

ABSTRACT

This paper tells of the story of the struggles of artisanal fisherfolks in the CALABARZON (Cavite, Laguna, Batangas, Rizal and Quezon) Region in Luzon in the Philippines in terms of how they try to reclaim the foreshore lands, fishery and inland resources that are traditionally utilized by them. It is an attempt to document the different forms of commercialization in the foreshore areas, which often come in the forms of private beach resorts, reclamation projects and fishponds. These development aggressions have entirely altered the coastal and land uses in these areas as more and more traditional fishing grounds and foreshore lands are turned into eco-tourism and agri-business sites. This paper is a consolidation of three case studies made in Laguna Lake, the Municipality of Real in Quezon and the Municipality of Calatagan in Batangas. It is interesting to note how perceived development have led the way to foreshore land grabbing and displacement of fisherfolks from their traditional fishing grounds. It is also important to note how foreshore lands have taken its toll from the demands for fisherfolk settlement, reclamation for tourism purposes and conversion of mangroves into fishponds in the past.

This paper suggests for the national government to address the seeming virtual privatization and commercialization of foreshore areas in the country. The increase in the number of private beach resorts and recreational areas are putting too much pressure to the productivity and social cohesion of coastal communities. Many fishing communities are being dislocated due to these trends.

Key Words: commercialization, privatization, foreshore lands

COMMERCIALIZATION OF FORESHORE LANDS IN SELECTED MUNICIPALITIES IN THE CALABARZON REGION IN THE PHILIPPINES

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I. INTRODUCTION

Commercial pressures on foreshore lands in the Philippines were not as pronounced as it is today. In the past, the prospect of getting more than one's fair share of a fishery resource is relatively good since there are less people who are engaged in fishing and there are less investments that are poured in the fishing industry. In other words, Philippine fishery resources are yet overexploited. At present, however, with a re-invigorated government policy on promoting aquaculture for rural development and tourism-hyped economy, the foreshore lands became contested commodities because of their potentials to create higher returns of investments particularly from commercial beach resorts and operations of large fishponds.

These issues are particularly pronounced in the CALABARZON Region due to their proximity to Metro Manila thus to private individuals and corporations. Infrastructures have long been constructed like the South Luzon Expressway to pave the way for investments to these rural communities. But this development has impacts to the fishing communities found in this Region.



The NGOs for Fisheries Reform (NFR) sees the CALABARZON Region as an important research site that shows how government policies that encourage highly extractive fishing activities and privatization of foreshore lands impact the everyday lives of municipal fisherfolks. The CALABARZON region, being near to the country's capital, is highly vulnerable to exploitation since the region has been widely developed, which started from the administration of former President Fidel Ramos. The rationale behind the plan is to decongest Metro Manila by developing the provinces near it. With a developed countryside, economic managers are

hoping that people will be attracted to work and reside in CALABARZON Region. Consequently, several cities in these provinces became highly urbanized and populated. The paper's main problematique is how this development impacted the use

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of foreshore lands in selected coastal municipalities. It has been mentioned that the conversion of mangroves to fishponds and the privatization of foreshore lands to make way for beach resorts and private recreational parks have displaced artisanal fisherfolks from their traditional fishing grounds.

II. BACKGROUND OF THE STUDY

A. Objectives

The paper has the following set of objectives as guidelines:

1. To assess the tenurial security of municipal fisherfolks in the 3 target sites. The status of tenurial security of fisherfolks have been collected. These data were used to establish baseline information on the tenurial status of municipal fisherfolks in the target sites. The results were also used to formulate local advocacy plans for foreshore land management;
2. To assess the implementation of aquaculture and tourism-related activities vis-a-vis the access of artisanal fisherfolks to foreshore lands for human settlement and municipal capture fisheries production. The information that were collected showed the extent and gravity of commercial pressures to foreshore lands. These were highlighted during the conduct of dialogues with concerned LGUs and government agencies like the DENR and the DA-BFAR; and
3. To generate information on the government's responses, both the local government units and concerned national agencies, on the impacts of commercialization and privatization of foreshore lands. The views of the communities involved were highlighted by using participatory methods for data gathering. Their views formed part of the recommendations regarding the use of foreshore land.

B. Research Methodology

The study employed participatory action research (PAR) as a strategy for data collection and analysis. It tapped the members of the local research teams in data collection and analysis.³ Prior to the conduct of the study, a Scoping Workshop was conducted to enable the local research team to initially understand the issues on commercialization of foreshore lands and how these are attributable to fisherfolk settlement, aquaculture for rural development and eco-tourism. The workshop provided the said team with the opportunity to review the principles of PAR and the different methods of data collection

³ The composition of the local research team (LRT) varies from one research site to another. In the case of the Laguna Lake, local research team is composed of members of MAPAGPALA, a local fisherfolk organization. In the Municipality of Real, Quezon, the members of the Municipal Fisheries and Aquatic Resources Management Council (MFARMC) has been tapped. In the Municipality of Calatagan, Batangas, some members of the Fisherfolk Organization in Calatagan was tapped as members of the LRT.

and analysis. It also provided the venue by which to get them involved in the design of the research tools and methods of analysis that will be used. Validation workshops were also designed to improve the paper.

C. Research Sites

Municipality of Calatagan, Batangas

The Municipality of Calatagan is a peninsula surrounded by large bodies of water, which include the South China Sea and Pagapas Bay. Its municipal waters supply the province of Batangas an estimated 25 percent of the total fish produce of the province (Municipal Planning Development Council, 1998:61). But as in many coastal areas in the Philippines, the municipal waters of Calatagan are under an open-access regime that threatens its sustainable productivity.



General land uses in the municipality is divided into built-up areas, tourism, agricultural and industrial, roads, planned unit development, swamps, fishponds and bodies of water and open grasslands. Built-up areas include those areas utilized for residential, commercial, institutional, function open spaces and utilities. There are around 391.63 hectares of built-up areas in the municipality. Agricultural lands, on the other hand, comprise 6,698.07 hectares and open grasslands comprise 1,768.55 hectares. Notably, around 417.25 hectares are swamps, fishponds and bodies of water (See *Table 1*)

1).

Table 1. General Land Use Distribution, Calatagan, Batangas, 2000

LAND USE CLASSIFICATIONS	AREA (Hectares)	Percentage of Total
Built-up Areas	391.6375	3.72%
Urban	60.1824	
Rural	331.4551	
Tourism	197.9243	1.88%
Agricultural	6,698.0766	63.62%

Industrial	40.0000	0.38%
Roads	143.3610	1.36%
Planned Unit Development	871.0806	8.27%
Swamps, Fishponds and Bodies of Water	417.2529	3.96%
Open Grasslands	1,768.5561	16.81%
Total	10,527.8890	100%

Source: 2010 Annual Investment Plan, Municipality of Calatagan, 149.



Municipality of Real, Quezon

On the other hand, the Municipality of Real is a third class municipality located approximately 133 kilometers northeast of Manila and 125 kilometers away from Lucena City. Real Fish Port, one of the major fish ports in the Philippines, is located in this municipality. Based on the Comprehensive Land Use Plan (CLUP, 2004) of the Municipality of Real, the municipality has 17 *barangays* or villages, of which 11 are coastal villages and 6 are upland villages. In terms of main sources of livelihood, 17% of the respondents are engaged in fishing related occupations while 39% are farmers. Around 29% are wage-earners while others are involved in informal work. These

informal workers are the ones involved in aquaculture and sari-sari store operators (Institute of Social Order (ISO), Understanding the Impact of Population Increase to Mangrove Productivity, 2008). It should be noted that fishing is a family enterprise. Men, women and children contribute to fisheries extraction. Men fisherfolks in the Municipality of Real involves in actual fish catch. Women, on the other hand, while some of them involve in actual fishing are also involve in cleaning and mending nets as well as marketing of their fish catch. Women are also involved in gleaning, collection of edible seashells and backyard charcoal production (which is illegal). Children, on the other hand, also help in cleaning and mending nets.

Based on the CLUP and the ISO study, there are more males involved in fishing than women. But it should be noted that women contributes to capture fishing and aquaculture. In terms of capture fishing, there are some women who assist in the actual fishing, those who clean up and mend nets and those who market the fish catch of their male counterparts. In terms of aquaculture, women are involved in the preparation of food during the preparatory phase of fishpond development and women are also

involved in the marketing produced from aquaculture. Unfortunately, no statistical data are available to show the labor distribution in terms of gender.

