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FISHERIES SITUATIONER

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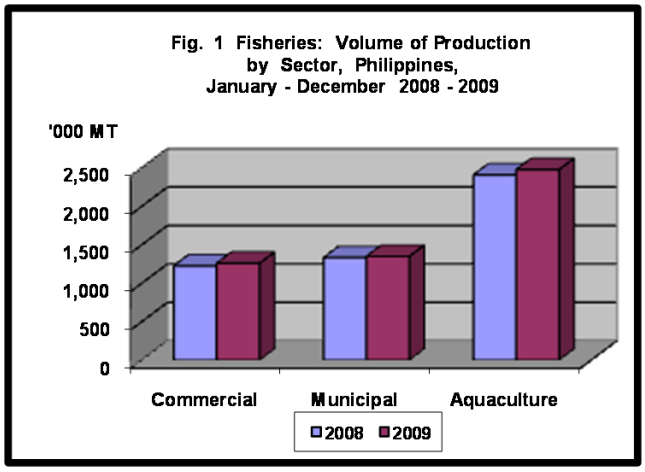
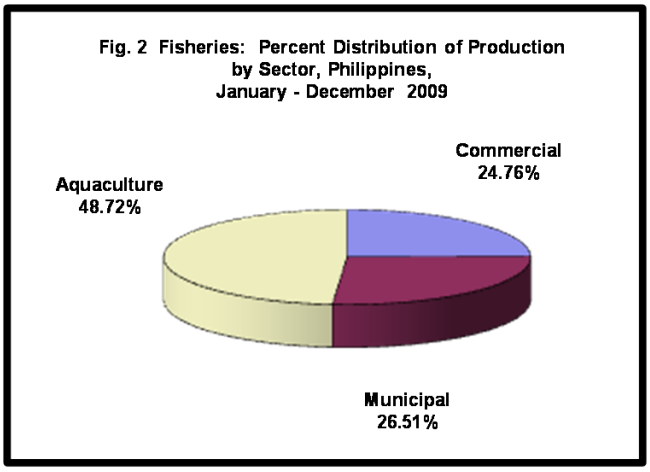
HIGHLIGHTS





In 2009, the **fisheries sector** grew by 2.37 percent. This year's production was 5,084,520.25 metric tons. All the fisheries sub-sectors managed to outdo their 2009 production performance. Aquaculture which served as the major source of growth, expanded by 2.89 percent. Total output from commercial fisheries surged by 2.67 percent. Municipal fisheries registered a 1.14 percent increase in production (Table 1).

In **commercial fisheries**, the volume of unloadings was estimated at 1,258,975.07 metric tons or 32,770.19 metric tons more than last year's production. Four (4) regions recorded production increases this year. In Zamboanga Peninsula fish production went up by 28.93 percent or 80,199.31 metric tons, which contributed to the country's total output expansion. Heavy unloadings of indian sardines were noted in private landing centers of Zamboanga City during the second quarter of 2009. The growth was mainly attributed to the increased demand from canning factories in Zamboanga City during the second quarter of 2009. In 12 regions, downward trends in production were observed. There were reports of production shortfalls that were attributed to the lesser fishing trips due to rough seas, big waves and successive typhoons during the second, third and fourth quarters of 2009. Nevertheless, the production losses in most regions were offset by the gains in four (4) regions. Commercial fisheries shared 24.76 percent in the total fisheries production in 2009.

Municipal fisheries production at 1,348,153.15 metric tons in 2009 was 1.14 percent or 15,166.77 metric tons higher than the 2008 output. Marine municipal fisheries shared 1,159,431.21 metric tons in the total municipal fisheries production. Eight (8) regions recorded production increments while the other eight (8) regions exhibited downward trends in production. Heavy unloadings of marine municipal fish catch were observed in MIMAROPA. Western Visayas, Bicol Region, Zamboanga Peninsula, and Eastern Visayas. The gears and boats distributed by the Bureau of Fisheries and Aquatic Resources (BFAR) served as initiatives to municipal fishermen to increase fishing efforts. Likewise, the establishment of fish sanctuaries and the use of fish aggregating devices (FADs) contributed to the growth in the volume of fish caught by municipal fishermen.

Inland municipal fisheries, accounted for 188,721.94 metric tons in the total municipal fisheries production or grew by 3.88 percent this year. The growth in production was attributed to the abundant catch of fish, crustaceans and mollusks due to sufficient water level in rivers and other tributaries brought about by incessant rains especially during the fourth quarter of 2009. There was continuous dispersal of tilapia fingerlings to communal bodies of water by the BFAR. Municipal fisheries contributed about 26.52 percent of the total fisheries production in 2009.

Aquaculture surpassed its last year's production by 69,694.11 metric tons or 2.89 percent. Production rose to 2,477,392.03 metric tons in 2009 from 2,407,697.92 metric tons in 2008. Seaweeds contributed about 70.23 percent to the total aquaculture production while fins/shellfishes shared 29.77 percent. Seaweed farmers produced 1,739,994.97 metric tons or 73,438.71 metric tons more output this year than in 2008. This was evidenced by the continuous expansion in production during the whole year of 2009. Bigger volumes of seaweed production were noted in Palawan, Tawi-Tawi, Sulu, Bohol and Zamboanga Sibugay. The growth in production

was attributed to the availability of quality planting materials, good weather conditions, establishment of more seaweed nurseries in Zamboanga Sibugay and Sulu and good market price offered to seaweed farmers. Aquaculture accounted for about 48.72 percent of the total fisheries production in 2009 (Table 1).

COMMERCIAL FISHERIES

Commercial fishermen produced 2.67 percent more output in 2009 compared to 2008. This year's volume of unloadings was estimated at 1,258,975.07 metric tons which was 32,770.19 metric tons higher than last year's production of 1,226,204.88 metric tons. Fish production in Zamboanga Peninsula which grew by 28.93 percent or 80,199.31 metric tons contributed to the total output expansion. Heavy unloadings of commercial fish caught were noted in this region specifically in private landing centers in Zamboanga City throughout the year. It was noted that during the second quarter, the bulk of indian sardines were unloaded in private landing centers. About 71,917.98 metric tons were noted in previous year's record of unloadings. The increase was mainly attributed to the higher demand of canning factories in Zamboanga City which recorded increased from 11 in 2008 to 18 this year. Likewise, there was higher demand for dried fish in Zamboanga City and other provinces. Three (3) other regions managed to surpass their last year's records namely: CALABARZON, Bicol Region and Autonomous Region in Muslim Mindanao (ARMM). The production increments were due to the increased number of fishing operations as encouraged by good weather conditions during the first quarter of 2009. The production gain was also traced to abundant catch of in-season species such as anchovies, indian sardines, cavalla, roundscad, frigate tuna, skipjack and yellowfin tuna in Bicol Region and ARMM during the first, second and third quarters of 2009 (Table 2).

