The survey of 59 households indicate that more than 50% of both mothers and fathers wake up between 4 to 5 in the morning. While the women prepare the breakfast, the men prepare to sell their products to other places.

Some women wake up as early as 4:00 A.M. for bible reading. Some men who sell fuel-wood for a living wake up at 6:00 A.M., eat breakfast and go to the mountains at 6:30 A.M. to gather fuel-wood which is later sold at the Santo Rosario market. Others go to their offices or fish or do carpentry work, but most of them work on their model boat craft at home or in their work-shed near the cluster of houses. Others go out to sell these to Iloilo City or to other parts of the region. Then the women do the dish washing and laundry, take care of the children and their needs, clean the house, water the plants and pick up the children from school. They start preparing lunch at 11:00 and have lunch from 11:30 to 12:00. Again, they do the dishes and cleaning up. They take a nap or watch TV in the afternoon or evening. Supper was from 7:00 to 7:30 P.M. The women go to sleep between 10:00 to 11:00 P.M. while the men at 8:30 P.M. Survey data however show that both mothers and fathers sleep between 8 to 9 in the evening unless there is an order to be rushed when members of the family go to sleep late to finish the order.

Observations of the life in the community and interviews show that a few women are active in income-generating activities. They take charge of household chores such as food preparation, cleaning the house and the premises where their husbands attend to the model-boat business. The men are responsible for the discipline of the children, house repairs and gathering of fuel-wood. While some men assist in the household chores, the women usually spend more time on these concerns.

Division of Labor in the Workplace

In farming, the men use the cow-driven plow for rice and corn cultivation as there are no motorized tractors in use, and few hand-tractors are used in hilly areas. They apply fertilizers, participate in harvesting, and do the threshing and transporting of the harvested rice (*palay*). Women's farm work is limited to the transplanting of the seedlings and harvesting. However, they also maintain vegetable gardens in their small backyards and occasionally put in work for a communal garden within the neighborhood.

It is the men who build the boats for transportation, who compose the boat crew (*tripulante*) and work as charcoal-makers. The women assume major roles in activities considered by both men and women as "light", such as *sari-sari* store management, vending cooked food, vegetables and herbal medicines, as well as livestock-raising and vegetable-growing. One respondent shared that men were ashamed to go around and sell cooked food or snacks (e.g. *kumbo*, a kind of frying mashed banana with flour mixture) and another cracked a joke that it is unwise to make a young man oversee the store because it will surely go bankrupt.

Men assume "major" roles by doing work considered "heavy", such as the gathering, transporting and shaping of the material (the women admit their inability since they find the large knives or *bolos* too heavy for their use). They also do marketing activities which entail carrying the products and traveling to far away places or approaching ships on nearby dry docks.

In fishing, the men usually produce more catch from the shore and offshore as well as from fishponds. Women and children, on the other hand, forage for shells and do some fishing from the fishponds.

Aside from their heavy workloads at home, the women assist the men in the construction of miniature galleons, yachts, frigates, clippers, and sailboats. The men with their sons and other male relatives procure the timber, slice, dry, paint, pack and sell the products to distant places or to vessels nearby. The women with their daughters or their female relatives sew and attach the sails and riggings of the crafts; some also join the transporting and trading of these products.

Time Spent for Work

Women who have their own source of income-generating livelihood spend four hours or less everyday on their activities; most men claim to work more than eight hours or five to eight hours for four to six days in a week. The gender-disaggregated seasonal activities calendar of the community constructed in a workshop session shows that the women of Rizal practically have no rest the whole year round, doing all the household chores or doing various production activities as well.

While only the men go out to fish along the shore, river banks or offshore, both men and women fish in fishponds during *pahubas*. This is an opportunity for the community to have a share of whatever fish is left after the fishpond owner had harvested his fishpond. The use of the fish hook (*bunit*) is the most popular method of catching fish and the source of the common reference to fishing as an activity (*pamunit*). During low tides, men and women also gather a variety of shells (*panginhas*) for family consumption. Offshore and from the river, they gather various kinds of finfish and other aquatic species. The nearby Daliran river is also a good source of seafood such as oyster because the water of the river is cooler than the sea water.

Aside from their assistance to their parents in model boat making and food vending, the children also do some food foraging like gathering clams and other edible shells (*nagapanginhas*) or catching shrimps and crablets.

There is no particular time for them to fish but fishing is dependent on the ebb and flow of the tides. They go fishing once a week and the average amount they could catch is one kilo for their consumption. Noticeably, however, the abundant time for fishing is between April and December especially of the species *lupoy*.

