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CENSUS OF AGRICULTURE AND FISHERIES
2012



AQUACULTURE and MUNICIPAL FISHING

PHILIPPINES



REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY
SOLID · RESPONSIVE · WORLD-CLASS

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PRESIDENT RODRIGO ROA DUTERTE



**REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY**

LISA GRACE S. BERSALES, Ph.D.
National Statistician and Civil Registrar General

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Quezon City, Philippines

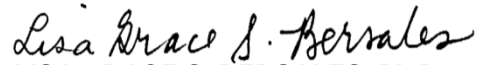
FOREWORD

Over the years, the Census of Agriculture and Fisheries (CAF) has been the major source of structural information on agriculture and fishery sectors in the country. The collected census data provide statistical information which can be used as basis for decision making by the government, businesses, academics, researchers, community organizations and others. The 2012 CAF was the sixth in a series of decennial agriculture censuses and the fifth in the series of decennial censuses of fisheries in the country.

This report presents data on the structure and characteristics of aquaculture holdings, municipal fishing operations, and selected demographic characteristics of aquaculture and municipal fishing operators. Data on agriculture, commercial fishing operations and barangay information on agriculture, aquaculture and fishing facilities/infrastructures will be presented in separate reports.

The Philippine Statistics Authority (PSA) greatly appreciates the support of all people and various local and government agencies, local government units and private organizations whose valuable assistance contributed to the successful implementation of this major statistical undertaking. Worthy to mention is the full cooperation extended by the respondents to the census enumerators and the funding provided by the national government. Credit is also due to the staff of the then National Statistics Office including regional and provincial officers, supervisors, processors and other individuals who, in one way or another have contributed to the completion of the 2012 CAF data collection. Also acknowledged are the PSA staff who worked hard in the processing of data and publication of this report.

It is hoped that data users will find this report useful in their undertakings. Moreover, we welcome comments and suggestions from the data users, researchers and other stakeholders for the improvement of the census particularly the data system of aquaculture and fishing.



LISA GRACE S. BERSALES, Ph.D.

Undersecretary

National Statistician and Civil Registrar General

Quezon City, Philippines
August 2018

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Acronyms and Initials Used

ARMM	Autonomous Region in Muslim Mindanao
BAS	Bureau of Agricultural Statistics
BFAR	Bureau of Fisheries and Aquatic Resources
CA	Commonwealth Act
CAF	Census of Agriculture and Fisheries
CALABARZON	Cavite, Laguna, Batangas, Rizal, Quezon
CAR	Cordillera Administrative Region
CSC	Census Steering Committee
EC	Economic Census
EO	Executive Order
HSD	Household Statistics Department
MIMAROPA	Occidental Mindoro, Oriental Mindoro, Marinduque, Romblon, Palawan
NCR	National Capital Region
NIR	Negros Island Region
NSO	National Statistics Office
PSA	Philippine Statistics Authority
RA	Republic Act
RD	Regional Director
SOCCKSARGEN	South Cotabato, Cotabato (North), Cotabato City, Sultan Kudarat, Sarangani, General Santos City
SEAFDEC	Southeast Asian Fisheries Development Center

CHAPTER 1

EXPLANATORY TEXT

1.1 INTRODUCTION

The Census of Agriculture and Fisheries (CAF) is a large-scale government undertaking, geared towards the collection and compilation of basic information on the agriculture and fishery sectors in the Philippines. Over the years, the CAF has been a source of comprehensive statistics on agriculture for the use of the general public, government, business industry, research and academic institutions.

The 2012 CAF was the sixth decennial agriculture census undertaken by the then National Statistics Office (NSO). The collection of agriculture data was first included in the Economic Census (EC) in 1903, 1918, 1939 and 1948. The Census of Agriculture was undertaken separately from the EC in 1960 and conducted simultaneously with the Census of Fisheries, beginning in 1971 and every 10 years thereafter. These two census activities were collectively known as the CAF.

The 2012 CAF was conducted from February 25, 2013 to April 30, 2013. This operation primarily covered all households engaged in agriculture, aquaculture and fishing to obtain data about the operation of holding/farm, aquafarm and fishing.

A community-based module was also administered in all barangays. This community-based module provided information on facilities, input dealers and service providers related to agriculture, aquaculture and fishing present or available in the barangay. This module also gathered the dominant terrain of the barangay as well as the destructive natural calamities experienced in the barangay during the past five years.

1.1.1 Objectives of 2012 CAF

The 2012 CAF was envisioned to achieve the following objectives:

1. Determine the structural characteristics of agriculture and fishery sectors,
2. Provide sampling frame for the conduct of statistical surveys on crop production, livestock and poultry raising, and other agricultural undertakings,
3. Provide basic data for use in national as well as sub-national development planning, and
4. Provide data on agriculture, aquaculture, and fishery facilities and services in the barangay.

Specifically, this census aimed to:

1. Obtain data on the characteristics of the holdings/farms such as physical area, number of parcels, legal status, etc. and characteristics of parcels such as physical area, location, tenure status, main use, presence of irrigation structure/equipment, source of irrigation water, types of crops planted, planting pattern and area planted;
2. Determine the number of households with members engaged as operator of an agricultural and/or aquaculture and/or fishing activity (or activities);
3. Gather data on the legal status of agricultural holders/operators and operators of aquaculture and fishing activities;
4. Determine the type of agricultural activity (or activities) operated such as growing of crops, contract growing of trees, growing of orchids for sale, ornamental plant and flower gardening for sale, raising livestock and/or poultry, raising race horses and breeder dogs for sale, bee culture, sericulture and others;

5. Collect data on aquaculture such as the type of aquafarm, location and size/volume of aquafarm, type of water environment used, and the aquafarm species cultured/raised;
6. Obtain characteristics of the fishing activity such as the category of fishing, number of fishing boats/vessels used, ownership of boats/vessels, tonnage of boats/vessels used, type of boat/vessel used, and kind and number of fishing gears/devices/accessories employed in fishing activity;
7. Determine the number of household members of the agricultural operators and/or operators of aquaculture and/or fishing activity as well as their selected socio-demographic characteristics; and
8. Collect data on the physical attributes of each barangay as well as presence/availability of agriculture and fishery facilities, input dealers and service providers.

1.1.2 Authority for 2012 CAF

The former NSO undertook the 2012 CAF in accordance with EO 121, which designated the said office as the *“major statistical agency responsible for generating general purpose statistics”* and Commonwealth Act (CA) 591, which authorized the then NSO *“to prepare for and undertake all censuses of population, agriculture, industry and commerce”*.

Moreover, EO 352, otherwise known as the *“Designation of Statistical Activities that will Generate Critical Data for Decision-Making of the Government and the Private Sector”*, provided for the conduct of census of agriculture every 10 years with the objective of providing government planners and policy-makers with data on which to base their plans for the country’s development.

1.1.3 Confidentiality of information

In accordance with Section 4 of CA 591, information obtained from individuals or establishments during the census operation was STRICTLY CONFIDENTIAL and was not divulged to any person, except to the PSA personnel who were authorized and acting in the performance of their duties.

The information collected from households/persons or establishments would be used for statistical purposes only, not for taxation or investigation or law enforcement. RA 10625 (Article 59, Rule 30) stated that *“any person, including parties within the PSA Board and the PSA, who breach the confidentiality of information, whether by carelessness or improper behaviour or behaviour with malicious intent or use of confidential information for profit, are considered guilty of an offense and shall be liable to fines and/or imprisonment as prescribed by the PSA Board”*.

1.1.4 2012 CAF organizational set-up

The planning and preparation of the 2012 CAF started as early as the middle of 2009 through the creation of Census Steering Committee (CSC) and Working Groups to provide overall directions for the different activities of the 2012 CAF. The former NSO Administrator chaired the CSC with the Deputy Administrator as Vice-chair and was assisted by the different Department Directors. The CSC also consulted the field personnel concerning field operations.

The former NSO Director of the Household Statistics Department (HSD) coordinated and monitored all matters pertaining to the 2012 CAF through its Census Project Staff. The Census Planning and Operations Division conducted all activities of the census.

In the field offices, the former NSO Regional Directors (RDs) and the former Bureau of Agricultural Statistics (BAS) Regional Agricultural Statistics Officers coordinated, monitored and supervised the CAF operations in all provinces within their respective region. The former NSO RDs also directly supervised the scanning and archiving activities with the technical supervision of the Information Resource Department and HSD. The former NSO Provincial

Statistics Officers coordinated and supervised the census field operations as well as the manual processing activities at the provincial level.

1.2 SCOPE OF 2012 CAF

In line with the objectives of 2012 CAF, the following data items were included in the census:

1. Name of holder/operator/hired manager and type of agricultural/aquaculture/fishing activity,
2. Legal status of the agricultural holder/operator and/or aquaculture and fishing activity,
3. Characteristics of the holding/farm such as physical area, number of parcels, etc. and characteristics of parcels such as area, location, tenure status, main use and irrigation,
4. Temporary and permanent crops, planting pattern, area planted, and number of trees/vines/hills,
5. Livestock and poultry raised,
6. Characteristics of the aquafarm such as type, location, area/volume, water environment, and the type of species cultured,
7. Characteristics of the fishing activity such as category of fishing, tonnage of boat/vessel used, number of boats/vessels used, and kind and number of fishing gears/accessories/devices,
8. Selected socio-demographic and economic characteristics of the household members, and
9. Information on the barangay facilities, input dealers and service providers related to agriculture, aquaculture and fisheries.

1.3 BASIC CONCEPTS AND DEFINITIONS

Household

A household is a social unit consisting of a person living alone or a group of persons who sleep in the same housing unit and have a common arrangement in the preparation and consumption of food.

Aquaculture

Aquaculture refers to propagating and culturing of fish, crustaceans, mollusks, and other aquatic plants and animals in fresh, brackish, and/or marine water areas. Examples are propagating and culturing of milkfish in fish ponds, eucheuma (gozo) in seaweed farm, mussels in mussel farm, and oysters in oyster farm.

Aquaculture Holding/Farm

An aquaculture holding/farm is an economic unit of aquaculture production under single management, comprising all aquaculture facilities without regard to title, legal form, or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe, or by a juridical person such as a corporation, cooperative or government agency. The aquaculture holding's aquaculture facilities are located in one or more separate areas or in one or more territorial or administrative divisions, providing the facilities share the same production means, such as labour, buildings and machinery.

Aquafarm

Aquafarm refers to a farming facility used in the culture or propagation of aquatic species like fish, crustaceans, mollusks, and aquatic plants. It includes fishpond, fish pen, fish cage, fish tank, hatchery or “pangitlugan”, seaweed farm, oyster farm, mussel farm and other farms for culturing of pearl, cockles, and abalone.

Aquaculture Holder/Operator

An aquaculture holder/operator is a person who takes the technical and administrative responsibility of managing the day-to-day operation of an aquafarm. The aquaculture holder/operator is responsible for making major decisions including the management and supervision of hired workers in his aquafarm. He/she may do the farming/culturing of aquatic products himself/herself or with the members of his household or may employ others to do the job for him/her. An aquaculture holder/operator may be the owner of the aquafarm.

Fishing

Fishing refers to the catching and gathering of fish, crustaceans, mollusks, and other marine organisms and products, including other aquatic plants.

It is the catching, collecting and gathering activities directed at removing or collecting live wild aquatic organisms predominantly fish, mollusks (such as clams, snails, octopus and squid) and crustaceans (such as crabs, lobsters, shrimps and crayfish) including plants from the sea or inland waters for human consumption and other purposes by hand or various types of fishing gear such as nets, lines and stationary traps.

The 2012 CAF excluded sports fishing, and catching/gathering of fish, including ornamental fish and other aquatic products such as corals as a hobby.

Municipal Fishing

Municipal fishing operation carried out without the use of boat/vessel or with the use of a raft or a boat/vessel of three gross tons or less.

Commercial Fishing

Commercial fishing covers fishing operation using boat/vessel, usually with an engine, of more than three gross tons.

Fishing Boat/Vessel

Fishing boat/vessel refers to any boat, ship or other watercraft equipped to be used for taking of fishery species in the performance of any activity related to fishing. This includes a raft.

Gross Tonnage of the Boat/Vessel

Gross tonnage of the boat/vessel is the vessel’s “closed-in” spaces expressed in volume in terms of one hundred cubic feet (which is equal to one gross ton). This includes permanently enclosed spaces above the tonnage deck, also known as the underdeck tonnage.

Fishing Gear

Fishing gear is any apparatus, gadget, implement and other paraphernalia used in catching and gathering of fish, crustaceans, mollusks and other aquatic products.

Marine Waters

Marine waters refer to bodies of water such as oceans, bays, gulfs and channels with seawater salinity. It is pure saltwater, such as Manila Bay, Visayan Sea and Batangas Coast.

Inland Waters

Inland waters refer to bodies of water such as lakes, rivers, reservoirs, dams, paddy/rice fields, estuaries, marshes, and ponds usually consisting of fresh water or brackish water environments. Examples are Laguna de Bay, Taal Lake, Liguasan Marsh and Agusan Marsh.

Fishing Operator

A fishing operator is a person who takes the technical and administrative responsibility of managing the day-to-day fishing operation. He/she is responsible for making major decisions, including the management and supervision of hired workers in his/her fishing operation. He/she may do the catching or gathering of aquatic products alone or with the members of his household. He/she may not do the catching or gathering of aquatic products but may employ others to do the job for him/her. He/she may be the owner of the fishing boat and/or fishing gear.

A fishing operator on "own account" is the owner who is solely responsible for the technical decisions and implementation of plans involving when and where to go out fishing, what fishing gears/accessories/devices to use, and other fishing activity and who is responsible for the consequences that may result from the fishing operation. He/she may hire workers to do the job for him/her and may own a boat/vessel and/or fishing gears.

Hired Manager as Holder/Operator

A hired manager in the aquaculture/fishing operation is a person being paid a salary or wage, sometimes plus a commission, by other private individuals, corporations, cooperatives, institutions, and others to operate or be responsible for the day-to-day fishing operation. He/she may supervise other persons in performing these operations. He/she is different from a caretaker or overseer who merely carries out his employer's instructions.

Legal Form of Organization

Legal form of organization refers to the form of organization under which the aquaculture/fishing activity is undertaken. The operator may operate as an individual proprietor, partnership, corporation, cooperative, other private institution or government corporation/institution.

1.4 DATA LIMITATIONS

The data referring to aquaculture holdings/farms and municipal fishing operations in this report were tabulated according to the aquaculture holder's/operator's and fishing operator's residence while data referring to holdings/farms were tabulated according to its geographic/actual location. The 2012 CAF data were based on complete count of all aquaculture holdings/farms and municipal fishing operations.

Like other data gathering activities, the CAF results were not exempted from non-sampling errors.

Note that Baganga, Boston and Cateel in Davao Oriental were not covered during the 2012 CAF enumeration because the households in these municipalities were displaced due to typhoon Pablo. However, these households had been enumerated in other municipalities where they were temporarily relocated.

The 2012 CAF was supposed to conduct one or more sample-based census *supplementary modules* which were intended to collect more in-depth structural data on specific concerns on irrigation, cropping pattern, aquaculture and fisheries. Due to the transition of former statistical agencies into PSA by virtue of RA 10625, these were not carried out.

This report does not include agriculture and barangay information on agriculture, aquaculture and fishing. These will be reported in separate publications/factsheets.

1.5 COMPARABILITY OF 2012 CAF WITH PAST CENSUSES

The concepts, definitions, scope and coverage used in the 1960, 1971, 1980 and 2012 Census of Fisheries were basically the same. However, there were some differences in the reference periods and sample designs which should be taken into account when comparing data across the census years.

Comparison of selected indicators between the 1980 and 2012 CAF such as number and area of aquafarms, number of aquaculture and municipal fishing operators, fishing boat/vessel and fishing gears was also discussed in the succeeding chapters. For comparison purposes, selected indicators from the 1980 to 2012 CAF were presented according to the current regional composition and/or availability of 1980 CAF data.

CHAPTER 2 BACKGROUND: PHILIPPINES



The Philippines, officially the Republic of the Philippines, is a sovereign island country in South East Asia consisting of more than 7,000 islands. The Philippines has three major island groups, namely, Luzon, Visayas and Mindanao. These are subdivided into 18 administrative regions 81 provinces, 139 cities, 1,633 municipalities, 5,697 urban barangays and 36,328 rural barangays as of 2010.

As approved in the UN Convention on the Law of the Sea (UNCLOS) in December 1982, the Philippines is one of the five archipelagic states, including Fiji, Indonesia, Papua New Guinea, and the Bahamas. With 36,289 kilometers continental coastline, it is the fifth country with the longest coastline in the world next to Canada, Indonesia, Greenland and Russia (World Atlas, 2017). Its coastal waters cover an area of 266,000 square kilometers, while oceanic waters cover 1,934,000 square kilometers. The Philippines also has 1,830 square kilometers of inland water area (major rivers, lakes and reservoirs) (BFAR, 2012).

In 2012, the Philippines ranked seventh among the top fish producing countries of the world (BFAR, 2013). Total volume of fisheries production from January to December 2012 reached about 4.9 metric tons valued at Php237.7 billion. The Philippines was also the fourth largest marine capture fishery producer in Southeast Asia, contributing 13.8 percent to the total production volume and 14.0 percent to the total production value of the region. Specifically, the country's marine capture fishery production in 2012 was 2.1 million metric tons valued at US\$2.9 million (SEAFDEC, 2017).

Moreover, the geographic characteristics of the Philippines make the country a favourable place for culturing aquatic products. In 2012, aquaculture production amounted to 790,894 metric tons of fish, crustaceans and mollusks, contributing 25 percent to the country's total fish production based on *Food and Agriculture Organization (FAO) Global Aquaculture Production Volume and Value Statistics Database Updated to 2012*. The Philippines landed in the eighth place of the top food fish aquaculture producing Asian countries in 2012. It shared 1.3 percent of the total aquaculture production in Asia. Furthermore, the Philippines was the world's third largest producer of seaweeds in 2012, with a production of 1.8 million tons, which accounted for about nine percent of the total world production of seaweeds of nearly 21 million metric tons. Seaweeds had an export value of US\$185.55 million or an 18 percent share of the country's total earnings for the year.

CHAPTER 3 HIGHLIGHTS OF RESULTS

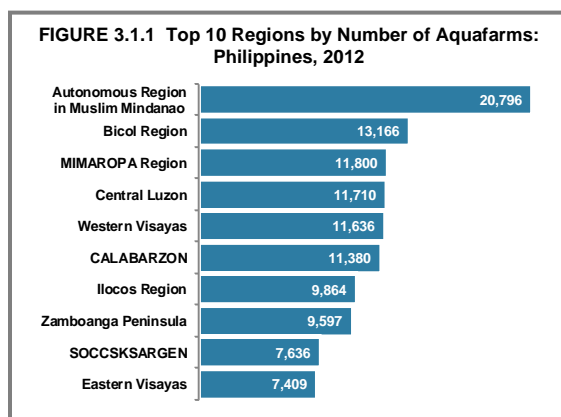
This chapter presents the results of the 2012 CAF on aquaculture and municipal fishing. The 2012 CAF listed all households in the Philippines and enumerated those households with at least one member engaged in aquaculture and/or fishing operation. Operating establishments with aquaculture activities as listed in 2012 List of Establishments were also covered. The aquaculture section of the 2012 CAF questionnaire gathered information on aquaculture activity and its basic characteristics such as the type, location, and size/volume of aquafarm, type of water environment used, and type of species cultured/raised; the number of aquaculture operators/members engaged in aquaculture activities and their basic socio-economic characteristics including age, sex, highest grade completed and usual activity/occupation; and the legal status of the aquaculture operator. On the other hand, the fishing section of the 2012 CAF questionnaire gathered information on the municipal fishing activity and its basic characteristics such as the type of water environment where the fishing activity was performed, type, number and gross tonnage of boats/vessels used and fishing gears/accessories/devices used. The number of aquaculture/municipal fishing operators and household members engaged in aquaculture and/or municipal fishing activities and their basic socio-economic characteristics including age, sex and highest grade completed were also collected.

3.1 AQUACULTURE HOLDINGS/FARMS CHARACTERISTICS

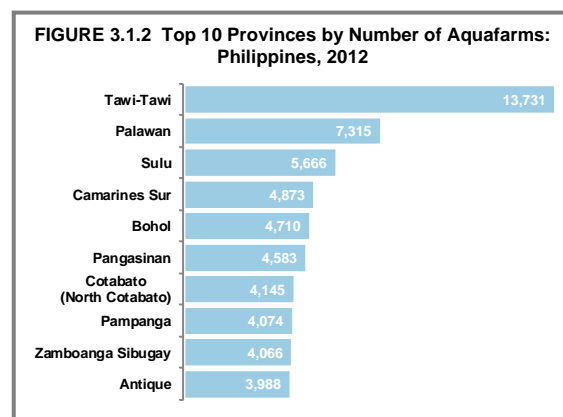
This section presents the number of aquaculture holdings and aquafarms in the Philippines and the latter's selected basic characteristics. Generally, this section takes into account the number, type and size/volume of aquafarms operating in a region/province and presents the data collected and tabulated according to the location of the aquafarms.

3.1.1 Number of aquafarms increased in 2012

The 2012 census recorded a total of 131,593 aquaculture holdings in the country with 148,694 aquafarms, posting an average of one aquafarm per aquaculture holding. Over the last three decades, the total number of aquafarms in 2012 was four times higher than the number of aquafarms reported in 1980.



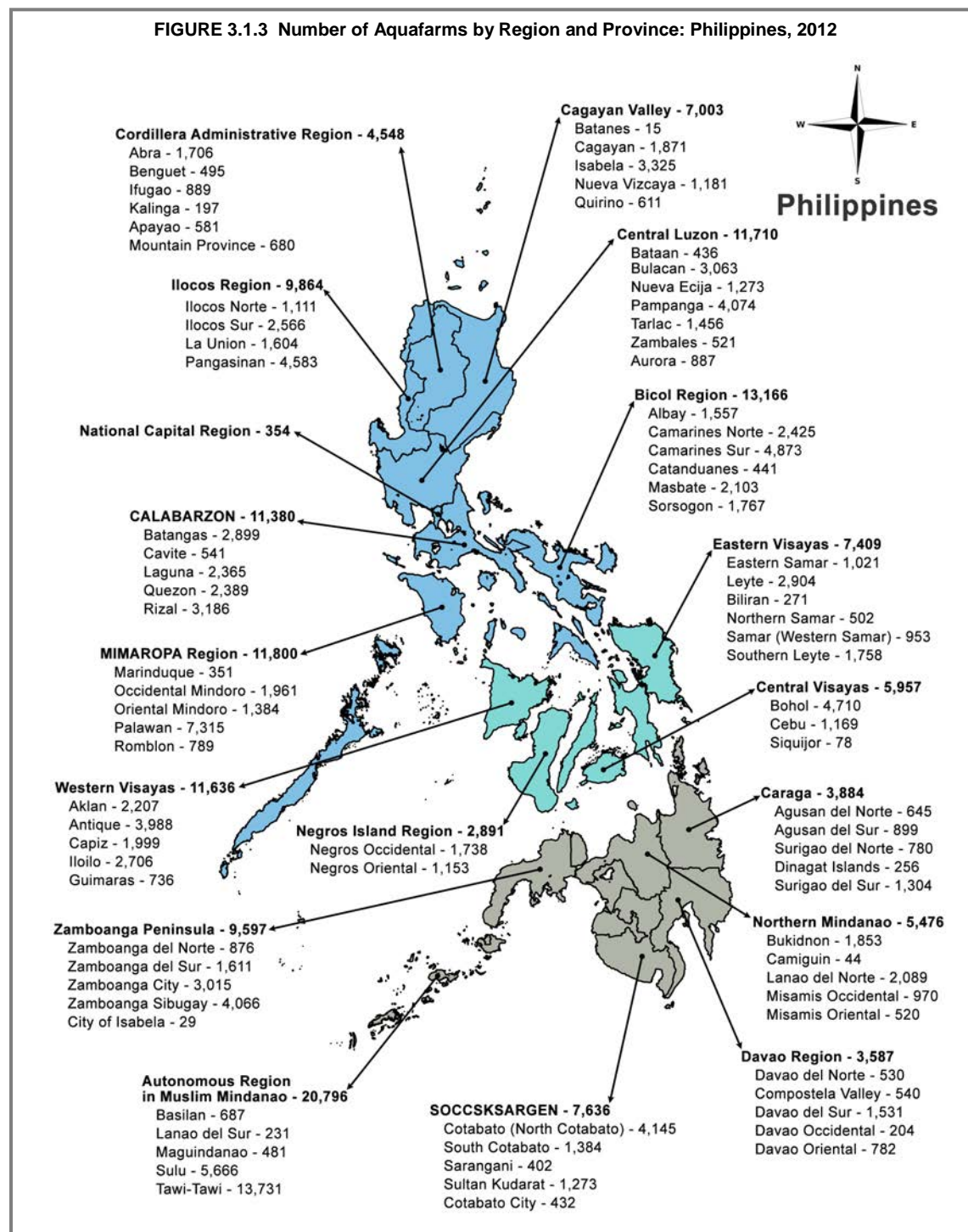
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

The Autonomous Region in Muslim Mindanao (ARMM) reported the highest number of aquafarms, accounting for 14.0 percent of the country's total number of aquafarms (Figure 3.1.1). The graph below shows the involvement of the other regions in the operation of aquafarming.

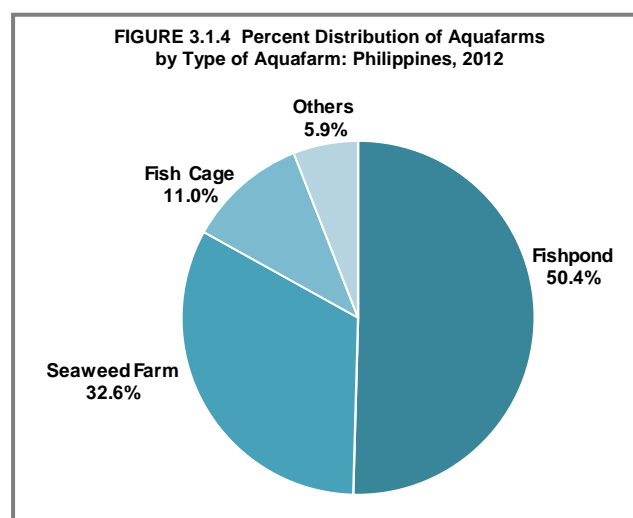
At the provincial level, Tawi-Tawi, Palawan and Sulu reported more than five thousand aquafarms, about 18.0 percent of the country's total aquafarms (Figure 3.1.2 and Figure 3.1.3).



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.1.2 Fishpond was the most common aquafarm

Fishponds comprised half of the 148,694 aquafarms reported in 2012, spread over an area of 85,606 hectares (Figure 3.1.4 and Table 3.1.1). Seaweed farms, the second most common type of aquafarm, totaled 48,494 units with a total area of 30,292 hectares. In addition, there were 16,353 fish cages and 3,102 fish pens reported, covering a total area of 2,849 hectares and 2,553 hectares, respectively. Thus, the structure of aquaculture in the Philippines in terms of average size of different types of aquafarms was as follows: 1.14 hectares per fishpond 0.62 hectare per seaweed farm, 0.17 hectare per fish cage, and 0.82 hectare per fish pen.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

TABLE 3.1.1 Number and Area/Volume of Aquafarms by Type of Aquafarm: Philippines, 2012

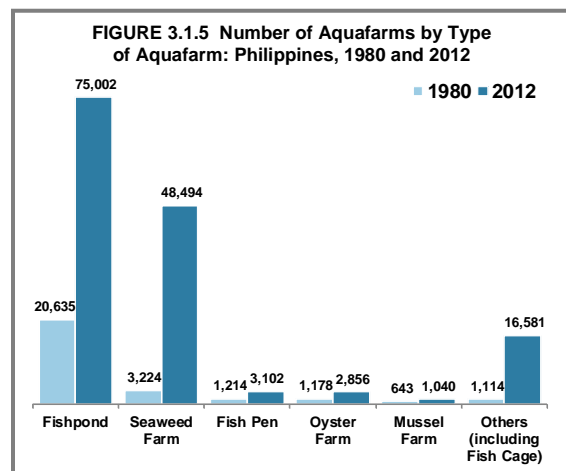
Type of Aquafarm	Number	Area (in Hectares)	Volume (in Cubic Meters)
Total	148,694	122,224	33,700
Fishpond	75,002	85,606	
Fish Pen	3,102	2,553	
Fish Cage	16,353	2,849	
Seaweed Farm	48,494	30,292	
Oyster Farm	2,856	568	
Mussel Farm	1,040	233	
Fish Tank	1,029		12,375
Hatchery	590		21,325
Others	228	122	

Note: Details may not add up to total due to rounding

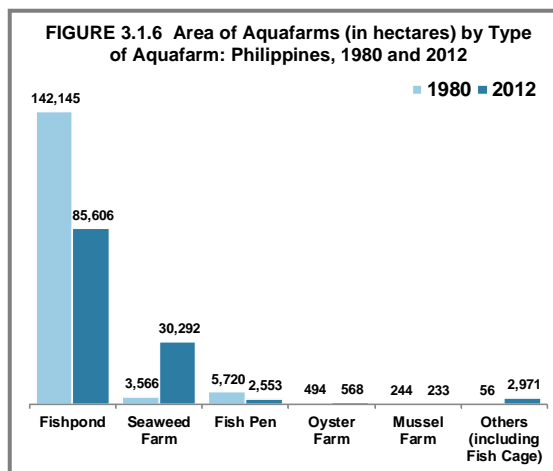
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.1.3 Seaweed farms increased fifteen times in 2012

Between 1980 and 2012, seaweed farms had the largest increase in both number and area from only 3,244 farms covering 3,566 hectares in 1980 to 48,494 farms covering 30,292 hectares in 2012 (Figure 3.1.5 and Figure 3.1.6). Likewise, the oyster farms increased by more than 100.0 percent in the number of aquafarms and by 15.0 percent in the area of aquafarms.



Sources: National Statistics Office, *Census of Agriculture and Fisheries 1980*
Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*



Sources: National Statistics Office, *Census of Agriculture and Fisheries 1980*
Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

On the other hand, as the number of fishponds increased by around three times from 1980 to 2012, its total area decreased by 39.8 percent. The census results also noted the increases in number of aquafarms and decreases in its corresponding area that occurred in the other types of aquafarms.