In 12 regions, namely: National Capital Region, Ilocos Region, Cagayan Valley, Central Luzon, MIMAROPA, Western Visayas, Central Visayas, Eastern Visayas, Northern Mindanao, Davao Region, SOCCSKSARGEN and Caraga Region, a downward trend in production was exhibited. The production shortfalls were brought about by lesser fishing trips due to rough seas and big waves resulting from various weather disturbances that brought in more rainfall and strong winds. Fishermen mentioned, among others, typhoons Crising, Dodong, Feria, Nando, Ondoy, Kiko and Pepeng during the second, third and fourth quarters of 2009. It was reported that there were fishing boats that underwent dry docking for repair and maintenance. The decline in production could also be traced to the ban on the use of purse seine during spawning period (August-September 2009) which was imposed by the Western and Central Pacific Fisheries Commission (WCPFC) on its member countries to replenish stocks of the highly migratory tuna species. The Bureau of Fisheries and Aquatic Resources (BFAR) closely monitored the operations of purse seine owners in SOCCSKSARGEN in compliance with the ban. Cutting or shortening of fishing trips by Muslim operators in observance of Ramadan also contributed to the decline in production of commercial fishermen during the third quarter of 2009. Another reason cited was reduced level of operations and fishing trips because of high cost of fuel in the provinces of Aurora, Cavite, Aklan, Iloilo, Leyte and Samar during the fourth quarter of 2009.

Except for traditional landing centers, all types of landing centers recorded increases in volume of unloadings. unloadings. Unloadings at private landing centers at 356,298.13 metric tons boosted the performance of commercial fishing. It posted the biggest expansion at 39.31 percent or 100,530.63 metric tons higher than in 2008. There was increased number of fishing vessels that unloaded indian sardines in private landing centers during the second quarter of 2009. Abundant supply of indian sardines was

recorded during the second quarter. The volume of fish catch unloaded at Philippine Fisheries Development Authority (PFDA) ports was estimated at 244,413.10 metric tons or 23.46 percent higher than in 2008. Commercial fishermen unloaded a total volume of 79,503.49 metric tons of fish caught at Local Government Unit (LGU) - managed landing centers this year and this was 12.54 percent higher than in 2008.

On the other hand, unloadings at traditional landing centers at 578,760.35 metric tons went down by 123,065.00 metric tons or 17.53 percent this year. Traditional landing centers accounted for the bulk of unloadings (Table 2).

MUNICIPAL FISHERIES

Municipal fisheries output grew by 1.14 percent in 2009. Consolidated production of marine and inland fisheries for the year was 1,348,153.15 metric tons. Marine fisheries accounted for 86 percent of the total municipal fisheries production and inland fisheries shared 14 percent (Table 3).

The volume of fish unloaded by municipal fishing boats in 2009 was 1,159, 431.21 metric tons. This was 0.71 percent more than the 2008 record of 1,151,308.73 metric tons. On the other hand, catch from inland waters reached 188,721.94 metric tons or 3.88 percent more than last year's 181,677.65 metric tons.

MIMAROPA, Western Visayas, Bicol Region, Zamboanga Peninsula and Eastern Visayas were the biggest contributors to the output gain of marine municipal fisheries. Eight (8) out of 16 regions surpassed their last year's levels of production. MIMAROPA had a production decline of 7.48 percent or 17,651.66 metric tons from the 2008 municipal fisheries production. The failure to exceed previous year's level was due to the series of weather disturbances that interrupted daily fishing operations of municipal fishermen in the provinces, especially, in Palawan.

Among the 67 provinces with municipal fisheries, Palawan was consistently on the list of top provinces despite the 8.45 percent reduction in its 2009 production. Its annual volume of unloadings of 194,849.36 metric tons was followed by Iloilo with 67,212.43 metric tons, Surigao del Norte with 45,240.27 metric tons, Zamboanga City with 41,973.08 metric tons and Masbate with 40,101.88 metric tons.

Luzon accounted for the biggest volume of fish unloadings which reached 487,853.49 metric tons and recorded a 42.08 percent share to total marine municipal fisheries production in 2009. Mindanao and Visayas had 31.32 percent and 26.61 percent shares, respectively. The total volume of fish unloaded by municipal fishing boats in the Visayas provinces increased by 11.69 percent compared to 2008 level. On the other hand, volume of fish unloaded in Luzon and Mindanao decreased by 3.25 percent and 2.10 percent, respectively.

The volume of unloadings was bigger during the second quarter of the year at 344,346.87 metric tons. Marine fish production slowed down during the latter part of the third quarter when typhoons Ondoy and Pepeng hit NCR and Northern Luzon provinces. For several days, fishermen in affected areas were unable to go on fishing and this led to lower output of 260,842.65 metric tons. However, improved catch was observed during the fourth quarter when species in season appeared in different fishing grounds that pushed production up to 265,445.69 metric tons.

Daily catch of municipal fishermen was seemingly low but this was compensated by frequent fishing trips. It was also observed that catch from fish traps like lambaklads and fish shelters increased. Different kinds of shells and clams gathered throughout the year added to municipal fisheries production. Fishing gears and boats distributed by the BFAR served as initiatives to fishermen to undertake more fishing efforts. Marine fish sanctuaries and fish aggregating devices (FADs) established along the coastline of provinces attracted more schools of fish that enhanced catch of fishermen. The effort of Bantay Dagat to control intrusion of commercial vessels in the municipal waters resulted in expanded fishing grounds and longer fishing time for municipal fishermen.

Among the top marine species caught by municipal fishermen were roundscad (galonggong), frigate tuna (tulingan), big-eyed scad (matang-baka), indian sardine (tamban), fimbriated sardines (tunsoy), anchovies (dilis), indian mackerel (alumahan), and squid (pusit). These species shared almost 50 percent in the marine municipal fisheries production.

Meanwhile, catch from inland fisheries went up by 3.88 percent to 188,721.94 metric tons in 2009 from 181,677.65 metric tons in 2008. Despite the decrease recorded in the second quarter, the sector recovered in the third and fourth quarters with 1.42 percent and 13.91 percent increases, respectively. Additional volumes of fish catch from inland bodies of water over the previous year were recorded in Ilocos Region (2,712.39 metric tons), SOCCSKSARGEN (2,525.34 metric tons) and Cagayan Valley (1,192.54 metric tons). Rizal (41,907.32 metric tons), Laguna (38,499.25 metric tons), North Cotabato (14,965.05 metric tons), Maguindanao (11,755.07 metric tons) and Sultan Kudarat (10,820.82 metric tons) were the top producing provinces. The combined catch of these five (5) provinces contributed 62.50 percent to the 2009 inland fisheries production.

The growth in production was due to the swelling of rivers and other tributaries caused by incessant rains, especially, during the fourth quarter. With sufficient water level, more fish, crustaceans and mollusks thrived in these inland waters which were eventually caught by subsistence fishermen. Species like tilapia, carp, gourami, mudfish, catfish and shrimps from swampy areas, irrigation canals, creeks and ricefields were caught by inland fishermen. Pangasinan attributed the big increase to the oversupply of milkfish from fishponds that overflowed during typhoons Ondoy and Pepeng. The 3.88 percent increment could also be attributed to the initiatives of inland fishermen to look for more sources of fish for home consumption. The continuous dispersal of tilapia fingerlings to communal bodies of water by the BFAR helped sustain the meager sources of livelihood of subsistence fishermen.