The Municipality of Real has a total land area of 56,380 hectares. Of these, 1,308 hectares (2.3%) are mangrove areas. These mangrove areas are now being threatened by intense pressure from resource-users who use mangrove trees for firewood, charcoal and housing materials. The most alarming development of late however is the conversion of these areas into fishponds. The foreshore and salvage zones in the municipality is around 38-kilometers starting from the boundary from the Municipality of Infanta in the north through barangays Cawayan, Ungos, Poblacion 61, Poblacion 1, Kiloloron, Capalong, Tiguan, Malapad, Lubayat and Pandan up to the boundary in the Municipality of Mauban. The Municipality of Real is foremost a mountainous place. With only 16 percent of the total land area that is relatively flat, Real is confounded by a “shortage of suitable land for urban expansion” (Real CLUP 2002-2022). The current open-access state of coastal areas has made it the subject of private interest. Coastal residents have continually encroached on foreshore areas, thereby reducing the space of municipal fishers, blocking traditional routes to fishing grounds, and preventing fishing boats from docking.

Laguna Lake (National Capital Region, Rizal & Laguna Provinces)

Laguna Lake is considered to be the largest and most significant inland body of water in the Philippines with a surface area of 900 square kilometres. It has an average depth of 2.5 meters and has a water volume of 2.25 km³. It is estimated that around 66 local government units (LGUs) grouped into 5 provinces including the Provinces of Rizal, Laguna, Batangas, Cavite and Quezon. Part of the National Capital Region (NCR) can also be found within the lake. This stretches within 49 municipalities and 12 cities. In 2005, around 13.2 million people are estimated to reside in the watershed based on a study by the LLDA.



In terms of land use, it has a large tract of watershed land measuring around 388,000 hectares and subdivided into four types. It has a forest that covers 5% of the total watershed area. Around 52% are considered to be agricultural lands (See Table 2).

Table 2. Land Use Types in Laguna Lake

Land Use Type	Area (hectares)	Percent
Forest	19,100	5%

Open /Deforested Areas	59,480	14%
Built-up/Industrial	110,780	29%
Agricultural	198,640	52%

Source: Adelina Santos-Borja and Dolora N. Nepomuceno, Laguna Lake Development Authority, 2000.

It was noted that rapid industrialization and urbanization led to the conversion of lands into residential and industrial uses. Based on a report, the forest cover has been reduced from 93,000 hectares in 1963 to less than 18,000 hectares in 1988 due to human pressures (Guerrero III, 1995:1). It is believed that the average annual rate of decrease has been estimated at 6.56% (as cited in Guerrero III, 1995:1).

The shoreland in Laguna Lake is approximately 14,000 hectares. It is distributed as follows: Laguna, which covers 9,200 hectares or 66%, Rizal, which covers around 3,670 hectares or 26% and Metro Manila, which covers around 1,130 hectares or 8% (Laguna de Bay Environment Monitor, 2008:4).

The lake, on the other hand, is a multiple use resource. However, the lake is largely used for fisheries production. Aside from being a source of food, the lake provides for irrigation, power supply, cooling of industrial equipment and source of water for domestic use. The Laguna Lake is considered to be one of the five largest freshwater lakes in Southeast Asia. It became the 18th member of the International Living Lakes Network last July 2001. It occupies a total surface area of approximately 900 square kilometres with a shoreline of 285 kilometres. Its shore land is approximately 14, 000 hectares, of which 66% can be found in the Province of Laguna, 26% in Rizal Province and 8% in the NCR.

Total fisheries production in Laguna Lake showed an increasing trend from 2002-2006. The Province of Rizal recorded the highest total fisheries production with 425,182 metric tons over the 5 year period, followed by the Province of Laguna with 145,274 metric tons. The NCR, on the other hand, recorded 18,172 metric tons over the same period (See Table 3).

Table 3. Fisheries Production in Laguna de Bay (2002-2006)

Province	Production (MT)					Total
	2002	2003	2004	2005	2006	
Laguna	20,887	20,968	21,935	30,293	51,191	145,274
Rizal	84,784	85,429	92,528	89,861	72,580	425,182
NCR	4,725	3,429	3,738	3,608	2,672	18,172
TOTAL	110,396	109,826	118,201	123,762	126,443	588,628

Source: Bureau of Fisheries and Aquatic Resources, Laguna de Bay Fisheries Profile, 2006.

Social and Economic Description

Aquaculture plays significant role in the positive trend in total fisheries production in the lake. This can be observed in the increasing number of fish cages within the lake. Based on a 2006 BFAR's data, there are approximately 2,659 fish cages that cover around 1,515 hectares of water area. Fish pens, on the other hand, number around 452 that cover 12,233 hectares (See Table 4).

Table 4. Number of Fish Pens and Fish Cages in Laguna Lake (2006)

Provinces/Municipalities/Cities	Fish pens		Fish Cages	
	Total Number	Total Area (hectares)	Total Number	Total Area (hectares)
National Capital Region				
Taguig	43	994.11	280	226.40
Muntinlupa	107	2,179.85	313	230.38
Laguna				
San Pedro	26	778.06	92	80.85
Sta. Rosa	2	100.47	15	4.91
Calamba	8	164.89	79	58.34
Los Baños	-	-	110	40.18
Biñan	26	728.14	83	37.03
Pila	-	-	32	6.53
Pakil	-	-	174	28.87
Paete	-	-	23	1.97
Victoria	-	-	11	10.25
Kalayaan	-	-	13	1.02
Sta.Cruz	-	-	46	8.83
Pangil	-	-	28	11.18
Rizal				
Jala Jala	22	1,048.17	127	66.94
Cardona	63	1,880.66	447	243.65
Tanay	6	209.81	37	24.03

Pililla	26	642.52	204	94.56
Binangonan	123	3,506.42	538	332.57
Angono	-	-	7	6.50
Total	452	12,233	2,659	1,515

Source: Bureau of Fisheries and Aquatic Resources, Laguna de Bay Fisheries Profile, 2006.

Based on a 2006 BFAR's data, around 35,514 fisherfolks depend on Laguna Lake for their subsistence and economic needs. The Province of Rizal accounts for a big share of resource users with an estimated 25,245 fisherfolks, of which the Municipality of Tanay registered around 1, 720 fisherfolks. This is followed by the Province of Laguna with 7,600 fisherfolks and the NCR with 2,669 resource users (See Table 5).

Table 5. Number of Resource Users and Municipalities in Laguna Lake (2006)

Province	Number of Municipalities/Cities	Number of Resource Users
Rizal	10	25,245
Laguna	18	7,600
NCR	2	2,669

Source: Bureau of Fisheries and Aquatic Resources, Laguna de Bay Fisheries Profile, 2006.

Behind all the figures is the brewing land and resource use brought about by a policy regime that favours increasing economic productivity at the expense of social and environmental integrity.

D. Data Collection Methods

A review of *secondary data* regarding local ordinances and LGU and Laguna Lake Development Authority (LLDA)-initiated programs for commercialization of foreshore and shoreland management was made. From these, the research team determined whether commercialization and privatization of foreshore lands were considered and addressed by the existing programs and local ordinances of the LGUs.