3.1.4 Three-fourths of fishponds were less than 1.0 hectare

About three-fourths of the 75,002 fishponds reported in 2012 had sizes below 1.0 hectare with an average area of 0.13 hectare per aquafarm (Table 3.1.2). These fishponds possibly had been operated within the vicinity of the residence of the operator, commonly called as the backyard fishponds. About 14.5 percent of the total fishponds had an average size of 1.45 hectares while 9.4 percent of the total fishponds were reported to have bigger average sizes of 8.85 hectares.

Central Luzon had the highest number of fishponds, comprising about 14.8 percent of the total number of fishponds in the country. More than half of these fishponds in Central Luzon had sizes of less than 1.0 hectare. At the same time, this region also reported the highest total area of fishponds in the country with an average area of 1.76 hectares per fishpond.

The other regions reported either bigger number of fishponds but smaller total areas or smaller numbers of fishponds with bigger total areas. The former led to an average of less than one hectare while the latter had an average fishpond area of more than one hectare like Central Luzon. There were other nine regions with an average area per fishpond of more than one hectare such as Zamboanga Peninsula (3.86 hectares), the Negros Island Region (NIR) (2.33 hectares), Western Visayas (2.28 hectares), the MIMAROPA Region (1.66 hectares), CALABARZON (1.54 hectares), ARMM (1.40 hectares), Caraga (1.37 hectares), the Bicol Region (1.34 hectares), and the Davao Region (1.15 hectares).

TABLE 3.1.2 Number and Area of Fishponds by Size and Region: Philippines, 2012

Philippines/Region	Size of Fishpond							
	Total		Less Than 1.0 Hectare		1.0 to 2.9 Hectares		3.0 Hectares or More	
	Number	Area (in Hectares)	Number	Area (in Hectares)	Number	Area (in Hectares)	Number	Area (in Hectares)
Philippines	75,002	85,606	57,080	7,523	10,879	15,720	7,043	62,363
National Capital Region	175	167	114	16	44	64	17	88
Cordillera Administration Region	4,182	368	4,130	253	39	47	13	68
Ilocos Region	6,468	3,589	5,270	1,006	955	1,261	243	1,323
Cagayan Valley	6,729	1,978	6,240	956	403	521	86	502
Central Luzon	11,109	19,519	6,269	1,367	3,194	4,749	1,646	13,403
CALABARZON	3,107	4,776	2,085	416	614	860	408	3,500
MIMAROPA Region	2,610	4,342	1,931	235	383	569	296	3,538
Bicol Region	8,311	11,143	6,382	714	927	1,339	1,002	9,089
Western Visayas	5,291	12,051	3,316	557	998	1,439	977	10,054
Central Visayas	2,616	2,101	2,112	161	308	440	196	1,500
Eastern Visayas	4,956	1,391	4,536	267	299	395	121	730
Zamboanga Peninsula	2,397	9,254	586	147	873	1,381	938	7,725
Northern Mindanao	3,491	1,841	2,934	284	383	538	174	1,019
Davao Region	2,608	3,012	2,055	186	368	574	185	2,252
SOCCKSARGEN	6,439	2,246	5,932	490	346	488	161	1,269
Autonomous Region in Muslim Mindanao	660	922	460	116	153	214	47	592
Caraga	2,149	2,936	1,535	215	363	530	251	2,192
Negros Island Region	1,704	3,969	1,193	137	229	311	282	3,521

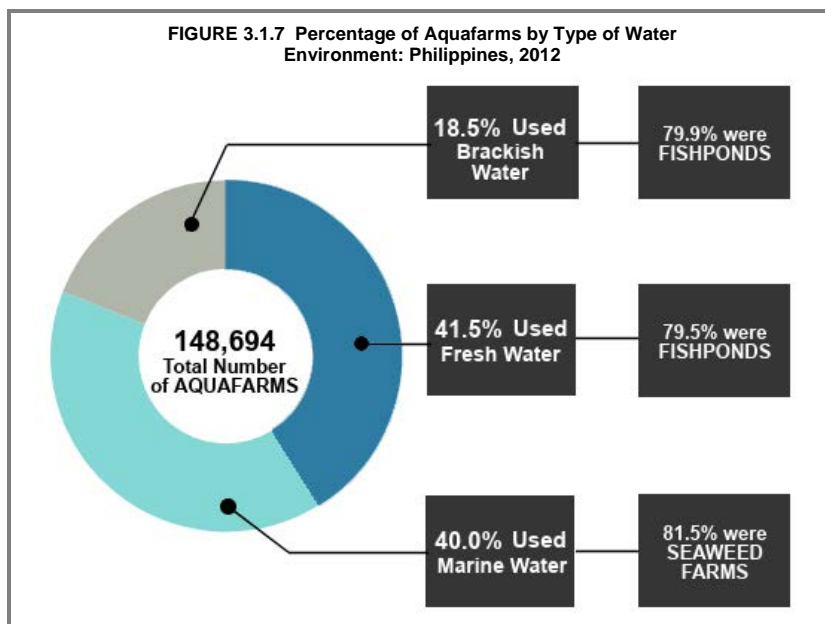
Note: Details may not add up to total due to rounding

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.1.5 Most aquafarms used either fresh water or marine water

About 61,695 aquafarm operations (41.5%) were conducted in fresh water like rivers, lakes, etc., 59,466 (40.0%) in marine water like seas, oceans, etc., and 27,533 aquafarms (18.5%) in brackish water (Figure 3.1.7 and Table 3.1.3).

Fresh water aquafarms were most common for fishponds, fish pens, fish cages, fish tanks and hatcheries. Two-thirds of the 75,002 fishponds in the country were operated in fresh water. More than half of the 16,353 fish cages operation also utilized the fresh water environment. On the other hand, the operation of all seaweed farms and three quarters of the mussel farms used the marine water environment. Brackish water environment was used for the majority (69.6%) of the oyster farms.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

TABLE 3.1.3 Number of Aquafarms by Type of Aquafarm and Water Environment: Philippines, 2012

Type of Aquafarm	Number of Aquafarms	Type of Water Environment		
		Fresh Water	Brackish Water	Marine Water
Total	148,694	61,695	27,533	59,466
Fishpond	75,002	49,065	21,987	3,950
Fish Pen	3,102	1,623	785	694
Fish Cage	16,353	9,683	2,323	4,347
Seaweed Farm	48,494	-	-	48,494
Oyster Farm	2,856	-	1,988	868
Mussel Farm	1,040	3	250	787
Fish Tank	1,029	929	57	43
Hatchery	590	352	138	100
Others	228	40	5	183

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.1.6 *Tilapia, euclidean (gozo) and milkfish (bangus) were the major species cultured*

The species cultured in the Philippine aquaculture operation included different kinds of fish, crustacean, mollusk, seaweed, and other species (Table 3.1.4). Among these species, tilapia, euclidean (gozo), and milkfish (bangus) were primarily cultured in 2012. About 68,941 aquafarms cultured tilapia; 41,438 aquafarms cultured euclidean (gozo); and 24,778 aquafarms raised milkfish (bangus). Other important aquaculture species such as mud crab (alimango), tiger prawn (sugpo), catfish (hito, kanduli), gracilaria (gulaman-dagat), white shrimp, carp (karpa), and grouper (lapu-lapu) were also cultured in at least 4,000 aquafarms in the country.

TABLE 3.1.4 Number of Aquafarms by Type of Species Cultured and Aquafarm: Philippines, 2012

Species Cultured	Total	Type of Aquafarm								
		Fishpond	Fish Pen	Fish Cage	Seaweed Farm	Oyster Farm	Mussel Farm	Fish Tank	Hatchery	Others
Fish										
Milkfish (Bangus)	24,778	21,620	992	2,054	-	1	-	45	66	-
Tilapia	68,941	56,873	1,715	9,628	-	1	4	488	224	8
Catfish (Hito, Kanduli)	7,403	7,113	25	139	-	-	-	76	49	1
Carp (Karpa)	4,508	3,049	305	1,000	-	-	-	134	19	1
Grouper (Lapu-lapu)	4,118	420	194	3,461	-	-	-	23	20	-
Siganid (Samaral, Dangit)	861	274	65	522	-	-	-	-	-	-
Seabass (Apahap, Dugso)	55	24	3	28	-	-	-	-	-	-
Gourami	641	608	14	8	-	-	-	8	2	1
Other Fish	10,671	6,604	664	2,177	-	-	1	950	208	67
Crustacean										
Tiger Prawn(Sugpo)	9,376	9,222	11	11	-	-	-	5	127	-
Endeavor Prawn (Swahe)	1,473	1,374	24	60	-	-	-	-	14	1
White Shrimp	4,745	4,373	203	122	-	3	1	4	39	-
Mud Crab (Alimango)	10,571	10,152	174	221	-	3	1	6	12	2
Other Crustacean	764	119	28	598	-	-	-	6	10	3
Mollusk										
Mussel (Tahong)	1,089	9	1	2	-	24	1,053	-	-	-
Oyster (Talaba)	2,963	18	-	17	-	2,874	53	-	1	-
Pearl Oyster	7	-	-	2	-	2	-	1	-	2
Cockles (Sigay, Halaan)	54	-	1	28	-	3	14	-	-	8
Abalone (Saang)	23	1	-	19	-	-	-	2	-	1
Other Mollusk	208	140	2	7	-	23	26	-	1	9
Seaweed										
Euचेuma (Gozo)	41,438	-	-	-	41,438	-	-	-	-	-
Gracilaria (Gulaman-dagat)	6,160	-	-	-	6,160	-	-	-	-	-
Caulerpa (Lato)	1,885	-	-	-	1,885	-	-	-	-	-
Other Seaweed	611	-	-	-	611	-	-	-	-	-
Other Species										
Pearl (Perlas)	20	-	-	-	-	-	-	-	-	20
Other Species Not Elsewhere Classified	268	55	5	19	-	-	-	18	15	156

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Farming of seaweed was most common in ARMM where about 20,941 aquafarms (41.8%) cultured seaweeds (Table 3.1.5A and Figure 3.1.8). The top five provinces in terms of aquafarms that were into seaweed farming were Tawi-Tawi, Sulu, Palawan, Zamboanga del Sur and Antique (Table 3.1.5B).

TABLE 3.1.5A Number of Aquafarms by Selected Species Cultured and Region: Philippines, 2012

Philippines/Region	Tilapia Culture		Seaweed Farming		Milkfish (Bangus) Culture	
	Number	Percentage	Number	Percentage	Number	Percentage
Philippines	68,941	100.0	50,094	100.0	24,778	100.0
National Capital Region	259	*	-	-	121	*
Cordillera Administrative Region	4,516	6.6	-	-	2	*
Ilocos Region	5,404	7.8	2	*	5,113	20.6
Cagayan Valley	6,692	9.7	-	-	310	1.3
Central Luzon	8,667	12.6	-	-	3,570	14.4
CALABARZON	7,959	11.5	256	*	1,672	6.7
MIMAROPA Region	2,127	3.1	7,336	14.6	1,062	4.3
Bicol Region	7,451	10.8	3,057	6.1	2,136	8.6
Western Visayas	2,823	4.1	4,169	8.3	2,900	11.7
Central Visayas	2,114	3.1	2,981	6.0	774	3.1
Eastern Visayas	4,547	6.6	1,030	2.1	879	3.5
Zamboanga Peninsula	1,145	1.7	6,951	13.9	1,917	7.7
Northern Mindanao	3,030	4.4	1,587	3.2	744	3.0
Davao Region	1,952	2.8	577	1.2	825	3.3
SOCCKSARGEN	6,910	10.0	5	*	792	3.2
Autonomous Region in Muslim Mindanao	517	*	20,941	41.8	199	*
Caraga	1,629	2.4	772	1.5	924	3.7
Negros Island Region	1,199	1.7	430	*	838	3.4

Notes: * Denotes <1 percent

- Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

TABLE 3.1.5B Top 20 Provinces Engaged in Seaweed Culture by Number of Aquafarms: Philippines, 2012

Rank	Province	Number of Aquafarms	Rank	Province	Number of Aquafarms
1	Tawi-tawi	14,328	11	Lanao del Norte	1,188
2	Sulu	5,794	12	Surigao del Sur	716
3	Palawan	5,279	13	Leyte	655
4	Zamboanga del Sur	3,506	14	Basilan	641
5	Antique	3,426	15	Guimaras	592
6	Zamboanga Sibugay	3,130	16	Davao del Sur	543
7	Bohol	2,475	17	Cebu	490
8	Camarines Sur	1,669	18	Romblon	419
9	Occidental Mindoro	1,474	19	Negros Oriental	404
10	Masbate	1,219	20	Misamis Occidental	392

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Central Luzon and CALABARZON belonged to the top two regions in tilapia culture, having 12.6 percent and 11.5 percent of the total aquafarms culturing tilapia in the Philippines (Table 3.1.5A and Figure 3.1.8). Three out of seven provinces in Central Luzon and three out of five provinces in CALABARZON belonged to the top 20 provinces in tilapia culture. Among the top 20 provinces, Cotabato (North Cotabato), Isabela, Pampanga, Camarines Sur, Rizal, Batangas, Laguna and Ilocos Sur reported more than two thousand aquafarms that cultured tilapia in 2012 (Table 3.1.5C).

On the other hand, the Ilocos Region was the number one region in culturing milkfish (bangus). About 20.6 percent of the total aquafarms culturing milkfish in the country were located in the said region (Table 3.1.5A and Figure 3.1.8). Pangasinan, Bulacan, Pampanga and Aklan led the other provinces in having more than one thousand aquafarms that cultured milkfish (bangus) in 2012 (Table 3.1.5D).

TABLE 3.1.5C Top 20 Provinces Engaged in Tilapia Culture by Number of Aquafarm: Philippines, 2012

Rank	Province	Number of Aquafarms
1	Cotabato (North Cotabato)	3,980
2	Isabela	3,267
3	Pampanga	2,994
4	Camarines Sur	2,604
5	Rizal	2,543
6	Batangas	2,215
7	Laguna	2,099
8	Ilocos Sur	2,029
9	Leyte	1,836
10	Southern Leyte	1,786
11	Bukidnon	1,761
12	Abra	1,700
13	Bohol	1,668
14	Cagayan	1,634
15	Bulacan	1,586
16	Camarines Norte	1,578
17	Pangasinan	1,567
18	Albay	1,454
19	Tarlac	1,404
20	South Cotabato	1,270

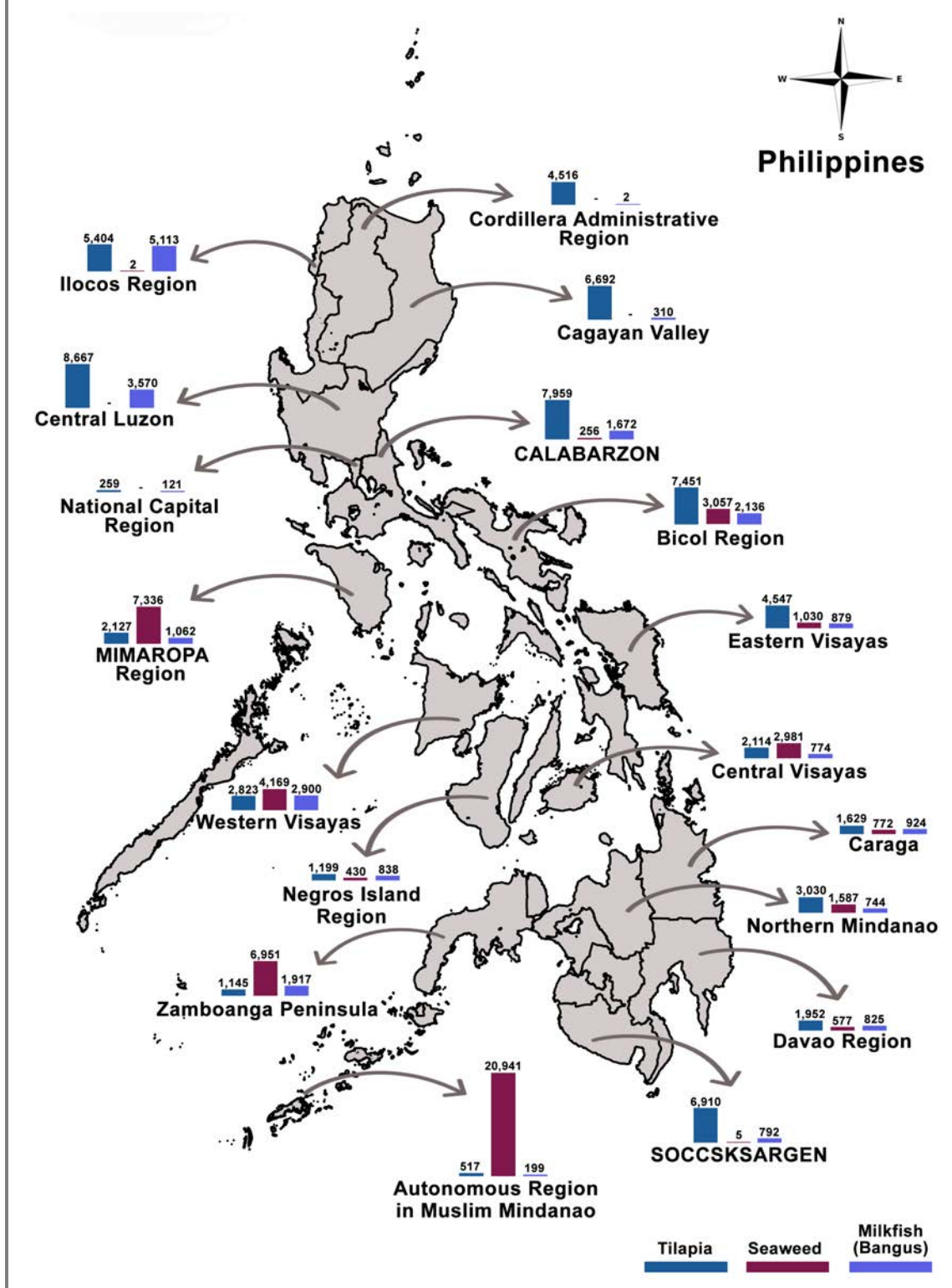
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

TABLE 3.1.5D Top 20 Provinces Engaged in Milkfish (Bangus) Culture by Number of Aquafarm: Philippines, 2012

Rank	Province	Number of Aquafarms
1	Pangasinan	3,270
2	Bulacan	1,690
3	Pampanga	1,448
4	Aklan	1,050
5	Ilocos Sur	904
6	Quezon	893
7	Capiz	822
8	Zamboanga del Sur	807
9	Zamboanga Sibugay	787
10	La Union	776
11	Iloilo	771
12	Masbate	738
13	Negros Occidental	674
14	Batangas	577
15	Sorsogon	549
16	Bohol	547
17	Oriental Mindoro	436
18	Agusan del Norte	405
19	Leyte	370
20	Davao del Norte	358

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

FIGURE 3.1.8 Number of Aquafarms with Tilapia, Seaweed and Milkfish (Bangus) as Species Cultured by Region: Philippines, 2012



Note: - Denotes zero value

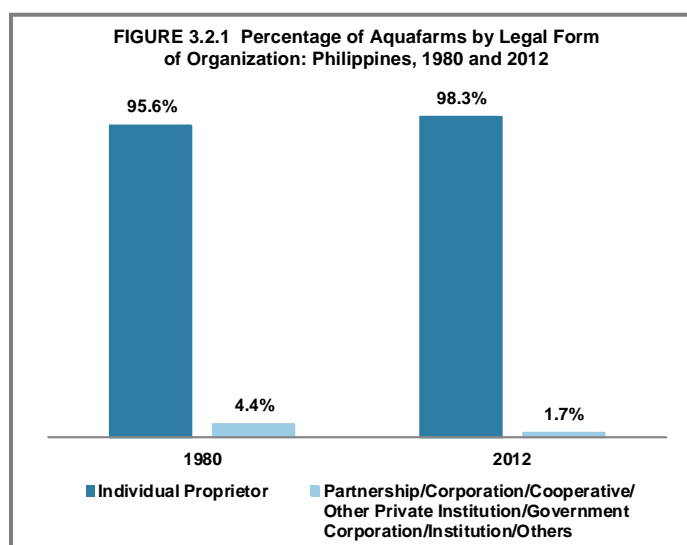
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.2 AQUACULTURE HOLDERS/OPERATORS AND HOUSEHOLDS

This section presents the number of aquafarms under different legal forms of organization and selected demographic characteristics of aquaculture operators and household members engaged in aquaculture. Such data collected in the 2012 CAF were tabulated according to the residence of the aquaculture holders/operators.

3.2.1 Ninety-eight percent of aquafarms were operated by individual proprietors

The majority of the aquafarms in the country were operated under individual proprietorship. In 1980, out of 28,028 aquafarms, 26,805 aquafarms or 95.6 percent were under individual proprietorship. In 2012, out of 148,694 aquafarms, 146,138 or 98.3 percent were reported under individual proprietorship (Figure 3.2.1).



Sources: National Statistics Office, *Census of Agriculture and Fisheries 1980*
Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Among these individually-operated aquafarms in 2012, 50.3 percent were fishponds, 32.9 percent were seaweed farms and 10.9 percent were fish cages (Table 3.2.1). Only 1.2 percent of the total aquafarms in the country were managed under partnership and the rest were operated under corporation, cooperative, other private institution, government corporation/institution or others.

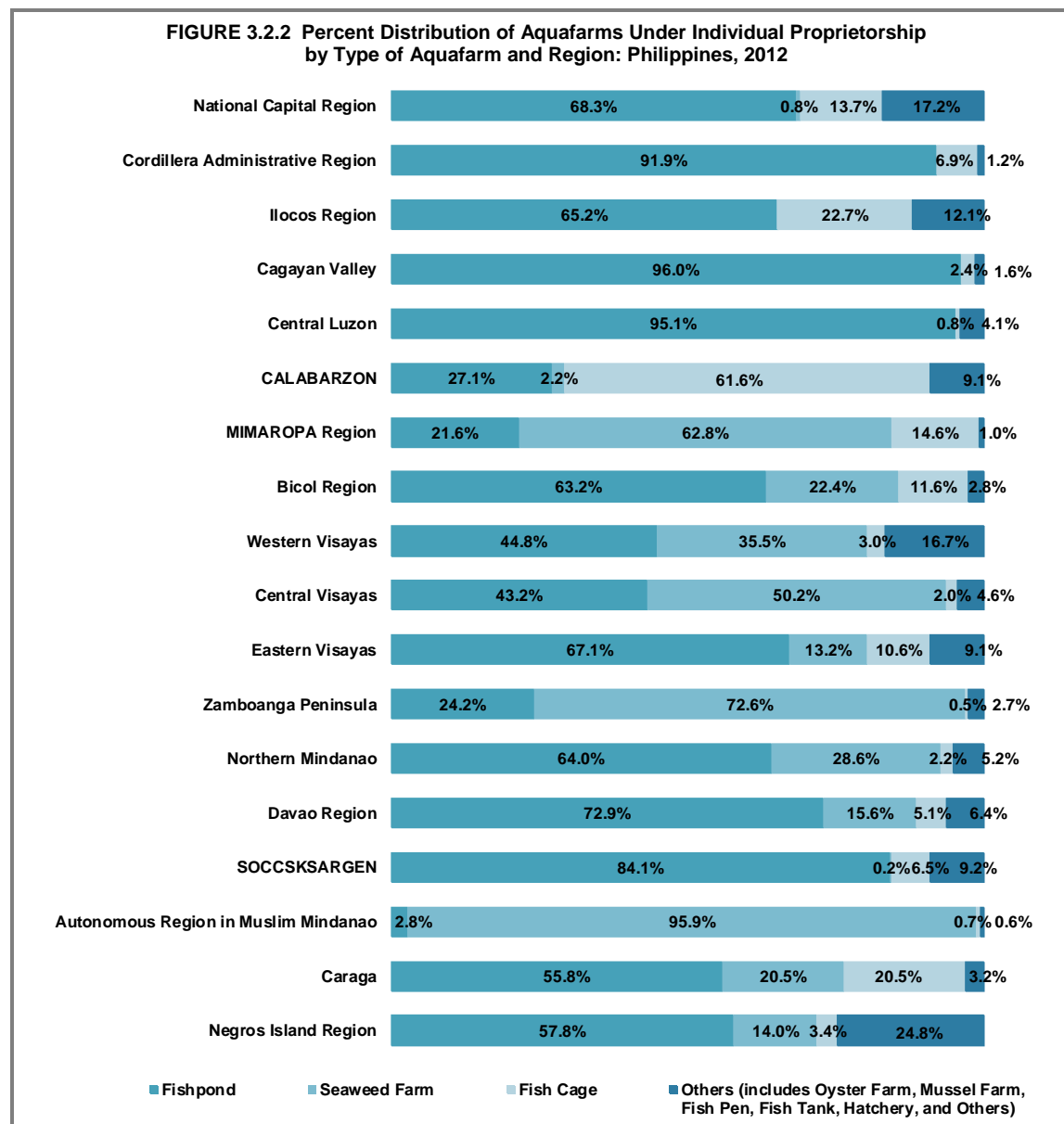
TABLE 3.2.1 Number of Aquafarms by Legal Form of Organization: Philippines, 2012

Legal Form of Organization	Total	Type of Aquafarm								
		Fishpond	Fish Pen	Fish Cage	Seaweed Farm	Oyster Farm	Mussel Farm	Fish Tank	Hatchery	Others
All Forms	148,694	75,002	3,102	16,353	48,494	2,856	1,040	1,029	590	228
Individual Proprietor	146,138	73,527	3,030	15,933	48,070	2,823	1,033	995	519	208
Partnership	1,748	939	46	337	376	20	7	11	8	4
Corporation/Cooperative/ Other Private Institution/ Government Corporation/ Institution/Others	808	536	26	83	48	13	-	23	63	16

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Fishponds comprised more than 90.0 percent of the aquafarms operated by individual proprietors in Cagayan Valley, Central Luzon and the Cordillera Administrative Region (CAR). On the other hand, almost all (95.9%) of the aquafarms under individual proprietorship in ARMM cultured seaweeds. The majority of the seaweed aquafarms in Zamboanga Peninsula and in the MIMAROPA Region were managed by individuals or households (Figure 3.2.2).



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.2.2 Aquaculture operators increased five-folds

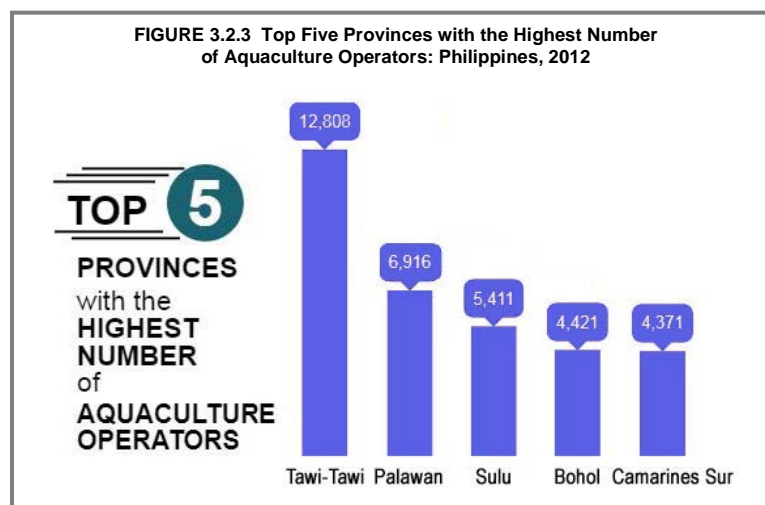
The reported number of aquaculture operators in 2012 was about 131,312, posting almost a five-fold increase from the 27,363 operators recorded in 1980 (Table 3.2.2). In 2012, ARMM reported the highest number of aquaculture operators in the Philippines, operating 20,693 aquafarms located within or outside the region. The Bicol Region reported about 11,924 aquaculture operators and the MIMAROPA Region had about 11,113 aquaculture operators.

TABLE 3.2.2 Number of Aquaculture Operators and Aquafams by Region: Philippines, 1980 and 2012

Philippines/Region	Number of Aquaculture Operators		Number of Aquafarms	
	1980	2012	1980	2012
Philippines	27,363	131,312	28,075	148,694
National Capital Region	614	730	617	848
Cordillera Administrative Region	130	3,937	130	4,582
Ilocos Region	5,488	7,899	5,753	9,737
Cagayan Valley	1,421	6,065	1,388	6,969
Central Luzon	3,424	9,894	3,573	11,550
CALABARZON	2,968	8,241	2,994	11,339
MIMAROPA Region	525	11,113	548	11,779
Bicol Region	1,658	11,924	1,665	13,105
Western Visayas	2,655	10,137	2,805	11,599
Central Visayas	703	5,544	727	5,964
Eastern Visayas	507	6,539	513	7,364
Zamboanga Peninsula	1,132	9,006	1,155	9,537
Northern Mindanao	532	4,746	538	5,549
Davao Region	414	3,091	425	3,585
SOCCSKSARGEN	609	6,994	613	7,727
Autonomous Region in Muslim Mindanao	2,912	19,474	2,917	20,693
Caraga	446	3,371	448	3,882
Negros Island Region	1,225	2,607	1,266	2,885

Sources: National Statistics Office, *Census of Agriculture and Fisheries 1980*
Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Two provinces of ARMM, namely, Tawi-Tawi and Sulu, belonged to the top five provinces in terms of number of aquaculture operators in the Philippines in 2012 (Figure 3.2.3). The number of aquaculture operators in these two provinces accounted for about 13.9 percent of the country's total number of aquaculture operators. Palawan, Bohol and Camarines Sur were the other three provinces that completed the top five provinces.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.2.3 Men dominated the aquaculture operations

About nine out of ten aquaculture operators aged 15 years and over were males. Moreover, the aquaculture operators in the Philippines posted a median age of 45.6 years old, which means that half of the aquaculture operators in the country, were aged 45 years and over and half of them aged 15 to 44. By sex, the male aquaculture operators had a median age of 45.2 years old, which was five years younger than their female counterparts.

Males dominated the aquaculture operations in all regions (Table 3.2.3). It is noted, however, that more than 11.0 percent of operators in the National Capital Region (NCR), the Bicol Region, NIR and the Davao Region were females.