Laguna de Bay was the major source of fishermen in Rizal and Laguna. Snails, utilized as supplemental feeds by duck raisers and fishpond operators, enabled these two (2) provinces to record production expansion this year (Table 3).

AQUACULTURE

The 2009 aquaculture production reached 2.48 million metric tons and posted a 2.89 percent increase from the previous year's output. The sources of production increases were seaweed farms, brackishwater fishponds and freshwater fish cages.

Production of seaweeds accounted for 70.23 percent of total aquaculture and it grew by 4.41 percent this year. The establishment of seaweed nurseries in ARMM provided good quality planting materials at reasonable price to operators. High market prices during the second and third quarters of the year encouraged seaweed operators to produce more.

Harvests from brackishwater fishponds exhibited an increasing trend. It was noted in Western Visayas that during the second quarter, rehabilitated ponds previously damaged by typhoon were back in operation. High demand and good price for brackishwater species prevailed during the first and third quarters of the year. In spite of the significant damage caused by typhoon Pepeng in Northern Luzon during the last quarter, output from brackishwater fishponds increased by 2.14 percent.

Freshwater fish cages registered a 3.79 percent gain from last year's production. CALABARZON which consistently dominated production from this aquafarm type reported that dismantling of cages in Taal Lake reduced pollution, thus, the favorable harvests throughout the year.

On the other hand, a production setback was observed on freshwater fish pens, mussel farms and marine cages. The 9.63 percent decline in freshwater fish pens was mainly due to the overflowed pens and washed out species in Laguna and Rizal caused by typhoons Ondoy and Santi. Production from mussel farms decreased by 13.38 as a result of the dismantling of structures along Manila Bay to give way to the construction of Boulevard 2000. Live grouper production in marine fish cages in Palawan went down due to financial constraints (Table 4).

The following table shows the percentage change in production by aquafarm type from 2008 to 2009.

Type of Aquafarm/Environment	% Increase (Decrease)
Brackishwater fishpond	5.73
Brackishwater fish pen	(1.23)
Brackishwater fish cage	(4.01)
Freshwater fishpond	4.99
Freshwater fish pen	10.08
Freshwater fish cage	13.28
Marine fish pen	(20.18)
Marine fish cage	(6.36)
Oyster	7.82
Mussel	1.44
Seaweed	3.85

SELECTED AQUACULTURE SPECIES

MILKFISH

Milkfish production was down by 0.92 percent this year. From 350,814.02 metric tons in 2008, production went down to 347,587.53 metric tons in 2009. It was reported that there was reduction in area stocked due to high cost of inputs. The abrupt changes in water temperature resulted in lower survival rate. This was due to overflowing of ponds brought about by the series of typhoons that hit the country during the year.

Production of milkfish from brackishwater fishponds rose by 0.17 percent from last year's level. The provinces of Iloilo, Capiz, Negros Occidental and Pampanga exhibited upward trend in production because of increased stocking rates. The prevailing market price has, likewise, encouraged milkfish farmers to raise their stocking density. It was also observed that ponds which were affected by typhoon in 2008 were made operational and good quality of species were harvested due to the availability of natural food. On the other hand, production of milkfish in Bulacan went down by 6.55 percent and in Pangasinan, by 33.08 percent. This was attributed to pollution caused by domestic and industrial wastes, overflowing of ponds because of frequent heavy rains and lesser area utilized due to high cost of inputs.

Milkfish production from brackishwater, freshwater and marine fish pens went down by 17.97 percent, 10.83 percent and 2.76 percent, respectively. It was reported that fish pens in La Union and Pangasinan were washed out and smaller sizes of milkfish were harvested. In Rizal, overflowing of pens, thick water lily and strong current adversely affected the growth of milkfish. The decline of production in the National Capital Region (NCR) was caused by prolonged cold weather during the first quarter that hindered the growth of fish. High cost of material inputs was another constraint. The rehabilitation of pens was delayed due to high level of stagnant flood water brought by typhoon Ondoy.

Brackishwater and marine fish cages came down with output contractions of 14.37 percent and 1.04 percent, respectively. Freshwater fish cages, on the other hand, registered a 13.96 percent output gain. Among the reasons cited were the availability of good stocking materials, better management practices and government regulation on cage construction to prevent water pollution. On the contrary, production of milkfish in brackishwater and marine fish cages went down due to smaller sizes of milkfish harvested in Agusan del Norte as an effect of typhoon Urduja while in Pangasinan, area stocked was reduced due to high risk since some ponds were silted that needed excavation. The production gains recorded by Davao del Sur, Samar, Davao del Norte and La Union did not offset the losses in brackishwater and marine fish cages (Table 5).

TILAPIA

The 2009 tilapia production from all types of aquafarm increased by 1.48 percent or 260,911.05 metric tons from last year's output of 257,110.41 metric tons. About 94 percent of the total tilapia production came from freshwater environment and six (6) percent, from brackishwater.

Production from freshwater fishponds increased by 1.08 percent from last year's level. In Pampanga, output was up by 4.68 percent. In Tarlac, tilapia production gained by 11.45 percent and in Isabela, by 0.10 percent. The output gain in Pampanga was attributed to the expansion of harvest area and the re-opening of some closed areas during the second quarter. Good water condition resulting in abundant supply of natural food hastened the growth of tilapia during the third quarter. The upswing in Tarlac was traced to the availability of quality fingerlings coupled with better management practices during the second quarter. The small production increase in Isabela was a result of the reactivation of some fishponds and the shifting of extensive culture system to semi-intensive culture system during the third quarter. Also reported was the increase in area harvested to avail of the seasonal increase in the demand for fish during holiday season in the fourth quarter. On the other hand, production of Nueva Ecija and Pangasinan dropped by 28.10 percent and 7.12 percent, respectively. This was due to the overflowing of fishponds caused by typhoon Pepeng during the fourth quarter.

The 2.45 percent production increase from freshwater fish cages was contributed by the gains recorded in these provinces; Batangas, 7.20 percent; Laguna, 1.89 percent and Albay 10.67 percent. In Batangas, good management practices were observed. The dismantling of abandoned and damaged fish cages resulted in good growth of tilapia with lesser mortality rate during the first semester. In Laguna, the increase was due to quality fingerlings and intensive feeding that resulted in bigger sizes of tilapia harvested during the second quarter. The increase of tilapia production in Albay was attributed to the additional fish cages in Libon due to high demand and higher prices. On the contrary, Camarines Sur and Rizal indicated 18.86 percent and 14.73 percent decreases, respectively. This was due to fish kill in Lake Bato because of over stocking that resulted in lack in oxygen during the second quarter. In Rizal, the decrease was brought about by the overflowing of many fish cages due to typhoon Ondoy as well as the thickening of water lilies in the lake during the fourth quarter.