The water level of the nearby fishing grounds can be very high for passenger pump-boats to pass through during high tide. The rising waters still seep into the reclaimed land and clog the drainage and toilets of the houses near the shore, even affecting houses across the main road. But low tides also leave the shoreline almost dried up at times to become children's playgrounds for certain hours of the latter months of the year. The resident who have small boats seldom use their boats for offshore fishing; instead, they use them more for transporting their toy boat products to the big ships moored along the Guimaras Straits.

Foraging or fishing along the shorelines can be a family affair. It is common to see, during low tide, whole families wade while using a torch or lamp in the evening (*gapanulo*) to catch various crabs (*kasag*, *alimango*) or gather shells (*guso*). They know when it is *lamgud* or times when there is a scarcity of fish.

Resources

Household Resources

a. Cash Income

Cash income for the family is derived from salaries or wages, sale of farm and cottage industry products, personal business like "buying and selling" of commercially - produced goods (including

pyramid sales), and remittances from other parts of the Philippines and abroad. Non-cash income come from food that was either picked from the garden or the nearby mini-forest, raised in the backyard, sent by relatives, fished in the nearby fishpond or sea; and water from nearby springs and wells. The survey shows that the average monthly family income is Php 5,730 which is sourced from salary/wages, sale of farm or handicraft products, personal business, and remittances from abroad or from within the Philippines. A study of the income of 17 families based on model-boat making alone shows an average monthly income of Php 2,721.75. This will then be distributed for the following expenses: food (33%); electricity and water (10%); medicine (2%); school needs like fare, allowance, supplies, (5%); miscellaneous needs like partial payment for appliances, transportation, men's drinking (2%); women's needs (1%); and plowed back as capital (18%).

While the majority of families gain primary or secondary income from the various occupations and production activities, others gain income through money sent by a family member or a close relative outside the barangay or from overseas. Others receive pension as retired government or private company workers.

b. Tools, Equipment, Appliances

Most households had the typical rural paraphernalia of *bolos* and some garden and farm tools such as the rake, hoe, sprayer, and the plow. But it seemed that many households also had modern appliances (e.g., television, electric fans, cassette radios, radio, gas stove, refrigerators and karaoke system), which they acquired through cash installments from local and outside appliance salespersons or *agente*.

Model-boat makers who are dominantly male use the following tools: spoke shave, chisel of various sizes, bolo, *kisse kisse* and *barina* for boring holes, steel saw of two sizes, jigsaw for design, knives, pliers including long nose pliers, and other tools specific to model boat-making. The making of the sails is women's work because it is they who have the sewing machine and are more at home with the needle and thread.

Those who fish, especially the males, use gillnets (*pukot*), beach seines (*sensuro*), hudhud for different types of shrimps (including *hipon*) and filter nets (*tangab*).

Some have *pedicabs* or tricycles and trisikad, motorbikes, owner-type jeeps, boats, telephones, components, computers, automobile, and handsets. Many of the houses have appliances, decorative jars and other items because they also barter their model boats with crew of foreign vessels which come to the Iloilo port carrying imported decors and appliances for trade.

The farm areas devoted to rice are minimal. Cows are still used to plow the fields, though there are some who use hand-tractors. Both the cow and the hand-tractors are still male-used tools. The scythe is still the major tool for harvesting, utilized by both male and female adults and the children.

c. Land

Land is mostly obtained through inheritance and a few were able to secure land upon retirement. A review of the Municipal Tax Map Control Roll from the assessor's office reveals that most of the landowners do not reside in the area. However, documents on Barangay Rizal shows that village land titles are registered to women and men or to couples. Though most of the households do not own the land they live in nor till, most of the villagers own their houses that are registered either in the name of the man or the woman or in both. Of 31 pieces of land registered, 12 are titled to men; 12 to women; 4 to couples, and 1 to the Republic of the Philippines. There are 31 titles but some have more than one title to his/her name.

The government owns strips of land along the banks of the Daliran river on the northeast boundaries of the barangay. The barangay also takes charge of about a hectare of land along the coast (reclaimed and as yet untitled)⁴ where most of the public utilities (the school, the day care, the multipurpose center with the barangay hall) are located across the main access road from the mini-plaza.

Most of the other big landowners (owning more than 5 ha) do not live in the area. Approximately 55.59% of the total area is owned by non-residents. But there are a few resident landowners with areas approximately the same sizes, including some of the pioneers whose lands had been redistributed through inheritance across the generations. One was able to buy wider tracts of land after retirement. The documents also show a slight difference in the number of titles in men's names over titles in women's names.