Field visits to the sites were then conducted as follows:

Table 6. Field Data Gathering Schedule

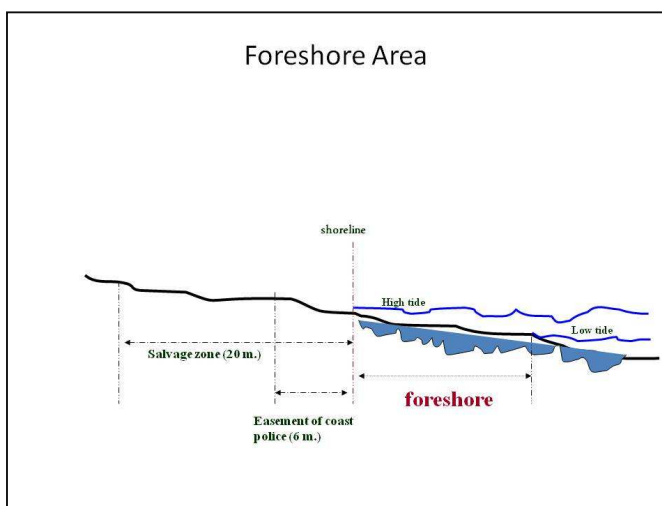
Municipalities	Provinces	Dates
Tanay	Rizal	November 7, 2009
Calatagan	Batangas	November 17, 2009
Real	Quezon	November 23, 2009

Actual Research		
Calatagan	Batangas	December 3-4, 2010
Real	Quezon	December 7-8, 2010
Laguna Lake	Rizal & Tanay	December 9-10, 2010

Focus group discussions/key informant interviews (FGD/KIs) were undertaken with representatives of key stakeholders to know about the driving force and impacts of commercialization of foreshore lands. The FGDs/KIs also clarified the roles and responsibilities of stakeholders and the relationships among them with regard to foreshore land use. Key informant interviews with Local Chief Executives, Sangguniang Bayan (SB, local council) members, Municipal Environment and Natural Resources Officers and Municipal Planning Development Officers were also conducted to generate information concerning these issues as well as the LGU policies and programs.

III. FORESHORE LANDS IN CALABARZON

A discussion on the status of foreshore lands is important. Foreshore lands are common pool resource. They are publicly or communally owned. Public access is unlimited and utilization of foreshore land (for non-private and non-commercial purpose) is free. Under Republic Act 8550 or the Philippine Fisheries Code of 1998, foreshore lands are defined as ‘a string of land margining a body of water: the part of a seashore between the low water line usually marked by a beach scarp or berm.’



There are many instances of privatized communal resources that worked against its supposed intent of achieving sustainable use. A case in point is the immense privatization for commercial use of foreshores in the Municipalities of Calatagan, Batangas and Real, Quezon as well as the shorelands in Laguna Lake. Most of these areas are contested where all beach fronts have been virtually appropriated through legal and illegal means, and where foreshore areas have been reclaimed for fish culture.

IV. ISSUES ON FISHERFOLK SETTLEMENT, AQUACULTURE AND TOURISM

The issue on commercialization of foreshore lands is intricately related to fisherfolk settlement, aquaculture for rural development and tourism. These three issues are apparent in the research sites.

For fisherfolk settlement, Section 108 of the Philippine Fisheries Code of 1998 mandated the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) and other concerned agencies to specifically provide secure fisherfolk settlement. However, despite social equity provisions in the Fisheries Code, the municipal fisherfolks remained left out from the development process as those who have money capital benefited from the potentials of foreshore areas for lucrative aquaculture industry and dollar generator tourism industry. Moreover, lack of implementing guidelines for Section 108 left wide opportunities for corporations and private individuals to exploit the foreshore lands. Explicitly, large mangrove areas have been converted into fishponds threatening the natural fish habitats and straining fish stocks. Beach resorts have proliferated as municipal fisherfolks are prevented to dock their boats and dry their fish catch within the virtual private foreshore lands. Equally important, several fishing communities are in constant danger of eviction due to absence of tenurial security.

Aquaculture, on the other hand, became prominent in the Philippines since the 1960s, when fishery products like shrimps and crabs were highly valued in the international market. At present, aquaculture is considered to be the crown jewel of BFAR as its primary vehicle to alleviate poverty in fishing communities. The aquaculture sector employs around 226,195 operators compared to municipal and commercial sector with 1,371,676 and 16,497, respectively (National Statistics Office, Census for Fisheries as cited in Philippine Fisheries Profile, 2007:8). The aquaculture sector also posted the highest growth in fish production in 2007 with 47% (2.215 million metric tons) of the total fish production in the Philippines. Despite this positive growth, environmental and social costs due to aquaculture proliferation seemed to fall in deaf ears. Contaminated waters are common near large fish pens and cages resulting to fish kills. Several idle and abandoned fish ponds are left by individual owners without bearing the costs of reverting them back to mangrove forms. Equally disturbing, many municipal fisherfolks are displaced from their traditional fishing grounds and settlements.

Equally important to highlight is that tourism has expanded to foreshore areas especially with the passage of the Philippine Tourism Act in 2009, which stipulated that tourism is the 'Engine of socio-economic growth and cultural affirmation to generate investment, foreign exchange and employment, and to continue to mold an enhanced sense of national pride for all Filipinos'. In 2008, the tourism industry generated a total of US \$4.40 billion, a significant decrease compared to 2007 due to economic slowdown. But this does not undermine the pressures purposively resulting from the commercialization of foreshore lands to the detriment of municipal fisherfolks. Consequently, the intensive promotion of tourism has expanded opportunities for private investments to concentrate on foreshore lands. In hindsight, this can spell economic growth in rural communities. The problem, though, is that the impact of these investments to the community and its surrounding environment should be largely taken into account.

V. DRIVING FORCES THAT LED TO CONFLICTS OF FORESHORE LANDS, SHORELANDS AND FISHERY RESOURCES

Several factors contribute to the continuing pressure to utilize foreshore lands and shorelands in the CALABARZON Region. These are as follows:

A. *Conflicting Policy Regimes on Foreshore and Shoreland Uses*

The existing policy regimes governing the management and use of land and resources in the Region is identified to be the primary driving force why there is a brewing conflict land users and managers. This is apparent in the three research sites. According to Mr. Ruperto Alerosa, a fisherfolk leader of *Samahan ng mga Maliliit na Mangingisda sa Calatagan* (SAMMACA, Organization of Small Fisherfolks in Calatagan), the 2007 CLUP was a product of a rigged process done by the local council of Calatagan, Batangas, as it bypassed a comprehensive stakeholders' consultation. Aside from its engagement with the CLUP controversy, the SAMMACA likewise served a key role in the cancellation of the Mineral Production Sharing Agreement entered into by Asturias Chemical Industries Inc, a local mining corporation. Through media exposure and countless street demonstrations, the SAMMACA was able to prevent the construction of Asturias's facilities and its planned mining operations in Barangays Baha and Talibayog. The Philippine Daily Inquirer, a leading national broadsheet, reported of the hasty approval of the reclassification of agricultural lands in the Municipality of Calatagan (July 30, 2007:A10). The news also stated that the amendments to the CLUP of 2002-2010 were done to accommodate the plans of Asturias Chemical Industries to build a cement plant and an industrial park. It is believed to be capable of producing 3-million-metric tons of cement annually. Unfortunately, the more than 800 hectares of disputed land is supposed to be under the Comprehensive Agrarian Reform Program (CARP) by the national government until the re-classification of the agricultural land into industrial and commercial lands was made. At present, the DENR issued a suspension of its operation until matters have been decided by the court.

A similar issue on conflicts of management authorities can be observed in the cases of Laguna Lake and the Municipality of Real. For the former, policy conflict has been identified by most of our participants in one of our focus group discussions with MAPAGPALA, a lake-wide coalition of fisherfolks from the provinces of Laguna and Rizal. The MAPAGPALA (*Mamamayan para sa Pagpapanatili ng Lawa ng Laguna*) is a national coalition that adheres to the rejuvenation of the healthy marine ecosystem in Laguna Lake. According to the late Bonifacio Federizo, spokesperson of MAPAGPALA, the existing Laguna Lake Development Authority (LLDA), the primary agency that manages the resource and shoreland use within the Laguna Lake, is driven by profit to the detriment of the environment and the people who depend on inland marine resources for living. He said that for the longest time the Republic Act 4850 or the 'Act Creating the Laguna Lake Development Authority Prescribing its Powers, Functions and Duties. Providing Funds Thereof, and For Other Purposes' failed particularly in terms of promoting and accelerating the balanced growth of Laguna Lake.

In the case of the Municipality of Real, conflicts arise among the LGU, the DENR and the Municipal Agriculture Office (MAO). In an interview with Mr. Potestades of the Municipal Environment and Natural Resources Office, it was evident that there is an existing policy conflict between the LGU of Real, the MAO, and the Department of Environment and Natural Resources (DENR) Regional office on the protection and utilization of mangrove areas for fishpond use⁴. According to Mr. Potestades, the DENR Regional office have allowed the conversion of mangrove areas (forested areas), which under the law is illegal. Construction of fishponds inside forested areas is still rampant despite the efforts and initiatives exerted by the LGU.