The 1.86 percent output increase from freshwater fish pens was contributed by Sultan Kudarat, Maguindanao and Davao del Norte. Sultan Kudarat rose its output by 12.69 percent because of cropping movement from last quarter of 2008 to first quarter of 2009 and those pens that were under repair were back in operation. The volume of tilapia harvests in Maguindanao went up by 4.55 percent due to the availability of funds for operation during the fourth quarter. It was also reported that tilapia harvested were of big sizes. Davao del Norte exhibited an increase of 34.10 percent this year due to simultaneous harvest at Maligaya Fish Farmers Integrated Multi-Purpose Cooperative in Carmen, Davao del Norte (MAFEMCO). It was also reported that some damaged fish pens were rehabilitated during the second and third quarters of 2009.

Tilapia production from brackishwater fishponds decreased by 0.24 percent. Provinces contributing to the decline were Cagayan and Pampanga where outputs dropped by 1.43 percent and 5.42 percent, respectively. The reason was the occurrence of flashflood brought about by the series of typhoons during the fourth quarter in Cagayan and the abrupt change of temperature affecting the growth of tilapia in Pampanga. It was also reported that some operators shifted from tilapia culture to *Peneus vannamei (*hipong puti/putian*)* during the second quarter. On the other hand, provinces contributing to the output increase were Bulacan with production gains by 12.90 percent; Zamboanga Sibugay by 20.54 percent and Zamboanga del Sur by 16.59 percent. In Bulacan, there was shifting of tiger prawn and mudcrab culture to tilapia culture during the fourth quarter. In Zamboanga Sibugay and Zamboanga del Sur, quality fingerlings stocked during the second quarter resulted to the fast growth of tilapia

A 26.59 decrease in output was recorded in brackishwater fish cages and fish pens. The decrement came from Cagayan and Ilocos Norte where production went down by 46.19 percent and 26.35 percent, respectively. In Cagayan, there was a decrease in area harvested and overflowing of fish cages caused by series of typhoons

during the fourth quarter. In Ilocos Norte, operations were adversely affected by typhoons Gorio and Isang. Some operators were discouraged to set up their cages because of their apprehension that early rains might result in flood and overflowing of water during the fourth quarter. On the contrary, only La Union showed an increase of 4.57 percent because of availability of quality fingerlings, proper feeding and good water parameter due to the frequent rains during the first semester of 2009 (Table 6).

TIGER PRAWN

Production of tiger prawn in 2009 at 47,829.75 metric tons was higher than the previous year's production of 45,342.42 metric tons. Generally, the 5.49 percent increment was attributed to the increased stocking density and area harvested, high survival rate and the high demand and good price in the market. Zamboanga Sibugay produced 35.11 percent more this year because of the availability of quality post larvae and less incidence of flash floods. Similarly, harvests of tiger prawn in Zamboanga del Sur grew by 13.60 percent because of sufficient supply of post larvae and proper maintenance of ponds. In Lanao del Norte, the 13.04 percent output gain was achieved since more operators ventured into prawn culture with the availability of inputs, usage of commercial feeds, and the re-operational of idle ponds due to market demand.

Meanwhile, harvests of tiger prawn in Bulacan for 2009 increased by 4.94 percent. This was traced to the increase in area harvested, quality post larvae and bigger size of harvests during the second quarter. In Pampanga, the 4.93 percent output gain was attained since operators used supplemental feeds. There was area expansion due to the availability of quality post larvae. Early harvests were noted as operators wanted to take advantage of the demand and good price in the market during the holiday season.

On the contrary, the 5.98 percent cut in tiger prawn in other producing provinces was due to while spot syndrome infestation, overflow of ponds due to heavy rains and dikes that were under repair (Table 7).

MUD CRAB

The 2009 production of mud crab at 13,729.83 metric tons surpassed the 2008 production of 11,625.07 metric tons by 18.11 percent. The combined volume of harvests of the top five (5) producing provinces contributed 73.45 percent to the total mud crab production this year. The production gain was attributed to increased stocking due to availability of quality crablets, additional area harvested, big size harvested and high demand and good price in the market. Of the top five (5) producing provinces, only Camarines Sur suffered a production cut of 9.97 percent due to the shifting of culture from mud crab to milkfish.

The 49 percent growth in Lanao del Norte was the result of increased stocking of quality crablets, proper management of ponds and more harvesting done to avail of market demand and good price in the market. In Camarines Norte, mud crab operators increased their stocking density in response to high demand and to avail of the good price in the market which resulted in 7.71 percent gain on production for 2009. In like manner, Pampanga, the top producing province of mud crab, posted a modest 5.22 percent growth since operators increased their area harvested and inputs in response to the demand during the Lenten and holiday seasons to avail of good market price. Also, the shifting of culture from milkfish to mud crab during the third quarter and the big size of mud crab harvested added up to the growth of its production in the province. Similarly, there were more areas harvested in the municipalities of Bonifacio, Baliangao and Plaridel in Misamis Occidental during the second semester of 2009 that contributed to 7.71 percent increase of mud crab production due to the local demand in Cebu and Manila. Other provinces that produce mud crab also recorded production gains of 4.57 percent because of the resumption of pond operation and more harvests of natural entry crabs (Table 7).

CARP

Carp production in 2009 was 15,691 metric tons, 24.33 percent lower than its 2008 level. This was due to the reduction of production from fishponds by 28.15 percent, fish pens and fish cages by 24.21 percent and small farm reservoirs (SFRs) by 30.56 percent.

The output contraction was due to the 38.02 percent decline in the fourth quarter production. Typhoons Ondoy and Santi damaged fish pens and fish cages along Laguna Lake, the top aquafarm producer of carps. These brought heavy rains that caused floods and resulted in the loss of stocks. These offset the quarterly production increments in Rizal, Laguna and Metro Manila.

On the other hand, a 28.15 percent production cut in freshwater fishponds was a consequence of zero production in Laguna as there were no fingerlings available during the year. In Quezon, the 39.47 percent decrease was an effect of cold weather and water temperature that caused mortality and stunted growth of carps in fishponds during the first quarter of 2009. Poor quality fingerlings stocked and frequent heavy rainfall were also noted during the year. In Lanao del Norte, the financial problems experienced by some operators prompted them to shift to tilapia production while others stopped operations during the first semester of 2009. Thus, total production was slashed by 9.46 percent from its 2008 level. Meanwhile, Tarlac and Pampanga's 158.69 percent and 2.14 percent production gains, respectively, were due to the quality of fingerlings used, good management practice by operators and area expansion this year.

Pangasinan harvested a total of 0.32 metric ton of carps from rice fish culture. On the other hand, there were lesser carps harvested in SFRs (Table 7).