The Bicol Region recorded a total of 1,762 female aquaculture operators, the highest in terms of number, that comprised 14.8 percent of the region's total number of aquaculture operators. ARMM ranked second with 1,225 female aquaculture operators.

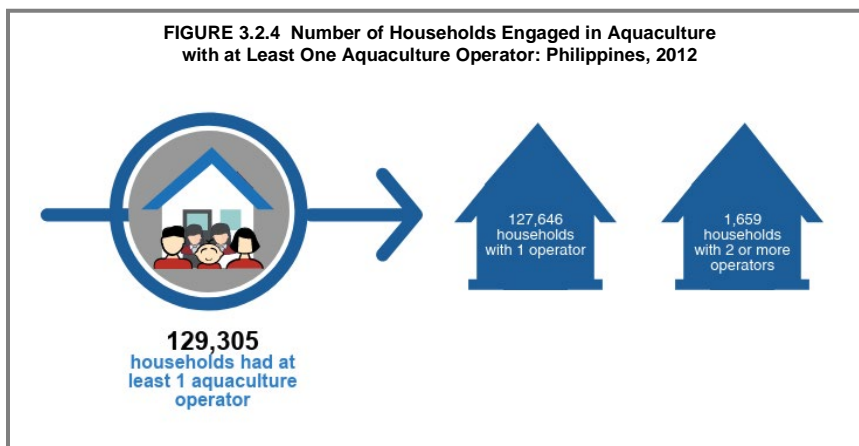
TABLE 3.2.3 Number of Aquaculture Operators by Sex and Region: Philippines, 2012

Philippines/Region	Total Number of Aquaculture Operators	Sex		Percentage to the Total Number of Aquaculture Operators	
		Male	Female	Male	Female
Philippines	131,312	120,053	11,259	91.4	8.6
National Capital Region	730	596	134	81.6	18.4
Cordillera Administrative Region	3,937	3,662	275	93.0	7.0
Ilocos Region	7,899	7,338	561	92.9	7.1
Cagayan Valley	6,065	5,544	521	91.4	8.6
Central Luzon	9,894	9,055	839	91.5	8.5
CALABARZON	8,241	7,663	578	93.0	7.0
MIMAROPA Region	11,113	10,170	943	91.5	8.5
Bicol Region	11,924	10,162	1,762	85.2	14.8
Western Visayas	10,137	9,230	907	91.1	8.9
Central Visayas	5,544	5,075	469	91.5	8.5
Eastern Visayas	6,539	6,045	494	92.4	7.6
Zamboanga Peninsula	9,006	8,374	632	93.0	7.0
Northern Mindanao	4,746	4,283	463	90.2	9.8
Davao Region	3,091	2,744	347	88.8	11.2
SOCCSKSARGEN	6,994	6,498	496	92.9	7.1
Autonomous Region in Muslim Mindanao	19,474	18,249	1,225	93.7	6.3
Caraga	3,371	3,120	251	92.6	7.4
Negros Island Region	2,607	2,245	362	86.1	13.9

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.2.4 Household members engaged in aquaculture

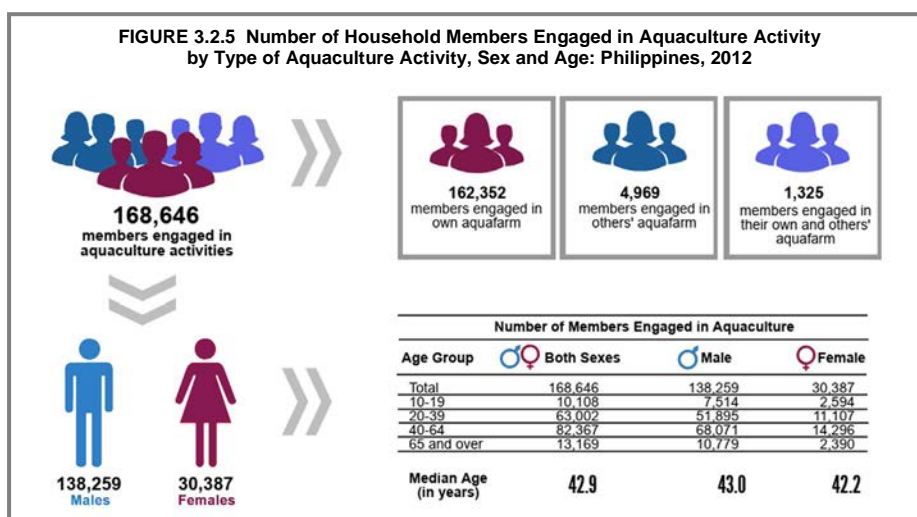
The Philippines had a total of 129,305 households with at least one member engaged as aquaculture operator in 2012 (Figure 3.2.4). Almost all of these households (98.7%) had only one aquaculture operator, while the remaining households had two or more operators managing their respective aquafarms.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Among the 129,305 households operating aquafarms, a total of 168,646 household members, 10 years old and over, reported to have engaged either as the operator himself/herself or worker in aquafarms (Figure 3.2.5). The majority were males. About 162,352 household members worked in their own aquafarms, of which 79.0 percent (128,255) worked as operators; a total of 4,969 worked in others' aquafarms, of which 48.4 percent (2,407) worked as operators; and a few (1,325) members worked both in their own and in others' aquafarms, of which 49.1 percent (650) worked as operators.

Nearly half (82,367) of these household members engaged in aquaculture activities belonged to the age group 40 to 64 years, while more than one-third (63,002) were in the younger age group 20 to 39 years. Only 6.0 percent were in the youngest age group (10 to 19 years), while 7.8 percent were in the oldest age group (65 years and over). The median age of these members, 10 years old and over, was 42.9 years old.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.3 MUNICIPAL FISHING

This section presents the number and characteristics of municipal fishing operations, such as category of fishing, type of fishing boat/vessel used, the number of fishing boats/vessels used whether owned or not by the fishing operator, and the number and selected demographic characteristics of municipal fishing operators.

In the 2012 CAF, municipal fishing referred to capture fishing activities using hands, fishing gears, rafts or boats of three gross tons or less for human consumption and/or other purposes. Municipal fishing operations were done in inland waters as well as in coastal areas within 15 kilometers from the shoreline. These fishing activities were managed technically and administratively by so-called municipal fishing operators.

3.3.1 Municipal fishing was most common in the Bicol Region

The 2012 CAF recorded a total of 791 thousand municipal fishing operations for the period of January to December 2012 (Table 3.3.1). Of the 18 regions in the country, Bicol, Eastern Visayas, and MIMAROPA regions posted the highest number of municipal fishing operations with 102 thousand, 100 thousand, and 84 thousand, respectively.

**Table 3.3.1 Number of Municipal Fishing Operations
by Region: Philippines, 2012**

Philippines/Region	Number of Municipal Fishing Operations
Philippines	791,236
National Capital Region	2,925
Cordillera Administrative Region	5,582
Ilocos Region	28,576
Cagayan Valley	23,346
Central Luzon	34,660
CALABARZON	59,867
MIMAROPA Region	84,042
Bicol Region	101,769
Western Visayas	41,103
Central Visayas	62,195
Eastern Visayas	100,070
Zamboanga Peninsula	31,661
Northern Mindanao	25,322
Davao Region	22,609
SOCCSKSARGEN	34,631
Autonomous Region In Muslim Mindanao	71,294
Caraga	32,266
Negros Island Region	29,318

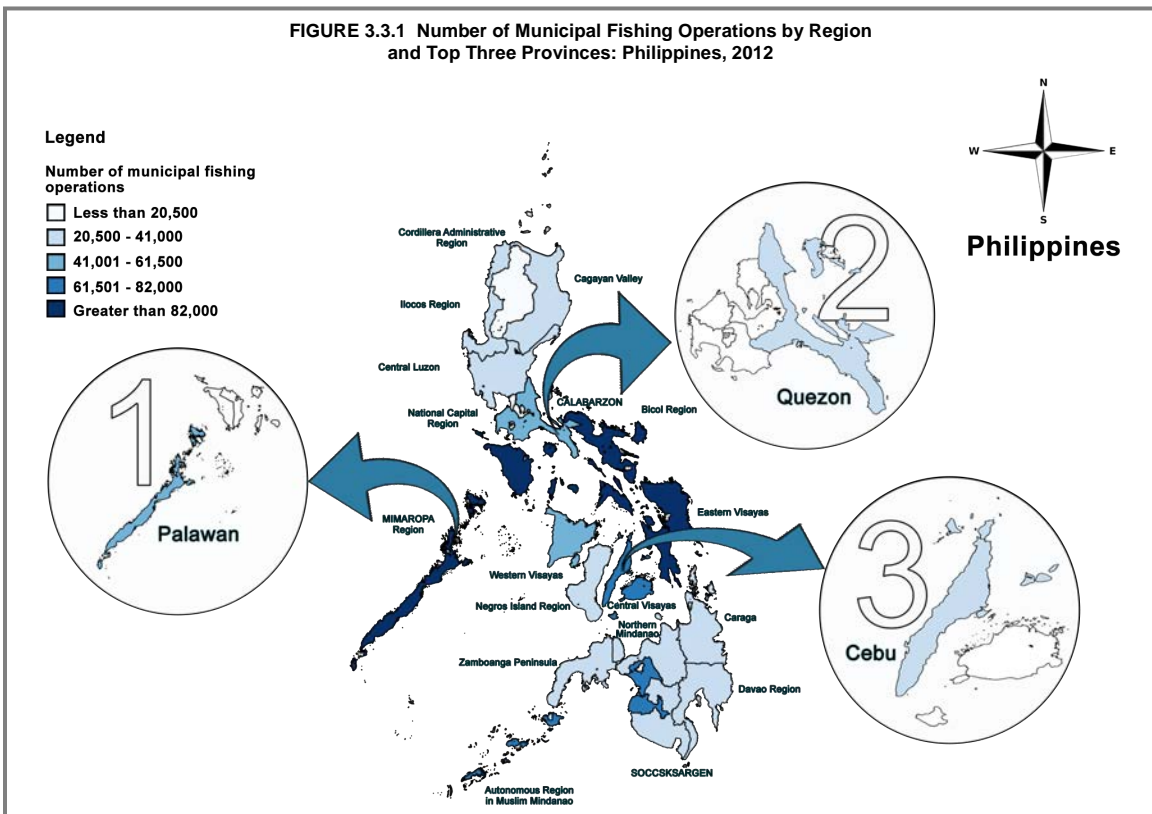
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

At the provincial level, Palawan, Quezon, Cebu, Masbate, and Leyte were the top five provinces in municipal fishing (Table 3.3.2). About 169 thousand or 21.4 percent of the total municipal fishing operations in the Philippines were managed by operators from these provinces. Furthermore, Palawan, Quezon and Cebu accounted for more than half of the total municipal fishing operations of their respective regions (MIMAROPA Region, CALABARZON and Central Visayas, respectively). Cebu and Bohol contributed 94.0 percent (58 thousand) to the total municipal fishing operations in Central Visayas. The share of the provinces of Masbate, Camarines Sur and Sorsogon to Bicol Region's municipal fishing operations was nearly 70 percent.

TABLE 3.3.2 Top 20 Provinces with the Highest Number of Municipal Fishing Operations: Philippines, 2012

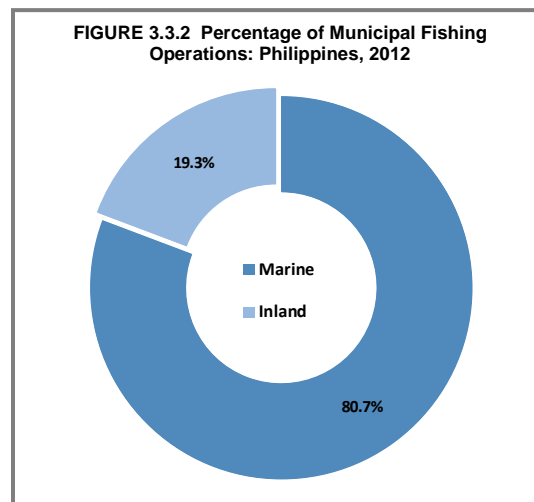
Rank	Province	Number of Fishing Operations	Rank	Province	Number of Fishing Operations
1	Palawan	45,833	11	Sorsogon	19,185
2	Quezon	33,066	12	Negros Occidental	16,683
3	Cebu	31,757	13	Maguindanao	15,554
4	Masbate	31,504	14	Tawi-Tawi	15,529
5	Leyte	26,836	15	Iloilo	15,058
6	Bohol	26,684	16	Northern Samar	14,280
7	Sulu	25,663	17	Isabela	14,253
8	Samar (Western Samar)	21,407	18	Negros Oriental	12,635
9	Eastern Samar	20,595	19	Batangas	12,588
10	Camarines Sur	19,385	20	Pangasinan	12,223

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*



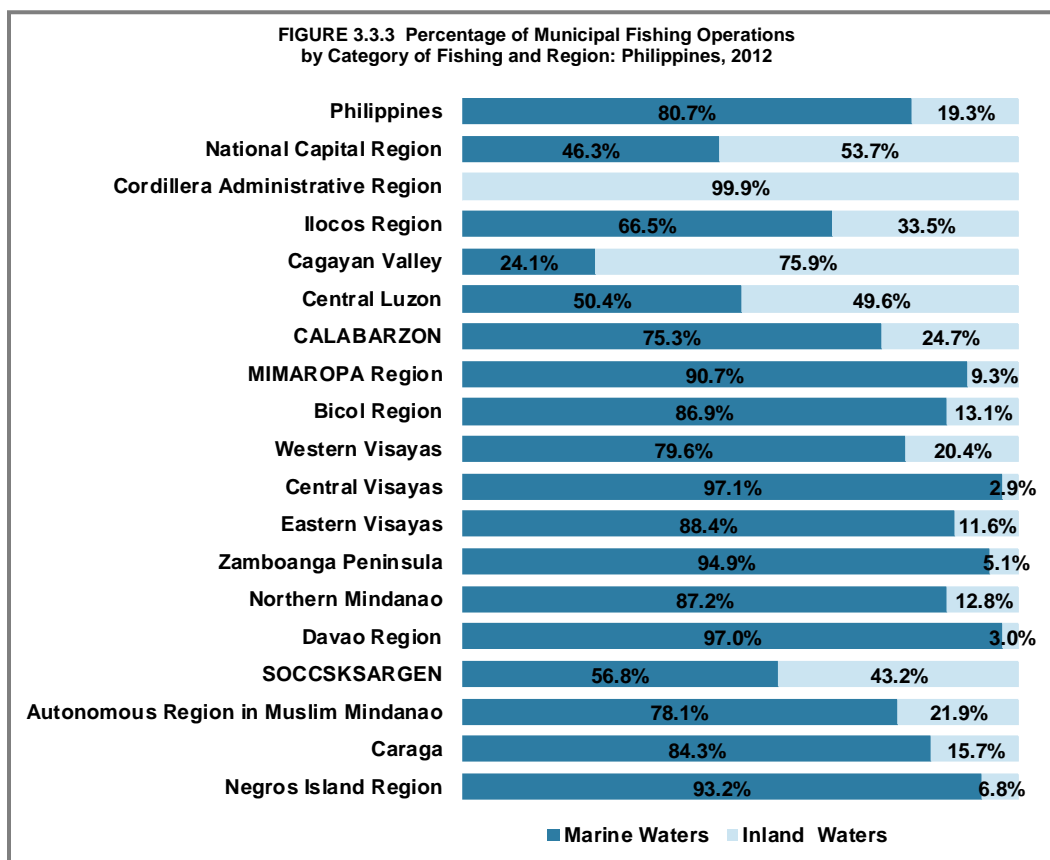
3.3.2 Four in five household municipal fishing operations were carried out in marine waters

Four-fifths or 80.7 percent (639 thousand) of municipal fishing operations in the Philippines were carried out in marine waters such as oceans, bays, gulfs and channels with seawater salinity (Figure 3.3.2). The rest of the municipal fishing operations (152 thousand) were done in inland waters such as lakes, rivers, reservoirs, dams, paddy/rice fields, estuaries, marshes, and others.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Municipal marine capture fishing operation was most common in Central Visayas, Davao Region, Zamboanga Peninsula, NIR, and MIMAROPA Region (Figure 3.3.3). In contrast, municipal inland fishing was primarily operated in CAR and in Cagayan Valley.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

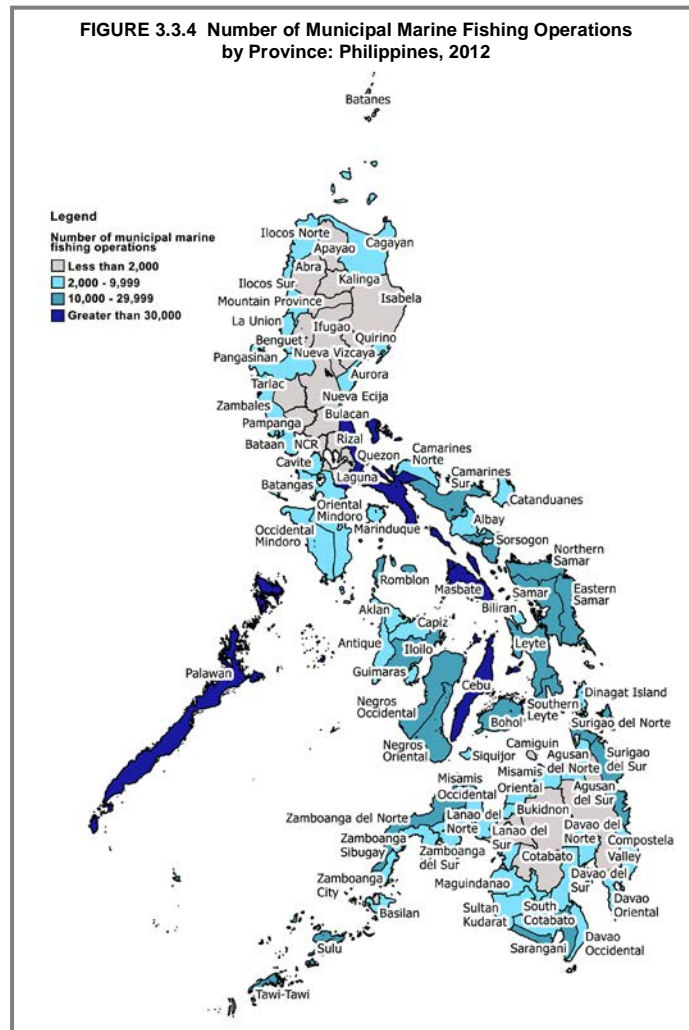
3.3.3 Household municipal marine fishing was predominant in Palawan

The fishing households predominantly operated municipal marine capture fishing operations in Palawan, Cebu, Quezon and Masbate (Table 3.3.3). More than 90 percent of the household municipal fishing operations in these provinces were done in marine waters.

TABLE 3.3.3 Top 20 Provinces with the Highest Number of Municipal Marine Fishing Operations: Philippines, 2012

Rank	Province	Number of Marine Fishing Operations	Rank	Province	Number of Marine Fishing Operations
1	Palawan	44,959	11	Tawi-Tawi	15,175
2	Cebu	31,740	12	Negros Occidental	14,908
3	Quezon	31,277	13	Camarines Sur	14,568
4	Masbate	30,136	14	Iloilo	14,144
5	Sulu	24,994	15	Negros Oriental	12,426
6	Bohol	24,914	16	Zamboanga del Norte	11,522
7	Leyte	21,715	17	Sarangani	11,477
8	Samar (Western Samar)	19,654	18	Northern Samar	11,269
9	Eastern Samar	19,334	19	Romblon	10,930
10	Sorsogon	18,213	20	Surigao del Norte	10,852

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*



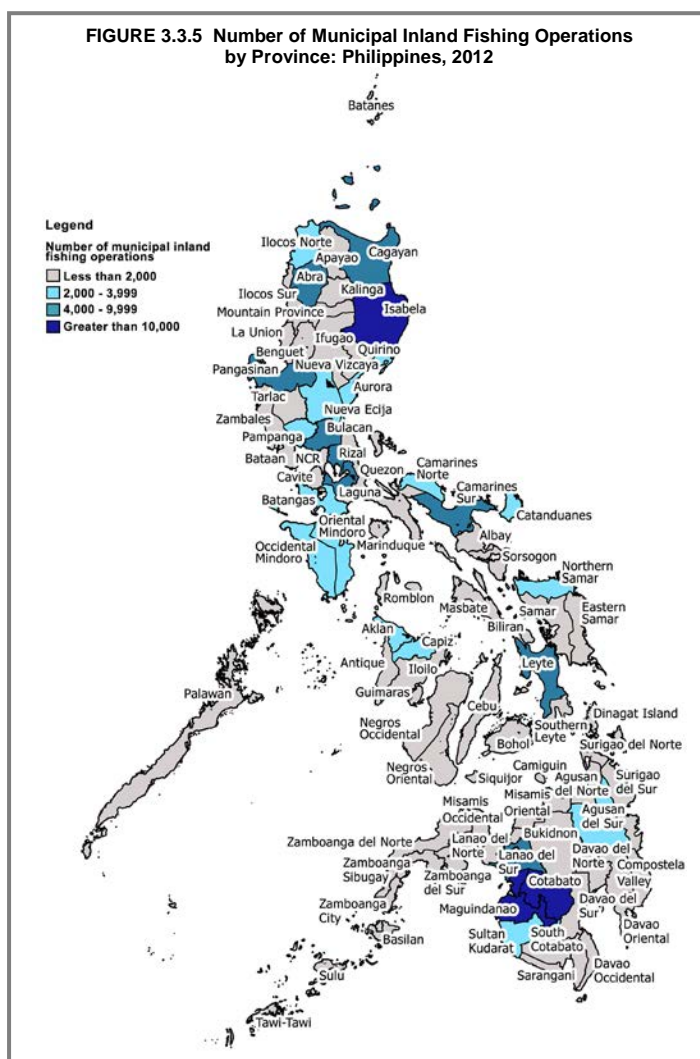
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Household inland fishing was predominantly operated in the provinces of Isabela, Maguindanao and Cotabato (North Cotabato) (Table 3.3.4). Almost 100 percent of the household municipal fishing operations in Cotabato (North Cotabato) and Rizal were done in inland waters.

TABLE 3.3.4 Top 20 Provinces with the Highest Number of Municipal Inland Fishing Operations: Philippines, 2012

Rank	Province	Number of Inland Fishing Operations	Rank	Province	Number of Inland Fishing Operations
1	Isabela	12,458	11	Cagayan	4,114
2	Maguindanao	10,388	12	Lanao del Sur	4,062
3	Cotabato (North Cotabato)	10,221	13	Pampanga	3,832
4	Bulacan	6,741	14	Capiz	3,760
5	Rizal	5,792	15	Sultan Kudarat	3,703
6	Leyte	5,121	16	Oriental Mindoro	3,376
7	Abra	4,899	17	Catanduanes	3,070
8	Camarines Sur	4,817	18	Aklan	3,043
9	Pangasinan	4,512	19	Occidental Mindoro	3,037
10	Laguna	4,236	20	Northern Samar	3,011

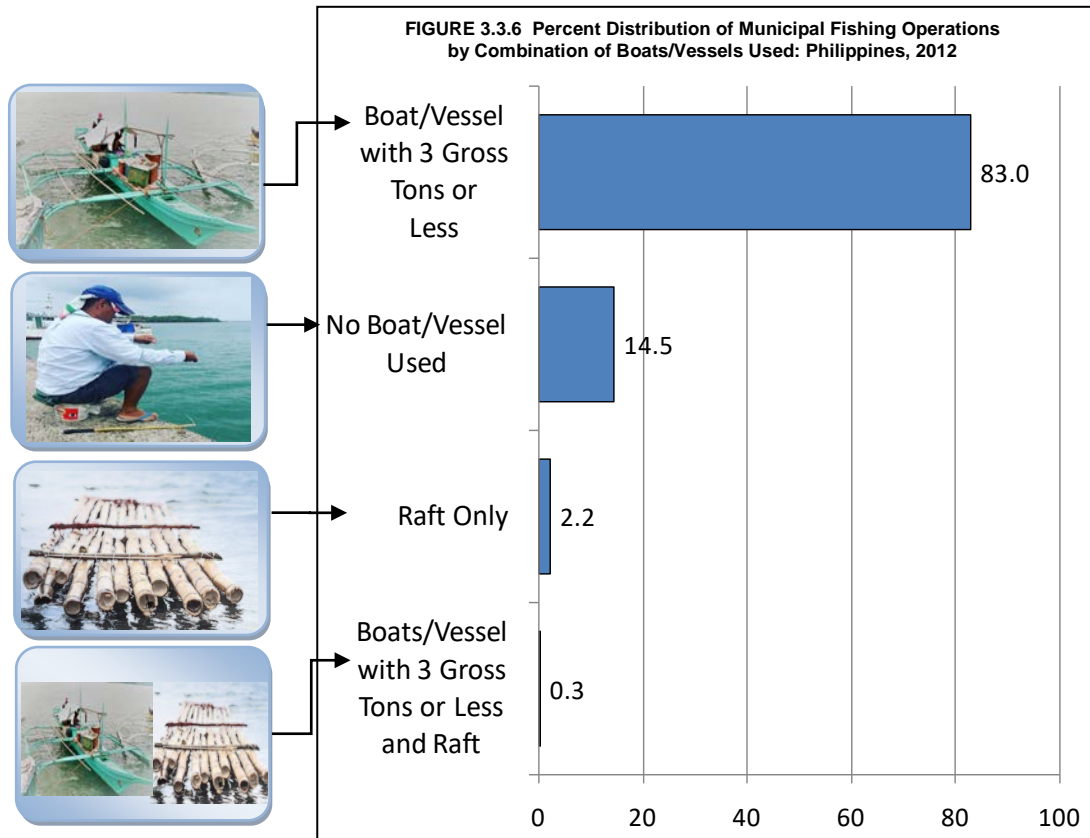
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

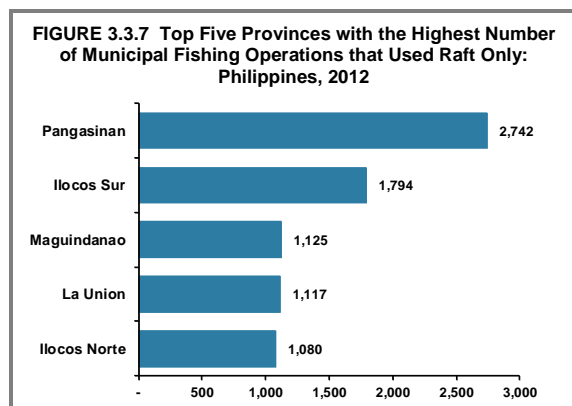
3.3.4 Five in six household municipal fishing operations used boats of three gross tons or less

Household municipal fishing operations in the Philippines used one or more boats of three gross tons or less and/or rafts or no boat or raft at all. In 2012, 83.0 percent or 656 thousand household municipal fishing operations made use of one or more boats of three gross tons or less (Figure 3.3.6). About 14.5 percent or 115 thousand household municipal fishing operations did not make use of any boat or raft at all. Around 2.2 percent or 18 thousand household municipal fishing operations made use of rafts only. Less than one percent or two thousand household municipal fishing operations made use of boats with three gross tons or less and raft.

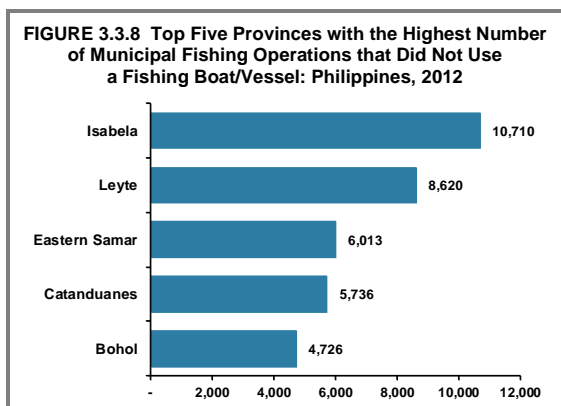


Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Figure 3.3.7 and Figure 3.3.8 indicate the five provinces with the highest number of household municipal fishing operations that used raft only and those that did not use any fishing craft, respectively. The use of raft in municipal fishing operation was common in Ilocos Region. The four provinces of the region, namely, Pangasinan, Ilocos Sur, La Union and Ilocos Norte accounted for 38.1 percent of the total household municipal fishing operations that used raft only. On the other hand, household municipal fishing operations without the use of a fishing boat or vessel were found mostly in the province of Isabela in Cagayan Valley.