B. Increasing Population Putting Pressures to Foreshore Lands and Shorelands

This is apparent in the Municipalities of Calatagan and Real. In the case of the former, it has an increasing labor force with an estimated annual average of 2.35% from 2001-2006. During this period, the municipality was projected to grow annually by 9.05% (LGU Calatagan, SEP, 2007)⁵. But these growth projections understandably require investments in (1) job-generating projects, (2) the development of social capital through effective and modern social infrastructures, and (3) the development of land and water resources to answer for the growing need for housing, recreation, and a robust local economy. The latter is seen as critical driving force in the appropriation of foreshore lands for aquaculture, fisherfolk settlements and private beach resorts in the area. Foreshores and/or mangrove areas have also become prey to commercial pressures in the municipality, as the local government unit finds external private investment as another key driver of economic growth and job generation. As more and more people are concentrated in one area of the municipality, its potential for economic growth is increasing. Its Comprehensive Land Use Plan for 2001-2010 was indicative of the direction the local government of Calatagan. The said document highlighted the development and promotion of tourism, aquaculture, and other commercial purposes with utter disregard to environment costs and the further displacement of artisanal fisherfolks.

C. Weak Enforcement of Laws on Foreshore and Shoreland Management

Weak law enforcement and regulation by the LGUs in the Municipality of Calatagan has resulted in the appropriation of beach fronts by private resort operators and conversion of mangroves into fishponds. Mr. Potestades mentioned that while the LGU, the D.A., and the *Bantay-Dagat/Bantay-Pakatan* agree that mangrove conversions to fishponds are illegal, the lack of consistent logistical support to monitor human activities within mangrove areas is their biggest setbacks. This is despite the presence of *Bantay Pakatan*, who are mostly volunteer fisherfolks. The researcher during the on-site visit to the biggest converted mangrove area attest to the aforementioned drawback as one *Bantay-Pakatan* volunteer mentioned of the on-going fishpond development in the area.

⁴ MAO and MENRO are devolved government institutions. The former assists the LGUs in agricultural and fishery related issues. MENRO, on the other hand, assists the LGUs in environmental matters.

⁵ Annual average growth rates are the author's calculation.

He further asserted that they were having difficulties apprehending the culprits due to logistical problems.

Shoreland use has been the source of constant conflict in Laguna Lake. For instance, some of the MAPAGPALA leaders from Laguna Lake were adamant on the non-participatory manner that the LLDA programs have been undertaken. Transparency of programs has been questioned by MAPAGPALA. However, the LLDA remained steadfast that what they are doing are still in the bounds of their mandates. What happens is that the conflicts between two opposing groups/stakeholders intensified leading to non-resolution of issues that concern Laguna Lake. This is a result of its virtual commercialization as perpetuated by existing policy regime that encourages 'continuous encroachment, illegal reclamation and quarrying and even unsafe farming practices.' Moreover, issues on shoreland management stems from weak implementation of policies. For instance, the issuance of permits for the use of shore land is being undertaken by the local government units despite the ruling by the LLDA that this function will be the sole responsibility of the latter. There are also conflicting claims between the LLDA, the DENR and the LGUs over shore land management policies. For instance, the LLDA sees shore land as a public land thus the sole ownership of these public lands rest on the state. However, government agencies under the DENR see shore lands as alienable and disposable lands, which meant they can be leased or bought by individuals and corporations. The disposition of which is subject to minimum requirements such as whether the contested shore lands will not be used by the government for its programs.

VI. FORMS OF COMMERCIALIZATION OF FORESHORE LANDS, SHORELANDS AND FISHERY RESOURCES

Coastal Real Estate Development

Conversion of foreshore and shorelands in the CALABARZON Region has led to its virtual appropriation for subdivisions and government housing projects. Issues on fisherfolk settlement have been highlighted in Laguna Lake and the Municipality of Real. Existing government housing projects could be good in hindsight, but if we take a closer look, good intentions can be detrimental. This is what happens in a housing project within Laguna Lake. This case showed shorelands that are not feasible for human settlements are converted into residential areas. A very good example of this is in Arenda in the Municipality of Taytay, Rizal, where an area unfit for human settlement because of its being a flood-prone area, was converted into a government socialized housing area. The socialized housing project began during the time of then President Fidel Ramos issued Presidential Proclamation 704 (PP 704), which set aside an 80-hectare portion of shoreland in Sitio Tapayan, Barangay Sta. Ana in Taytay, Rizal. What was once a swampy shoreland is now 'dumped with 100,000 cubic meters of garbage and soil' and converted into a human settlement. It is no wonder that the area in Arenda has been one of the major issues that have been brought out in relation to the tropical storms Ketsana and Parma that hit the country in 2009. It was argued particularly by the LLDA that informal settlers along the Laguna Lake have been the major source of

flooding in Metro Manila because they blocked the water spillways. The major blunder though is the Presidential Proclamation Number 704 that encouraged reclamation of shoreland for human settlement even though the area is unfit for human habitation. This resulted in 'almost 300 people dead and some 6 billion pesos in damage in agriculture and fisheries', as explained by Congressman Edgar San Luis of Laguna during his privilege speech in the Lower House of Representatives that calls for the strengthening of the LLDA to respond to major calamities such as the two tropical typhoons.

At present, there is a pending bill in the 14th Congress of the Philippines to strengthen the Laguna Lake. This will likely be re-filed when the 15th Congress convenes in July of 2010. This call for amendments was prompted by the devastations resulting from the heavy rains and strong winds carried by tropical storms Ondoy and Peping, with international names Ketsana and Parma, respectively. It has been reported that due to massive number of informal settlers that have occupied portions of the 90,000-hectare of river basin, Metro Manila was flooded. The LLDA blamed the informal settlers, which numbers around 400,000, that allegedly block key drainage channels of Laguna Lake. However, there are opposing views regarding this matter. It was long been recognized that the Pasig River is prone to flooding. It is believed that during heavy rainfall, water from the Marikina River overflow towards Pasig River, thus causing flooding in residential communities along it. To divert the overflowing water from Pasig River, the Manggahan Floodway was constructed, thus shifting the water towards Laguna Lake. The latter becomes the reservoir for the excess water from Marikina River.

Unfortunately, a government plan to construct a water spillway from Laguna Lake to the South China Sea has been shelved during the administration of President Ferdinand Marcos. Thus, the flooding that happened in Metro Manila cannot solely be blamed to the informal settlers along Laguna Lake but also to the infrastructure gaps that have supposedly been addressed by national government agencies.

In the case of the Municipality of Real, the shortage of suitable land for human settlement amidst a high annual population growth rate of 3.78% (August 2007) highlights the urgency of addressing fisherfolk settlement (CLUP 2002-2022) in the Municipality of Real. Its CLUP for 2002-2022 suggests the practice of sound urban management, investment in other potential growth areas (especially in the southern areas of the municipality), and the development of a robust local economy. At present, the urban growth center is Poblacion 1. However, the local government will develop some of its barangays in the south, which include Brgy. Cawayan and Capalong as alternative urban growth centers (*See Table 1*). This should be studied further since remaining tracts of mangroves can be found in Brgy. Cawayan. With the planned built-up areas, these mangrove areas will be most likely be affected. Former municipal councilor Ascarraga opined that fisherfolks are transient – that they settle in areas nearest to fishing grounds. Transience, in this context, means that fishers occupy public lands along coastal areas, or rent houses nearest to fishing grounds. Ascarraga likewise noted that, as in the past, the municipality's expansion and development of human settlement will inevitably encroach on certain portions of mangrove forested areas and swamp marshes. This is especially more problematic today as beach fronts and upland areas adjacent to the municipality's foreshores have already been privatized

or occupied. The development agenda of the municipality will very likely create new settlements out of marshlands, similar to Poblacions Uno and 61, and Barangays Ungos and Cawayan that were originally marshlands prior to their reclamation under Presidential Proclamation 311.