CATFISH

Catfish production was noted mostly in freshwater fishponds. The total volume of catfish harvested this year was 2,857.52 metric tons or 6.02 percent higher compared to last year's level. The increase in production was contributed by Iloilo, Pampanga, Davao City and Nueva Ecija. The biggest production increase among provinces was in Iloilo which recorded a huge output increment of 73.65 percent. This was due to the availability of fingerlings from Bureau of Fisheries and Aquatic Resources (BFAR) and additional area harvested in Lemery and Dumangas, Iloilo with sufficient water supply. It was also reported that some operators resumed operations after recovering from the effects of typhoons during the third quarter. Also, the good water condition and better management practices, coupled with proper feeding during the fourth quarter contributed to the bigger increase of production in the province. In Pampanga, the increase of 6.23 percent was due to high demand from "ihaw-ihaw" stands and eateries during the third quarter and high demand during holiday season of the fourth quarter. Harvest of catfsh in Davao City rose by 22.29 percent this year due to the sufficient supply of fingerlings and good water condition which encouraged operators to expand their areas to meet local market demand during the first quarter. It was noted that survival rate of catfish was higher during the third and fourth quarters of the year. Nueva Ecija recorded a 56.73 percent increase due to the high demand of catfish during the first quarters of this year. On the other hand, Bulacan posted a decrease of 50.40 percent due to conversion of areas to crops farming in San Rafael, Bustos, Angat, Pandi and San Ildefonso during the first quarter. Some operators stopped operation due to high cost of inputs while, other operators shifted to agricultural jobs during the second quarter. Low production was traced to the overflowing of ponds in Angat, San Ildefonso, Bustos, San Miguel, Calumpit, Pandi and Balagtas during the fourth quarter (Table 7).

SEAWEEDS

Seaweeds posted another 4.41 percent increase in production, from 1,666,556.26 metric tons in 2008 to 1,739,994.97 metric tons in 2009. This was largely contributed by the top producing provinces of Bohol, Sulu and Tawi-Tawi which managed to put up production gains of 7.72 percent, 5.54 percent and 2.32 percent, respectively. Cited as major reason was the expansion of area throughout the year particularly in Bohol. High demand for the commodity encouraged farmers to plant more. The good weather conditions, continuous dispersal of quality planting materials from LGU and BFAR-established nurseries coupled with improved farm maintenance led to a higher production this year. In Zamboanga Sibugay, less incidence of pilfering was reported (Table 8).

OYSTER

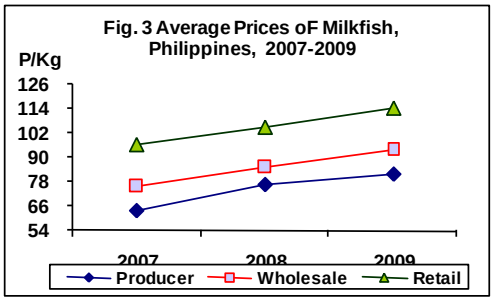
Production of oyster at 19,930.59 metric tons in 2009 was 1.21 percent lower than last year's production of 20,174.82 metric tons. Oyster production in the provinces of Pangasinan and Bulacan was down by 7.78 percent and 3.89 percent, respectively. This was due to the low demand and low quality of oyster harvested. It was noted that some of the oyster farms from these provinces were destroyed by typhoons during the second and third quarters of 2009. In Pangasinan, some operators had not restored their stocks due to lack of capital. Bulacan experienced low propagation of spats as some harvested oysters were remnants of the last summer's produce that were put back to oyster farms.

On the contrary, Negros Occidental enjoyed a 24.86 percent increase in production. Area expansion was encouraged by the high demand in the province specifically during the second and fourth quarters of the year where the Panaad and Maskara Festivals were celebrated. Farmers had numerous harvests to fill in the demand from buyers. In Iloilo and Capiz, more oyster farms have gradually recovered from previous damages that resulted in better quality of oyster harvested (Table 8).

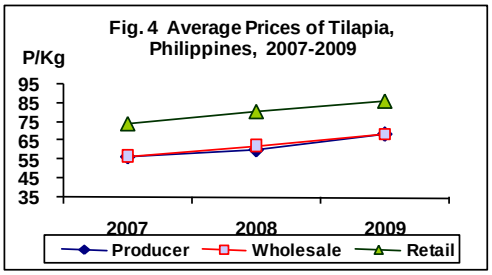
MUSSEL

Mussel production went down by 13.38 percent this year from the 2008 level. The provinces of Cavite and Bataan suffered production losses of 41.14 percent and 9.65 percent, respectively. Decrease in mussel farm areas was recorded in Cavite because of the dismantling of illegal structures in Manila Bay and the on-going Coastal Rehabilitation Program. Most of the farmers temporarily stopped operation and were hesitant to return in mussel farming to avoid losses.

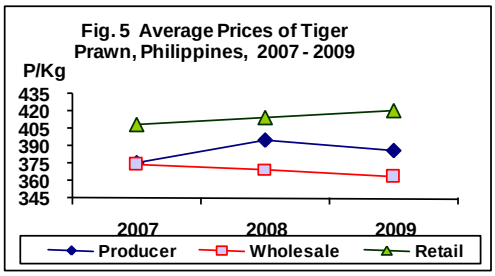
Increased mussel production in Negros Occidental was the result of selective and frequent harvesting done following the good signals in the market such as better prices and high demand in the locality and in the neighboring provinces. In Samar and Capiz, gradual recovery of stocks and re-opening of some rehabilitated farms were noted (Table 8).



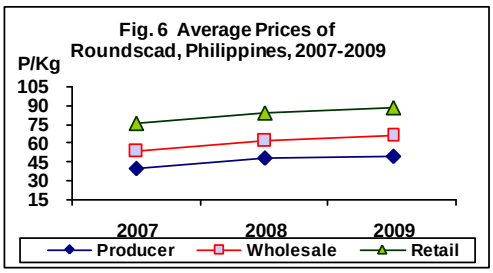
Milkfish. Producer, wholesale and retail prices were 7.26 percent, 10.07 percent and 9.08 percent higher than their 2008 levels, respectively. Bigger price increments were recorded during the first (2) two quarters of 2009.



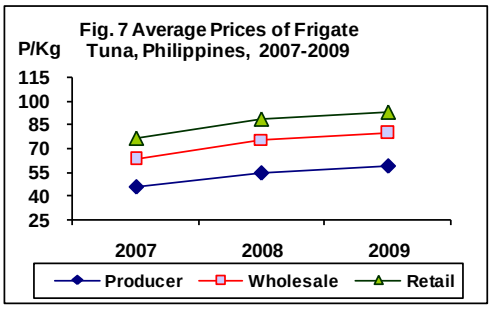
Tilapia. Average prices rose by 14.55 percent at the producer level and by 11.35 percent at the wholesale level. Retail price was more than the 2008 record by 7.63 percent. The first two (2) quarters registered high prices.