Most of those who live along the densely populated areas along the shores in *Puroks Bounty*, *Vinta*, and *Kumpit* are "squatters" either with or without permission, or rents to the absentee landowners. Others living directly on the coast had actually reclaimed the area or built houses on stilts above the water level. Most of the land in these areas is owned by one person. Hence, the "squatter" residents experience anxieties, especially with the rise in the cost of real estate throughout Guimaras in recent years and after receiving forms to be filled in with information related to land ownership. It is these households which are primarily engaged in model boat production. Those households located further inland and into the hilly parts of the village are those whose livelihoods were more directly associated with farming and related activities.

A fair portion of the hilly areas are devoted to planting rice and corn or to production of coconut and legumes. It is noteworthy that no more land is available for the production of the major raw materials for model boat-making such as *kapuk* and *bita*. The producers have to buy these outside the barangay. *Ilang ilang* is starting to grow in the area but this is on private lands owned by non-residents.

The minimal area of land devoted to rice farming are both worked on by the male and female residents with the assistance of children in some stages of production. However, it is the men who have control and responsibility in terms of what and when to plant and how much to spend while the women go out to access credit for farm expenses and capital.

The upland areas planted to rice, root crops and fruit trees are also used as grazing land for some animals. The mini-forest and coconut-grove serve as source of fuel-wood. Very minimal swine and other livestock and vegetables are raised in the backyards due to the overflow of the river and the sea water during certain times of the year.

d. Products

Regularly, the residents engage in barter of their toy boat products for rice, cement, or fertilizer with crewmembers of cargo vessels that anchor nearby. Money came easily when the ships docked, especially around the time of the annual Dinagyang celebrations at Iloilo City, or when they could market their goods to local and foreign tourists at trade fairs in different parts of the country, e.g., Bacolod, Cebu, Boracay, Manila and Davao.

It is the men who transact business with and deliver the products to the distributors or direct buyers, but some women can also transact business at home or assist in the selling in trade fairs which they call "parking". The income that they receive from the sale of the model boats are spent on rice, food, capital for the business, and school needs. Most of the income goes to family needs or to the men's "recreational" drinking.

⁴ Throughout the research period, additional pilings were being delivered by government trucks to extend the reclaimed area next to the school.

e. Savings

Some residents save some amount through the *alkansiya* (piggy bank) or the rural bank and other private banks, but others claim to have no savings because their income is just sufficient for their basic needs.

Community Resources

a. Health Facilities

Whenever a new health program is launched or when the barangay officially requests the presence of medical doctors and/or dentists, local residents avail of services such as medical consultation at the Health Center (about 4 km away) in the adjacent Barangay Sto. Rosario. Resident female Barangay Health Workers (BHWs) monitor the health situation of barangay residents. Two midwives are on call for services, however, residents usually could not purchase basic medicines or supplies within the barangay.

b. Non-cash Needs and Production Materials

Most of the farming, food, and market needs are answered by the facilities at the neighboring village of Santo Rosario, a kilometer away. *Nipa* and coconut thatch-makers have no problem securing their materials except during rainy season, since they live along the fishponds where *nipa* grow and near the hills where coconut abound. They soak these overnight to soften the leaves before they sew them into the bamboo slots.

c. Education Facilities

Primary education is not completely available within the village. Formal education is conducted in a two-room primary school for Grades 1 to 2 for the children of the community. For higher level of elementary education, the local children go to the nearby elementary school in Santo Rosario. For secondary (high school) education, they go to the public high school at New Poblacion, the town center of Buenavista, some 4.5 km from Barangay Rizal.

d. Food

The community generally eats three (some even four) times a day, but their daily meals are usually limited to rice, vegetables, fruits and fresh fish. Most partake of dried or canned fish, dried beans, pork or canned meat at least once a week, while a number can have pork, canned meat and chicken during special occasions. It is the women who decide on what to cook.

f. Water Resources

The barangay has a water system and a source of electricity. The area was supplied with electricity by Guimaras Electric Company (GUIMECO), and provided with water through water pipes and faucets by the semi-government administered Local Water Utilities Administration (LWUA). Eighty two per cent (82%) of the households avail of the electricity while only those in the shoreline avail of the water system. The rest source their water from the rain through catchments or from artesian wells and deep wells. Several springs provide water for drinking and domestic use. Both men and women make use of the spring water.

g. Community Education/Training

Some male residents of the community have undergone at least one of the various types of training programs. Among these were: Coastguard training on "How to Save Passengers", Production of "Cord Marine Epoxy", Department of Justice Seminar, monthly yacht-making seminars (which were the most attended), house nursing, Barangay Tanod Assessment and Development Seminar, Corporation Finance and Taxation, training for hilots, training for Philippine Association managers and accountants, herbal medicine and seminars on bamboo.