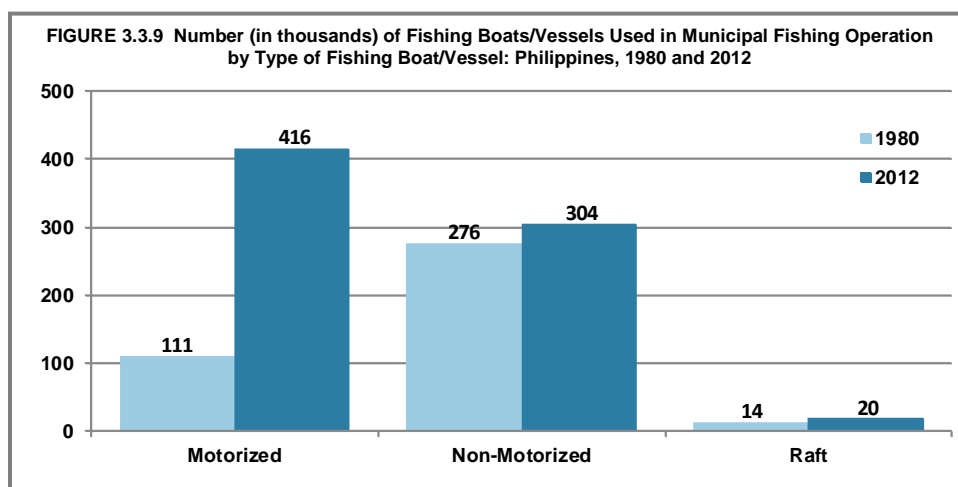
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.3.5 Number of motorized fishing boats used in household municipal fishing operations increased almost three folds in three decades

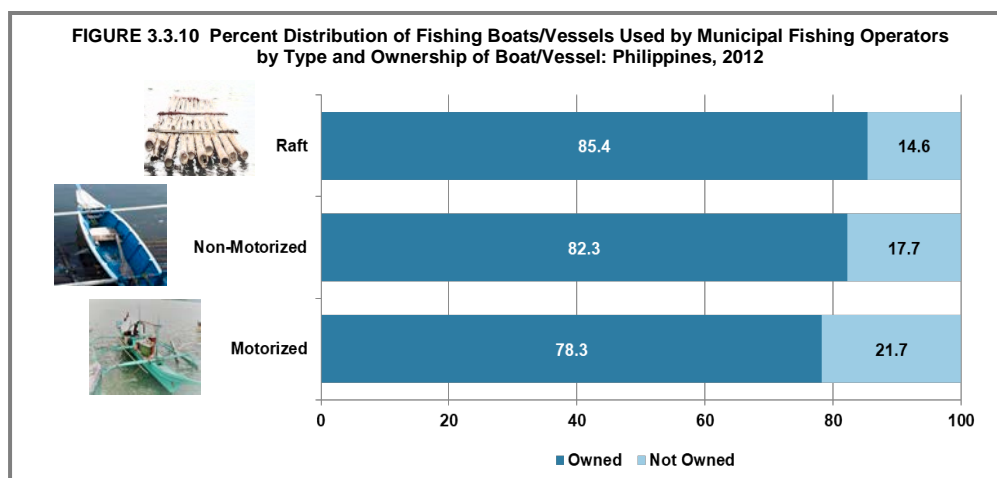
The household municipal fishing operations in the Philippines used fishing boats with or without engines of three gross tons or less. As presented in Figure 3.3.9, the number of fishing boats used in the household municipal fishing operations in 2012 almost doubled over the past three decades, from 402 thousand in 1980 to 740 thousand in 2012. In particular, the number of motorized fishing boats used in household municipal fishing in 2012 exceeded the reported number in 1980 by nearly three times. In contrast, the increase in the number of non-motorized boats and rafts in the same period was only 9.4 percent and 42.9 percent, respectively. Moreover, a much higher proportion (56.2%) of motorized boats was used in the household municipal fishing in 2012 than in 1980 (27.6%) compared to a lower proportion of non-motorized boats used in 2012 (41.1%) than in 1980 (69.2%). This implies that many household municipal fishing operators shifted to the use of motorized fishing boats in 2012.



Sources: National Statistics Office, *Census of Agriculture and Fisheries 1980*
Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.3.6 More than three-fourths of the motorized fishing boats used were owned by the household municipal fishing operators

The reported 791 thousand household municipal fishing operations used a total of 740 thousand boats. About 80 percent or 593 thousand of these were owned by the household fishing operators while the rest were either borrowed or rented. Of these owned municipal fishing boats, five out of nine had motors. The household municipal fishing operators also owned 85.4 percent of the total rafts used in the fishing operations (Figure 3.3.10).



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

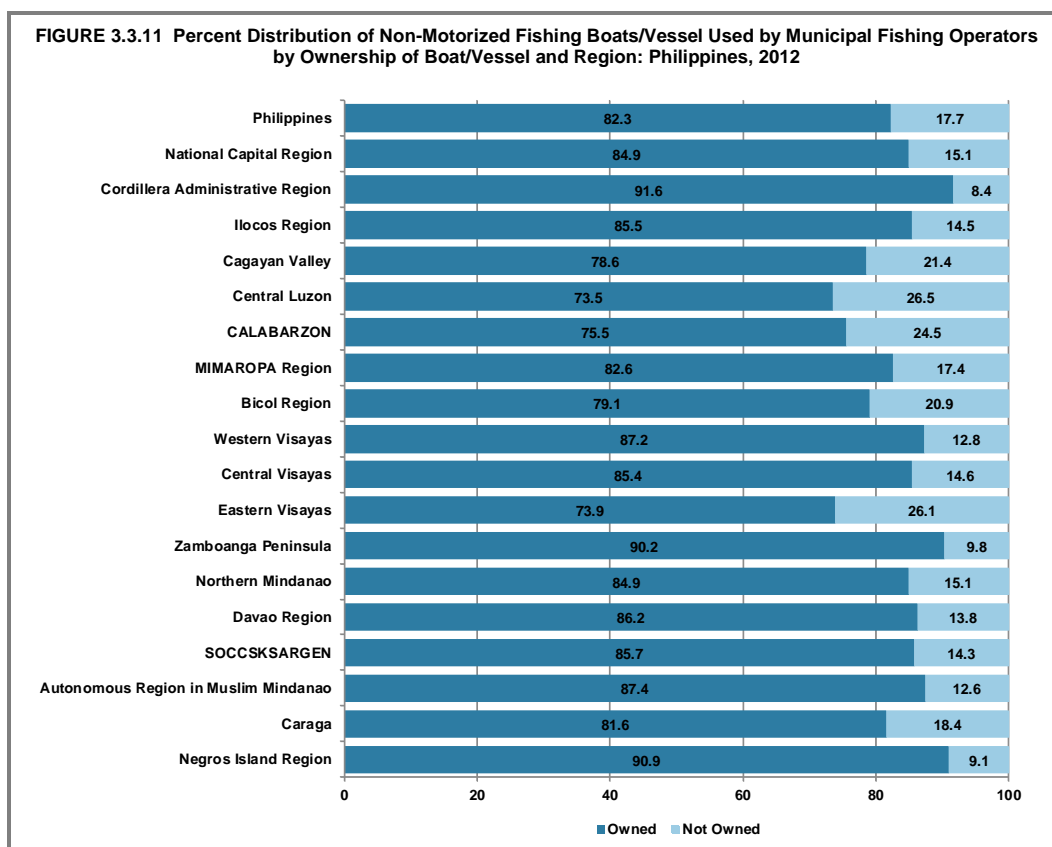
3.3.7 Most motorized fishing boats used in municipal fishing operation were in MIMAROPA Region and Bicol Region

MIMAROPA and Bicol regions reported and used the most number of motorized municipal fishing boats in 2012, totalling to more than 53 thousand (Table 3.3.5). At the provincial level, Palawan (36 thousand) and Masbate (22 thousand) had the highest number of motorized fishing boats used. Palawan reported 66.2 percent of the total number of motorized boats in the MIMAROPA Region and Masbate from the Bicol Region accounted for 41.5 percent of the region's motorized boats. Moreover, the majority of the household municipal fishing operators in all regions owned the motorized boats they used in their fishing operations, except in SOCCSKSARGEN where only 52.9 percent of the motorized boats were owned by the operators.

Table 3.3.5 Number of Fishing Boats/Vessels Used by Municipal Fishing Operators by Ownership of Fishing Boat/Vessel and Region: Philippines, 2012

Philippines/Region	Number of Motorized Fishing Boats Used	Percentage	
		Owned	Not Owned
Philippines	415,530	78.3	21.7
National Capital Region	2,106	77.9	22.1
Cordillera Administrative Region	106	97.2	2.8
Ilocos Region	13,775	71.0	29.0
Cagayan Valley	4,789	77.6	22.4
Central Luzon	19,315	71.9	28.1
CALABARZON	39,618	74.1	25.9
MIMAROPA Region	54,280	83.2	16.8
Bicol Region	53,415	72.6	27.4
Western Visayas	27,306	82.2	17.8
Central Visayas	29,208	80.4	19.6
Eastern Visayas	39,649	75.1	24.9
Zamboanga Peninsula	16,638	86.1	13.9
Northern Mindanao	11,018	80.7	19.3
Davao Region	11,653	84.7	15.3
SOCCSKSARGEN	16,965	52.9	47.1
Autonomous Region In Muslim Mindanao	41,780	91.7	8.3
Caraga	16,778	77.9	22.1
Negros Island Region	17,131	80.5	19.5

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries*



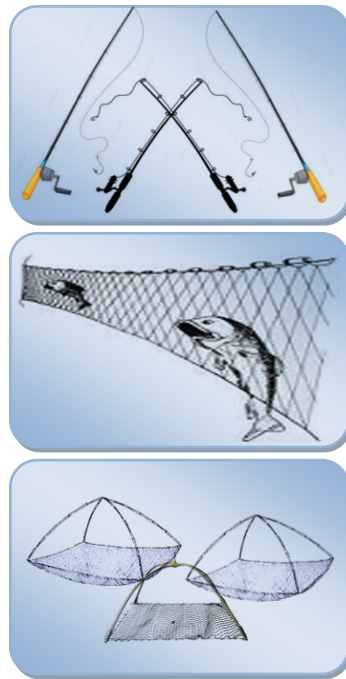
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

In 2012, the use of non-motorized fishing boats was most common in Eastern Visayas with 43 thousand boats and Bicol Region with 41 thousand boats. In both regions, over 70 percent of the non-motorized boats were owned (Figure 3.3.11). Meanwhile, the number of rafts used in municipal fishing was highest in Ilocos Region with about eight thousand rafts, followed by ARMM with two thousand

3.3.8 Hook and line was the most common fishing gear used in municipal fishing

Among the types of fishing gears/accessories/devices used in household municipal fishing operations, the top three reported gears/accessories/devices used were hook and line, gill net and crab pot (Table 3.3.6). There were a total of 6.9 million hooks and lines, 1.2 million gill nets and 760 thousand crab pots reported in the 2012 CAF, which were used in municipal fishing. The municipal fishing operators also used about 667 thousand long lines, 633 thousand fish traps/corrals or "baklad", 526 thousand squid jigs, and 495 thousand fish pots.

TABLE 3.3.6 Top 20 Gears/Accessories/Devices Used in Municipal Fishing Operation: Philippines, 2012

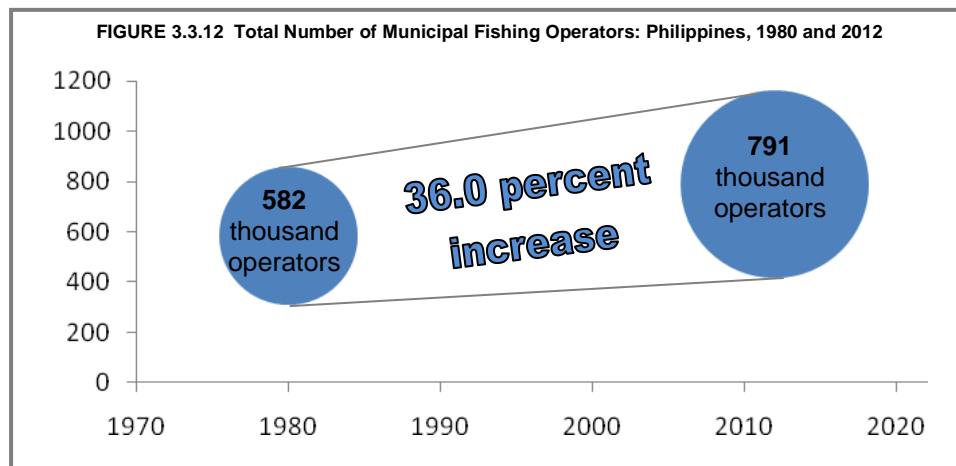


Rank	Type of Gears/Accessories/Devices	Number
1	Hook and Line	6,860,460
2	Gill Net	1,153,858
3	Crab Pot	760,053
4	Long Line	666,759
5	Fish Trap/Fish Corral/Baklad	632,769
6	Squid Jig	525,861
7	Fish Pot	494,602
8	Cast Net	340,674
9	Luring Device	208,388
10	Harpoon/Spear Gun	161,133
11	Fishing Light	147,723
12	Scoop Net or Dip Net	141,396
13	Crab Hook	73,234
14	Cover Pot	69,703
15	Push Net	62,915
16	Beach Seine Net	55,199
17	Lambaklad Net	25,967
18	Hoop Net	20,041
19	Filter Net	18,489
20	Rake and Hand Dredge	13,832

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.3.9 Male operators dominated the household municipal fishing operations

The 2012 CAF recorded 791 thousand municipal fishing operators aged 15 years and over (Figure 3.3.12). Compared with the 1980 data, the number of such operators increased by 35.9 percent.



Sources: National Statistics Office, *Census of Agriculture and Fisheries 1980*
 Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

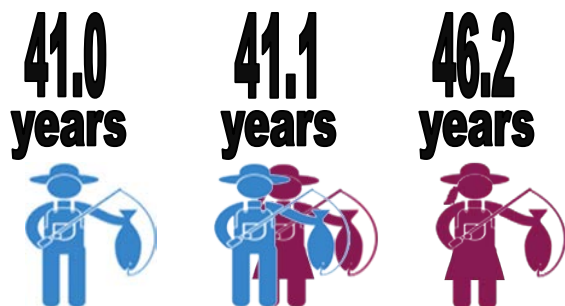
Of the total household municipal fishing operators, 97.6 percent were males and the remaining 2.4 percent were females. This translated into a ratio of about 41 male municipal fishing operators for every one female counterpart.

Distribution of Household Municipal Fishing Operators



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Median Age of Municipal Fishing Operators



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

The municipal fishing operators had a median age of 41.1 years old. The median age of male municipal fishing operators was 41.0 years, which was five years younger than their female counterparts.

3.3.10 One in four household municipal fishing operators were elementary graduates

Of the 791 thousand household municipal fishing operators aged 15 years and over, almost one-third (254 thousand) had some elementary education and about a quarter (199 thousand) were elementary graduates. Almost one-fifth (137 thousand) were able to graduate high school but only less than two percent (13 thousand) were baccalaureate degree holders (Figure 3.3.13).

TABLE 3.3.7 Number of Municipal Fishing Operators by Highest Grade Completed and Sex: Philippines, 2012

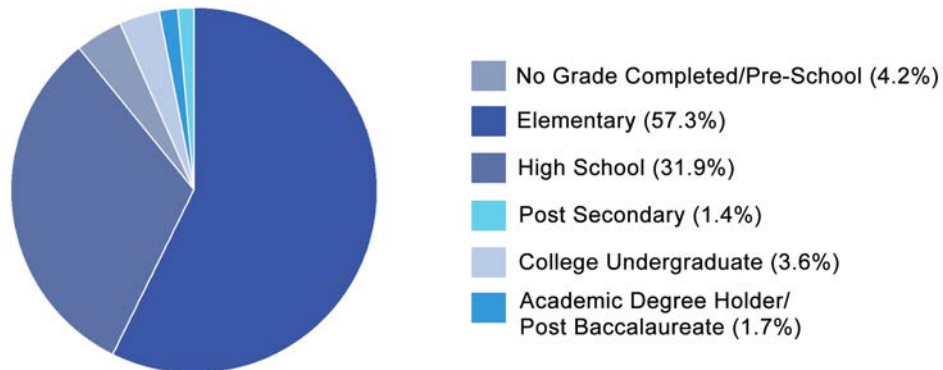
Highest Grade Completed	Number (in Thousands)		
	Total	Male	Female
Total	791	772	19
No Grade Completed/Pre-School	33	33	1
Elementary			
Undergraduate	254	250	5
Graduate	199	194	5
High School			
Undergraduate	115	112	3
Graduate	137	133	4
Post Secondary			
Undergraduate	2	2	*
Graduate	9	8	*
College Undergraduate	28	27	1
Academic Degree Holder	13	12	1
Post Baccalaureate	*	*	*

Note: * denotes less than 500 operators

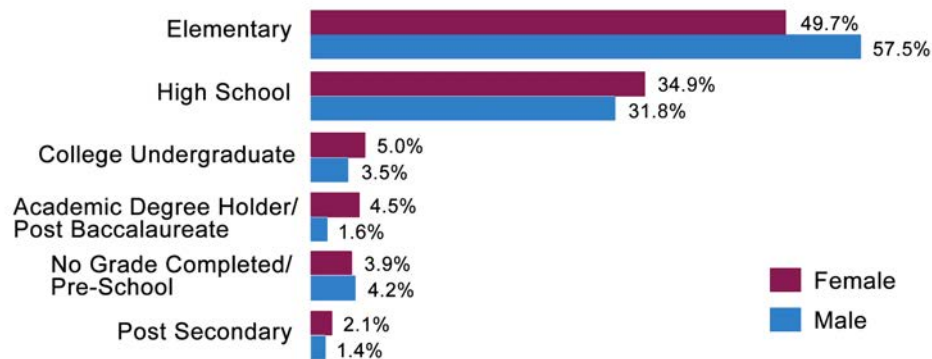
Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

FIGURE 3.3.13 Percentage of Municipal Fishing Operators by Highest Grade Completed and Sex: Philippines, 2012

791 Thousand Municipal Fishing Operators



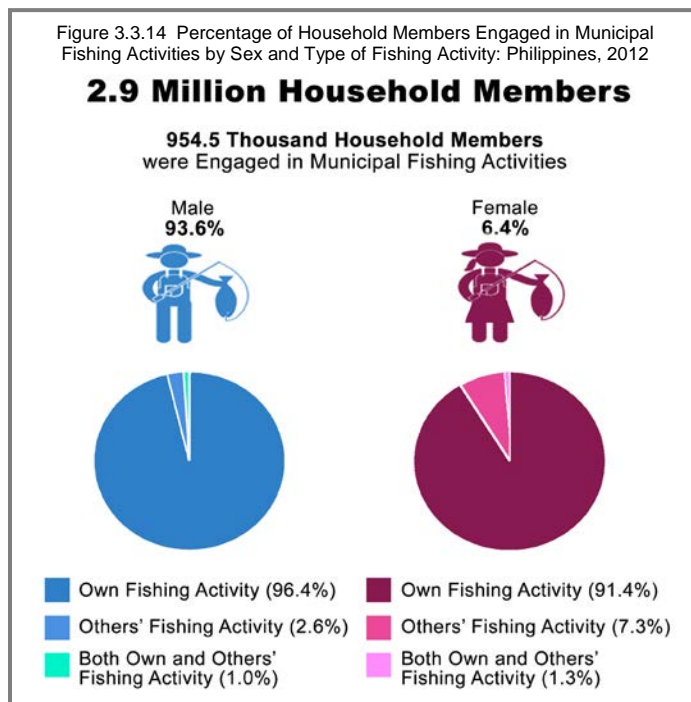
Percent Distribution by Sex



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

3.3.11 About one-third of the household members were engaged in municipal fishing operations

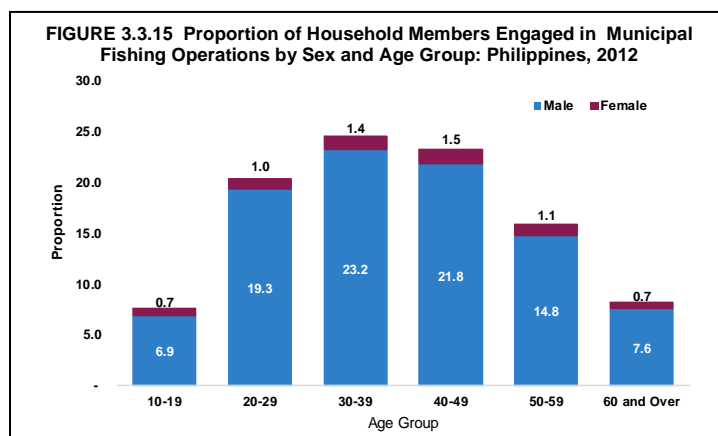
About 955 thousand of the 2.9 million household members of the municipal fishing operators' households had engaged in municipal fishing in 2012. Of these members, 918 thousand (96.1%) worked in their own household fishing activities while the rest worked in others' household fishing operations (Figure 3.3.14). Of these household members engaged in municipal fishing, 93.6 percent were males and 6.4 percent were females.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

A majority (68.2 percent) of the household members engaged in municipal fishing operations were in the age group 20 to 49 years old (Figure 3.3.15). The rest of them belonged to the youngest age group 10 to 19 years old and older age group 50 years and over.

The median age of household members engaged in municipal fishing operation was 38.9 years for males and 40.7 years for females.



Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

STATISTICAL TABLES

LOCATION OF AQUAFARM

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Philippines										
Fishpond										
Number	75,002	50,358	6,722	7,633	3,246	3,136	1,490	851	1,219	347
Area	85,606	3,658	3,865	8,808	6,912	10,766	7,999	6,618	17,025	19,955
Fish Pen										
Number	3,102	2,210	488	276	45	29	17	3	17	17
Area	2,553	249	261	294	93	99	92	23	278	1,165
Fish Cage										
Number	16,353	15,333	557	283	73	41	21	11	25	9
Area	2,849	642	318	317	154	138	108	82	382	708
Seaweed Farm										
Number	48,494	37,936	6,733	3,012	462	114	31	17	18	171
Area	30,292	5,067	3,796	3,231	955	380	163	128	228	16,345
Oyster Farm										
Number	2,856	2,636	140	53	7	5	1	-	12	2
Area	568	131	78	57	15	17	5	-	195	71
Mussel Farm										
Number	1,040	902	73	47	12	3	2	-	1	-
Area	233	81	39	51	25	10	11	-	15	-
Others										
Number	228	199	4	4	11	3	4	1	1	1
Area	122	3	2	4	23	11	21	7	11	40
National Capital Region (NCR)										
Fishpond										
Number	175	98	16	27	17	12	-	3	2	-
Area	167	7	9	29	36	45	-	23	20	-
Fish Pen										
Number	25	16	2	3	2	-	1	-	-	1
Area	63	1	1	3	4	-	5	-	-	49
Fish Cage										
Number	80	76	1	-	1	1	1	-	-	-
Area	14	2	1	-	2	5	5	-	-	-
Seaweed Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Oyster Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Mussel Farm										
Number	41	39	-	2	-	-	-	-	-	-
Area	5	3	-	2	-	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Cordillera Administration Region (CAR)										
Fishpond										
Number	4,182	4,029	101	37	2	5	6	2	-	-
Area	368	194	59	43	5	19	33	16	-	-
Fish Pen										
Number	26	25	1	-	-	-	-	-	-	-
Area	2	1	1	-	-	-	-	-	-	-
Fish Cage										
Number	311	289	18	4	-	-	-	-	-	-
Area	35	18	12	5	-	-	-	-	-	-

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Seaweed Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Oyster Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Ilocos Region (Region I)										
Fishpond										
Number	6,468	4,333	937	803	152	137	52	30	22	2
Area	3,589	456	550	926	335	460	269	234	280	80
Fish Pen										
Number	711	653	34	15	4	2	2	1	-	-
Area	134	67	20	16	8	6	10	8	-	-
Fish Cage										
Number	2,205	2,177	16	7	-	1	1	-	3	-
Area	133	58	10	8	-	3	5	-	49	-
Seaweed Farm										
Number	2	2	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Oyster Farm										
Number	267	242	12	10	3	-	-	-	-	-
Area	28	6	6	10	6	-	-	-	-	-
Mussel Farm										
Number	9	8	1	-	-	-	-	-	-	-
Area	1	*	1	-	-	-	-	-	-	-
Others										
Number	145	144	-	-	-	-	1	-	-	-
Area	6	1	-	-	-	-	5	-	-	-
Cagayan Valley (Region II)										
Fishpond										
Number	6,729	5,511	729	333	70	50	21	8	4	3
Area	1,978	535	420	370	151	166	114	63	54	105
Fish Pen										
Number	22	21	-	-	1	-	-	-	-	-
Area	4	2	-	-	2	-	-	-	-	-
Fish Cage										
Number	166	160	6	-	-	-	-	-	-	-
Area	13	9	4	-	-	-	-	-	-	-
Seaweed Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Oyster Farm										
Number	36	29	6	1	-	-	-	-	-	-
Area	7	3	3	1	-	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	6	5	1	-	-	-	-	-	-	-
Area	2	1	1	-	-	-	-	-	-	-

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Central Luzon (Region III)										
Fishpond										
Number	11,109	4,765	1,504	2,177	1,017	853	331	187	216	59
Area	19,519	502	866	2,562	2,187	2,926	1,768	1,452	2,904	4,352
Fish Pen										
Number	98	73	6	8	4	3	1	-	1	2
Area	114	6	3	9	9	11	5	-	10	62
Fish Cage										
Number	108	94	6	6	1	-	-	-	1	-
Area	32	7	4	8	3	-	-	-	12	-
Seaweed Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Oyster Farm										
Number	258	244	5	6	-	2	-	-	1	-
Area	34	7	3	7	-	8	-	-	10	-
Mussel Farm										
Number	7	4	-	3	-	-	-	-	-	-
Area	3	*	-	3	-	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
CALABARZON (Region IV-A)										
Fishpond										
Number	3,107	1,622	463	451	163	170	79	53	77	29
Area	4,776	161	255	510	350	593	427	408	1,064	1,008
Fish Pen										
Number	518	256	112	101	13	15	7	-	4	10
Area	836	26	61	107	27	51	39	-	60	466
Fish Cage										
Number	6,959	6,641	198	90	15	10	1	-	3	1
Area	591	247	112	99	31	34	5	-	38	25
Seaweed Farm										
Number	246	212	28	4	2	-	-	-	-	-
Area	42	18	16	4	4	-	-	-	-	-
Oyster Farm										
Number	49	44	3	2	-	-	-	-	-	-
Area	6	2	2	3	-	-	-	-	-	-
Mussel Farm										
Number	345	272	29	31	8	2	2	-	1	-
Area	118	18	16	35	17	6	11	-	15	-
Others										
Number	10	10	-	-	-	-	-	-	-	-
Area	1	1	-	-	-	-	-	-	-	-
MIMAROPA Region										
Fishpond										
Number	2,610	1,717	214	240	143	115	61	32	74	14
Area	4,342	111	123	269	300	395	331	248	1,072	1,492
Fish Pen										
Number	39	31	4	1	2	-	1	-	-	-
Area	15	3	2	1	4	-	5	-	-	-
Fish Cage										
Number	1,733	1,676	28	18	5	2	1	1	1	1
Area	158	50	15	19	10	6	5	8	15	30

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Seaweed Farm										
Number	7,323	5,751	1,008	469	62	25	3	2	1	2
Area	2,145	711	577	510	127	83	15	15	15	92
Oyster Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	22	3	-	4	10	2	3	-	-	-
Area	49	1	-	4	20	8	16	-	-	-
Bicol Region (Region V)										
Fishpond										
Number	8,311	5,737	645	648	279	335	246	140	222	59
Area	11,143	352	362	744	595	1,141	1,309	1,083	3,138	2,418
Fish Pen										
Number	106	93	7	6	-	-	-	-	-	-
Area	17	7	4	7	-	-	-	-	-	-
Fish Cage										
Number	1,553	1,308	122	67	26	12	6	3	8	1
Area	711	95	69	76	54	41	30	23	124	200
Seaweed Farm										
Number	2,935	2,482	258	161	29	1	2	1	1	-
Area	636	228	139	179	59	3	11	8	10	-
Oyster Farm										
Number	6	6	-	-	-	-	-	-	-	-
Area	1	1	-	-	-	-	-	-	-	-
Mussel Farm										
Number	100	91	4	3	1	1	-	-	-	-
Area	21	10	2	3	2	4	-	-	-	-
Others										
Number	3	2	1	-	-	-	-	-	-	-
Area	1	*	1	-	-	-	-	-	-	-
Western Visayas (Region VI)										
Fishpond										
Number	5,291	2,813	503	699	299	377	208	119	204	69
Area	12,051	268	289	808	631	1,305	1,128	942	2,942	3,737
Fish Pen										
Number	186	153	13	13	2	2	-	1	1	1
Area	94	17	7	15	4	7	-	7	10	28
Fish Cage										
Number	355	316	30	7	2	-	-	-	-	-
Area	43	16	16	8	4	-	-	-	-	-
Seaweed Farm										
Number	4,069	3,295	566	159	34	9	3	2	1	-
Area	1,101	451	332	172	70	31	15	17	12	-
Oyster Farm										
Number	1,491	1,385	80	11	2	2	-	-	10	1
Area	365	87	42	11	5	6	-	-	175	40
Mussel Farm										
Number	136	124	12	-	-	-	-	-	-	-
Area	12	6	6	-	-	-	-	-	-	-
Others										
Number	9	8	1	-	-	-	-	-	-	-
Area	1	*	1	-	-	-	-	-	-	-

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Central Visayas (Region VII)										
Fishpond										
Number	2,616	2,000	112	215	93	78	43	39	29	7
Area	2,101	94	67	245	194	269	230	304	414	283
Fish Pen										
Number	71	55	6	1	-	2	-	1	6	-
Area	117	3	4	1	-	7	-	8	94	-
Fish Cage										
Number	124	103	12	6	-	1	-	1	1	-
Area	47	4	7	6	-	3	-	8	20	-
Seaweed Farm										
Number	2,938	1,853	486	406	37	10	1	5	1	139
Area	13,636	285	266	415	75	32	5	36	12	12,510
Oyster Farm										
Number	97	90	5	1	1	-	-	-	-	-
Area	11	6	3	1	2	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	3	2	-	-	-	-	-	-	-	1
Area	40	*	-	-	-	-	-	-	-	40
Eastern Visayas (Region VIII)										
Fishpond										
Number	4,956	4,326	210	230	69	61	29	12	18	1
Area	1,391	148	119	252	143	207	160	89	239	35
Fish Pen										
Number	235	224	6	4	1	-	-	-	-	-
Area	18	9	3	4	2	-	-	-	-	-
Fish Cage										
Number	781	749	10	11	3	4	1	2	1	-
Area	85	17	6	12	7	12	7	14	11	-
Seaweed Farm										
Number	992	914	67	8	2	1	-	-	-	-
Area	112	59	37	9	4	4	-	-	-	-
Oyster Farm										
Number	13	9	1	3	-	-	-	-	-	-
Area	5	1	1	3	-	-	-	-	-	-
Mussel Farm										
Number	347	315	24	6	2	-	-	-	-	-
Area	61	39	12	7	4	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Zamboanga Peninsula (Region IX)										
Fishpond										
Number	2,397	420	166	486	387	414	201	118	175	30
Area	9,254	51	95	569	812	1,448	1,082	918	2,520	1,757
Fish Pen										
Number	146	107	19	10	9	1	-	-	-	-
Area	50	8	11	10	18	3	-	-	-	-
Fish Cage										
Number	46	33	4	6	2	-	1	-	-	-
Area	21	2	2	7	5	-	5	-	-	-