This lack of tenured settlements for fishers was further lamented by the members of the Real Fisherfolk for Christ, a local-based fisherfolk organization. In an FGD conducted by the researchers, the group reported the absence of security of tenure for the lands they occupy. These fishers merely paid for a settlement right worth P1,500.00 (1979 rate) to the legal owners. At present, the price of lots in the area is unilaterally determined by property owners, some of whom set prices based on the lot's proximity of roads⁶. The members of said group mentioned a certain Gervacio Murillo who demanded a 20 percent down payment and a 36 month payment scheme that municipal fishers cannot afford. They likewise complained that the process involved in securing the tenure of the lots they occupy require frequenting pertinent agencies like the DENR– the cost of which is regarded prohibitive. It can also be observed that foreshore lands in the Municipality of Real are already privatized. In fact, in coastal barangay like Brgy. Ungos, foreshore lands are owned by wealthy families. Thus, lands in Purok Duhat and Purok Bayabas are owned by the family of Gervacio Murillo, Purok Sampaloc is owned by a certain Macasaet and Purok Mangga and Purok Santol are owned by Almeida. As explained by MFARMC Chair Mr. Velasquez, the current land owners belong from families who earned substantially from logging activities in the past. As soon as logging became regulated, these families turned to the potentials of foreshore lands. They were able to buy properties near foreshores and leased these properties to municipal fisherfolks.

The association is, however, determined to secure ownership of the properties they occupy. They have engaged in dialogues with the owner, the provincial government of Quezon, and the concerned government agencies to settle the selling price of lots to P300.00 per square meter. For its part, the municipal government initiated talks between the owner and the association to bring prices down, and assured, albeit only verbally, the allocation of settlement areas for fisherfolks. Yet despite this seemingly positive note, the mayor of Real prioritizes income generation of the municipality in its effort to become self-dependent.

Aquaculture for Rural Development

Another form of commercialization of foreshore lands is the conversion of mangroves into fishponds as well as the utilization of inland waters for fish pens and fish cages. These were highlighted in the Municipalities of Calatagan and Real and in Laguna Lake.

In the case of the Municipality of Calatagan, the LGU encourages the development of aquaculture as a poverty alleviation program. To mitigate the decrease in fish catch and offer alternative jobs to displaced or marginalized fisherfolk, local governments from

⁶ Some charge as much as P600.00 per square meter.

past to present spearheaded policies that promote the development of aquaculture. The result was the development of 70 hectares of land in the northwestern part and 128 hectares in the eastern part of the municipality utilized for fishpond operations. Notably, only about 60 and 100 hectares of mangrove areas were maintained in the northwestern and eastern part, respectively (*See Table 8*). Both men and women fisherfolks rely on mangroves for resources. Men fisherfolks rely on mangroves for juvenile fish, which in turn they use for their backyard fishponds. Women, on the other hand, use mangroves to gather edible seashells and fish. Some of the women fisherfolks are also involved in backyard charcoal production (which is illegal based on Republic Act 8550 or the Philippine Fisheries Code of 1998).

Table 8. Mangrove and Fishpond Resources Municipality of Calatagan, Batangas

LOCATION	RESOURCES	SIZE	DISTRIBUTION
CALATAGAN NORTHWEST	Mangrove	60 Hectares	5 clusters of mangrove areas along the stretch of coast.
	Fishpond	70 Hectares	7 barangays from Balibago to Sta. Ana
CALATAGAN EAST	Mangrove	100 Hectares	Found along 5 kilometers shoreline from Punta Baluarte to Bataha area. Width of mangrove area ranges from 100 to 300 meters 6 barangays from Hukay to Tanagan
	Fishpond	128 Hectares	

Source: Socio-Economic Profile, Center for Empowerment and Resource Development, Municipality of Calatagan, 1998:78-79.

In Barangay Tanagan, the Juan Lorenzo Vergara (JLV) Shrimp Farm owned by Atty. Lorenzo Vergara occupied almost the size of an entire land area of a barangay⁷. Though this has been denied by the owner, saying that his shrimp farm only covers around 8 hectares. Little is known about Atty. Vergara. Participants of our focus group discussions said that Atty. Vergara is a known lawyer-businessman that resides in Metro Manila. Brgy. Capt. Cahayon of Brgy. Tanagan noted that Atty. Vergara is the president of a certain association of fishpond owners in Cavite, Laguna, Batangas, Rizal and Quezon (CALABARZON) Region, which makes him a very influential person.

The JLV Shrimp Farm does not only sit on what used to be mangrove forests. The area stretches further to the foreshore land. The foreshores have disappeared due to dumping of dirt and gravel from a nearby hill being quarried by Vergara himself. Consequently, around 30,000 mangrove trees have been destroyed due to the expansion of JLV Shrimp Farm based on the conservative estimates of SAMMACA. Around 3,000 fishing families were affected as a result of mangrove destruction, many of which are women fisherfolks who use the mangroves to extract seashells and shrimps for household consumption. Most of the fishworkers employed in the JLV Shrimp farm are men. Most of them work seasonally, meaning it is not a regular source of income. They get hired during preparatory and harvest periods. Based on our field notes, the Vergara shrimp ponds operate for 2 cycles per year, wherein one cycle covers 5 months. Apart from the big fishponds, there are backyard fishponds in the Municipality of Calatagan. These backyard fishponds are often operated by the whole family. It is a family enterprise that involves both men and women family members. Men are usually involved in the preparation of fishponds and harvesting. Women, on the other hand, do the marketing of fishery products. Unfortunately, there are no available data on the backyard fishponds from the Municipal Agriculture Office of the municipality.

Like the case in Calatagan, Batangas, aquaculture has been promoted particularly by BFAR as a means to alleviate poverty in fishing communities in the Municipality of Real. Based on the data presented by the Mr. Terraña, there are 86 FLC holders in the municipality. These FLA holders often reside in Metro Manila. They are often compared to 'absentee landlords' who own and earn profit out of a property but does not reside within the local community. Absentee ownership has dire consequences as shown in some of the observations by our FGD participants. Mr. Guillermo Velasquez, the current Municipal Fisheries and Aquatic Resources Management Council (MFARMC) Chairperson of Real, said that local residents who are supposed to be gaining out of a fishery resource is being inhibited because of so called 'outsiders'.

Virtual commercialization and privatization perpetrated by the LLDA can be seen not only in shoreland but in the inland marine resources as well. Aquaculture in the forms of fish pens and fish cages started to operate in 1970s with a noble objective of helping small fisherfolks to augment their income from capture fisheries. Unfortunately, moneyed capitalists usually based in Metro Manila began to compete with small

⁷ Barangay is the smallest administrative unit in the Philippines. It is further sub-divided into puroks or sitios (zones).

fisherfolks over the use of the inland water resources. These capitalists are often composed of ‘politicians, military and police generals and big time capitalists’. The LLDA, on the other hand, failed to set policies and regulations in the establishment of aquaculture that several illegal fish pens and fish cages appeared. Although the aquaculture industry provided steady supply of fish for the growing Metropolis and provided income for the LLDA, intense conflicts between and among resource users erupted that resulted in the loss of lives and properties.

Several programs have been initiated by the national government to resolve the conflict on aquaculture in Laguna Lake. In 1983, then President Ferdinand Marcos issued a resolution calling for the demolition of illegal fish pens and fish cages. The President also called on to rationalize the use of inland water resource use for aquaculture. Unfortunately, weak enforcement of rules and procedures by the LLDA and non-compliance of some operators of aquaculture led to the failure of the rationalization program. This resulted in the further deterioration of Laguna Lake which can be observed in decline in fish catch particularly among small fisherfolks involved in capture fisheries. The rationalization of aquaculture activities in Laguna Lake was revived under then President Fidel Ramos. A Zone and Management Plan (ZOMAP) of Laguna de Bay was formulated in 1996, which was a result of highly participative process. Fishpen belts and fishcage belts were delineated in specified location in the lake, with a total area of 100 square kilometres and 50 square kilometres, respectively (2004:14). The ZOMAP also allocated 10,000 hectares to be utilized for fishpens and 5,000 hectares for fishcages. However, around 12,117 hectares are currently occupied by fishpens and 998 hectares are currently occupied by fishcages (LLDA as cited in Israel, 2006:5). See *Table 9*. But these are registered fishpen and fishcage operators. Based on our interviewees, there are several illegal fishpens and fishcages that either fall beyond what the ZOMAP provides. There are also those who operate without necessary permits.