Some of the female residents have attended at least one of the following training courses: Yacht-making, Taos Puso Foundation-initiated training, training for barangay tanod, DOST (Department of Science and Technology) - initiated training, and barangay leadership training.

According to the focus group discussion participants, government agencies such as the Department of Trade and Industry (DTI), DOST, the Provincial Government especially the Provincial Planning and Development Office (PPDO), the Department of Labor and Employment (DOLE), and the Department of Agriculture (DA) have assisted them in their livelihood projects through seminars, funding and various services. Non-government organizations such as the Guimaras Producers' Association (GPA), the Participatory Research, Organizing Communities and Education Towards the Struggle for Self-Reliance, Inc. (PROCESS) Foundation and the Taos Puso Foundation (TPFI) had been of help in the community activities.

An analysis of the nature, composition, functions and activities of these organizations show the gender relations. These organizations may have socialization and development of self-esteem goals and no sex discriminating titles, but a review of their membership showed that the men are active in traditionally-male organizations based on their traditionally-male jobs and likewise with the women's organisations.

Social capital and government agency intervention could also bring good results for the environmental status of the community. An example was the case of community and government partnership in the "Clean Up Campaign" during the month of June when women assisted in the environmental activities led by the Department of Environment and Natural Resource (DENR). The women of the community assisted the mobile medical and dental team of doctors and nurses as they provided services. This was followed by a coastal clean up awareness campaign, which was part of a long-range program of the "Clean and Green" community project. The community followed the directives of the DENR such as no cutting down of mangroves and replanting vacant areas with seedlings provided by the DENR nursery. Public use of these areas needed clearance from DENR. The women and other community members assisted in the replanting of the coastline with mangrove species seedlings such as *bakhaw* and *pagatpat* as well as other kinds of trees. There was a time when students were also sent to the area for two years to help in the cleaning of the shoreline. Despite all these, the problem of waste disposal is still prevailing since residents simply throw their garbage on the shore.

h. Credit Facilities

The residents experience difficulties when family members get sick and need hospitalization or when a family member dies. Money also becomes a major problem when classes start because this will mean that capital meant for business will go to paying for tuition fees, uniforms and school supplies. This would then mean visiting a pawnshop or seeing a relative. The residents, and most Ilonggos differentiate credit from loans. Credit applies to securing goods from sari sari stores or ready-to-wear (RTW) clothes and/or appliance dealers which are paid at a later period. "Loans" are borrowed amounts of money, usually secured from relatives and friends at low or no interest. Others do not borrow money at all because they say they do not have the money to pay for their debts. The women are usually the ones who transact credit.

It is observed that in this area environmental conditions affect people's livelihood and people develop coping strategies to sustain them. It is also observed that one livelihood supports another livelihood or income and products from one livelihood support the others. Cash income received by model boat makers support motorboat operators and crew, porters, furniture-makers, *pedicab* drivers, *sarisari* store owners, food and fish vendors and practically all who have to eke out a living. This holds true too with the salary of day care teachers and the maintenance of the school which depend on the income of all tax payers and parents.

Though model boat makers are all over the place, they are mostly located in *Puroks Vinta* and *Yacht*. Many male residents of *Purok Bounty* are *tripulantes* or crewmen of motor boats that ply the Guimaras-Iloilo waters. Their wives earn income from their stores or food stalls that dot the road. They do not mind the closeness of stores to each other since each one has her own *suki* or patron. They also become ambulant food vendors selling from house to house or in schools to students in the morning, *merienda* or snacks between 2-4 in the afternoon and chicken and pork barbecue before twilight. Their children assist them in all these. The men living in the hills are either farmers or charcoal makers.

i. Knowledge of the Natural Environment

Their being close to their environment gives them knowledge to determine its course even without the use of modern technology. For example, time can be approximated by looking at the position of the sun, the coming of the rain can be determined by the sound of insects and frogs, and the movement of ants. However, specially printed calendars can be a guide for the dates of low and high tide.

Some of the residents and even their leaders still believe in spirits that abound in the environment. One cited the spirit who appeared when they used dynamite to clear a portion of the mountain during the road construction. Only a *babaylan* can appease these.