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Seaweed Farm										
Number	6,876	4,805	1,086	724	191	41	16	5	6	2
Area	2,947	712	587	768	396	137	86	39	82	140
Oyster Farm										
Number	30	20	2	6	1	-	1	-	-	-
Area	17	2	1	7	2	-	5	-	-	-
Mussel Farm										
Number	9	6	1	2	-	-	-	-	-	-
Area	3	1	1	2	-	-	-	-	-	-
Others										
Number	3	3	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Northern Mindanao (Region X)										
Fishpond										
Number	3,491	2,709	225	275	108	104	27	13	27	3
Area	1,841	150	135	313	225	352	147	100	340	80
Fish Pen										
Number	38	36	1	-	-	1	-	-	-	-
Area	7	3	1	-	-	3	-	-	-	-
Fish Cage										
Number	122	102	9	7	3	1	-	-	-	-
Area	29	7	5	8	6	3	-	-	-	-
Seaweed Farm										
Number	1,583	1,476	61	39	6	1	-	-	-	-
Area	240	139	38	47	14	3	-	-	-	-
Oyster Farm										
Number	1	1	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Mussel Farm										
Number	15	15	-	-	-	-	-	-	-	-
Area	1	1	-	-	-	-	-	-	-	-
Others										
Number	4	2	1	-	-	1	-	-	-	-
Area	4	*	1	-	-	3	-	-	-	-
Davao Region (Region XI)										
Fishpond										
Number	2,608	1,923	132	218	150	107	24	20	18	16
Area	3,012	111	75	250	324	365	131	157	277	1,322
Fish Pen										
Number	91	46	32	9	-	2	1	-	-	1
Area	551	7	20	11	-	7	6	-	-	500
Fish Cage										
Number	199	147	20	13	5	6	1	-	2	5
Area	544	15	11	15	13	22	5	-	37	425
Seaweed Farm										
Number	549	503	34	5	2	2	1	2	-	-
Area	132	73	21	6	5	9	5	14	-	-
Oyster Farm										
Number	15	14	1	-	-	-	-	-	-	-
Area	2	2	1	-	-	-	-	-	-	-
Mussel Farm										
Number	3	3	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Others										
Number	11	10	-	-	-	-	-	1	-	-
Area	7	*	-	-	-	-	-	7	-	-

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
SOCCSKSARGEN (Region XII)										
Fishpond										
Number	6,439	5,614	318	239	107	91	40	7	18	5
Area	2,246	314	176	265	222	296	213	52	226	482
Fish Pen										
Number	625	317	218	84	5	-	1	-	-	-
Area	293	78	111	87	11	-	6	-	-	-
Fish Cage										
Number	501	469	11	12	3	1	2	1	1	1
Area	128	37	6	14	6	3	10	8	16	28
Seaweed Farm										
Number	5	1	1	1	1	1	-	-	-	-
Area	7	*	1	1	2	3	-	-	-	-
Oyster Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Autonomous Region in Muslim Mindanao (ARMM)										
Fishpond										
Number	660	330	130	127	26	15	15	6	9	2
Area	922	39	77	160	55	52	78	42	120	300
Fish Pen										
Number	70	26	26	15	1	-	1	-	1	-
Area	50	3	14	16	2	-	5	-	10	-
Fish Cage										
Number	159	120	29	4	1	1	4	-	-	-
Area	65	13	20	5	2	4	22	-	-	-
Seaweed Farm										
Number	19,823	15,754	2,969	962	81	20	2	-	7	28
Area	8,967	2,308	1,689	1,042	169	65	10	-	81	3,603
Oyster Farm										
Number	51	26	16	9	-	-	-	-	-	-
Area	28	5	13	10	-	-	-	-	-	-
Mussel Farm										
Number	11	10	1	-	-	-	-	-	-	-
Area	3	2	1	-	-	-	-	-	-	-
Others										
Number	1	-	-	-	1	-	-	-	-	-
Area	3	-	-	-	3	-	-	-	-	-
Caraga (Region XIII)										
Fishpond										
Number	2,149	1,360	175	255	108	128	43	25	41	14
Area	2,936	112	102	300	230	439	230	200	560	763
Fish Pen										
Number	55	50	1	2	1	1	-	-	-	-
Area	13	5	1	2	2	4	-	-	-	-
Fish Cage										
Number	845	785	32	19	5	-	1	1	2	-
Area	122	42	18	21	11	-	5	7	20	-

Table A1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (concluded)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Seaweed Farm										
Number	769	509	167	72	15	2	3	-	1	-
Area	296	58	93	75	31	7	16	-	16	-
Oyster Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Mussel Farm										
Number	1	-	-	-	1	-	-	-	-	-
Area	2	-	-	-	2	-	-	-	-	-
Others										
Number	11	10	-	-	-	-	-	-	1	-
Area	11	*	-	-	-	-	-	-	11	-
Negros Island Region (NIR)										
Fishpond										
Number	1,704	1,051	142	173	56	84	64	37	63	34
Area	3,969	52	85	195	117	289	348	287	856	1,742
Fish Pen										
Number	40	28	-	4	-	-	2	-	4	2
Area	175	4	-	6	-	-	11	-	94	60
Fish Cage										
Number	106	88	5	6	1	1	1	2	2	-
Area	77	4	3	6	2	3	5	15	40	-
Seaweed Farm										
Number	384	379	2	2	-	1	-	-	-	-
Area	31	24	1	2	-	4	-	-	-	-
Oyster Farm										
Number	542	526	9	4	-	1	-	-	1	1
Area	65	12	5	5	-	3	-	-	10	31
Mussel Farm										
Number	16	15	1	-	-	-	-	-	-	-
Area	1	*	1	-	-	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-

Notes: Details may not add up to total due to rounding

* Denotes < 0.5 hectare

- Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Table A2. Number and Volume of Fish Tank and Hatchery by Volume of Aquafarm and Region: Philippines, 2012
(Data are tabulated by location of aquafarm)

Region, Type, Number and Volume of Aquafarm	Total	Volume of Aquafarm (in Cubic Meters)					
		Under 1.0	1.0 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 9.9	10 and Over
Philippines							
Fish Tank							
Number	1,029	464	151	102	57	37	218
Volume	12,375	60	251	345	330	299	11,091
Hatchery							
Number	590	248	75	47	55	10	155
Volume	21,325	34	109	170	321	79	20,612
National Capital Region (NCR)							
Fish Tank							
Number	30	4	2	7	1	3	13
Volume	467	*	2	25	6	25	408
Hatchery							
Number	3	1	-	-	2	-	-
Volume	11	*	-	-	11	-	-
Cordillera Administration Region (CAR)							
Fish Tank							
Number	20	8	5	-	1	-	6
Volume	227	*	8	-	7	-	212
Hatchery							
Number	9	4	1	-	-	-	4
Volume	685	*	2	-	-	-	683
Ilocos Region (Region I)							
Fish Tank							
Number	31	13	3	1	1	-	13
Volume	1,350	4	4	5	6	-	1,331
Hatchery							
Number	26	11	9	3	-	1	2
Volume	70	1	18	10	-	9	32
Cagayan Valley (Region II)							
Fish Tank							
Number	16	10	3	-	1	-	2
Volume	54	1	7	-	6	-	40
Hatchery							
Number	28	22	1	1	1	1	2
Volume	163	2	1	4	6	8	142
Central Luzon (Region III)							
Fish Tank							
Number	29	12	4	1	1	2	9
Volume	295	2	5	3	5	15	265
Hatchery							
Number	101	24	7	5	9	1	55
Volume	5,508	8	10	18	54	8	5,410
CALABARZON (Region IV-A)							
Fish Tank							
Number	42	12	3	6	5	1	15
Volume	1,051	1	6	21	28	7	988
Hatchery							
Number	104	46	9	20	7	-	22
Volume	886	6	15	70	37	-	758

Table A2. Number and Volume of Fish Tank and Hatchery by Volume of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Volume of Aquafarm	Total	Volume of Aquafarm (in Cubic Meters)					
		Under 1.0	1.0 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 9.9	10 and Over
MIMAROPA Region							
Fish Tank							
Number	67	10	11	8	9	7	22
Volume	1,096	1	22	28	51	58	937
Hatchery							
Number	6	3	1	-	-	-	2
Volume	720	1	2	-	-	-	717
Bicol Region (Region V)							
Fish Tank							
Number	116	48	12	6	10	13	27
Volume	1,542	5	24	23	58	103	1,328
Hatchery							
Number	36	17	6	1	5	1	6
Volume	988	2	6	4	30	8	938
Western Visayas (Region VI)							
Fish Tank							
Number	56	23	7	7	2	-	17
Volume	1,661	3	12	23	12	-	1,610
Hatchery							
Number	43	22	6	6	3	-	6
Volume	1,745	2	8	21	17	-	1,697
Central Visayas (Region VII)							
Fish Tank							
Number	87	35	24	9	8	-	11
Volume	1,081	2	36	33	45	-	965
Hatchery							
Number	21	5	2	1	2	1	10
Volume	1,237	*	3	5	11	8	1,210
Eastern Visayas (Region VIII)							
Fish Tank							
Number	59	35	3	7	4	2	8
Volume	735	3	5	23	26	18	660
Hatchery							
Number	26	17	5	-	1	-	3
Volume	270	1	7	-	5	-	258
Zamboanga Peninsula (Region IX)							
Fish Tank							
Number	33	13	11	4	-	-	5
Volume	123	1	20	14	-	-	88
Hatchery							
Number	57	5	7	5	19	1	20
Volume	4,768	*	12	21	115	7	4,614
Northern Mindanao (Region X)							
Fish Tank							
Number	208	126	30	20	5	4	23
Volume	626	23	47	64	29	33	431
Hatchery							
Number	14	7	2	1	1	-	3
Volume	128	1	3	4	6	-	113

Table A2. Number and Volume of Fish Tank and Hatchery by Volume of Aquafarm and Region: Philippines, 2012 (concluded)
(Data are tabulated by location of aquafarm)

Region, Type, Number and Volume of Aquafarm	Total	Volume of Aquafarm (in Cubic Meters)					
		Under 1.0	1.0 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 9.9	10 and Over
Davao Region (Region XI)							
Fish Tank							
Number	71	44	6	8	3	2	8
Volume	443	4	8	27	16	16	372
Hatchery							
Number	40	27	2	3	-	-	8
Volume	2,333	5	3	11	-	-	2,314
SOCCKSARGEN (Region XII)							
Fish Tank							
Number	30	10	2	1	2	1	14
Volume	652	1	5	4	12	8	624
Hatchery							
Number	36	20	6	-	1	2	7
Volume	1,508	*	9	-	6	16	1,477
Autonomous Region in Muslim Mindanao (ARMM)							
Fish Tank							
Number	17	9	-	-	-	-	8
Volume	213	1	-	-	-	-	212
Hatchery							
Number	4	2	1	-	-	-	1
Volume	20	*	2	-	-	-	18
Caraga (Region XIII)							
Fish Tank							
Number	42	19	12	3	1	-	7
Volume	271	2	22	10	6	-	230
Hatchery							
Number	12	2	1	-	4	2	3
Volume	131	*	2	-	24	15	90
Negros Island Region (NIR)							
Fish Tank							
Number	75	33	13	14	3	2	10
Volume	488	3	19	43	17	15	392
Hatchery							
Number	24	13	9	1	-	-	1
Volume	155	1	9	3	-	-	142

Notes: Details may not add up to total due to rounding

* Denotes < 0.5 cubic meter

- Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Table A3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012
(Data are tabulated by location of aquafarm)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
Philippines				
Fishpond	75,002	49,065	21,987	3,950
Fish Pen	3,102	1,623	785	694
Fish Cage	16,353	9,683	2,323	4,347
Seaweed Farm	48,494	-	-	48,494
Oyster Farm	2,856	-	1,988	868
Mussel Farm	1,040	3	250	787
Fish Tank	1,029	929	57	43
Hatchery	590	352	138	100
Others	228	40	5	183
National Capital Region (NCR)				
Fishpond	175	54	116	5
Fish Pen	25	13	12	-
Fish Cage	80	71	7	2
Seaweed Farm	-	-	-	-
Oyster Farm	-	-	-	-
Mussel Farm	41	-	4	37
Fish Tank	30	16	12	2
Hatchery	3	2	1	-
Others	-	-	-	-
Cordillera Administration Region (CAR)				
Fishpond	4,182	4,179	3	-
Fish Pen	26	26	-	-
Fish Cage	311	311	-	-
Seaweed Farm	-	-	-	-
Oyster Farm	-	-	-	-
Mussel Farm	-	-	-	-
Fish Tank	20	20	-	-
Hatchery	9	9	-	-
Others	-	-	-	-
Ilocos Region (Region I)				
Fishpond	6,468	2,748	3,481	239
Fish Pen	711	134	422	155
Fish Cage	2,205	532	1,340	333
Seaweed Farm	2	-	-	2
Oyster Farm	267	-	99	168
Mussel Farm	9	3	2	4
Fish Tank	31	26	2	3
Hatchery	26	9	9	8
Others	145	4	1	140
Cagayan Valley (Region II)				
Fishpond	6,729	6,298	412	19
Fish Pen	22	14	8	-
Fish Cage	166	88	65	13
Seaweed Farm	-	-	-	-
Oyster Farm	36	-	36	-
Mussel Farm	-	-	-	-
Fish Tank	16	15	1	-
Hatchery	28	28	-	-
Others	6	6	-	-

Table A3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
Central Luzon (Region III)				
Fishpond	11,109	6,516	4,460	133
Fish Pen	98	34	64	-
Fish Cage	108	43	56	9
Seaweed Farm	-	-	-	-
Oyster Farm	258	-	206	52
Mussel Farm	7	-	1	6
Fish Tank	29	25	4	-
Hatchery	101	62	23	16
Others	-	-	-	-
CALABARZON (Region IV-A)				
Fishpond	3,107	1,559	962	586
Fish Pen	518	497	9	12
Fish Cage	6,959	6,761	95	103
Seaweed Farm	246	-	-	246
Oyster Farm	49	-	2	47
Mussel Farm	345	-	9	336
Fish Tank	42	38	1	3
Hatchery	104	72	19	13
Others	10	3	-	7
MIMAROPA Region				
Fishpond	2,610	1,357	1,040	213
Fish Pen	39	16	18	5
Fish Cage	1,733	16	36	1,681
Seaweed Farm	7,323	-	-	7,323
Oyster Farm	-	-	-	-
Mussel Farm	-	-	-	-
Fish Tank	67	51	6	10
Hatchery	6	2	3	1
Others	22	-	-	22
Bicol Region (Region V)				
Fishpond	8,311	4,938	2,519	854
Fish Pen	106	86	6	14
Fish Cage	1,553	1,104	63	386
Seaweed Farm	2,935	-	-	2,935
Oyster Farm	6	-	2	4
Mussel Farm	100	-	44	56
Fish Tank	116	103	7	6
Hatchery	36	11	16	9
Others	3	-	-	3
Western Visayas (Region VI)				
Fishpond	5,291	2,454	2,407	430
Fish Pen	186	12	57	117
Fish Cage	355	45	245	65
Seaweed Farm	4,069	-	-	4,069
Oyster Farm	1,491	-	1,266	225
Mussel Farm	136	-	128	8
Fish Tank	56	47	6	3
Hatchery	43	20	15	8
Others	9	4	2	3

Table A3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012 (continued)
(Data are tabulated by location of aquafarm)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
Central Visayas (Region VII)				
Fishpond	2,616	1,833	452	331
Fish Pen	71	23	9	39
Fish Cage	124	38	13	73
Seaweed Farm	2,938	-	-	2,938
Oyster Farm	97	-	7	90
Mussel Farm	-	-	-	-
Fish Tank	87	83	3	1
Hatchery	21	7	4	10
Others	3	1	-	2
Eastern Visayas (Region VIII)				
Fishpond	4,956	3,953	788	215
Fish Pen	235	38	33	164
Fish Cage	781	41	88	652
Seaweed Farm	992	-	-	992
Oyster Farm	13	-	5	8
Mussel Farm	347	-	42	305
Fish Tank	59	47	6	6
Hatchery	26	21	4	1
Others	-	-	-	-
Zamboanga Peninsula (Region IX)				
Fishpond	2,397	333	1,855	209
Fish Pen	146	28	8	110
Fish Cage	46	12	12	22
Seaweed Farm	6,876	-	-	6,876
Oyster Farm	30	-	19	11
Mussel Farm	9	-	1	8
Fish Tank	33	29	3	1
Hatchery	57	8	30	19
Others	3	3	-	-
Northern Mindanao (Region X)				
Fishpond	3,491	2,608	834	49
Fish Pen	38	24	14	-
Fish Cage	122	38	18	66
Seaweed Farm	1,583	-	-	1,583
Oyster Farm	1	-	1	-
Mussel Farm	15	-	12	3
Fish Tank	208	207	-	1
Hatchery	14	9	2	3
Others	4	2	1	1
Davao Region (Region XI)				
Fishpond	2,608	1,933	503	172
Fish Pen	91	19	63	9
Fish Cage	199	34	57	108
Seaweed Farm	549	-	-	549
Oyster Farm	15	-	7	8
Mussel Farm	3	-	-	3
Fish Tank	71	70	1	-
Hatchery	40	37	2	1
Others	11	10	-	1

Table A3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012 (concluded)
(Data are tabulated by location of aquafarm)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
SOCCKSARGEN (Region XII)				
Fishpond	6,439	5,752	554	133
Fish Pen	625	608	15	2
Fish Cage	501	472	3	26
Seaweed Farm	5	-	-	5
Oyster Farm	-	-	-	-
Mussel Farm	-	-	-	-
Fish Tank	30	29	-	1
Hatchery	36	33	3	-
Others	-	-	-	-
Autonomous Region in Muslim Mindanao (ARMM)				
Fishpond	660	416	72	172
Fish Pen	70	27	4	39
Fish Cage	159	14	12	133
Seaweed Farm	19,823	-	-	19,823
Oyster Farm	51	-	1	50
Mussel Farm	11	-	1	10
Fish Tank	17	11	2	4
Hatchery	4	1	-	3
Others	1	-	-	1
Caraga (Region XIII)				
Fishpond	2,149	1,265	817	67
Fish Pen	55	22	20	13
Fish Cage	845	60	135	650
Seaweed Farm	769	-	-	769
Oyster Farm	-	-	-	-
Mussel Farm	1	-	1	-
Fish Tank	42	40	-	2
Hatchery	12	6	3	3
Others	11	7	1	3
Negros Island Region (NIR)				
Fishpond	1,704	869	712	123
Fish Pen	40	2	23	15
Fish Cage	106	3	78	25
Seaweed Farm	384	-	-	384
Oyster Farm	542	-	337	205
Mussel Farm	16	-	5	11
Fish Tank	75	72	3	-
Hatchery	24	15	4	5
Others	-	-	-	-

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

**RESIDENCE OF AQUACULTURE
OPERATOR**

Table B1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)									
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over	
Philippines											
Fishpond											
Number	75,002	50,358	6,722	7,633	3,246	3,136	1,490	851	1,219	347	
Area	85,606	3,658	3,865	8,808	6,912	10,766	7,999	6,618	17,025	19,955	
Fish Pen											
Number	3,102	2,210	488	276	45	29	17	3	17	17	
Area	2,553	249	261	294	93	99	92	23	278	1,165	
Fish Cage											
Number	16,353	15,333	557	283	73	41	21	11	25	9	
Area	2,849	642	318	317	154	138	108	82	382	708	
Seaweed Farm											
Number	48,494	37,936	6,733	3,012	462	114	31	17	18	171	
Area	30,292	5,067	3,796	3,231	955	380	163	128	228	16,345	
Oyster Farm											
Number	2,856	2,636	140	53	7	5	1	-	12	2	
Area	568	131	78	57	15	17	5	-	195	71	
Mussel Farm											
Number	1,040	902	73	47	12	3	2	-	1	-	
Area	233	81	39	51	25	10	11	-	15	-	
Others											
Number	228	199	4	4	11	3	4	1	1	1	
Area	122	3	2	4	23	11	21	7	11	40	
National Capital Region (NCR)											
Fishpond											
Number	579	241	71	107	67	49	18	13	9	4	
Area	1,042	20	40	118	140	167	94	104	102	257	
Fish Pen											
Number	52	26	5	9	2	1	1	-	2	6	
Area	353	2	3	10	4	3	5	-	46	281	
Fish Cage											
Number	117	97	4	7	4	3	1	-	1	-	
Area	49	4	2	7	9	12	5	-	11	-	
Seaweed Farm											
Number	6	4	-	2	-	-	-	-	-	-	
Area	3	1	-	2	-	-	-	-	-	-	
Oyster Farm											
Number	2	2	-	-	-	-	-	-	-	-	
Area	*	*	-	-	-	-	-	-	-	-	
Mussel Farm											
Number	44	43	-	1	-	-	-	-	-	-	
Area	4	3	-	1	-	-	-	-	-	-	
Others											
Number	1	-	-	-	-	-	1	-	-	-	
Area	5	-	-	-	-	-	5	-	-	-	
Cordillera Administration Region (CAR)											
Fishpond											
Number	4,211	4,050	103	43	3	4	6	2	-	-	
Area	377	196	60	49	7	16	33	16	-	-	
Fish Pen											
Number	29	27	1	-	1	-	-	-	-	-	
Area	4	2	1	-	2	-	-	-	-	-	
Fish Cage											
Number	313	290	18	5	-	-	-	-	-	-	
Area	36	19	12	6	-	-	-	-	-	-	

Table B1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Seaweed Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Oyster Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Ilocos Region (Region I)										
Fishpond										
Number	6,364	4,287	922	787	142	128	50	28	19	1
Area	3,401	452	542	906	312	432	258	219	250	30
Fish Pen										
Number	702	648	33	13	3	2	2	1	-	-
Area	129	67	19	14	6	6	10	8	-	-
Fish Cage										
Number	2,193	2,172	14	3	-	1	1	-	2	-
Area	117	58	8	3	-	3	5	-	39	-
Seaweed Farm										
Number	1	1	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Oyster Farm										
Number	267	242	12	10	3	-	-	-	-	-
Area	28	6	6	10	6	-	-	-	-	-
Mussel Farm										
Number	9	8	1	-	-	-	-	-	-	-
Area	1	*	1	-	-	-	-	-	-	-
Others										
Number	145	144	-	-	-	-	1	-	-	-
Area	6	1	-	-	-	-	5	-	-	-
Cagayan Valley (Region II)										
Fishpond										
Number	6,696	5,499	723	322	66	51	20	8	4	3
Area	1,950	533	416	358	143	169	109	63	54	105
Fish Pen										
Number	22	21	-	-	1	-	-	-	-	-
Area	4	2	-	-	2	-	-	-	-	-
Fish Cage										
Number	166	158	6	1	-	-	-	-	1	-
Area	24	9	4	1	-	-	-	-	10	-
Seaweed Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Oyster Farm										
Number	35	28	6	1	-	-	-	-	-	-
Area	7	3	3	1	-	-	-	-	-	-
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	6	5	1	-	-	-	-	-	-	-
Area	2	1	1	-	-	-	-	-	-	-
Central Luzon (Region III)										
Fishpond										
Number	10,962	4,707	1,488	2,149	992	836	324	186	219	61
Area	19,437	497	857	2,532	2,136	2,870	1,731	1,443	2,955	4,415

Table B1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Mussel Farm										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-
Others										
Number	22	3	1	4	10	2	2	-	-	-
Area	44	1	1	4	20	8	11	-	-	-
Bicol Region (Region V)										
Fishpond										
Number	8,270	5,723	639	639	278	332	242	138	223	56
Area	10,955	350	358	733	593	1,132	1,288	1,068	3,148	2,284
Fish Pen										
Number	103	93	7	3	-	-	-	-	-	-
Area	14	7	4	4	-	-	-	-	-	-
Fish Cage										
Number	1,542	1,304	122	62	25	11	6	3	8	1
Area	700	94	69	71	52	38	30	23	124	200
Seaweed Farm										
Number	2,933	2,481	258	160	29	1	2	1	1	-
Area	634	228	139	178	59	3	11	8	10	-
Oyster Farm										
Number	6	6	-	-	-	-	-	-	-	-
Area	1	1	-	-	-	-	-	-	-	-
Mussel Farm										
Number	99	90	4	3	1	1	-	-	-	-
Area	21	10	2	3	2	4	-	-	-	-
Others										
Number	2	2	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Western Visayas (Region VI)										
Fishpond										
Number	5,271	2,810	498	694	297	374	203	118	205	72
Area	12,147	268	286	802	627	1,295	1,100	933	2,954	3,882
Fish Pen										
Number	185	152	13	13	2	2	-	1	1	1
Area	94	17	7	15	4	7	-	7	10	28
Fish Cage										
Number	351	315	29	5	2	-	-	-	-	-
Area	40	16	15	5	4	-	-	-	-	-
Seaweed Farm										
Number	4,056	3,290	561	157	34	9	3	1	1	-
Area	1,086	451	329	170	70	31	15	8	12	-
Oyster Farm										
Number	1,491	1,385	80	11	2	2	-	-	10	1
Area	365	87	42	11	5	6	-	-	175	40
Mussel Farm										
Number	136	124	12	-	-	-	-	-	-	-
Central Visayas (Region VII)										
Fishpond										
Number	2,601	2,002	112	214	93	78	43	23	29	7
Area	1,982	94	66	244	194	269	230	180	420	283
Fish Pen										
Number	70	55	6	1	-	1	-	1	6	-
Area	114	3	4	1	-	4	-	8	94	-

Table B1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Northern Mindanao (Region X)										
Fishpond										
Number	3,555	2,712	225	285	125	117	29	30	28	4
Area	2,138	150	135	325	262	398	157	231	350	130
Fish Pen										
Number	49	46	1	-	1	1	-	-	-	-
Area	9	4	1	-	2	3	-	-	-	-
Fish Cage										
Number	122	102	9	7	3	1	-	-	-	-
Area	29	7	5	8	6	3	-	-	-	-
Seaweed Farm										
Number	1,583	1,476	61	39	6	1	-	-	-	-
Area	240	139	38	47	14	3	-	-	-	-
Oyster Farm										
Number	1	1	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Mussel Farm										
Number	15	15	-	-	-	-	-	-	-	-
Area	1	1	-	-	-	-	-	-	-	-
Others										
Number	4	2	1	-	-	1	-	-	-	-
Area	4	*	1	-	-	3	-	-	-	-
Davao Region (Region XI)										
Fishpond										
Number	2,610	1,917	133	220	151	110	25	20	18	16
Area	3,031	111	76	253	326	374	136	157	277	1,322
Fish Pen										
Number	91	46	32	9	-	2	1	-	-	1
Area	551	7	20	11	-	7	6	-	-	500
Fish Cage										
Number	194	147	20	11	4	6	1	-	1	4
Area	419	15	11	13	11	22	5	-	17	325
Seaweed Farm										
Number	550	504	34	5	2	2	1	2	-	-
Area	133	73	21	6	5	9	5	14	-	-
Oyster Farm										
Number	15	14	1	-	-	-	-	-	-	-
Area	2	2	1	-	-	-	-	-	-	-
Mussel Farm										
Number	3	3	-	-	-	-	-	-	-	-
Area	*	*	-	-	-	-	-	-	-	-
Others										
Number	11	10	-	-	-	-	-	1	-	-
Area	7	*	-	-	-	-	-	7	-	-
SOCCKSARGEN (Region XII)										
Fishpond										
Number	6,487	5,621	331	247	110	98	45	10	21	4
Area	2,290	315	183	275	228	318	238	75	276	382
Fish Pen										
Number	643	317	222	96	6	-	1	-	1	-
Area	320	78	113	100	13	-	6	-	10	-
Fish Cage										
Number	507	469	13	13	4	1	2	1	2	2
Area	253	37	7	16	8	3	10	8	36	128

Table B1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)									
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over	
Autonomous Region in Muslim Mindanao (ARMM)											
Seaweed Farm											
Number	17	5	1	8	2	1	-	-	-	-	
Area	16	*	1	8	4	3	-	-	-	-	
Oyster Farm											
Number	-	-	-	-	-	-	-	-	-	-	
Area	-	-	-	-	-	-	-	-	-	-	
Mussel Farm											
Number	-	-	-	-	-	-	-	-	-	-	
Fishpond											
Number	601	320	115	116	20	10	10	4	5	1	
Area	719	38	68	146	43	35	52	28	59	250	
Fish Pen											
Number	53	26	22	4	-	-	1	-	-	-	
Area	24	3	11	4	-	-	5	-	-	-	
Fish Cage											
Number	155	119	26	4	1	1	4	-	-	-	
Area	63	13	18	5	2	4	22	-	-	-	
Seaweed Farm											
Number	19,805	15,749	2,969	952	80	19	1	-	7	28	
Area	8,947	2,308	1,689	1,032	167	62	5	-	81	3,603	
Oyster Farm											
Number	51	26	16	9	-	-	-	-	-	-	
Area	28	5	13	10	-	-	-	-	-	-	
Mussel Farm											
Number	11	10	1	-	-	-	-	-	-	-	
Area	3	2	1	-	-	-	-	-	-	-	
Others											
Number	1	-	-	-	1	-	-	-	-	-	
Area	3	-	-	-	3	-	-	-	-	-	
Caraga (Region XIII)											
Fishpond											
Number	2,146	1,363	173	255	107	125	43	24	41	15	
Area	2,942	112	101	300	228	430	230	191	560	790	
Fish Pen											
Number	55	50	1	2	1	1	-	-	-	-	
Area	13	5	1	2	2	4	-	-	-	-	
Fish Cage											
Number	846	785	32	20	5	-	1	1	2	-	
Area	123	42	18	22	11	-	5	7	20	-	
Seaweed Farm											
Number	769	509	167	72	15	2	3	-	1	-	
Area	296	58	93	75	31	7	16	-	16	-	
Oyster Farm											
Number	-	-	-	-	-	-	-	-	-	-	
Area	-	-	-	-	-	-	-	-	-	-	
Mussel Farm											
Number	1	-	-	-	1	-	-	-	-	-	
Area	2	-	-	-	2	-	-	-	-	-	
Others											
Number	11	10	-	-	-	-	-	-	1	-	
Area	11	*	-	-	-	-	-	-	11	-	
Negros Island Region (NIR)											
Fishpond											
Number	1,698	1,049	142	172	56	83	66	36	62	32	
Area	3,838	51	85	194	117	285	359	278	838	1,632	