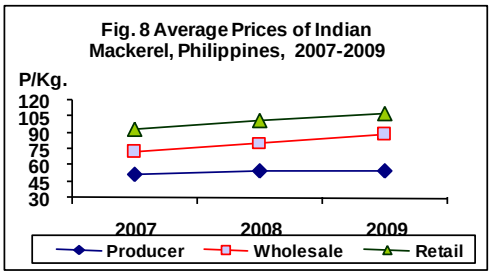
Tiger Prawn. Annual average producer and wholesale prices dipped by 2.06 percent and 1.81 percent, respectively. The retail price was 1.43 percent more than the 2008 level. Average producer prices declined on the last two (2) quarters while wholesale prices were down on the first, second and fourth quarter of 2009.



Roundscad and Frigate Tuna. Average prices at all levels rolled up by 4.51 percent to 8.25 percent. Quarterly prices were moving upward by 2.89 percent to 12.10 percent.



Indian mackerel. Average wholesale and retail prices for 2009 were up from their 2008 levels by 8.65 percent and 5.66 percent, respectively. Average producer price was 0.89 percent less than the 2008 level.



The 2009 producer-retail price margins were observed to be wider for tiger prawn and indian mackerel at P34.48 and P53.44, respectively. Milkfish, tilapia, roundscad and frigate tuna had narrower price margins this 2009 than in 2008 at P32.50, P17.53, P38.74, P34.64, respectively.

Table 1. Fisheries: Volume of Fish Production by Sub-Sector, by Region, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Region/ Sub-Sector	Fisheries		% Change 09/08	Commercial		% Change 09/08	Municipal		% Change 09/08	Aquaculture		% Change 09/08
	2008	2009		2008	2009		2008	2009		2008	2009	
PHILIPPINES	**4,966,889.18**	**5,084,520.25**	**2.37**	**1,226,204.88**	**1,258,975.07**	**2.67**	**1,332,986.38**	**1,348,153.15**	**1.14**	**2,407,697.92**	**2,477,392.03**	**2.89**
NCR	84,827.79	73,854.52	(12.94)	77,424.42	67,551.54	(12.75)	4,350.44	4,166.24	(4.23)	3,052.93	2,136.74	(30.01)
CAR	4,129.94	4,228.72	2.39				934.38	940.21	0.62	3,195.56	3,288.51	2.91
I	149,371.28	137,357.46	(8.04)	6,478.04	5,052.39	(22.01)	47,031.34	49,790.13	5.87	95,861.90	82,514.94	(13.92)
II	61,320.34	63,463.37	3.49	16,350.48	15,676.64	(4.12)	29,384.16	32,450.82	10.44	15,585.70	15,335.91	(1.60)
III	274,926.10	272,113.90	(1.02)	8,979.87	5,873.27	(34.60)	42,464.85	41,950.71	(1.21)	223,481.38	224,289.92	0.36
IV-A	408,150.40	414,887.87	1.65	81,862.04	81,886.87	0.03	123,809.87	122,145.01	(1.34)	202,478.49	210,855.99	4.14
IV-B	740,238.79	720,734.55	(2.63)	48,347.66	44,850.25	(7.23)	236,843.52	219,386.03	(7.37)	455,047.61	456,498.27	0.32
V	263,100.12	273,563.45	3.98	58,882.11	65,364.23	11.01	137,168.51	139,165.34	1.46	67,049.50	69,033.88	2.96
VI	400,741.62	433,230.56	8.11	111,313.62	109,158.74	(1.94)	147,361.58	168,936.60	14.64	142,066.42	155,135.22	9.20
VII	225,421.17	233,765.08	3.70	52,557.23	47,205.60	(10.18)	51,336.20	54,727.20	6.61	121,527.74	131,832.28	8.48
VIII	199,575.91	206,830.88	3.64	73,245.27	71,694.09	(2.12)	88,428.19	95,301.09	7.77	37,902.45	39,835.70	5.10
IX	644,386.31	732,145.86	13.62	277,230.04	357,429.35	28.93	126,174.98	127,082.97	0.72	240,981.29	247,633.54	2.76
X	149,815.18	155,525.19	3.81	46,462.24	45,983.43	(1.03)	42,996.54	42,392.12	(1.41)	60,356.40	67,149.64	11.26
XI	69,866.19	66,664.78	(4.58)	15,181.49	11,473.75	(24.42)	31,985.10	26,586.35	(16.88)	22,699.60	28,604.68	26.01
XII	326,912.10	304,821.10	(6.76)	255,770.66	230,714.89	(9.80)	46,520.88	48,645.63	4.57	24,620.56	25,460.58	3.41
Caraga Region	111,162.06	103,656.61	(6.75)	7,214.89	6,676.21	(7.47)	76,888.59	70,380.89	(8.46)	27,058.58	26,599.51	(1.70)
ARMM	852,943.89	887,676.35	4.07	88,904.82	92,383.82	3.91	99,307.25	104,105.81	4.83	664,731.82	691,186.72	3.98

P - Preliminary

Table 2. Commercial Fisheries: Volume of Fish Unloading by Region, by Type of Landing Center, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Region	Commercial		% Change 09/08	Private		% Change 09/08	PFDA		% Change 09/08	LGU		% Change 09/08	Traditional		% Change 09/08
	2008	2009		2008	2009		2008	2009		2008	2009		2008	2009	
PHILIPPINES	**1,226,204.88**	**1,258,975.07**	**2.67**	**255,767.50**	**356,298.13**	**39.31**	**197,968.87**	**244,413.10**	**23.46**	**70,643.16**	**79,503.49**	**12.54**	**701,825.35**	**578,760.35**	**(17.53)**
NCR	77,424.42	67,551.54	(12.75)				74,319.60	64,758.76	(12.86)				3,104.82	2,792.78	(10.05)
CAR															
I	6,478.04	5,052.39	(22.01)				635.41	416.23	(34.49)	308.19	98.85	(67.93)	5,534.44	4,537.31	(18.02)
II	16,350.48	15,676.64	(4.12)										16,350.48	15,676.64	(4.12)
III	8,979.87	5,873.27	(34.60)	5,465.87	4,783.84	(12.48)				85.39	152.57	78.67	3,428.61	936.86	(72.68)
IV-A	81,862.04	81,886.87	0.03				12,101.25	14,985.69	23.84	4,527.07	5,851.15	29.25	65,233.72	61,050.03	(6.41)
IV-B	48,347.66	44,850.25	(7.23)										48,347.66	44,850.25	(7.23)
V	58,882.11	65,364.23	11.01	10,017.00	11,389.19	13.70				14,206.60	18,816.11	32.45	34,658.51	35,158.93	1.44
VI	111,313.62	109,158.74	(1.94)	5,855.55	7,618.08	30.10	1,238.66	1,694.21	36.78	27,231.78	25,148.69	(7.65)	76,987.63	74,697.76	(2.97)
VII	52,557.23	47,205.60	(10.18)								3,015.20		52,557.23	44,190.40	(15.92)
VIII	73,245.27	71,694.09	(2.12)	810.20	901.99	11.33					8.70		72,435.07	70,783.40	(2.28)
IX	277,230.04	357,429.35	28.93	78,102.65	252,338.36	223.09	9,588.33	11,849.13	23.58	18,331.45	16,121.00	(12.06)	171,207.61	77,120.86	(54.95)
X	46,462.24	45,983.43	(1.03)							5,952.68	7,760.24	30.37	40,509.56	38,223.19	(5.64)
XI	15,181.49	11,473.75	(24.42)	557.60	688.04	23.39	4,319.26	3,551.23	(17.78)		2,530.98		10,304.63	4,703.50	(54.36)
XII	255,770.66	230,714.89	(9.80)	154,958.63	78,578.63	(49.29)	95,766.36	147,157.85	53.66				5,045.67	4,978.41	(1.33)
Caraga Region	7,214.89	6,676.21	(7.47)										7,214.89	6,676.21	(7.47)
ARMM	88,904.82	92,383.82	3.91										88,904.82	92,383.82	3.91