Table 9. Registered Fishpen and Fishcage Operators and Area of Fishpens and Fishcages in Laguna de Bay, by Zone and Municipality, 2006

Zone/Municipality	Fishpens		Fishcages		Total	
	Number of Operators	Area (Hectares)	Number of Operators	Area (Hectares)	Number of Operators	Area (Hectares)
Zone A	176	3,951	506	429	682	4,380
Muntinlupa City	107	2,179	218	168	325	2,347
Taguig City	43	994	223	203	266	1,197
San Pedro	26	778	65	58	91	836
Zone B	36	901	204	80	240	981
Biñan	26	650	76	35	102	686

Sta.Rosa	2	100	8	3	10	103
Calamba City	8	150	43	25	51	174
Los Baños	0	0	58	14	58	14
Pila	0	0	19	4	19	4
Zone C	0	0	126	22	126	22
Sta. Cruz	0	0	28	7	28	7
Pakil	0	0	92	15	92	15
Kalayaan	0	0	6	0	6	0
Zone D	95	3,018	247	142	342	3,160
Cardona Main	41	1,099	70	46	111	1,145
Tanay	6	210	17	12	23	222
Pililla	26	664	80	30	106	695
Jala-Jala	22	1,045	80	53	102	1,098
Zone E	68	1,734	188	134	256	1,868
Binangonan Marin	68	1,734	188	134	256	1,868
Zone F	80	2,513	328	190	408	2,703
Binangonan Talim	58	1,746	130	87	188	1,833
Cardona Talim	22	767	198	103	220	870
TOTAL	455	12,117	1,599	998	2,054	13,115

Source: Danilo Israel, *Philippine Institute for Development Studies, 2006, p. 5.*

Reclamation of Foreshore Lands

Aside from pronounced commercialization of inland resources, the LLDA has for the longest time facilitated the reclamation of parts of Laguna Lake to pave way for road dikes, the Napindan Hydraulic Control System and the Manggahan Floodway. What is worst is that the LLDA and the national government seems to use the natural calamities as pretext to demolish an estimated 100,000 families living in the shoreland of Laguna Lake to pave way for a massive reclamation project. Based on the data presented by Mr. Bonifacio Federizo of MAPAGPALA, the Philippine government has an existing Technical Cooperation Agreement with the People's Republic of China through Xiamen Rongtai and China State Construction Engineering Corporation to develop an investment area in Laguna Lake. The China State Construction Engineering

Corporation is the largest construction company and largest international general contractor in the People's Republic of China. Among its construction projects in the Philippines include the establishment of the Culasi, Antique-Patnaongon Highway in the Province of Panay and the Phase 2 of the Pinatubo protection dam. The LABART project could be its 3rd project in the Philippines and it will cost around 2.5 billion dollars. It covers a total of 150 kilometers shoreline out of the 220 kilometers of total shoreline in Laguna Lake. It is called 'LABART' Project, that entails the construction of an integrated road and railway system from Metro Manila to Laguna and Rizal. The whole road and railway system means construction of 150 kilometers of shoreline embankment road, 30 kilometers of causeway structures and 25 kilometers of land-based on-grade road and railway. The project will reclaim parts of 90,000 hectares of Laguna Lake that covers Municipalities of Calamba, Pakil and Taguig City. Several reports concur with the LABART plan, which includes the joint venture agreement last December 2008 between the City Government of Taguig and the LLDA to reclaim 3,000 hectares of shoreline to construct airport and commercial establishments. An estimated 25,000 families will be relocated due to the reclamation project.

However, there are also some perceived benefits with the LABART Project. This includes, among others: (1) Establish a cost effective road network to new and existing railway and highways along the shoreline; (2) Minimize flooding in towns and cities along the lake shoreline with the inclusion of shoreline protection; and (3) Promote the tourism potential of southern Luzon especially the Caliraya Lake, the forest reserves of Mt. Makiling and Mt. Banahaw. It should be noted that these are perceived benefits. Fisherfolk leaders that we have interviewed raised their concerns whether actual benefits of the LABART Project will trickle down on them.

These practices of reclamation of foreshore areas are not only for the purpose of building dikes and nautical highways. In Barangay Tanagan, in the Municipality of Calatagan, a residential area believed to be owned by the Puno family was constructed within a mangrove forested area. The Puno family is an influential political family in the Philippines. One of its family members is the Secretary of the Department of Interior and Local Government (DILG) under the administration of then President Gloria Macapagal Arroyo. The Fisheries Code of 1998 clearly stipulates that mangrove conversions can only be made on areas declared suitable for fish pond use, and only for fish pond use. Section 45 of the R.A. 8550 (1998) states that "Public lands such as tidal swamps, mangroves, marshes, foreshore lands and ponds suitable for fishery operations shall not be disposed or alienated. Upon effectivity of this Code, FLA may be issued for public lands that may be declared available for fishpond development primarily to qualified fisherfolk cooperative/associations..."⁸

⁸ **R.A. 8550 SEC. 45. Disposition of Public Lands for Fishery Purpose.** - Public lands such as tidal swamps, mangroves, marshes, foreshore lands and ponds suitable for fishery operations shall not be disposed or alienated. Upon effectivity of this Code, FLA may be issued for public lands that may be declared available for fishpond development primarily to qualified fisherfolk cooperative/associations: *Provided, however,* that upon the expiration of existing FLAs the current lessees shall be given priority and be entitled to an extension of twenty-five (25) years in the utilization of their respective leased areas.

Proliferation of Private Beach Resorts

According to Mr. Jessie de los Reyes of CAP-Ocean, a local-based organization in Calatagan, there exists a total of 20 beach resorts in Calatagan located in Barangays Bagong Silang, Baha, Balibago, and Sanbungan. However, only two Foreshore Lease Agreements were approved prior to the “moratorium” on FLA approval mandated by the local government. This proves that majority of the beach resorts are unregistered and built without any authorization from the municipal government nor from the DENR. Many of these beach resorts do not pay taxes and are engaged in the illegal reclamation of foreshores.

The SAMMACA protested against these developments, and launched a petition-signing campaign that reached the DENR national office. The protest opposed Golden Sunset’s plan of (1) constructing a new seawall on the left foreshore area of the property, (2) the erected seawall entrenching a portion of the foreshore, (3) the numerous physical and verbal attempts at preventing seaweed farmers from using the foreshore area for their seedling propagation and farming; and (4) the incidents of seaweed killing due to suspected releases of water waste (chlorinated water) were cited in this campaign. A dialogue with the local government was conducted, along with Ricky Reyes and community members affected by the development of the resort. The local government ordered to discontinue further expansion and development of Golden Sunset Resort based on findings that the development contravenes laws on the use of disposable and alienable public lands. It was likewise revealed that employees earn a meager income of P150.00 per day contrary to Reyes’ promise of subsistence wages, and that employment had become seasonal and precarious because irregular tourist visits have made the business unsustainable. Resort operation should be on hold prior to the resolution of a protest by SAMMACA. However, the resort still operates despite this. It even became the venue for the Ms. Earth Beauty Pageant last 2009.

On the other hand, a beach resort in Brgy. Quilitisan is situated between a mangrove forest and a foreshore area. The Nacua Resort is owned and operated by a certain Ms. Virginia B. Nacua. The area has reclaimed a substantial amount of foreshore area including the constructed seawall, property wall, bridges, walkways, and fishing huts. It is estimated to be 1,731 square meters. Rosegold Beach Resort is likewise a reclaimed foreshore area for resort development purposes. The property occupies around 70,000 square meters. Rosegold Beach Resort, according to an interview with the current MFARMC Chairman, was owned and managed by Rose Baladjay. She is known to be the ‘Queen of Pyramidizing’ until she was caught in a multi-billion peso scam. It was believed that the resort was sold to pay for debts she incurred. The resort not only occupied a neighboring foreshore area, but placed several cottages where the low

There after, such FLAs shall be granted to any Filipino citizen with preference, primarily to qualified fisherfolk cooperatives/associations as well as small and medium enterprises as defined under Republic Act No. 8289: *Provided, further*, that the Department shall declare as reservation, portions of available public lands certified as suitable for fishpond purposes for fish sanctuary, conservation, and ecological purposes: *Provided, finally*, that two (2) years after the approval of this Act, no fish pens or fish cages or fish traps shall be allowed in lakes.

seawater tide touches. Based on the FGD, the owners of these beach resorts are accomplished persons in business, who reside in Metro Manila.