Table B1. Number and Area of Aquafarms by Type of Aquafarm, Size of Aquafarm and Region: Philippines, 2012 (concluded)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Area of Aquafarm	Total	Size of Aquafarm (in Hectares)								
		Under 0.500	0.500 to 0.999	1.000 to 1.999	2.000 to 2.999	3.000 to 4.999	5.000 to 6.999	7.000 to 9.999	10.000 to 24.999	25.000 and Over
Fish Pen										
Number	38	28	-	4	-	-	2	-	2	2
Area	129	4	-	6	-	-	11	-	48	60
Fish Cage										
Number	107	88	5	7	1	1	1	2	2	-
Area	79	4	3	8	2	3	5	15	40	-
Seaweed Farm										
Number	385	380	2	2	-	1	-	-	-	-
Area	31	24	1	2	-	4	-	-	-	-
Oyster Farm										
Number	541	525	9	4	-	1	-	-	1	1
Area	65	12	5	5	-	3	-	-	10	31
Mussel Farm										
Number	16	15	1	-	-	-	-	-	-	-
Area	1	*	1	-	-	-	-	-	-	-
Others										
Number	-	-	-	-	-	-	-	-	-	-
Area	-	-	-	-	-	-	-	-	-	-

Notes: Details may not add up to total due to rounding

* Denotes < 0.5 hectare

- Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Table B2. Number and Volume of Fish Tank and Hatchery by Volume of Aquafarm and Region: Philippines, 2012
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Volume of Aquafarm	Total	Volume of Aquafarm (in Cubic Meters)					
		Under 1.0	1.0 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 9.9	10 and Over
Philippines							
Fish Tank							
Number	1,029	464	151	102	57	37	218
Volume	12,375	60	251	345	330	299	11,091
Hatchery							
Number	590	248	75	47	55	10	155
Volume	21,325	34	109	170	321	79	20,612
National Capital Region (NCR)							
Fish Tank							
Number	33	4	2	7	2	4	14
Volume	491	*	2	25	11	32	420
Hatchery							
Number	14	2	2	1	3	-	6
Volume	203	*	4	3	17	-	180
Cordillera Administration Region (CAR)							
Fish Tank							
Number	20	8	5	-	1	-	6
Volume	227	*	8	-	7	-	212
Hatchery							
Number	9	4	1	-	-	-	4
Volume	685	*	2	-	-	-	683
Ilocos Region (Region I)							
Fish Tank							
Number	31	13	3	1	1	-	13
Volume	1,350	4	4	5	6	-	1,331
Hatchery							
Number	25	10	9	3	-	1	2
Volume	70	1	18	10	-	9	32
Cagayan Valley (Region II)							
Fish Tank							
Number	16	10	3	-	1	-	2
Volume	54	1	7	-	6	-	40
Hatchery							
Number	28	22	1	1	1	1	2
Volume	163	2	1	4	6	8	142
Central Luzon (Region III)							
Fish Tank							
Number	27	12	4	1	-	1	9
Volume	283	2	5	3	-	8	265
Hatchery							
Number	93	22	5	5	9	1	51
Volume	5,344	8	7	18	54	8	5,250
CALABARZON (Region IV-A)							
Fish Tank							
Number	42	12	3	6	5	1	15
Volume	1,051	1	6	21	28	7	988
Hatchery							
Number	106	50	9	19	6	-	22
Volume	878	7	14	67	31	-	758

Table B2. Number and Volume of Fish Tank and Hatchery by Volume of Aquafarm and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Volume of Aquafarm	Total	Volume of Aquafarm (in Cubic Meters)					
		Under 1.0	1.0 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 9.9	10 and Over
MIMAROPA Region							
Fish Tank							
Number	67	10	11	8	9	7	22
Volume	1,096	1	22	28	51	58	937
Hatchery							
Number	3	1	-	-	-	-	2
Volume	717	*	-	-	-	-	717
Bicol Region (Region V)							
Fish Tank							
Number	115	48	12	6	10	13	26
Volume	1,530	5	24	23	58	103	1,316
Hatchery							
Number	35	17	6	1	5	1	5
Volume	978	2	6	4	30	8	928
Western Visayas (Region VI)							
Fish Tank							
Number	55	23	7	7	2	-	16
Volume	1,649	3	12	23	12	-	1,598
Hatchery							
Number	45	22	7	6	3	-	7
Volume	1,862	3	10	21	17	-	1,812
Central Visayas (Region VII)							
Fish Tank							
Number	87	35	24	9	8	-	11
Volume	1,081	2	36	33	45	-	965
Hatchery							
Number	21	5	2	1	2	1	10
Volume	1,237	*	3	5	11	8	1,210
Eastern Visayas (Region VIII)							
Fish Tank							
Number	59	35	3	7	4	2	8
Volume	735	3	5	23	26	18	660
Hatchery							
Number	25	17	5	-	1	-	2
Volume	260	1	7	-	5	-	248
Zamboanga Peninsula (Region IX)							
Fish Tank							
Number	33	13	11	4	-	-	5
Volume	123	1	20	14	-	-	88
Hatchery							
Number	56	5	7	5	19	1	19
Volume	4,653	*	12	21	115	7	4,499
Northern Mindanao (Region X)							
Fish Tank							
Number	207	125	30	20	5	4	23
Volume	626	23	47	64	29	33	431
Hatchery							
Number	13	6	2	1	1	-	3
Volume	127	1	3	4	6	-	113

Table B2. Number and Volume of Fish Tank and Hatchery by Volume of Aquafarm and Region: Philippines, 2012 (concluded)
(Data are tabulated by residence of aquaculture operator)

Region, Type, Number and Volume of Aquafarm	Total	Volume of Aquafarm (in Cubic Meters)					
		Under 1.0	1.0 - 2.9	3.0 - 4.9	5.0 - 6.9	7.0 - 9.9	10 and Over
Davao Region (Region XI)							
Fish Tank							
Number	71	44	6	8	3	2	8
Volume	443	4	8	27	16	16	372
Hatchery							
Number	40	27	2	3	-	-	8
Volume	2,333	5	3	11	-	-	2,314
SOCCKSARGEN (Region XII)							
Fish Tank							
Number	37	10	2	1	2	1	21
Volume	830	1	5	4	12	8	802
Hatchery							
Number	36	20	6	-	1	2	7
Volume	1,508	*	9	-	6	16	1,477
Autonomous Region in Muslim Mindanao (ARMM)							
Fish Tank							
Number	12	10	-	-	-	-	2
Volume	47	1	-	-	-	-	46
Hatchery							
Number	4	2	1	-	-	-	1
Volume	20	*	2	-	-	-	18
Caraga (Region XIII)							
Fish Tank							
Number	42	19	12	3	1	-	7
Volume	271	2	22	10	6	-	230
Hatchery							
Number	12	2	1	-	4	2	3
Volume	131	*	2	-	24	15	90
Negros Island Region (NIR)							
Fish Tank							
Number	75	33	13	14	3	2	10
Volume	488	3	19	43	17	15	392
Hatchery							
Number	25	14	9	1	-	-	1
Volume	155	2	9	3	-	-	142

Notes: Details may not add up to total due to rounding

* Denotes < 0.5 cubic meter

- Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Table B3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012

(Data are tabulated by residence of aquaculture operator)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
Philippines				
Fishpond	75,002	49,065	21,987	3,950
Fish Pen	3,102	1,623	785	694
Fish Cage	16,353	9,683	2,323	4,347
Seaweed Farm	48,494	-	-	48,494
Oyster Farm	2,856	-	1,988	868
Mussel Farm	1,040	3	250	787
Fish Tank	1,029	929	57	43
Hatchery	590	352	138	100
Others	228	40	5	183
National Capital Region (NCR)				
Fishpond	579	253	274	52
Fish Pen	52	29	18	5
Fish Cage	117	90	16	11
Seaweed Farm	6	-	-	6
Oyster Farm	2	-	1	1
Mussel Farm	44	-	3	41
Fish Tank	33	19	12	2
Hatchery	14	8	4	2
Others	1	-	-	1
Cordillera Administration Region (CAR)				
Fishpond	4,211	4,205	3	3
Fish Pen	29	26	1	2
Fish Cage	313	311	2	-
Seaweed Farm	-	-	-	-
Oyster Farm	-	-	-	-
Mussel Farm	-	-	-	-
Fish Tank	20	20	-	-
Hatchery	9	9	-	-
Others	-	-	-	-
Ilocos Region (Region I)				
Fishpond	6,364	2,698	3,444	222
Fish Pen	702	132	420	150
Fish Cage	2,193	530	1,333	330
Seaweed Farm	1	-	-	1
Oyster Farm	267	-	99	168
Mussel Farm	9	3	2	4
Fish Tank	31	26	2	3
Hatchery	25	9	9	7
Others	145	4	1	140
Cagayan Valley (Region II)				
Fishpond	6,696	6,268	409	19
Fish Pen	22	14	8	-
Fish Cage	166	87	65	14
Seaweed Farm	-	-	-	-
Oyster Farm	35	-	35	-
Mussel Farm	-	-	-	-
Fish Tank	16	15	1	-
Hatchery	28	28	-	-
Others	6	6	-	-

Table B3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
Central Luzon (Region III)				
Fishpond	10,962	6,421	4,414	127
Fish Pen	96	29	64	3
Fish Cage	106	40	55	11
Seaweed Farm	-	-	-	-
Oyster Farm	258	-	206	52
Mussel Farm	8	-	2	6
Fish Tank	27	23	4	-
Hatchery	93	59	20	14
Others	-	-	-	-
CALABARZON (Region IV-A)				
Fishpond	3,085	1,557	944	584
Fish Pen	505	489	5	11
Fish Cage	6,954	6,756	96	102
Seaweed Farm	247	-	-	247
Oyster Farm	49	-	2	47
Mussel Farm	341	-	9	332
Fish Tank	42	38	1	3
Hatchery	106	70	22	14
Others	10	3	-	7
MIMAROPA Region				
Fishpond	2,582	1,350	1,026	206
Fish Pen	39	16	18	5
Fish Cage	1,732	16	36	1,680
Seaweed Farm	7,334	-	-	7,334
Oyster Farm	-	-	-	-
Mussel Farm	-	-	-	-
Fish Tank	67	51	6	10
Hatchery	3	2	-	1
Others	22	-	-	22
Bicol Region (Region V)				
Fishpond	8,270	4,919	2,504	847
Fish Pen	103	84	6	13
Fish Cage	1,542	1,099	61	382
Seaweed Farm	2,933	-	-	2,933
Oyster Farm	6	-	2	4
Mussel Farm	99	-	43	56
Fish Tank	115	103	6	6
Hatchery	35	10	16	9
Others	2	-	-	2
Western Visayas (Region VI)				
Fishpond	5,271	2,446	2,396	429
Fish Pen	185	12	56	117
Fish Cage	351	44	243	64
Seaweed Farm	4,056	-	-	4,056
Oyster Farm	1,491	-	1,266	225
Mussel Farm	136	-	128	8
Fish Tank	55	46	6	3
Hatchery	45	20	17	8
Others	9	4	2	3

Table B3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012 (continued)
(Data are tabulated by residence of aquaculture operator)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
Central Visayas (Region VII)				
Fishpond	2,601	1,819	454	328
Fish Pen	70	23	9	38
Fish Cage	123	38	13	72
Seaweed Farm	2,961	-	-	2,961
Oyster Farm	97	-	7	90
Mussel Farm	1	-	1	-
Fish Tank	87	83	3	1
Hatchery	21	7	4	10
Others	3	1	-	2
Eastern Visayas (Region VIII)				
Fishpond	4,939	3,950	777	212
Fish Pen	235	38	33	164
Fish Cage	779	41	86	652
Seaweed Farm	967	-	-	967
Oyster Farm	13	-	5	8
Mussel Farm	347	-	42	305
Fish Tank	59	47	6	6
Hatchery	25	21	3	1
Others	-	-	-	-
Zamboanga Peninsula (Region IX)				
Fishpond	2,345	331	1,806	208
Fish Pen	135	18	7	110
Fish Cage	46	12	12	22
Seaweed Farm	6,880	-	-	6,880
Oyster Farm	30	-	19	11
Mussel Farm	9	-	1	8
Fish Tank	33	29	3	1
Hatchery	56	8	29	19
Others	3	3	-	-
Northern Mindanao (Region X)				
Fishpond	3,555	2,624	880	51
Fish Pen	49	34	15	-
Fish Cage	122	38	18	66
Seaweed Farm	1,583	-	-	1,583
Oyster Farm	1	-	1	-
Mussel Farm	15	-	12	3
Fish Tank	207	206	-	1
Hatchery	13	9	2	2
Others	4	2	1	1
Davao Region (Region XI)				
Fishpond	2,610	1,929	508	173
Fish Pen	91	19	63	9
Fish Cage	194	33	55	106
Seaweed Farm	550	-	-	550
Oyster Farm	15	-	7	8
Mussel Farm	3	-	-	3
Fish Tank	71	70	1	-
Hatchery	40	37	2	1
Others	11	10	-	1

Table B3. Number of Aquafarms by Type of Aquafarm and Water Environment and Region: Philippines, 2012 (concluded)
(Data are tabulated by residence of aquaculture operator)

Region and Type of Aquafarm	Total Number of Aquafarms	Type of Water Environment Used		
		Fresh Water	Brackish Water	Marine Water
SOCCKSARGEN (Region XII)				
Fishpond	6,487	5,770	569	148
Fish Pen	643	626	15	2
Fish Cage	507	473	6	28
Seaweed Farm	17	-	-	17
Oyster Farm	-	-	-	-
Mussel Farm	-	-	-	-
Fish Tank	37	33	1	3
Hatchery	36	33	3	-
Others	-	-	-	-
Autonomous Region in Muslim Mindanao (ARMM)				
Fishpond	601	391	56	154
Fish Pen	53	10	4	39
Fish Cage	155	12	11	132
Seaweed Farm	19,805	-	-	19,805
Oyster Farm	51	-	1	50
Mussel Farm	11	-	1	10
Fish Tank	12	8	2	2
Hatchery	4	1	-	3
Others	1	-	-	1
Caraga (Region XIII)				
Fishpond	2,146	1,267	814	65
Fish Pen	55	22	20	13
Fish Cage	846	60	136	650
Seaweed Farm	769	-	-	769
Oyster Farm	-	-	-	-
Mussel Farm	1	-	1	-
Fish Tank	42	40	-	2
Hatchery	12	6	3	3
Others	11	7	1	3
Negros Island Region (NIR)				
Fishpond	1,698	867	709	122
Fish Pen	38	2	23	13
Fish Cage	107	3	79	25
Seaweed Farm	385	-	-	385
Oyster Farm	541	-	337	204
Mussel Farm	16	-	5	11
Fish Tank	75	72	3	-
Hatchery	25	15	4	6
Others	-	-	-	-

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

**Table B4. Number of Aquaculture Operators and Aquafarms
by Region: Philippines, 2012**

(Data are tabulated by residence of aquaculture operator)

Region	Number of Aquaculture Operators	Number of Aquafarms
Philippines	131,312	148,694
National Capital Region (NCR)	730	848
Cordillera Administrative Region (CAR)	3,937	4,582
Ilocos Region (Region I)	7,899	9,737
Cagayan Valley (Region II)	6,065	6,969
Central Luzon (Region III)	9,894	11,550
CALABARZON (Region IV-A)	8,241	11,339
MIMAROPA Region	11,113	11,779
Bicol Region (Region V)	11,924	13,105
Western Visayas (Region VI)	10,137	11,599
Central Visayas (Region VII)	5,544	5,964
Eastern Visayas (Region VIII)	6,539	7,364
Zamboanga Peninsula (Region IX)	9,006	9,537
Northern Mindanao (Region X)	4,746	5,549
Davao Region (Region XI)	3,091	3,585
SOCCKSARGEN (Region XII)	6,994	7,727
Autonomous Region in Muslim Mindanao (ARMM)	19,474	20,693
Caraga (Region XIII)	3,371	3,882
Negros Island Region (NIR)	2,607	2,885

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

**RESIDENCE OF MUNICIPAL
FISHING OPERATOR**

Table M1. Number of Municipal Fishing Operations by Boat/Vessel Used, Category of Fishing, and Region: Philippines, 2012

Region and Boat/Vessel Used	Total	Category Of Fishing	
		Marine	Inland
Philippines			
All Boats	791,236	638,753	152,483
All Boats Three Gross Tons or Less	656,353	574,349	82,004
Boats Three Gross Tons or Less and Raft	2,077	1,549	528
Raft Only	17,683	8,344	9,339
No Boat Used	115,123	54,511	60,612
National Capital Region (NCR)			
All Boats	2,925	1,354	1,571
All Boats Three Gross Tons or Less	2,740	1,256	1,484
Boats Three Gross Tons or Less and Raft	3	2	1
Raft Only	109	44	65
No Boat Used	73	52	21
Cordillera Administrative Region (CAR)			
All Boats	5,582	3	5,579
All Boats Three Gross Tons or Less	332	3	329
Boats Three Gross Tons or Less and Raft	-	-	-
Raft Only	376	-	376
No Boat Used	4,874	-	4,874
Ilocos Region (Region I)			
All Boats	28,576	19,011	9,565
All Boats Three Gross Tons or Less	15,748	13,141	2,607
Boats Three Gross Tons or Less and Raft	894	733	161
Raft Only	6,733	3,637	3,096
No Boat Used	5,201	1,500	3,701
Cagayan Valley (Region II)			
All Boats	23,346	5,637	17,709
All Boats Three Gross Tons or Less	7,866	4,515	3,351
Boats Three Gross Tons or Less and Raft	24	16	8
Raft Only	1,331	215	1,116
No Boat Used	14,125	891	13,234
Central Luzon (Region III)			
All Boats	34,660	17,475	17,185
All Boats Three Gross Tons or Less	24,283	15,457	8,826
Boats Three Gross Tons or Less and Raft	23	19	4
Raft Only	616	100	516
No Boat Used	9,738	1,899	7,839
CALABARZON (Region IV-A)			
All Boats	59,867	45,066	14,801
All Boats Three Gross Tons or Less	54,879	42,406	12,473
Boats Three Gross Tons or Less and Raft	90	17	73
Raft Only	1,132	217	915
No Boat Used	3,766	2,426	1,340
MIMAROPA Region			
All Boats	84,042	76,201	7,841
All Boats Three Gross Tons or Less	73,304	70,098	3,206
Boats Three Gross Tons or Less and Raft	235	229	6
Raft Only	909	792	117
No Boat Used	9,594	5,082	4,512

Table M1. Number of Municipal Fishing Operations by Boat/Vessel Used, Category of Fishing, and Region: Philippines, 2012 (continued)

Region and Boat/Vessel Used	Total	Category Of Fishing	
		Marine	Inland
Bicol Region (Region V)			
All Boats	101,769	88,487	13,282
All Boats Three Gross Tons or Less	85,522	78,576	6,946
Boats Three Gross Tons or Less and Raft	71	61	10
Raft Only	1,178	636	542
No Boat Used	14,998	9,214	5,784
Western Visayas (Region VI)			
All Boats	41,103	32,702	8,401
All Boats Three Gross Tons or Less	37,414	31,281	6,133
Boats Three Gross Tons or Less and Raft	276	111	165
Raft Only	611	258	353
No Boat Used	2,802	1,052	1,750
Central Visayas (Region VII)			
All Boats	62,195	60,403	1,792
All Boats Three Gross Tons or Less	52,217	51,981	236
Boats Three Gross Tons or Less and Raft	39	39	-
Raft Only	758	724	34
No Boat Used	9,181	7,659	1,522
Eastern Visayas (Region VIII)			
All Boats	100,070	88,454	11,616
All Boats Three Gross Tons or Less	76,571	72,455	4,116
Boats Three Gross Tons or Less and Raft	68	67	1
Raft Only	710	513	197
No Boat Used	22,721	15,419	7,302
Zamboanga Peninsula (Region IX)			
All Boats	31,661	30,040	1,621
All Boats Three Gross Tons or Less	31,192	29,817	1,375
Boats Three Gross Tons or Less and Raft	11	9	2
Raft Only	243	143	100
No Boat Used	215	71	144
Northern Mindanao (Region X)			
All Boats	25,322	22,077	3,245
All Boats Three Gross Tons or Less	20,832	19,588	1,244
Boats Three Gross Tons or Less and Raft	12	12	-
Raft Only	215	132	83
No Boat Used	4,263	2,345	1,918
Davao Region (Region XI)			
All Boats	22,609	21,941	668
All Boats Three Gross Tons or Less	20,676	20,305	371
Boats Three Gross Tons or Less and Raft	5	5	-
Raft Only	102	81	21
No Boat Used	1,826	1,550	276
SOCSESKSARGEN (Region XII)			
All Boats	34,631	19,667	14,964
All Boats Three Gross Tons or Less	29,700	19,015	10,685
Boats Three Gross Tons or Less and Raft	14	1	13
Raft Only	486	92	394
No Boat Used	4,431	559	3,872

Table M1. Number of Municipal Fishing Operations by Boat/Vessel Used, Category of Fishing, and Region: Philippines, 2012 (concluded)

Region and Boat/Vessel Used	Total	Category Of Fishing	
		Marine	Inland
Autonomous Region In Muslim Mindanao (ARMM)			
All Boats	71,294	55,685	15,609
All Boats Three Gross Tons or Less	68,379	54,793	13,586
Boats Three Gross Tons or Less and Raft	273	198	75
Raft Only	1,688	436	1,252
No Boat Used	954	258	696
Caraga (Region XIII)			
All Boats	32,266	27,216	5,050
All Boats Three Gross Tons or Less	29,799	25,762	4,037
Boats Three Gross Tons or Less and Raft	7	1	6
Raft Only	100	33	67
No Boat Used	2,360	1,420	940
Negros Islands Region (NIR)			
All Boats	29,318	27,334	1,984
All Boats Three Gross Tons or Less	24,899	23,900	999
Boats Three Gross Tons or Less and Raft	32	29	3
Raft Only	386	291	95
No Boat Used	4,001	3,114	887

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

Table M2. Number of Fishing Boats/Vessels Used by Municipal Fishing Operators, by Type of Fishing Boat/Vessel, Ownership of Fishing Boat/Vessel, and Region: Philippines, 2012

Region and Type of Fishing Boat/Vessel	Total	Ownership of Boat/Vessel	
		Owned	Not Owned
Philippines			
All Boats	740,307	593,212	147,095
Boat with engine and outrigger	362,827	282,257	80,570
Boat with engine but without outrigger	52,703	43,119	9,584
Boat without engine but with outrigger	220,669	182,171	38,498
Boat without engine and outrigger	83,828	68,337	15,491
Raft	20,280	17,328	2,952
National Capital Region (NCR)			
All Boats	3,148	2,534	614
Boat with engine and outrigger	1,602	1,216	386
Boat with engine but without outrigger	504	424	80
Boat without engine but with outrigger	384	339	45
Boat without engine and outrigger	545	450	95
Raft	113	105	8
Cordillera Administrative Region (CAR)			
All Boats	750	669	81
Boat with engine and outrigger	29	26	3
Boat with engine but without outrigger	77	77	-
Boat without engine but with outrigger	32	32	-
Boat without engine and outrigger	207	187	20
Raft	405	347	58
Ilocos Region (Region I)			
All Boats	26,039	20,585	5,454
Boat with engine and outrigger	12,502	8,666	3,836
Boat with engine but without outrigger	1,273	1,110	163
Boat without engine but with outrigger	1,849	1,638	211
Boat without engine and outrigger	2,525	2,100	425
Raft	7,890	7,071	819
Cagayan Valley (Region II)			
All Boats	10,135	7,999	2,136
Boat with engine and outrigger	2,665	2,128	537
Boat with engine but without outrigger	2,124	1,589	535
Boat without engine but with outrigger	495	437	58
Boat without engine and outrigger	3,472	2,680	792
Raft	1,379	1,165	214
Central Luzon (Region III)			
All Boats	27,199	19,713	7,486
Boat with engine and outrigger	13,756	9,653	4,103
Boat with engine but without outrigger	5,559	4,225	1,334
Boat without engine but with outrigger	3,724	2,777	947
Boat without engine and outrigger	3,514	2,542	972
Raft	646	516	130
CALABARZON (Region IV-A)			
All Boats	60,013	44,851	15,162
Boat with engine and outrigger	34,523	25,486	9,037
Boat with engine but without outrigger	5,095	3,881	1,214
Boat without engine but with outrigger	13,380	10,107	3,273
Boat without engine and outrigger	5,780	4,360	1,420
Raft	1,235	1,017	218

Table M2. Number of Fishing Boats/Vessels Used by Municipal Fishing Operators, by Type of Fishing Boat/Vessel, Ownership of Fishing Boat/Vessel, and Region: Philippines, 2012 (continued)

Region and Type of Fishing Boat/Vessel	Total	Ownership of Boat/Vessel	
		Owned	Not Owned
MIMAROPA Region			
All Boats	82,371	68,400	13,971
Boat with engine and outrigger	50,379	41,589	8,790
Boat with engine but without outrigger	3,901	3,573	328
Boat without engine but with outrigger	22,343	18,574	3,769
Boat without engine and outrigger	4,588	3,659	929
Raft	1,160	1,005	155
Bicol Region (Region V)			
All Boats	95,801	72,256	23,545
Boat with engine and outrigger	49,447	35,773	13,674
Boat with engine but without outrigger	3,968	3,022	946
Boat without engine but with outrigger	28,284	22,876	5,408
Boat without engine and outrigger	12,801	9,635	3,166
Raft	1,301	950	351
Western Visayas (Region VI)			
All Boats	42,350	35,573	6,777
Boat with engine and outrigger	23,898	19,628	4,270
Boat with engine but without outrigger	3,408	2,815	593
Boat without engine but with outrigger	11,469	9,936	1,533
Boat without engine and outrigger	2,671	2,396	275
Raft	904	798	106
Central Visayas (Region VII)			
All Boats	58,000	48,082	9,918
Boat with engine and outrigger	27,434	22,039	5,395
Boat with engine but without outrigger	1,774	1,451	323
Boat without engine but with outrigger	25,290	21,519	3,771
Boat without engine and outrigger	2,705	2,380	325
Raft	797	693	104
Eastern Visayas (Region VIII)			
All Boats	83,441	62,068	21,373
Boat with engine and outrigger	37,890	28,378	9,512
Boat with engine but without outrigger	1,759	1,411	348
Boat without engine but with outrigger	38,100	28,285	9,815
Boat without engine and outrigger	4,905	3,502	1,403
Raft	787	492	295
Zamboanga Peninsula (Region IX)			
All Boats	34,419	30,346	4,073
Boat with engine and outrigger	13,795	11,813	1,982
Boat with engine but without outrigger	2,843	2,504	339
Boat without engine but with outrigger	14,496	13,139	1,357
Boat without engine and outrigger	3,030	2,675	355
Raft	255	215	40
Northern Mindanao (Region X)			
All Boats	23,445	19,416	4,029
Boat with engine and outrigger	10,046	8,036	2,010
Boat with engine but without outrigger	972	856	116
Boat without engine but with outrigger	9,680	8,274	1,406
Boat without engine and outrigger	2,515	2,074	441
Raft	232	176	56

Table M2. Number of Fishing Boats/Vessels Used by Municipal Fishing Operators, by Type of Fishing Boat/Vessel, Ownership of Fishing Boat/Vessel, and Region: Philippines, 2012 (concluded)

Region and Type of Fishing Boat/Vessel	Total	Ownership of Boat/Vessel	
		Owned	Not Owned
Davao Region (Region XI)			
All Boats	23,328	19,929	3,399
Boat with engine and outrigger	10,798	9,212	1,586
Boat with engine but without outrigger	855	656	199
Boat without engine but with outrigger	10,147	8,823	1,324
Boat without engine and outrigger	1,419	1,147	272
Raft	109	91	18
SOCCKSARGEN (Region XII)			
All Boats	32,571	22,273	10,298
Boat with engine and outrigger	13,573	7,192	6,381
Boat with engine but without outrigger	3,392	1,785	1,607
Boat without engine but with outrigger	6,007	4,956	1,051
Boat without engine and outrigger	9,066	7,968	1,098
Raft	533	372	161
Autonomous Region In Muslim Mindanao (ARMM)			
All Boats	75,084	67,490	7,594
Boat with engine and outrigger	28,219	25,769	2,450
Boat with engine but without outrigger	13,561	12,531	1,030
Boat without engine but with outrigger	14,154	12,606	1,548
Boat without engine and outrigger	17,149	14,744	2,405
Raft	2,001	1,840	161
Caraga (Region XIII)			
All Boats	33,569	26,774	6,795
Boat with engine and outrigger	16,126	12,513	3,613
Boat with engine but without outrigger	652	559	93
Boat without engine but with outrigger	11,385	9,220	2,165
Boat without engine and outrigger	5,298	4,389	909
Raft	108	93	15
Negros Islands Region (NIR)			
All Boats	28,644	24,254	4,390
Boat with engine and outrigger	16,145	13,140	3,005
Boat with engine but without outrigger	986	650	336
Boat without engine but with outrigger	9,450	8,633	817
Boat without engine and outrigger	1,638	1,449	189
Raft	425	382	43

Note: - Denotes zero value

Source: Philippine Statistics Authority, *Census of Agriculture and Fisheries 2012*

GLOSSARY

GLOSSARY

Household

A household is a social unit consisting of a person living alone or a group of persons who sleep in the same housing unit and have a common arrangement in the preparation and consumption of food.

Aquaculture

Aquaculture refers to propagating and culturing of fish, crustaceans, mollusks, and other aquatic plants and animals in fresh, brackish, and/or marine water areas. Examples are propagating and culturing of milkfish in fish ponds, eucheuma (gozo) in seaweed farm, mussels in mussel farm, and oysters in oyster farm.

Aquaculture Holding/Farm

An aquaculture holding is an economic unit of aquaculture production under a single management, comprising all aquaculture facilities without regard to title, legal form, or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe, or by a juridical person such as a corporation, cooperative or government agency. The aquaculture facilities are located in one or more separate areas or in one or more territorial or administrative divisions, providing the facilities share the same production means, such as labour, buildings and machinery.

Aquafarm

Aquafarm refers to a farming facility used in the culture or propagation of aquatic species like fish, crustaceans, mollusks, and aquatic plants. It includes fishpond, fish pen, fish cage, fish tank, hatchery or "pangitlugan", seaweed farm, oyster farm, mussel farm and other farms for culturing of pearl, cockles, and abalone.