P - Preliminary

Table 3. Municipal Fish Production by Region, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Region	Municipal		% Change 09/08	Marine		% Change 09/08	Inland		% Change 09/08
	2008	2009		2008	2009		2008	2009	
PHILIPPINES	**1,332,986.38**	**1,348,153.15**	**1.14**	**1,151,308.73**	**1,159,431.21**	**0.71**	**181,677.65**	**188,721.94**	**3.88**
NCR	4,350.44	4,166.24	(4.23)	4,350.44	4,166.24	(4.23)			
CAR	934.38	940.21	0.62				934.38	940.21	0.62
I	47,031.34	49,790.13	5.87	43,632.06	43,678.46	0.11	3,399.28	6,111.67	79.79
II	29,384.16	32,450.82	10.44	18,987.24	20,861.36	9.87	10,396.92	11,589.46	11.47
III	42,464.85	41,950.71	(1.21)	29,221.89	28,637.18	(2.00)	13,242.96	13,313.53	0.53
IV-A	123,809.87	122,145.01	(1.34)	40,249.10	39,010.58	(3.08)	83,560.77	83,134.43	(0.51)
IV-B	236,843.52	219,386.03	(7.37)	236,030.90	218,379.24	(7.48)	812.62	1,006.79	23.89
V	137,168.51	139,165.34	1.46	131,780.02	133,120.43	1.02	5,388.49	6,044.91	12.18
VI	147,361.58	168,936.60	14.64	139,612.33	160,326.14	14.84	7,749.25	8,610.46	11.11
VII	51,336.20	54,727.20	6.61	51,091.39	54,493.22	6.66	244.81	233.98	(4.42)
VIII	88,428.19	95,301.09	7.77	85,495.23	93,670.24	9.56	2,932.96	1,630.85	(44.40)
IX	126,174.98	127,082.97	0.72	125,395.16	125,987.94	0.47	779.82	1,095.03	40.42
X	42,996.54	42,392.12	(1.41)	40,288.43	38,944.86	(3.33)	2,708.11	3,447.26	27.29
XI	31,985.10	26,586.35	(16.88)	31,840.62	26,445.54	(16.94)	144.48	140.81	(2.54)
XII	46,520.88	48,645.63	4.57	23,000.29	22,599.70	(1.74)	23,520.59	26,045.93	10.74
Caraga Region	76,888.59	70,380.89	(8.46)	71,763.42	65,794.14	(8.32)	5,125.17	4,586.75	(10.51)
ARMM	99,307.25	104,105.81	4.83	78,570.21	83,315.94	6.04	20,737.04	20,789.87	0.25

P - Preliminary

Table 4. Aquaculture Production by Type of Aquafarm, by Environment and by Region, January - December 2008 - 2009[P]

(Metric Tons)

REGION	AQUACULTURE		% CHANGE 09/08	BRACKISHWATER FISHPOND		% CHANGE 09/08	BRACKISHWATER FISH PEN		% CHANGE 09/08	BRACKISHWATER FISH CAGE		% CHANGE 09/08	FRESHWATER FISHPOND		% CHANGE 09/08	FRESHWATER FISH PEN		% CHANGE 09/08	FRESHWATER FISH CAGE		% CHANGE 09/08
	2008	2009		2008	2009		2008	2009		2008	2009		2008	2009		2008	2009		2008	2009	
PHILIPPINES	**2,407,697.92**	**2,477,392.03**	**2.89**	**296,496.15**	**302,849.64**	**2.14**	**4,066.87**	**3,349.74**	**(17.63)**	**2,680.80**	**2,240.57**	**(16.42)**	**144,298.29**	**144,724.13**	**0.30**	**68,608.42**	**62,002.28**	**(9.63)**	**97,896.66**	**101,610.97**	**3.79**
NCR	3,052.93	2,136.74	(30.01)	576.36	471.91	(18.12)							899.86			1,160.21	1,183.08	1.97	313.49	341.88	9.06
CAR	3,195.56	3,288.51	2.91										1,667.46	1,829.01	9.69				1,528.11	1,459.50	(4.49)
I	95,861.89	82,514.94	(13.92)	25,698.37	18,439.26	(28.25)	3,999.41	3,297.84	(17.54)	1,435.57	1,162.63	(19.01)	5,652.94	5,301.21	(6.22)	0.30	0.31	1.97	48.60	36.55	(24.81)
II	15,585.70	15,335.91	(1.60)	4,035.40	3,842.20	(4.79)				212.26	93.75	(55.83)	7,380.75	7,538.82	2.14				977.48	942.97	(3.53)
III	223,481.37	224,289.92	0.36	95,535.60	96,182.45	0.68				2.93	0.72	(75.33)	119,279.36	120,307.37	0.86	0.37			5.90		
IV-A	202,478.49	210,855.99	4.14	12,549.57	10,466.94	(16.60)							1,997.24	1,728.46	(13.46)	51,482.68	43,828.58	(14.87)	83,744.00	88,866.26	6.12
IV-B	455,047.61	456,498.27	0.32	5,072.38	4,537.38	(10.55)		0.43			1.77		575.66	570.03	(0.98)						
V	67,049.50	69,033.88	2.96	5,379.39	6,801.96	26.44				0.60	1.00	66.67	1,822.21	1,573.76	(13.63)				9,053.79	7,890.23	(12.85)
VI	142,066.42	155,135.22	9.20	72,171.82	80,346.53	11.33	10.21	20.68	102.49	10.56	11.99	13.51	858.53	1,265.25	47.37		0.08		0.50	3.45	590.00
VII	121,527.74	131,832.28	8.48	8,994.05	9,260.27	2.96	0.30	0.01	(96.67)	11.01	10.53	(4.39)	133.37	178.59	33.90				9.52	7.83	(17.75)
VIII	37,902.45	39,835.70	5.10	5,645.64	6,187.68	9.60	15.57	13.74	(11.77)	19.42	19.45	0.15	203.54	278.76	36.96	33.32	6.96	(79.12)	107.54	46.57	(56.69)
IX	240,981.29	247,633.54	2.76	18,081.06	21,649.08	19.73					0.79		131.10	159.94	22.00		0.29				
X	60,356.40	67,149.64	11.26	22,738.02	25,587.78	12.53					0.10		1,323.40	1,358.02	2.62				0.80	0.56	(29.59)
XI	22,699.60	28,604.68	26.01	4,900.32	5,158.59	5.27				59.77	66.39	11.09	1,095.53	1,303.02	18.94	20.19	25.53	26.41	3.05	2.24	(26.80)
XII	24,620.56	25,460.58	3.41	8,431.57	8,416.20	(0.18)							845.20	936.42	10.79	11,680.04	12,436.53	6.48	1,765.32	1,660.29	(5.95)
Caraga Region	27,058.58	26,599.51	(1.70)	3,788.64	2,369.03	(37.47)	41.37	17.05	(58.79)	928.69	871.44	(6.16)	228.29	193.85	(15.09)	0.41	-	-	108.30	119.65	10.48
ARMM	664,731.82	691,186.71	3.98	2,897.94	3,132.39	8.09							203.86	201.62	(1.10)	4,230.89	4,520.95	6.86	230.26	232.99	1.19