Playa, on the other hand, was developed by Land Co., a private development corporation owned by the Palacios. The owner, however, asserted that the foreshore was part of his property, and that he is in turn justified in preventing fishers access to it. But before the property was bought and developed, fisherfolk have already been using the said foreshore area for fish drying, docking and resting area. The development of the property, however, made it more difficult for fishers to reach their docking areas as the debris and soil dug out of the property during construction were dumped on an alley that served as a walkway to the foreshore.

Like the Municipality of Calatagan, the Municipality of Real has several natural tourist resources. These consist of beaches, seascapes, rivers and waterfalls and panoramic mountain views. All barangays along the shore from Brgy. Cawayan in the north down to Brgy. Pandan in the south has beach areas that have potential for resort development. This potential will be tapped by the local government unit with its plan to re-invigorate local tourism industry. Engineer Manuel Terraña, the municipal administrator, disclosed the plan of the municipal government of Real to build an “ecotourism” industry. He cited the development of watersheds and riverbanks in Barangays Kiloloron, Poblacion 1, and Sitio Kinanliman as “ecotourism” destinations, and the development of Real’s entire coastal area into a prime tourist spot similar to Baywalk in the City of Manila.

As of writing, there are at least 20 private beach resorts in Real that are owned by non-residents of the municipality. Only a handful of those properties, among them, Real Star Beach Resort and Club Manila, were awarded Environmental Compliance Certificates (ECCs) by the DENR. The ECCs are regulatory instruments that ensure that any projects should have no detrimental effects to the environment. Engr. Terraña revealed that resort owners do not secure necessary permits from the municipal government, nor do they obtain Foreshore Lease Contracts (FLCs) from the DENR prior to the development of their properties into beach resorts.

On the other hand, some leaders of the Real Fisherfolks for Christ opined that beach resort owners are illegally reclaiming adjacent lands. Based on Mr. Velasquez’s account, what is unacceptable is the establishment of fences and permanent structures to secure their properties in the foreshore. Both men and women fisherfolks are affected by the enclosure of foreshore areas in Real. Men fisherfolks used foreshore areas for traditional routes to fishing areas and docking areas. Women fisherfolks, on the other hand, use the foreshore areas for seaweed drying and fish drying.

The municipal government attempted to regulate the influx of investment in upland areas near the foreshore with the passing of Municipal Ordinance Number 7 (1996), otherwise known as the Beach Code of Real, Quezon. The Code aims to prevent further encroachment on foreshore areas and to regulate and manage existing beach resorts.

The Beach Code of Real suggests establishment of uniform cottages and beach resort facilities.

VII. IMPACTS OF COMMERCIALIZATION OF FORESHORE LANDS, SHORELANDS AND FISHERY RESOURCES

Displacement of Women Seaweed Farmers

Out of the 20 beach resorts, the Ricky Reyes' Golden Sunset Resort in Barangay Uno is the most notable. Mr. Ricky Reyes is a renowned hair stylist and television personality in the Philippines. He is believed to be a close friend of the incumbent municipal mayor. The Golden Sunset Resort was constructed out of a fishpond/s that was constructed within a deforested mangrove area. The resort's development entailed expansion and reclamation of the adjacent foreshore. Structures such as seawalls, entertainment area/stage, and an artificial docking area/foreshore were built within the reclaimed area. The resort is estimated to be around 4,667 square meters resulting in the displacement of seaweed farmers. Women fisherfolks are usually involved in seaweed production. Based on our field observations, women plant and harvest seaweeds while their children assist them. Based on our interview with a seaweed women farmer, they are affected by the restrictions to access their traditional area for seaweed drying due to the resort development. Women fisherfolks like her need to look for additional sources of income because of the dwindling fish catch of their husbands.

Mangrove Degradation

Consequently, this has taken toll in the status of mangrove forests in the area. For instance, the mangrove forest in Brgy. Cawayan in the municipality has long been subjected to unregulated mangrove resource extraction. Based on the FGD results, large tracts of Brgy. Cawayan's mangrove forest has already been converted into fishponds. Several mangrove trees had been cut down for charcoal production. Based on our field notes, women fisherfolks used the mangroves more often than men fisherfolks. Women fisherfolks usually utilize mangroves to gather leaves to make medicine for stomach aches. They also utilized mangroves for household consumption purposes as firewood and charcoal. The commonly utilized mangrove species are *Aegiceras corniculatum* (*saging-saging*) and *Avicennia marina* (*piapi*), which are the species popular for charcoal production and house construction. However, the Mangrove Inventory and Valuation Research conducted in 2006 by ISO and IFARMC-NLB pointed out to the degradation of large tracts of mangrove areas for the establishment of fishponds in the 1980s.

Virtual Privatization of Foreshore Lands

Another impact brought about by the commercialization of foreshore lands is the increase in the number of private and commercial beach resorts. Somehow, the wrong notion that adjacent foreshore areas form part of the owner's property in Calatagan can be partly blamed for this. The Riparian principle maintains that owners of property

adjacent to a foreshore land, has the preferential right to use that foreshore land. However, Lands Administrative Order No. 8-3, Series of 1936 affirms that the riparian owner is given only the preferential right to apply for a lease of the foreshore adjacent to her property, and two, that the intended foreshore land is not being utilized by the public (DENR-USAID 2004, pp. 7-8).

On the other hand, the construction of the Famy-Real road facilitated the influx of migrants from contiguous provinces to the Municipality of Real. Most of these migrants settled in mangrove areas since they were considered to be free and near their sources of livelihood. The presence of ports in the Municipalities of Infanta and Real also encouraged in-migration since it is perceived that employment opportunities come with the fishports. Aside from these, mangroves are also threatened by the development of local products out of mangrove trees. The profitability of making *lambanog* augment income for fisherfolks, on one hand, but encourage the cutting of mangrove trees, on the other hand.

Minimal Local Employment Generation

Hon. F. Cahayon, Barangay Captain of Tanagan, pointed out that Vergara purchased the area from a certain Mr. De Vera. Residents were said to be in favor of the development of the ponds because of the prospect of alternative medium-term jobs to supplement income from traditional fishing, especially during the properties development stage. Today, however, jobs at JLV Shrimp Farm have become seasonal and limited to feeders. He further said that Vergara's shrimp aquaculture business is legal as it is registered with the Bureau of Fisheries and Aquatic Resources (BFAR). When asked if the barangay is able to collect tax from Vergara's aquaculture operations, Cahayon replied that he was not sure if the barangay was permitted by law to collect taxes from fishpond operators, though doing so, he said, would augment the income of the community.

Moreover, Ms. Maria Concepcion Velasco, treasurer of SAMMACA, related that in 2007, the organization was able to prevent the creation of Mariculture Park in Calatagan, which she believed would preserve only the interests of capitalists, and would further subvert the already narrowing fishing ground of local fisherfolk. Velasco opined that the current trajectory of the local government will not benefit Calatagan fishers. As consequences of the municipality's problematic tourism and fishpond-based economic agenda, Velasco cited the seasonal jobs generated by beach resorts and fishponds who employ caretakers and other workers outside Calatagan. This has contradicted the notion that further investment in aquaculture will result in job generation. Those who are employed in the resorts in Calatagan are mostly women who reside in the municipality. Though, high ranking resort employees are migrant labourers who are often relatives or family members of the resort owners. Women are often employed as dish washers, waitresses and those who clean up the place. Most of the labor too is seasonal, which means that they get hired during the summer period of April-May. Also, the wage is too low as mentioned in the research.

But Ms. Velasco claimed that what threatens the welfare and livelihood of Calatagan's fishers the most is tenurial insecurity – the constant threat of eviction from the land they occupy. Manuel Uy, believed to be the owner of 200 hectares of land currently occupied by tenants, is due to repossess his land – an event that would evict about 100 fisherfolk families. SAMMACA has not heard from barangay officials comments on this matter.