Types of Aquafarm

1. **Fishpond** refers to a body of water (artificial or natural) where fish and other aquatic products are cultured, raised or cultivated under controlled conditions. This is a landbased type of aquafarm.
2. **Fish pen** refers to a fish enclosure made of closely-woven bamboo screens, nylon screens or nets or other materials attached to poles staked from the bottom up to the surface of the lake, river or other shallow bodies of water for the purpose of growing and/or culturing of fish to various sizes in fresh, brackish and marine waters. A fish pen varies in shape. Its enclosure covers the entire water depth from the water surface down to the bottom.
3. **Fish cage** refers to a stationary or floating fish enclosure made of synthetic net wire/bamboo screen or other materials set in the form of inverted mosquito net (hapa type) with or without a cover with all sides either tied to poles staked to the bottom of the water or with anchored floats for aquaculture purposes.
4. **Seaweed farm** refers to a farm for cultivating seaweeds in suitable water areas by any method with an appropriate intensive care for production in commercial quantities.
5. **Oyster farm** refers to a farm for cultivating oysters in suitable water areas by any method with an appropriate intensive care for production purposes.

6. **Mussel farm** refers to a farm for cultivating mussels in suitable water areas by any method with an appropriate intensive care for production purposes.
7. **Fish tank** is a land-based structure made of wood, glass, metal or cement, usually rectangular or cylindrical in shape designed to grow and culture fish for breeding and seed fish production. It may be constructed below or above ground level and capable of holding and interchanging water.
8. **Hatchery or “pangitlugan”** is an aquafarm where brood stock eggs are hatched and reared into fries in a body of water (artificial or natural) contained in tanks or ponds under controlled condition in fresh or saltwater environment.

Water Environment

The type of water environment used in the aquafarm is any of the following:

1. **Freshwater** refers to water environment without salt or marine origin.
2. **Brackish water** refers to mixed seawater and fresh water environment with salinity of less than 30 parts per thousand (ppt) that varies with the tide.
3. **Marine water** refers to seawater environment with a salinity ranging from 30 to 40 ppt consisting of ocean, bay, gulf and channels.

Aquaculture Holder/Operator

An aquaculture operator is a person who takes the technical and administrative responsibility of managing the day-to-day operation of an aquafarm. The aquaculture operator is responsible for making major decisions including the management and supervision of hired workers in his/her aquafarm. He/she may do the farming/culturing of aquatic products himself/herself or with the members of his household or may employ others to do the job for him/her. An aquaculture operator may be the owner of the aquafarm.

Aquaculture Holder/Operator on Own Account

An aquaculture activity operated on “own account” means that the aquaculture operator is solely responsible for the technical decisions and implementation of plans involving the type of species to culture, stocking rate, and/or when to harvest. He/she is responsible for the consequences that may result from the aquaculture operation. He/she may hire workers to do the job for him/her.

Fishing Holder/Operator

A fishing operator is a person who takes the technical and administrative responsibility of managing the day-to-day fishing operation. He/She is responsible for making major decisions, including the management and supervision of hired workers in his/her fishing operation. He/she may do the catching or gathering of aquatic products alone or with the members of his household. He/she may not do the catching or gathering of aquatic products but may employ others to do the job for him/her. He/she may be the owner of the fishing boat and/or fishing gear.

Fishing Operator on Own Account

A fishing activity operated on “own account” means that the fishing operator is solely responsible for the technical decisions and implementation of plans involving when and where to go out fishing, what fishing gears/accessories/devices to use, and other fishing activities

and responsible for the consequences that may result from the fishing operation. He/she may hire workers to do the job for him/her and may own a boat/vessel and/or fishing gears.

Hired Manager as Operator

A manager is hired to supervise the day-to-day activities in the aquafarm/fishing operation by another household or by a juridical person. This person is also considered an aquaculture/fishing operator. He/she is called a hired manager.

A **hired manager** in the aquaculture/fishing operation is a person being paid a salary or wage, sometimes plus a commission, by other private individuals, corporations, cooperatives, and institutions to operate or be responsible for the day-to-day aquaculture/fishing operation. He/she may supervise other persons who work in the aquafarm/fishing operation. He/she is different from a caretaker or overseer who merely carries out his employer's instructions.

Fishing Gear

Fishing gear is any apparatus, gadget, implement and other paraphernalia used in catching and gathering of fish, crustaceans, mollusks and other aquatic products.

Types of Fishing Gears

Gill Net is a curtain-like net in which the capture of fishes is effected by the actual meshes of the net.

Beach Seine Net also known as shore, ground or drag seine, which is operated on smooth gradually shelving shores and is always hauled toward the shore or river bank.

Filter Net is a fixed, usually conical, bag net without non-return valves, set in flowing water and the capture is effected by straining.

Fyke Net is a set of nets consisting of a series of definitely funnel-shaped entrances, as in hoop nets, which lead into a closed sac, there forming a trap with small openings from which exit is difficult.

Hoop Net is a funnel-like bag net constructed over circular hoops, having non-return valves but no wings.

Push Net is a triangularly framed, collapsible net operated by one man and the capture is effected by a forward, horizontal pushing motion along the bottom of shallow waters within wading depths.

Cast Net is a conically shaped net usually operated by one man (except when used in deeper water from a boat) by casting motion to cover a small school of fish.

Drive-in-net is a framed or unframed lift net operated with scare-line.

Lambaklad Net is similar in structure to the fish corral except that the materials used as barriers and walls are made of netting materials instead of bamboo mattings or "banatan".

Purse Seine is a rectangular type of fishing gear with the bunt at one end and the lower portion provided with pursing devices or rings attached to the footrope by a ring bridle.

Ring Net is a fishing gear similar in structure and feature to that of a round haul seine or purse seine with a bunt at the center and flanked by two wings at the sides.

Bag Net is a conical or cubical net operated from outriggers or booms of a boat with the aid of light, affecting the capture of fish by its dipping and lifting motion.

Trawl Net is made in the form of a conical bag with the mouth kept open by various devices and the entire gear towed, trailed or trawled usually on the bottom of the sea, to capture submerged species that naturally keep at or near the bottom.

Round Haul Seine is a seine payed out in a circle or an arc of a circle, thereby surrounding the school of fish.

Modified Danish Seine is otherwise known as danish trawl, having comparatively long wings with extremely long ropes used to keep the mouth open.

Scoop Net or Dip Net is generally in the form of a small bag net, with or without a handle and used entirely by hand or partly by mechanical power in which fish are captured by a dipping or scooping motion.

Fish Trap that entice fish by employment of strong smelling baits or by the simulation of natural living conditions, hiding places or nesting facilities i.e., fish corral.

Fish Pot is usually a baited enticing device made of bamboo, rattan or chicken wire in the form of rectangular receptacles with a non-return valve which provides easy entrance but difficult exit.

Cover Pot is an entrapping device devoid of a non-return valve with the opening of the lowermost to cover fish.

Crab Pot is set or stationed in the water for a certain period regardless of the kind of material used for their construction.

Hook and Line is a simple type of fishing gear consisting of single monofilament vertical nylon line, a swivel, a sinker, one barbed hook, with or without a wooden bamboo spool.

Crab Hook is made of steel or metal to detect crab inside the hole which has a curve at one end.

Harpoon a spear-like weapon with a barbed head used in hunting whales and large fish.

Squid Jig is a line-connected device for hooking squid. It is shaped like a crown (lukon), provided with multiple barbless hooks with natural baits or artificial lures at the tail portion of the artificial decoy prawn.

Luring Device is a type of bait with a hook made of artificial material such as octopus, squid or crab to lure and catch especially cephalopod species.

Fishing Light is used for attracting fish school that could dense in a small area.

Fish Shelter is a kind of fishing gear in catching fish with anchored bunches of twigs, bushes weeds, piles of poles, etc. which afford refuge for fish and from where the fish are captured by varied devices operated in different ways.

Sonar is a device used for scanning fish school horizontally. It could be tilted 360 degrees with 500-meter radius.

Fish Finder is a device used for detecting fish school. It is vertical in use due to fix transducer and could detect also the topography of the bottom, same as sonar.

Service Boat is an accessory to service the fishermen to and from the shoreline, fish catch, etc.

Ranger Boat is an accessory used for scouting fish school in Fish Aggregating Device's (FAD) or in light boat for them to contact the motor boat and give fix position.

Legal Form of Organization of Aquaculture/Fishing Activity

Legal form of organization refers to the form of organization under which the aquaculture/fishing activity is undertaken. The operator may operate as an individual proprietor, partnership, corporation, cooperative, other private institutions or government corporations/institutions.

1. **Individual proprietor** is a person operating an aquaculture/fishing holding on his/her own account who may be the landowner, lessee, tenant or owner/lessee with a hired manager.
2. **Partnership** is a form of business organization, whether or not registered with the Securities and Exchange Commission (SEC), that results from a contract between two or more competent persons to associate themselves in a common ownership and management of a lawful business enterprise for profit.
3. **Corporation** is an organization formed for a definite purpose, under authority obtained from the government, treated as an artificial person, separate and apart from its owners/stockholders. Thus, it can own properties, make contracts, borrow money, sue and be sued, all in its name, without involving its unlimited number of owners/stockholders in any liability more than the money they have invested in it. Note that this refers to private corporations only.
4. **Cooperative** is an organization composed primarily of small producers and consumers who voluntarily join together to form a business enterprise, which they themselves own, control, and patronize.
5. **Other private institution** refers to an organization owned and operated by a group of persons with the same interest who bonded together.
6. **Government corporation/institution** refers to an organization owned and operated by the government.

APPENDICES

Appendix A
 2012 CAF Form 1 - List of Households
 Page 1

CAF FORM 1 L AUTHORITY: Section 2(c) of Commonwealth Act (CA) No. 591 authorizes the National Statistics Office to prepare for and undertake all censuses of population, agriculture, industry and commerce. CONFIDENTIALITY: Section 4 of CA No. 591 provides that all information furnished on this form are held STRICTLY CONFIDENTIAL.		Republic of the Philippines NATIONAL STATISTICS OFFICE 2012 CENSUS OF AGRICULTURE AND FISHERIES LIST OF HOUSEHOLDS		GEOGRAPHIC IDENTIFICATION SHEET <input style="width: 20px;" type="text"/> OF <input style="width: 20px;" type="text"/> SHEETS L PROVINCE <input style="width: 100px;" type="text"/> CITY/MUNICIPALITY <input style="width: 100px;" type="text"/> BARANGAY <input style="width: 100px;" type="text"/> ENUMERATION AREA NO. <input style="width: 100px;" type="text"/> SEGMENT NUMBER <input style="width: 100px;" type="text"/>					
L N U M B E R	MONTH AND DAY OF VISIT L	BUILDING SERIAL NUMBER (BSN)	HOUSING UNIT SERIAL NUMBER (HUSN)	HOUSE-HOLD SERIAL NUMBER (HSN)	NAME OF HOUSEHOLD HEAD <i>Who is the head of this household?</i> L	ADDRESS OF THE HOUSEHOLD <i>What is the address of this household?</i>	AS OF DATE OF VISIT		
	CALLBACK INDICATOR WRITE X IN THE CIRCLE IF CALLBACK	WRITE THE FOUR-DIGIT BSN	WRITE THE FOUR-DIGIT HUSN	WRITE THE FOUR-DIGIT HSN	WRITE THE LAST NAME AND FIRST NAME	WRITE THE HOUSE NUMBER AND STREET OR SITIO/PUROK NAME	How many members are there in this household? WRITE THE TOTAL NUMBER OF HOUSEHOLD MEMBERS	How many members are male? WRITE THE TOTAL NUMBER OF MALE HOUSEHOLD MEMBERS	How many members are female? WRITE THE TOTAL NUMBER OF FEMALE HOUSEHOLD MEMBERS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
2	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
3	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
4	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
5	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
6	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
7	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
8	○				LAST NAME				
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME			
PAGE TOTAL				HH	L		HM	MALE	FEMALE

Appendix A
2012 CAF Form 1 - List of Households
Page 2

CERTIFICATION										1A												
I hereby certify that the data set forth herein were personally obtained/reviewed by me and in accordance with the instructions given by the NSO.																						
ENUMERATOR SIGNATURE OVER PRINTED NAME	TEAM SUPERVISOR SIGNATURE OVER PRINTED NAME	DSO/SCO SIGNATURE OVER PRINTED NAME	CO/RO/PO SUPERVISOR SIGNATURE OVER PRINTED NAME				1															
DATE ACCOMPLISHED	DATE REVIEWED	DATE REVIEWED	DATE REVIEWED																			
<table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td colspan="6" style="padding-left: 10px;">ENUMERATOR'S CODE</td> <td style="border: none;"></td> </tr> </table>														ENUMERATOR'S CODE							NSCB Approval No. NSO -1218-01 Expires on October 9, 2013	
				ENUMERATOR'S CODE																		
AGRICULTURE			AQUACULTURE			FISHERIES			TOTAL NUMBER OF OPERATORS IN THE HOUSEHOLD	REMARKS	LINE NUMBER											
From January to December 2012,...			From January to December 2012,...			From January to December 2012,...																
Is there any member of this household who was engaged in raising crops, fruit trees, livestock/poultry, mushrooms, honeybees or any agricultural crops/livestock/poultry, or performed other agricultural activity? 1 Yes 2 No. GO TO COLUMN 14 (11)	Is there any member of this household who operated a crop farm, livestock/poultry farm or other agricultural farms, or who was hired as a manager of an agricultural farm? 1 Yes 2 No. GO TO COLUMN 14 (12)	How many agricultural operators are there in this household? WRITE THE NUMBER OF AGRICULTURAL OPERATORS IN THE HOUSEHOLD (13)	Is there any member of this household who was engaged in culturing fish, seaweeds or other aquatic plants and animals in a fishpond, fish cage or other types of aquafarm? 1 Yes 2 No. GO TO COLUMN 17 (14)	Is there any member of this household who operated a fishpond, fish cage, fish pen, fish tank, seaweed farm or other aquafarms, or who was hired as a manager of an aquafarm? 1 Yes 2 No. GO TO COLUMN 17 (15)	How many aquacultural operators are there in this household? WRITE THE NUMBER OF AQUACULTURAL OPERATORS IN THE HOUSEHOLD (16)	Is there any member of this household who was engaged in catching/gathering fish, crabs, shrimps or other aquatic plants and animals? 1 Yes 2 No. GO TO COLUMN 20 (17)	Is there any member of this household who operated a fishing activity on catching/gathering of fish, crabs, shrimps or other aquatic plants and animals, or who was hired as a manager of a fishing activity? 1 Yes 2 No. GO TO COLUMN 20 (18)	How many fishing operators are there in this household? WRITE THE NUMBER OF FISHING OPERATORS IN THE HOUSEHOLD (19)	WRITE "0" IF COLUMNS 12, 15 AND 18 ARE ALL CODE 2. OTHERWISE, COPY CORRECTLY THE ENTRY IN ITEM C18 OF CAF FORM 2 OF THIS HOUSEHOLD (20)	(21)												
											1											
											2											
											3											
											4											
											5											
											6											
											7											
											8											
ENGAGED AGRI	HA	OA	ENGAGED AQUA	HQ	OQ	ENGAGED FISHING	HF	OF	TO	7												


Appendix A
2012 CAF Form 1 - List of Households
Page 3

LINE NUMBER	MONTH AND DAY OF VISIT	BUILDING SERIAL NUMBER (BSN)	HOUSING UNIT SERIAL NUMBER (HUSN)	HOUSE-HOLD SERIAL NUMBER (HSN)	NAME OF HOUSEHOLD HEAD <i>Who is the head of this household?</i>	ADDRESS OF THE HOUSEHOLD <i>What is the address of this household?</i>	AS OF DATE OF VISIT			
	CALLBACK INDICATOR						<i>How many members are there in this household?</i>	<i>How many members are male?</i>	<i>How many members are female?</i>	
	WRITE X IN THE CIRCLE IF CALLBACK	WRITE THE FOUR-DIGIT BSN	WRITE THE FOUR-DIGIT HUSN	WRITE THE FOUR-DIGIT HSN	WRITE THE LAST NAME AND FIRST NAME	WRITE THE HOUSE NUMBER AND STREET OR SITIO/PUROK NAME	WRITE THE TOTAL NUMBER OF HOUSEHOLD MEMBERS	WRITE THE TOTAL NUMBER OF MALE HOUSEHOLD MEMBERS	WRITE THE TOTAL NUMBER OF FEMALE HOUSEHOLD MEMBERS	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
9	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
10	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
11	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
12	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
13	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
14	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
15	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
16	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
17	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
18	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
19	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
20	<input type="radio"/>				LAST NAME					
					FIRST NAME	HOUSE NUMBER AND STREET OR SITIO/PUROK NAME				
PAGE TOTAL							HH	HM	MALE	FEMALE

Appendix A
2012 CAF Form 1 - List of Households
Page 4

AGRICULTURE			AQUACULTURE			FISHERIES			TOTAL NUMBER OF OPERATORS IN THE HOUSEHOLD	REMARKS	LINE NUMBER
From January to December 2012,...			From January to December 2012,...			From January to December 2012,...					
Is there any member of this household who was engaged in raising crops, fruit trees, livestock/poultry, mushrooms, honeybees or any agricultural crops/livestock/poultry, or performed other agricultural activity?	Is there any member of this household who operated a crop farm, livestock/poultry farm or other agricultural farms, or who was hired as a manager of an agricultural farm?	How many agricultural operators are there in this household?	Is there any member of this household who was engaged in culturing fish, seaweeds or other aquatic plants and animals in a fishpond, fish cage or other types of aquafarm?	Is there any member of this household who operated a fishpond, fish cage, fish pen, fish tank, seaweed farm or other aquafarms, or who was hired as a manager of an aquafarm?	How many aquacultural operators are there in this household?	Is there any member of this household who was engaged in catching/gathering fish, crabs, shrimps or other aquatic plants and animals?	Is there any member of this household who operated a fishing activity on catching/gathering of fish, crabs, shrimps or other aquatic plants and animals, or who was hired as a manager of a fishing activity?	How many fishing operators are there in this household?	WRITE '0' IF COLUMNS 12, 15 AND 18 ARE ALL CODE 2. OTHERWISE, COPY CORRECTLY THE ENTRY IN C18 OF CAF FORM 2 OF THIS HOUSEHOLD		
1 Yes 2 No, GO TO COLUMN 14	1 Yes 2 No, GO TO COLUMN 14	WRITE THE NUMBER OF AGRICULTURAL OPERATORS IN THE HOUSEHOLD	1 Yes 2 No, GO TO COLUMN 17	1 Yes 2 No, GO TO COLUMN 17	WRITE THE NUMBER OF AQUACULTURAL OPERATORS IN THE HOUSEHOLD	1 Yes 2 No, GO TO COLUMN 20	1 Yes 2 No, GO TO COLUMN 20	WRITE THE NUMBER OF FISHING OPERATORS IN THE HOUSEHOLD			
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
ENGAGED AGRI	HA	OA	ENGAGED AQUA	HQ	OQ	ENGAGED FISHING	HF	OF	TO		7

Appendix B
 2012 CAF Form 2 - Household Roster
 Page 1

<p>CAF FORM 2</p> <p>AUTHORITY: Section 2(c) of Commonwealth Act (CA) No. 591 authorizes the National Statistics Office to prepare for and undertake all censuses of population, agriculture, industry and commerce.</p> <p>CONFIDENTIALITY: Section 4 of CA No. 591 provides that all information furnished on this form are held STRICTLY CONFIDENTIAL.</p>	 <p><i>Republic of the Philippines</i> NATIONAL STATISTICS OFFICE</p> <p>2012 CENSUS OF AGRICULTURE AND FISHERIES</p> <p>HOUSEHOLD ROSTER</p>	<p align="right">2A</p> <p align="center" style="font-size: 2em;">2</p> <p align="right">NSCB Approval No. NSO-1218-02 Expires on October 9, 2013</p>
--	--	--

CERTIFICATION

I hereby certify that the data set forth herein were personally obtained/reviewed by me in accordance with the instructions given by the National Statistics Office.

<p>ENUMERATOR SIGNATURE OVER PRINTED NAME</p>	<p>TEAM SUPERVISOR SIGNATURE OVER PRINTED NAME</p>	<p>DSO/SCO SIGNATURE OVER PRINTED NAME</p>	<p>CO/RO/PO SUPERVISOR SIGNATURE OVER PRINTED NAME</p>
DATE ACCOMPLISHED	DATE REVIEWED	DATE REVIEWED	DATE REVIEWED

SECTION A – GEOGRAPHIC IDENTIFICATION

BOOKLET OF BOOKLETS

PROVINCE

CITY/MUNICIPALITY

BARANGAY

ENUMERATION AREA NO.

SEGMENT NUMBER

BUILDING SERIAL NO.

HOUSING UNIT SERIAL NO.

HOUSEHOLD SERIAL NO.

SECTION B – INTERVIEW RECORD

	VISIT 1	VISIT 2	VISIT 3
DATE OF VISIT MONTH : DAY	<input type="text"/>	<input type="text"/>	<input type="text"/>
INTERVIEW TIME BEGAN HOUR : MINUTE	<input type="text"/>	<input type="text"/>	<input type="text"/>
INTERVIEW TIME ENDED HOUR : MINUTE	<input type="text"/>	<input type="text"/>	<input type="text"/>
RESULT OF VISIT*	<input type="text"/>	<input type="text"/>	<input type="text"/>

*Result of Visit Codes 1 Interview completed 3 Refused 5 Household not around/No respondent
 2 Interview partly completed 4 Postponed 6 Others, Specify _____

SUMMARY OF VISIT

TOTAL NUMBER OF VISITS RESULT OF FINAL VISIT* ENUMERATOR'S CODE

NAME OF HOUSEHOLD HEAD TOTAL HOUSEHOLD MEMBERS

LAST NAME

NAME OF RESPONDENT MALE HOUSEHOLD MEMBERS

FIRST NAME

ADDRESS FEMALE HOUSEHOLD MEMBERS

HOUSE NUMBER AND STREET OR SITIO/PUROK NAME

NAME OF RESPONDENT LINE NUMBER OF RESPONDENT

Appendix B
 2012 CAF Form 2 - Household Roster
 Page 2

2B		SECTION C – CHARACTERISTICS OF HOUSEHOLD MEMBERS									
C1 LINE NUMBER	FOR ALL PERSONS				FOR ALL PERSONS 5 YEARS OLD AND OVER	FOR ALL PERSONS 10 YEARS OLD AND OVER	AGRICULTURE				
	FOR ALL PERSONS 10 YEARS OLD AND OVER				FOR ALL PERSONS 15 YEARS OLD AND OVER			FOR ALL PERSONS 10 YEARS OLD AND OVER			
C2 Who are the members of this household as of (MENTION THE DATE OF VISIT)?		C3 What is ___'s relationship to the household head?	C4 Is ___ male or female?	C5 What is ___'s age as of his/her last birthday?	C6 What is the highest grade/year completed by ___?	C7 From January to December 2012, what was ___'s usual activity/occupation?	From January to December 2012,...				
LIST THE PERSONS OR HOUSEHOLD MEMBERS IN THIS ORDER: • Head • Spouse of the head • Never-married children of head/spouse from oldest to youngest • Ever-married children of head/spouse and their families from oldest to the youngest • Other relative • Nonrelative		WRITE THE RESPONSE ON THE LINE PROVIDED AND WRITE IN THE BOXES THE APPLICABLE CODE LISTED IN PAGE 2D	1 Male 2 Female L	WRITE THE AGE IN THE BOXES PROVIDED	IF GRADUATE IN POST SECONDARY OR COLLEGE, SPECIFY THE COURSE. WRITE THE RESPONSE ON THE LINE PROVIDED AND WRITE IN THE BOXES THE APPLICABLE CODE LISTED IN PAGE 2D	WRITE THE SPECIFIC ACTIVITY/OCCUPATION ON THE LINE PROVIDED. LEAVE THE CODE BOXES BLANK	C8 Was ___ engaged in an agricultural activity? 1 in own holding. 2 other's holding. 3 both in own and other's holding, or 4 not engaged? WRITE X IN THE BOX GO TO COLUMN 11 IF THE BOX FOR CODE 4 IS MARKED WITH X			C9 Did ___ operate a crop farm, livestock/poultry farm or other farms, or was a hired manager of an agricultural farm? 1 Yes 2 No, GO TO COLUMN 11 WRITE X IN THE BOX	C10 Was ___ operating this farm/holding: 1 on his/her own account, 2 as a hired manager of another household's farm, and/or 3 as a hired manager of an agricultural establishment? WRITE X IN THE BOX MULTIPLE ANSWERS ARE ALLOWED
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
01	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					
02	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					
03	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					
04	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY		L	SPECIFY	SPECIFY					
05	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					
06	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					
07	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					
08	LAST NAME	[][]	<input type="checkbox"/> 1 <input type="checkbox"/> 2	[][][]	[][][][]	[][][][][]	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		
	FIRST NAME	SPECIFY			SPECIFY	SPECIFY					

ARE THERE MORE THAN EIGHT (8) MEMBERS IN THIS HOUSEHOLD? (INCLUDE PERSONS SUCH AS SMALL CHILDREN, INFANTS, AND/OR OVERSEAS WORKERS WHO WERE NOT YET LISTED)

1 Yes, USE ADDITIONAL CAF FORM 2
 2 No


Appendix B
 2012 CAF Form 2 - Household Roster
 Page 3

SECTION C – CHARACTERISTICS OF HOUSEHOLD MEMBERS						2C	
LINE NUMBER	AQUACULTURE			FISHERIES			
	FOR ALL PERSONS 10 YEARS OLD AND OVER	FOR ALL PERSONS 15 YEARS OLD AND OVER	FOR ALL PERSONS 10 YEARS OLD AND OVER	FOR ALL PERSONS 15 YEARS OLD AND OVER	7		
	From January to December 2012, ...			From January to December 2012, ...			
	C11 Was ___ engaged in an aquacultural activity: 1 in own aquafarm, 2 other's aquafarm, 3 both in own and other's aquafarm, or 4 not engaged? <input type="checkbox"/> WRITE X IN THE BOX GO TO COLUMN 14 IF BOX FOR CODE 4 IS MARKED WITH X	C12 Did ___ operate a fishpond, fish cage, fish pen, fish tank, seaweed farm or other aquafarm, or was a hired manager of an aquafarm? 1 Yes 2 No, GO TO COLUMN 14 WRITE X IN THE BOX	C13 Was ___ operating this aquafarm: 1 on his/her own account, 2 as a hired manager of another household's aquafarm, and/or 3 as a hired manager of an aquacultural establishment? WRITE X IN THE BOX MULTIPLE ANSWERS ARE ALLOWED	C14 Was ___ engaged in a fishing activity: 1 in own fishing operation, 2 other's fishing activity, 3 both in own and other's fishing activity, or 4 not engaged? WRITE X IN THE BOX GO TO COLUMN 17 IF BOX FOR CODE 4 IS MARKED WITH X	C15 Did ___ operate a fishing activity such as catching/gathering fish, crabs, shrimps, mussels and other aquatic plants/animals, or was a hired manager of a fishing activity? 1 Yes 2 No, GO TO COLUMN 17 WRITE X IN THE BOX	C16 Was ___ operating this fishing activity: 1 on his/her own account, 2 as a hired manager of another household's fishing operation, and/or 3 as a hired manager of a fishing establishment? WRITE X IN THE BOX MULTIPLE ANSWERS ARE ALLOWED	C17 OPERATOR IN THE HOUSEHOLD WRITE X IN THE BOX IF BOX FOR CODE 1 IS MARKED WITH X IN C9, C12 AND/OR C15
	(11)	(12)	(13)	(14)	(15)	(16)	(17)
01	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
02	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
03	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
04	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
05	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
06	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
07	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
08	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/>
TOTAL NUMBER OF OPERATORS IN THE HOUSEHOLD (COUNT ALL THE BOXES MARKED WITH X IN COLUMN 17)						C18 (TO) <input type="checkbox"/>	

Appendix B
2012 CAF Form 2 - Household Roster
Page 4

2D		CODES	
<p>C3 – Relationship to the Household Head (Column 3)</p> <p>01 – Head 02 – Spouse 03 – Son 04 – Daughter</p> <p>21 – Stepson 22 – Stepdaughter 23 – Son-in-law 24 – Daughter-in-law</p> <p>31 – Grandson 32 – Granddaughter 33 – Father 34 – Mother</p> <p>41 – Brother 42 – Sister 43 – Uncle 44 – Aunt</p> <p>55 – Nephew 56 – Niece 57 – Other relative 58 – Nonrelative</p> <p>65 – Boarder 66 – Domestic helper</p>	<p>C6 – Highest Grade/Year Completed (Column 6)</p> <p>000 – No grade completed 010 – Preschool</p> <p>ELEMENTARY</p> <p>210 – Grade 1 220 – Grade 2 230 – Grade 3 240 – Grade 4 250 – Grade 5 260 – Grade 6 280 – Elementary graduate</p> <p>HIGH SCHOOL</p> <p>310 – 1st Year 320 – 2nd Year 330 – 3rd Year 340 – 4th Year 350 – High school graduate</p> <p>POST SECONDARY*</p> <p>410 – 1st Year 420 – 2nd Year 430 – 3rd Year</p> <p>* Specify course if graduate in postsecondary.</p> <p>COLLEGE*</p> <p>810 – 1st Year 820 – 2nd Year 830 – 3rd Year 840 – 4th Year 850 – 5th Year 860 – 6th Year</p> <p>*Specify course if graduate in college.</p> <p>POSTGRADUATE</p> <p>900 – Postbaccalaureate</p>	<p>C8 – Engaged in Own and Other's Holding (Column 8)</p> <p>1 – Own holding 2 – Other's holding 3 – Both in own and other's holding 4 – Not engaged</p> <p>C11 – Engaged in Own and Other's Aquafarm (Column 11)</p> <p>1 – Own aquafarm 2 – Other's aquafarm 3 – Both in own and other's aquafarm 4 – Not engaged</p> <p>C14 – Engaged in Own and Other's Fishing Activity (Column 14)</p> <p>1 – Own fishing activity 2 – Other's fishing activity 3 – Both in own and other's fishing activity 4 – Not engaged</p>	<p>C10 – Type of Agricultural Operator (Column 10)</p> <p>1 – On his/her own account 2 – As a hired manager of another household's farm 3 – As a hired manager of an agricultural establishment</p> <p>C13 – Type of Aquacultural Operator (Column 13)</p> <p>1 – On his/her own account 2 – As a hired manager of another household's aquafarm 3 – As a hired manager of an aquacultural establishment</p> <p>C16 – Type of Fishing Operator (Column 16)</p> <p>1 – On his/her own account 2 – As a hired manager of another household's fishing operation 3 – As a hired manager of a fishing establishment</p>
L			
DEFINITION OF OPERATORS		REMARKS	
<p>AGRICULTURAL OPERATOR</p> <p><i>A person who takes the technical and administrative responsibility of managing a holding. He/she is responsible for making the decisions of the operation, including the management and supervision of hired labor. The operator may work alone or with members of his/her household, or may employ others to work. He/she may or may not be the owner of the land. A person may be an agricultural operator regardless of size of land tilled or number of animals raised.</i></p> <p>AQUACULTURAL OPERATOR</p> <p><i>A person who takes the technical and administrative responsibility of managing the day-to-day operation of an aquafarm. The aquacultural operator is responsible for making major decisions including the management and supervision of hired workers in his/her aquafarm. He/she may do the farming (culturing) of aquatic products himself/herself or with the members of his/her household or may employ others to do the job for him/her. An aquacultural operator may or may not be the owner of the aquafarm.</i></p> <p>FISHING OPERATOR</p> <p><i>A person who takes the technical and administrative responsibility of managing the day-to-day fishing operation. He/she is responsible for making decisions, including the management and supervision of hired workers in his/her fishing operation. He/she may do the catching of aquatic products alone or with the members of his/her household. He/she may not do the catching or gathering of aquatic products but may employ others to do the job for him/her. He/she may or may not be the owner of the fishing boat and/or fishing gear.</i></p>			