An exploration of the types of livelihood in the area showed that a coastal community may not necessarily depend on fishing as a major source of income. Lachapelle (1997) in her study of Malalison island (based on her studies of the works of Barber, Illo and Polo, and Rodriguez) observed that much of the social science research on coastal households in the Philippines recognized that households in coastal communities rarely rely solely on fishing as their source of income. The Barangay Rizal case shows that community resources-natural, material, human, technological and time resources-if analyzed, utilized and managed properly can provide various forms of livelihoods for the community. Barangay Rizal showed a variety of income-generation activities which have provided means of living for the residents. The residents may have attained only a low level of formal education, but their indigenous skills and survival tactics in utilizing their environment have fed their families, sent their children to school and helped their families survive various crises for many generations. Added to these are government and non-government interventions which have benefited the community. However, livelihoods are still gendered just as space is.

As earlier seen, one livelihood sustains or supports another livelihood. Women's work sustains the labor force which includes the husband and other members of the family. The income from model boat makers, boat crew, animal raisers, noodle makers, etc. provide a source of living for *trisikad* and tricycle drivers, food vendors, *sarisari* store keepers, government employees, day care workers, carpenters, etc. Thus outcomes of livelihood benefit the community and further strengthen the social network.

An analysis of the people's access to and control of resources, benefits and decision-making revealed that in terms of resources, Barangay Rizal is a coastal village but the majority of the residents are do fish. The community abounds with natural resources, most of which

the residents do not own or control. The sea, the fishponds, the river, the mini-forest and the upland areas provide limited food and medicine for the community. Resource space is gendered. Generally men fish, gather fuel-wood while the women gather herbs and vegetables for the table. Women utilize springs and well water for washing. There is a depletion of resource materials for boat-making and a lack of markets for finished products. The closeness of the area to the port reduces its deep sea fish resources. The fishponds are not owned by the community residents but by outsiders. The bulk of timber materials for boat-making are bought from nearby barangays.

This is a community of low-income dwellers whose lives depend on the buyers of their products who are mostly tourists and foreigners. Any changes in the international market, global situation as well as political changes in the country affect their income. Most of the residents are landless and living on inadequate resources, but skillful in making do with what is available for survival.

Decision-making rests on the couple but some decisions (food to cook, child's education) rests on the woman. There are manifestations of the father as the disciplinarian and whose decision prevails. Since leadership in the political and economic spheres is in the hands of men, decision-making ultimately rests with them.

If one definition of livelihood is expanded to include the social processes, which determines one's access to resources, then the individual's access to social networks which provide funding and other services should be taken into consideration. It can be noted that the women had been very active in reaching out to government and non-government agencies in extending assistance to the community, but when projects are about to be implemented, it is the men who take the leadership while women go back to their domestic responsibilities.

There is rigid division of labor in the production of goods; however, a number of men assist the women in household tasks. Women own property such as land, which is registered in their name. Women and men are engaged in various forms of income-generating and life-sustaining activities; however these activities manifest gendered division of labor in the stages of production as in the model boat-making and farming activities. These forms of livelihood had existed since the early years of settlement of the first families that came to the area.

Division of labor is manifested in type of fishing men and women indulge in, the kind of tools they use and the area where they can fish, thus the type of fish that they capture.

Division of work within production activities manifests lack of desire on the part of the men to share power with nor give recognition to the women. Though the men are the recognized income earner, the women practically spend more time earning a living and maintaining the family's household needs. They spend more hours awake and work more days in a week, and they work all year round. Decision-making rests on the couple but women keep the money. Women's role is in managing the household income while men are responsible for disciplining the children.

Productive - Reproductive Labor

Production activities done by the women lack recognition because these gain minimal income compared with the men's, making them consider men as the major income or only income earner. Reproductive activities which are usually done by women such as sustaining the labor force through their cooking, caring and washing, etc. are still not as important for both men and women, compared with the major income-earning activities done by men. Though men's income pay the bulk of the household needs, the women's services and income also pay for other needs of the household. Women also utilize their skills in adding to the family coffers however meager they may be.

Social Capital and Networks

Social capital or a network of social relations which provided support for each member of the community was strengthened by the kinship system and the fact that most of the community members belong to the same social class. However, a hierarchical social network still prevails with the presence of big landowners, old families and patriarchs in the area.

Concluding Statements

Barangay Rizal is a community which serves as a concrete example of a self-directed and self-propelling community relying mostly on the resources, skills and creativity of its people to survive the onslaughts of nature and social forces. Since the settlement of the earliest families in the area, the environment has acted on them in two ways. It provided the resources for sustenance; yet its strong waves and poor quality of soil deprived them of other resources. In turn, they shaped this environment to suit their needs.

The livelihoods also sustained not only the lives of those who use it but also sustained other livelihoods, through the network of livelihoods. Meanwhile reproduction activities sustained the labor force and the future generation.

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