VIII. CONCLUSIONS

The appropriation of shorelands and inland water resources in the research sites is influenced by the current policy regime that encourages exploitation and resource extraction perpetuated by state institutions like the LLDA, the LGUs, the DENR and the BFAR. This led to intense conflict between and among resource users. Moreover, the driving force in the commercialization of foreshore lands in the Municipalities of Calatagan and Real includes the development of land and water resources to answer for the growing need for housing, recreation, and a robust local economy. The lack of political will and weak law enforcement was also identified to be a critical factor in the virtual appropriation of foreshore lands in the research sites. Consequently, a substantial part of the mangrove areas that provide ecosystem services have been destroyed. Several fishponds and beach resorts operate despite the lack of proper permits. The limited land for urban expansion in the Municipality of Real led to the encroachment in mangrove areas and foreshore lands by local establishments and industries.

This paper also concludes that:

1. **Commercialization of Foreshore and Shore Lands Affect Women**

Fisherfolks. The three organizations are long time partner of NFR in pursuing women fisherfolks' agenda, which include among others:

- a. Recognition of women fisherfolks' contribution to fisheries production and fisheries management;
- b. Provision by the local government units and the national government of social protection (insurance, health services, etc.);
- c. Establishment of Women-Managed Area (WMA), which is defined as any area within the coastal zone that specifically used and managed by women fisherfolks.

2. **Rapid urbanization brought about by economic integration adds up to the pressure of exploiting mangrove resources beyond their sustainable limits.**

Coastal construction due to increase in the demand for human settlement and economic growth is both beneficial and harmful. It is beneficial because it provides necessary infrastructures like docking areas for fishing boats and post-harvest facilities, among others. It is harmful because coastal construction can exacerbate runway pollution,

privatization of foreshore for beach resorts and loss of marine biodiversity. Harmonizing economic development and environmental sustainability has been one of the pronounced weaknesses of management institutions. Consequently, mangroves are foreseen in terms of economic values but not so much of its social and cultural linkage with the population. This fuels the exploitation of mangroves for immediate economic needs. The kind of development that economic managers is pursuing always leads to further displacement of fishing families and further degradation of mangroves. The conversion of mangrove areas to fishponds resulted in the displacement of families who use the mangroves as their traditional fishing grounds. Infrastructures like wharves and docking areas for boats are constant reminders that natural ecosystems can be set aside in the name of development.

3. Growing demand for fisherfolk settlement leads to local organizations asserting their rights over lands. The municipal fisherfolks in Real, Calatagan and in Laguna Lake are slowly demanding for local government and other concerned government agency to address the lack of decent areas for their settlements. Fisherfolk settlement can be realized only if it is included and defined clearly in policies or documents like the CLUP. Nothing can be realized in the absence of an appropriate policy regime and support mechanisms from the local government. It is unfortunate that the current CLUP does not mention any guidelines specific to fisherfolk settlement. They have even challenged the traditional wealthy families who owned the parcel of lands where municipal fisherfolks are residing. Small fisherfolks along Laguna Lake is always in constant threat of eviction. For one, they are forced to leave the area because they clog the waterways and would likely result to another flood in the Metropolis. It will not be a surprise if the LLDA and state institutions will use the occurrence of disasters in order to pursue evictions of informal settlers in the shorelands of Laguna de Bay. They may also be forced to leave because of displacement due to government programs that are more in tune with modernization at the expense of environmental integrity and social justice. At present, small fisherfolks are wary of a proposed legislative bill on the strengthening of LLDA as a state institution that will manage the utilization and management of Laguna Lake. Small fisherfolks fear that they will be displaced again in the whole development process, from planning, implementation and monitoring of programs. They are reclaiming their roles in policy making and decision making as observed in their continued dialogue with influential government officials like the newly elected provincial governor and Congressman in the Province of Laguna.

IX. RECOMMENDATIONS

For the national government, this paper emphasized the need to incorporate in fisheries-related programs and policies the principles of fisheries management. Given the state of our coastal resources, reduction of fishing efforts and strictly implementing fishery laws should be taken into considerations. We have so many good laws. For one, the Philippine Fisheries Code is considered to be a landmark legislation as it addresses the de facto 'open access' of our fishing grounds. The problem then is the implementation of these good laws. This paper emphasizes the need for the national

government to focus on certain issues articulated in this paper. The recommended actions on these issues are the following:

1. **Implement Fisherfolk Settlement Programs.** Section 108 of Republic Act 8550 or the Philippine Fisheries Code of 1998 should be the policy guideline in implementing fisherfolk settlement programs. The national government should release a Joint Administrative Order on Fisherfolk Settlement, mandating the Department of Environment and Natural Resources, the Bureau of Fisheries and Aquatic Resources (BFAR) and other concerned agencies to work out programs for secure settlement of fishing families. In addition, based on BFAR reports, more than 80% of coastal dwellers are living in low lying fishing areas. These make them vulnerable to the negative impact of sea-level rise and extreme weather events. Thus, the need for fisherfolk settlement.

2. For the LGUs and LLDA, the paper suggests the following:

a. *Fisherfolk settlement program should be integrated in the CLUP and Annual Investment Plan.* Coastal and inland municipalities should develop its vital economic sectors to address the growing needs of its growing population. Commercial development is necessary but will only be beneficial if the local government prioritizes the problems of the marginalized, particularly those of the municipal fishers. Then again, the current programs being implemented have only furthered the erosion of preferential rights of the municipal fishers on the use of marine resources and their access to foreshore lands. Several fisherfolks that have been interviewed stressed that displacement of fishers can be mitigated if a concrete fisherfolk settlement program exists in case development projects drive them out of the lands they occupy. There should also be a concrete fisheries development program that will capacitate them as stakeholders in the development of the fisheries sector.

b. *Clarification of roles and responsibilities between the DENR, the DA-BFAR and the LGUs should be clarified through a participatory consultation.* The expansion of fishponds into foreshore areas and exploitation of inland resources in Laguna Lake could have and can be prevented as long as the municipal government and the LLDA asserts its mandate on foreshore and shoreland management. The process for the application of a Fishpond Lease Agreement, Foreshore Lease Agreement or and Shoreland Lease Agreement should be inclusive and highly participatory.

In the case of the Municipality of Calatagan, the LGU should verify the documents of Vergara with regards to his shrimp ponds, as the researchers suspect that his leased foreshore area has exceeded the maximum allowable foreshore area per FLA. It was also found that he has violated the provisions on the responsibilities of FLA holder by prohibiting access of fisherfolk and the general public to the foreshore area and coastal water adjacent to his foreshore. Furthermore, the researchers found that a neighboring deforested mangrove area hold an unutilized fishpond leased by the Lhuillers. The LGU should verify how many years the area has been in that state, since the law states,

under Section 46. (d) of R.A. 8550 that, "...[underutilized] fishponds for five years shall be reverted back to a public domain for reforestation."

The local government has been putting so much effort in attracting external investments to the development of its key local economy, as seen on its Annual investment plan and the hasty CLUP amendment. However, it is an irony that municipal government is seemed so lost in implementing its taxing powers vis-à-vis foreshore use. The problems and solutions are so obvious. The lax legal enforcement of national foreshore-use regulations, and local business regulations results to great losses of substantial of money, and potential sources of revenue for the local government both tangible i.e. business tax, and intangible (buffer zones, accessible entry to fishing grounds). It is therefore an imperative that the local governments of Calatagan and Real execute its taxation powers over fishponds and foreshore use within its jurisdiction. The resulting revenue should be allocated for programs for the artisanal fisherfolks in Calatagan, Real and Laguna Lake.

c. *Strictly implement laws governing foreshores and their lease and to keep the integrity of foreshores as public lands and of mangrove forests as protected areas.* A Mangrove Management Plan should be formulated and implemented. The Plan should identify areas for multiple-use (i.e. regulated gathering of woods and food) and no-take zone. The local governments and the LLDA should ceate and enforce disincentive and penal regimes governing the illegal occupation and the practice of enclosing and effectively privatizing adjoining foreshore lands. The latter may take the form of ecological taxes that oppose the privatization bias of the DENR regional office. These taxes should be earmarked for the logistical support for the local government's *Bantay-Pakatan* project, particularly the volunteers who perform monitoring functions. In the same breadth, said taxation could likewise be a source of additional funds for local mangrove reforestation projects.

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