Appendix C
2012 CAF Form 4 - Core Questionnaire for Aquaculture
 Page 1

<p>CAF FORM 4</p> <p>AUTHORITY: Section 2(c) of Commonwealth Act (CA) No. 591 authorizes the National Statistics Office to prepare for and undertake all censuses of population, agriculture, industry and commerce.</p> <p>CONFIDENTIALITY: Section 4 of CA No. 591 provides that all information furnished on this form are held STRICTLY CONFIDENTIAL.</p>	 <p>Republic of the Philippines NATIONAL STATISTICS OFFICE</p> <p>2012 CENSUS OF AGRICULTURE AND FISHERIES</p> <p>CORE QUESTIONNAIRE FOR AQUACULTURE</p>	<p align="right">4</p> <p align="right">4A</p> <p align="right">NSCB Approval No. NSO – 1218-04 Expires on October 9, 2013</p>																																						
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<p>CO/RO/PO SUPERVISOR SIGNATURE OVER PRINTED NAME</p>																																								
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SECTION A – AQUACULTURE OPERATION IDENTIFICATION		SECTION B – INTERVIEW RECORD																																						
SHEET <input type="text"/> OF <input type="text"/> SHEETS L PROVINCE _____ CITY/MUNICIPALITY _____ BARANGAY _____ ENUMERATION AREA NO. _____ SEGMENT NUMBER _____ BUILDING SERIAL NO. _____ HOUSING UNIT SERIAL NO. _____ HOUSEHOLD SERIAL NO. _____ LINE NO. OF OPERATOR _____ ITEM C1 (COLUMN 1) OF CAF FORM 2 TYPE OF OPERATOR _____ ITEM C13 (COLUMN 13) OF CAF FORM 2		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>VISIT 1</th> <th>VISIT 2</th> <th>VISIT 3</th> </tr> </thead> <tbody> <tr> <td>DATE OF VISIT MONTH - DAY</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>INTERVIEW TIME BEGAN HOUR:MINUTE</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>INTERVIEW TIME ENDED HOUR:MINUTE</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>RESULT OF VISIT*</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table> <p>* Result of Visit 1 Interview completed 3 Refused 5 Household not around/No respondent 2 Interview partly completed 4 Postponed 6 Others, Specify _____</p> <p align="center">SUMMARY OF VISIT</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>TOTAL NUMBER OF VISITS</td> <td><input type="text"/></td> <td>RESULT OF FINAL VISIT*</td> <td><input type="text"/></td> <td>ENUMERATOR'S CODE</td> <td><input type="text"/></td> </tr> <tr> <td>NAME OF RESPONDENT</td> <td colspan="5">_____</td> </tr> <tr> <td>LINE NO. OF RESPONDENT</td> <td><input type="text"/></td> <td colspan="4"></td> </tr> </table>		VISIT 1	VISIT 2	VISIT 3	DATE OF VISIT MONTH - DAY	<input type="text"/>	<input type="text"/>	<input type="text"/>	INTERVIEW TIME BEGAN HOUR:MINUTE	<input type="text"/>	<input type="text"/>	<input type="text"/>	INTERVIEW TIME ENDED HOUR:MINUTE	<input type="text"/>	<input type="text"/>	<input type="text"/>	RESULT OF VISIT*	<input type="text"/>	<input type="text"/>	<input type="text"/>	TOTAL NUMBER OF VISITS	<input type="text"/>	RESULT OF FINAL VISIT*	<input type="text"/>	ENUMERATOR'S CODE	<input type="text"/>	NAME OF RESPONDENT	_____					LINE NO. OF RESPONDENT	<input type="text"/>				
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Appendix C

2012 CAF Form 4 - Core Questionnaire for Aquaculture

Page 2

4B		SECTION E - AQUACULTURE						
E1 From January to December 2012, how many aquafarm/s did _____ use in raising/farming (culture) of aquatic products? <div style="text-align: right; margin-top: 5px;"> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> </div>								
E2 What type of aquafarm did _____ operate? 1 Fishpond 2 Fish pen 3 Fish cage 4 Seaweed farm 5 Oyster farm 6 Mussel farm 7 Fish tank 8 Hatchery 9 Others, Specify WRITE THE CODE IN THE BOX	E3 Where is the aquafarm located? IF THE AQUAFARM IS LOCATED IN THE SAME BARANGAY, WRITE "SAME" ON THE SPACES PROVIDED FOR THE PROVINCE, CITY/MUNICIPALITY AND BARANGAY. IF IT IS LOCATED IN ANOTHER BARANGAY, SPECIFY THE NAME OF THE PROVINCE, CITY/MUNICIPALITY AND BARANGAY ON THE SPACES PROVIDED. LEAVE CODE BOXES BLANK			E4 What was the area devoted to the aquafarm? TO BE ASKED ONLY IF E2 IS CODE 1 TO 6 WRITE THE AREA IN HECTARES UP TO THREE (3) DECIMAL PLACES	E5 What was the total volume of the fish tank or hatchery? TO BE ASKED ONLY IF E2 IS CODE 7 OR 8 WRITE THE VOLUME IN CUBIC METERS UP TO THREE (3) DECIMAL PLACES	E6 What type of water environment was used in the aquafarm? 1 Freshwater 2 Brackish water 3 Marine water WRITE X IN THE BOX	E7 What was/were the species cultured in the aquafarm? WRITE THE TYPE OF SPECIES CULTURED	
A Q U A F A R M N U M B E R	PROVINCE	CITY/MUNICIPALITY	BARANGAY	HECTARES	CUBIC METERS	TYPE OF SPECIES	CODE DO NOT FILL	
01	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input style="width: 20px; height: 20px;" type="text"/>	
02	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input style="width: 20px; height: 20px;" type="text"/>	
03	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input style="width: 20px; height: 20px;" type="text"/>	
04	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input style="width: 20px; height: 20px;" type="text"/>	
ARE THERE MORE THAN FOUR (4) AQUAFARMS IN THE AQUACULTURAL OPERATION?		<input type="checkbox"/> 1 Yes, USE ADDITIONAL CAF FORM 4 <input type="checkbox"/> 2 No, END INTERVIEW FOR THIS OPERATOR AND GO TO THE NEXT OPERATOR/HOUSEHOLD						
REMARKS/COMPUTATION								

Appendix D
 2012 CAF Form 5 - Core Questionnaire for Fishing
 Page 1

<p>CAF FORM 5</p> <p>AUTHORITY: Section 2(c) of Commonwealth Act (CA) No. 591 authorizes the National Statistics Office to prepare for and undertake all censuses of population, agriculture, industry and commerce.</p> <p>CONFIDENTIALITY: Section 4 of CA No. 591 provides that all information furnished on this form are held STRICTLY CONFIDENTIAL.</p>	 <p>Republic of the Philippines NATIONAL STATISTICS OFFICE</p> <p>2012 CENSUS OF AGRICULTURE AND FISHERIES</p> <p>CORE QUESTIONNAIRE FOR FISHERIES</p>	<p>7 5 5A</p> <p>NSCB Approval No. NSO – 1218-05 Expires on October 9, 2013</p>																					
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<p>SECTION A – FISHING OPERATION IDENTIFICATION</p> <p>L SHEET <input type="text"/> OF <input type="text"/> SHEETS</p> <p>PROVINCE <input type="text"/></p> <p>CITY/ MUNICIPALITY <input type="text"/></p> <p>BARANGAY <input type="text"/></p> <p>ENUMERATION AREA NO. <input type="text"/></p> <p>SEGMENT NO. <input type="text"/></p> <p>BUILDING SERIAL NO. <input type="text"/></p> <p>HOUSING UNIT SERIAL NO. <input type="text"/></p> <p>HOUSEHOLD SERIAL NO. <input type="text"/></p> <p>LINE NO. OF OPERATOR <input type="text"/> ITEM C1 (COLUMN 1) OF CAF FORM 2</p> <p>TYPE OF OPERATOR <input type="text"/> ITEM C16 (COLUMN 16) OF CAF FORM 2</p>		<p>SECTION B – INTERVIEW RECORD</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 20%;">VISIT 1</th> <th style="width: 20%;">VISIT 2</th> <th style="width: 20%;">VISIT 3</th> </tr> </thead> <tbody> <tr> <td>DATE OF VISIT MONTH : DAY</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>INTERVIEW TIME BEGAN HOUR:MINUTE</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>INTERVIEW TIME ENDED HOUR:MINUTE</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>RESULT OF VISIT*</td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table> <p>* Result of Visit Codes 1 Interview completed 2 Interview partly completed 3 Refused 4 Postponed 5 Household not around/ No respondent 6 Others, Specify _____</p> <p style="text-align: center;">SUMMARY OF VISIT</p> <p>TOTAL NUMBER OF VISITS <input type="text"/> RESULT OF FINAL VISIT* <input type="text"/> ENUMERATOR'S CODE <input type="text"/></p> <p>NAME OF RESPONDENT <input type="text"/></p> <p>LINE NO. OF RESPONDENT <input type="text"/></p>			VISIT 1	VISIT 2	VISIT 3	DATE OF VISIT MONTH : DAY	<input type="text"/>	<input type="text"/>	<input type="text"/>	INTERVIEW TIME BEGAN HOUR:MINUTE	<input type="text"/>	<input type="text"/>	<input type="text"/>	INTERVIEW TIME ENDED HOUR:MINUTE	<input type="text"/>	<input type="text"/>	<input type="text"/>	RESULT OF VISIT*	<input type="text"/>	<input type="text"/>	<input type="text"/>
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RESULT OF VISIT*	<input type="text"/>	<input type="text"/>	<input type="text"/>																				
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<input type="checkbox"/> 3 Corporation	<input type="checkbox"/> 6 Government corporation/institution																						

Appendix D

2012 CAF Form 5 - Core Questionnaire for Fishing

Page 2

5B		SECTION E – FISHERIES				
E1 From January to December 2012, where did _____ perform the fishing operation, in marine waters or inland waters? WRITE X IN THE BOX <input type="checkbox"/> 1 Marine waters <input type="checkbox"/> 2 Inland waters		E2 From January to December 2012, how many fishing boat(s)/vessel(s) did _____ use in the operation (including raft)? <div style="text-align: right; border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> WRITE IN THE BOX THE NUMBER OF BOATS/VESSELS USED. WRITE "00" IF NO BOAT/VESSEL WAS USED. IF "00", GO TO ITEM E6.				
ASK ITEMS E3 TO E5 FOR EACH FISHING BOAT/VESSEL USED. INCLUDE ALL FISHING BOATS/VESSELS USED REGARDLESS OF OWNERSHIP AND FREQUENCY OF USE.						
BOAT/ VESSEL NO.	E3 What type of boat/vessel did _____ use? WRITE X IN THE BOX <input type="checkbox"/> 1 Boat with engine and outrigger <input type="checkbox"/> 2 Boat with engine but without outrigger <input type="checkbox"/> 3 Boat without engine but with outrigger		E4 What was the gross tonnage of the boat/vessel used in the fishing operation? WRITE X IN THE BOX <input type="checkbox"/> 1 More than three (3) gross tons <input type="checkbox"/> 2 Three (3) gross tons or less		E5 Does _____ own this boat/vessel? WRITE X IN THE BOX <input type="checkbox"/> 1 Owned <input type="checkbox"/> 2 Not owned	
01						
02						
03						
04						
05						
ARE THERE MORE THAN FIVE (5) BOATS/VESSELS USED IN THE FISHING OPERATION? <input type="checkbox"/> 1 Yes, USE ADDITIONAL CAF FORM 5 <input type="checkbox"/> 2 No					REMARKS/COMPUTATION	
E6 From January to December 2012, did _____ use fishing gears/ accessories/devices in the fishing operation? <input type="checkbox"/> 1 Yes, FILL OUT THE MATRIX BELOW <input type="checkbox"/> 2 No, END INTERVIEW FOR THIS OPERATOR AND GO TO THE NEXT OPERATOR/HOUSEHOLD						
E7 What kind of gears/accessories/devices did _____ use? KIND OF GEAR/ACCESSORY/DEVICE		E8 How many? NUMBER AS OF DECEMBER 31, 2012	E7 Continuation - What kind of gears/accessories/devices did _____ use? KIND OF GEAR/ACCESSORY/DEVICE			E8 Continuation - How many? NUMBER AS OF DECEMBER 31, 2012
1	CODE DO NOT FILL	NUMBER AS OF DECEMBER 31, 2012	6	CODE DO NOT FILL		NUMBER AS OF DECEMBER 31, 2012
2			7			
3			8			
4			9			
5			10			
ARE THERE MORE THAN TEN (10) GEARS/ACCESSORIES/DEVICES USED IN THE FISHING OPERATION? <input type="checkbox"/> 1 Yes, USE ADDITIONAL CAF FORM 5 <input type="checkbox"/> 2 No, END INTERVIEW FOR THIS OPERATOR AND GO TO THE NEXT OPERATOR/HOUSEHOLD						

Appendix E
2012 CAF Form 26 - Aquaculture Establishment
Page 2

Page 2 PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED

GENERAL INSTRUCTIONS

- Provide best estimates if exact figures are not available in your records. Indicate N.A. for items not applicable
- Refer to the concepts and definition of terms on page 5 and relevant instructions when providing responses for each item.
- Mark (X) only **one box**, unless instructed otherwise.
- Use another CAF Form 26 if there are more than six (6) aquafarms in Section B.

SECTION A. GENERAL INFORMATION ABOUT THE ESTABLISHMENT

A1. Business and Registered Name in 2012, Business Address, Company Website and Tax Identification Number (TIN)

A. Business Name _____

B. Registered Name _____

C. Business Address _____

D. Company Website _____

E. TIN _____

A2. Economic Activity or Business in 2012

Describe in detail the main and other activities of this establishment.

A.2.1. Main Activity (*Refers to the activity that contributes the biggest or major portion of the gross income or revenue of this establishment*)

Do Not Fill (For NSO Use Only)						
2009 PSIC						

A.2.1.1. Major products/goods produced or sold and/or type of service rendered (*Specify*)

A.2.2. Secondary/Other Activities (*Refer to activities carried out by this establishment in addition to the main activity and in which the output, like that of the main activity, must be suitable for delivery outside this establishment.*)

Do Not Fill (For NSO Use Only)						
2009 PSIC						

A3. Legal Organization in 2012

Mark (X) the box corresponding to the best description of this establishment.

1 Single Proprietorship 4 Cooperative 7 Others, Specify: _____

2 Partnership 5 Private Institution (Non-stock, Non-Profit Corporation)

3 Corporation (Stock Corporation) 6 Government Corporation/ Institution

Continued on Page 3

Appendix E
2012 CAF Form 26 - Aquaculture Establishment
Page 3

Page 3 PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED

SECTION B. CHARACTERISTICS OF THE AQUACULTURE				
B1. Number of aquafarms used in raising/farming (culturing) of aquatic products from January to December 2012.				
Write the total number of aquafarms in the boxes provided.				➔ <input type="text"/> <input type="text"/>
A Q U A F A R M M U N I C I T Y	B2. Type of aquafarm being operated by the establishment		B3. Location of aquafarm	
	1 – Fishpond 7 – Fish Tanks 2 – Fish Pen 8 – Hatchery 3 – Fish Cage 9 – Others, 4 – Seaweed Farm Specify 5 – Oyster Farm 6 – Mussel Farm		Write the name of the province, city/municipality and barangay in the space provided in the corresponding columns. Leave the boxes blank.	
		Province	City/Municipality	Barangay
(1)	(2)	(3)	(4)	(5)
1	<input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> <input type="text"/> _____
2	<input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> <input type="text"/> _____
3	<input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> <input type="text"/> _____
4	<input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> <input type="text"/> _____
5	<input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> <input type="text"/> _____
6	<input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> _____	<input type="text"/> <input type="text"/> <input type="text"/> _____
If there are more than six (6) aquafarms used by the establishment, write "1" for YES and use additional CAF Form 26 or "2" for NO in the box provided.				<input type="text"/>

Continued on Page 4

Appendix E
2012 CAF Form 26 - Aquaculture Establishment
Page 4

Page 4 PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED

SECTION B. CHARACTERISTICS OF THE AQUACULTURE (continued)				
B4. Area devoted to the aquafarm <i>Fill out only if answer in B2 is code 1 to 6</i> <i>Write the area in hectares up to three (3) decimal places</i>	B5. Total volume of the fish tank or hatchery <i>Fill out only if answer in B2 is code 7 or 8</i> <i>Write the volume in cubic meters up to three (3) decimal places</i>	B6. Type of water environment in the aquafarm 1 – Fresh Water 2 – Brackish Water 3 – Marine Water <i>Write X in the box corresponding to the answer</i>	B7. Species cultured in the aquafarm Type of Species <i>Write the name of species cultured in the space provided</i>	A Q U A F A R M N U M B E R
				CODE DO NOT FILL
(6)	(7)	(8)	(9)	(10)
_____ . _____	_____ . _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	_____ _____ _____ _____	_____ _____ _____ _____
_____ . _____	_____ . _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	_____ _____ _____ _____	_____ _____ _____ _____
_____ . _____	_____ . _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	_____ _____ _____ _____	_____ _____ _____ _____
_____ . _____	_____ . _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	_____ _____ _____ _____	_____ _____ _____ _____
_____ . _____	_____ . _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	_____ _____ _____ _____	_____ _____ _____ _____
_____ . _____	_____ . _____	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	_____ _____ _____ _____	_____ _____ _____ _____

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2012 CAF Form 26 - Aquaculture Establishment
Page 5

Page 5	PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED
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CONCEPTS AND DEFINITION OF TERMS

Aquafarm is a farming facility used in the culture or propagation of aquatic species such as fish, crustaceans, mollusks, and aquatic plants like seaweeds. In determining the number of aquafarms, a land-based aquafarm is considered one same farm when it is on a contiguous piece of land. Contiguous means that the piece of land is not separated by natural or man-made boundaries such as road, river, and canal that are not part of the holding/land. For aquafarms operated in open bodies of water such as fish pen, fish cage, seaweed farm, mussel farm, and oyster farm, consider the aquafarm as one farm if it is of the same type, located in the same barangay and have the same water environment.

Types of Aquafarm:

- 1. Fishpond** refers to a body of water (artificial or natural) where fish and other aquatic products are cultured, raised or cultivated under controlled conditions. This is a land-based type of aquafarm. Species usually cultured in fishponds are **milkfish (bangus), tilapia, hito, carp, grouper (lapu-lapu), siganid (samaral), sea bass (apahap), prawn (sugpo), shrimp (hipon), crab (alimango)**, and others.
- 2. Fish pen** refers to a fish enclosure made of closely-woven bamboo screens, nylon screens or nets or other materials attached to poles staked at the bottom up to the surface of the lake, river or other shallow bodies of water for the purpose of growing and/or culturing of fish to various sizes in fresh, brackish and marine waters. A fish pen varies in shapes. Its enclosure covers the entire water depth from the water surface down to the bottom.
 Note that fish corral (baklad) which is used for trapping fish in tidal waters or along the natural paths of fish is not considered fish pen. Both have similar features and materials used. The only difference is that a fish pen is a fish enclosure where fish from outside the enclosure cannot enter while a fish corral is constructed with openings to serve as fish trap. Species cultured in fish pens are **milkfish (bangus), carp, tilapia, sea bass (apahap)** and others.
- 3. Fish cage** refers to a stationary or floating fish enclosure made of synthetic net wire/bamboo screen or other materials set in the form of inverted mosquito net (hapa type) with or without cover with all sides either tied to poles staked to the bottom of the water or with anchored floats for aquaculture purposes. A fish cage is suitable in the culture of fish species that burrow into the lake bottom because it limits the fish inside the confines of the cage.
 Species cultured in fish cages are **milkfish (bangus), tilapia, carp, grouper (lapu-lapu), siganid (samaral), sea bass (apahap)** and others.
- 4. Seaweed farm** refers to a farm for cultivating seaweeds in suitable water areas by any method with appropriate intensive care for production in commercial quantities. The culture of seaweeds may be carried out by tying them to stones, straw lines, nets and other instruments which are set in a manner that is elevated from the sea bottom to protect them from predators in the sea. Examples of varieties of seaweeds which can be cultured are **eucaema (gozo), gracilaria (gulaman dagat), caulerpa (lato)**, and others. Gathering of seaweeds is not classified under aquaculture but in the gathering of aquatic products under fishing operation.
- 5. Oyster farm** refers to a farm for cultivating oysters in suitable water areas by any method with appropriate intensive care for production purposes.
- 6. Mussel farm** refers to a farm for cultivating mussels in suitable water areas by any method with appropriate intensive care for production purposes.
- 7. Fish tank** is a land-based structure made of wood, glass, metal or cement, usually rectangular or cylindrical in shape designed to grow and culture fish for breeding and seed fish production. It may be constructed below or above the ground level and capable of holding and interchanging water.
- 8. Hatchery or "pangitlugan"** is an aquafarm where brood stock eggs are hatched and reared into fry in a body of water (artificial or natural) contained in tanks or ponds under controlled condition in fresh or saltwater environment.
- 9. Others (SPECIFY)** includes aquafarms which cannot be classified in the aforementioned types of aquafarms. Examples are farms for culturing **pearl, cockles, abalone**, and others.

Water Environment:

- 1. Fresh water** refers to water environment without salt or marine origin. It is pure freshwater, that is, no mixture of seawater. Examples are Laguna de Bay, Taal Lake, Candaba Swamps, Liguasan Marsh, and rivers, canals, dams, paddy and rice fields, lakes, ponds, and springs.
- 2. Brackish water** refers to mixed seawater and fresh water environment with salinity of less than 30 parts per thousand (ppt) that varies with the tide. Examples are tidal flats, mangroves, swamps, and mouths of rivers, where seawater meets the fresh water.
- 3. Marine waters** refers to seawater environment with a salinity ranging from 30 to 40 ppt consisting of ocean, bay, gulf and channels. Examples are Manila Bay, West Philippine Sea, and Albay Gulf.

Continued on Page 6

Appendix E
2012 CAF Form 26 - Aquaculture Establishment
Page 6

Page 6	PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED			
CERTIFICATION				
I hereby certify that this report has been completed as accurately as the records of this establishment allow and with the best estimates in some instances.				
Name		Signature		
Title/Designation		Date		
Person in your establishment that we should contact if queries arise regarding this form:				
Name		Telephone no.		
Title/Designation		Facsimile No.		
Email Address				
FOR NSO USE ONLY (Do not fill)				
Activity	Name	Signature	Designation	Date
Distributed by:				
Collected by:				
Field Edited by:				
Edited/Coded by:				
Verified by:				
REMARKS/COMPUTATIONS				

Appendix F
 2012 CAF Form 27 - Fishing Establishment
 Page 2

Page 2	PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED
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GENERAL INSTRUCTION

- Provide best estimates if exact figures are not available in your records. Indicate N.A. for items not applicable
- Refer to the concepts and definition of terms on page 4 and relevant instructions when providing responses for each item.
- Mark (X) only **one box**, unless instructed otherwise.
- Use another CAF Form 27 if there are more than three "other" fishing gears/accessories/devices used in Section B, Item B4.

SECTION A. GENERAL INFORMATION ABOUT THE ESTABLISHMENT

A1. Business and Registered Name in 2012, Business Address, Company Website and Tax Identification Number (TIN)

A. Business Name _____

B. Registered Name _____

C. Business Address _____

D. Company Website _____

E. TIN _____

A2. Economic Activity or Business in 2012

Describe in detail the main and other activities of this establishment.

A2.1. Main Activity (Refers to the activity that contributes the biggest or major portion of the gross income or revenue of this establishment)

Do Not Fill (For NSO Use Only)						
2009 PSIC						

A2.1.1. Major products/goods produced or sold and/or type of service rendered (Specify)

A2.2. Secondary/Other Activities (Refer to activities carried out by this establishment in addition to the main activity and in which the output, like that of the main activity, must be suitable for delivery outside this establishment.)

Do Not Fill (For NSO Use Only)						
2009 PSIC						

A3. Legal Organization in 2012

Mark (X) the box corresponding to the best description of this establishment.

- | | | |
|--|--|---|
| <input type="checkbox"/> 1 Single Proprietorship | <input type="checkbox"/> 4 Cooperative | <input type="checkbox"/> 7 Others, Specify: _____ |
| <input type="checkbox"/> 2 Partnership | <input type="checkbox"/> 5 Private Institution (Non-stock, Non-Profit Corporation) | |
| <input type="checkbox"/> 3 Corporation (Stock Corporation) | <input type="checkbox"/> 6 Government Corporation/ Institution | |

Appendix F
 2012 CAF Form 27 - Fishing Establishment
 Page 3

Page 3 PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED

SECTION B. CHARACTERISTICS OF FISHING OPERATION							
B1. Type of water environment where fishing operation is performed most of the time from January to December 2012 1 – Marine Waters 2 – Inland Waters (Fresh and Brackish Water) Write the corresponding code of the answer in the box provided. ➔ <input style="width: 30px; height: 20px;" type="text"/>							
B2. Total number of fishing boats/vessels used in the operation from January to December 2012 Write the answer in the box provided. ➔ <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/>							
B3. Type, gross tonnage and ownership of fishing boats/vessels used in January to December 2012 Indicate the number of boats/vessels used in fishing by type of boat/vessel, ownership and gross tonnage.							
Type of Boat/Vessel	Type of Ownership and Gross Tonnage of the Fishing Boat/Vessel						
	Owned			Not owned			
	More than 3 Gross Tons	3 Gross Tons or Less		More than 3 Gross Tons	3 Gross Tons or Less		
1. Boat with engine and outrigger							
2. Boat with engine but without outrigger							
3. Boat without engine but with outrigger							
4. Boat without engine and outrigger							
B4. Kind and number of fishing gears/accessories/devices used in the operation from January to December 2012 Indicate the number of fishing gears/accessories/devices used in the boat/vessel.							
Kind of fishing gear/ Accessory/device used	Number as of December 31, 2012	Kind of fishing gear/ Accessory/device used	Number as of December 31, 2012	Kind of fishing gear/ Accessory/device used	Number as of December 31, 2012	Kind of fishing gear/ Accessory/device used	Number as of December 31, 2012
<small>CODE</small>		<small>CODE</small>		<small>CODE</small>		<small>CODE</small>	
PURSE SEINE	10	MODIFIED DANISH SEINE	15	SERVICE BOAT	30		
RING NET	11	HARPOON	23	RANGER BOAT	31		
BAG NET	12	FISHING LIGHT	26	OTHERS, Specify			
TRAWL NET	13	SONAR	28	_____			
ROUND HAUL SEINE	14	FISH FINDER	29	_____			
If there are more than three (3) "other" fishing gears/accessories/devices used, write "1" for YES and use additional CAF Form 27 or "2" for NO in the box provided. ➔ <input style="width: 30px; height: 20px;" type="text"/>							

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Appendix F
2012 CAF Form 27 - Fishing Establishment
Page 4

Page 4	PLEASE ENTER ON THE APPROPRIATE SPACE OR BOX THE DATA REQUESTED
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CONCEPTS AND DEFINITION OF TERMS
<p>Fishing refers to the catching and gathering of fish, crustaceans, mollusks, and other marine organisms and products, including other aquatic plants.</p> <p>Inland waters refer to bodies of water such as lakes, rivers, reservoirs, dams, paddy/rice fields, estuaries, marshes, and ponds usually consisting of fresh water or brackish water environments. Examples are Laguna de Bay, Taal Lake, and Agusan Marsh.</p> <p>Marine waters refer to bodies of waters such as oceans, bays, gulfs and channels with seawater salinity. It is pure saltwater such as Manila Bay, Visayan Sea, Batangas Coast.</p> <p>Fishing boat/vessel refers to any boat, ship or other watercraft equipped to be used for taking of fishery species in the performance of any activity related to fishing.</p> <p>Gross tonnage of the boat/vessel is the vessel's "closed-in" spaces expressed in volume in terms of one hundred cubic feet (which is equal to one gross ton). This includes permanently enclosed spaces above the tonnage deck, also known as the underdeck tonnage.</p> <p>Fishing gear is any apparatus, gadget, implement and other paraphernalia used in catching and gathering of fish, crustaceans, mollusks, and other aquatic products.</p>

CERTIFICATION				
I hereby certify that this report has been completed as accurately as the records of this establishment allow and with the best estimates in some instances.				
Name		Signature		
Title/Designation		Date		
Person in your establishment that we should contact if queries arise regarding this form:				
Name		Telephone no.		
Title/Designation		Facsimile No.		
Email Address				
FOR NSO USE ONLY (Do not fill)				
Activity	Name	Signature	Designation	Date
Distributed by:				
Collected by:				
Field Edited by:				
Edited/Coded by:				
Verified by:				
REMARKS/COMPUTATIONS				



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