REGION	MARINE FISH PEN		% CHANGE 09/08	MARINE FISH CAGE		% CHANGE 09/08	OYSTER		% CHANGE 09/08	MUSSEL		% CHANGE 09/08	SEAWEED		% CHANGE 09/08	RICE FISH		% CHANGE 09/08	SMALL FARM RESERVOIR		% CHANGE 09/08
	2008	2009		2008	2009		2008	2009		2008	2009		2008	2009		2008	2009		2008	2009	
PHILIPPINES	**22,221.45**	**21,574.30**	**(2.91)**	**61,425.43**	**59,026.13**	**(3.91)**	**20,174.82**	**19,930.59**	**(1.21)**	**23,017.22**	**19,936.50**	**(13.38)**	**1,666,556.26**	**1,739,994.97**	**4.41**	**2.24**	**4.83**	**115.23**	**253.32**	**147.38**	**(41.82)**
NCR										103.01	139.87	35.78									
CAR																					
I	11,074.22	10,211.05	(7.79)	41,494.42	38,112.99	(8.15)	5,440.66	4,979.22	(8.48)	833.85	777.19	(6.80)	141.79	189.95	33.96	1.49	3.61	142.56	40.27	3.14	(92.19)
II							530.99	527.18	(0.72)				2,349.56	2,272.84	(3.26)				99.27	118.14	19.01
III	32.00			2,467.79	2,120.89	(14.06)	3,561.99	3,425.58	(3.83)	2,290.40	2,069.44	(9.65)	215.23	177.87	(17.36)				89.78	5.60	(93.76)
IV-A	513.71			5.19	1.04	(79.89)	705.29	676.69	(4.05)	7,300.58	4,297.15	(41.14)	44,180.22	60,990.88	38.05						
IV-B				2,246.20	445.48	(80.17)				10.00	6.00	(40.00)	447,143.37	450,937.17	0.85						
V		69.00		10.04	13.17	31.20	16.32			117.83			50,649.30	52,684.76	4.02						
VI	1,075.92	1,160.82	7.89	39.66	43.71	10.22	8,502.70	8,820.92	3.74	9,030.33	9,200.35	1.88	50,347.59	54,256.43	7.76	0.56	0.93	65.73	18.03	4.10	(77.24)
VII	53.02	94.74	78.68	763.74	552.19	(27.70)	440.39	444.22	0.87				111,116.97	121,273.17	9.14				5.37	10.74	100.08
VIII	41.63	40.45	(2.84)	7,513.34	6,842.30	(8.93)	33.14	34.01	2.63	3,329.37	3,446.08	3.51	20,959.92	22,919.62	9.35		0.07				
IX				34.14	132.43	287.95	572.31	633.48	10.69	0.89	0.28	(68.29)	222,161.79	225,057.24	1.30						
X	15.93	0.48	(97.02)	457.06	1,318.64	188.50	2.09	3.14	50.00	0.94	0.14	(85.64)	35,818.16	38,879.91	8.55					0.87	
XI	9,230.55	9,849.00	6.70	4,395.16	7,469.37	69.95	368.94	386.15	4.66				2,625.91	4,344.19	65.44	0.19	0.22	12.42			
XII				1,708.93	1,740.40	1.84							188.91	265.95	40.78				0.60	4.79	700.25
Caraga Region	175.71	141.26	(19.61)	289.12	227.08	(21.46)							21,498.06	22,660.16	5.41						
ARMM	8.76	7.51	(14.21)	0.64	6.43	908.60							657,159.47	683,084.83	3.95						

P - Preliminary

Table 5. Aquaculture: Milkfish Production of Top Producing Provinces by Culture Environment and Type of Aquafarm, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Culture Environment/ Type of Aquafarm/Province	2008	2009	% Change 09/08
PHILIPPINES	**350,814.02**	**347,587.53**	**(0.92)**
Brackishwater Fishpond	**219,610.24**	**219,977.16**	**0.17**
Bulacan	31,793.41	29,711.93	(6.55)
Iloilo	18,750.87	24,271.05	29.44
Capiz	21,473.09	22,136.61	3.09
Negros Occidental	18,492.26	20,293.20	9.74
Pampanga	18,085.35	19,826.35	9.63
Pangasinan	21,529.61	14,407.76	(33.08)
Other Provinces	89,485.65	89,330.25	(0.17)
Brackishwater Fish pen	**3,985.39**	**3,269.28**	**(17.97)**
Pangasinan	3,025.30	2,635.10	(12.90)
La Union	914.03	601.32	(34.21)
Other Provinces	46.06	32.86	(28.65)
Brackishwater Fish cage	**2,421.27**	**2,073.45**	**(14.37)**
Agusan del Norte	921.87	865.49	(6.12)
Pangasinan	1,067.80	790.40	(25.98)
La Union	258.88	291.14	12.46
Other Provinces	172.72	126.42	(26.81)
Freshwater Fish pen	**30,326.38**	**27,040.62**	**(10.83)**
Rizal	21,316.76	18,628.30	(12.61)
Sultan Kudarat	6,020.59	6,059.15	0.64
NCR	1,939.31	1,183.08	(38.99)
Maguindanao	809.88	944.30	16.60
Other Provinces	239.84	225.79	(5.86)
Freshwater Fish cage	**14,105.68**	**16,074.20**	**13.96**
Batangas	14,020.62	16,010.88	14.20
Other Provinces	85.06	63.32	(25.56)
Marine Fish pen	**21,997.70**	**21,390.33**	**(2.76)**
Pangasinan	11,068.82	10,209.86	(7.76)
Davao del Sur	9,222.55	9,848.20	6.78
Capiz	730.72	558.25	(23.60)
Other Provinces	975.61	774.02	(20.66)
Marine Fish cage	**58,367.36**	**57,762.49**	**(1.04)**
Pangasinan	41,303.26	37,964.52	(8.08)
Davao Sur	3,666.01	5,039.34	37.46
Samar	3,000.97	3,022.20	0.71
Davao Norte	562.12	2,333.70	315.16
Other Provinces	9,835.00	9,402.73	(4.40)

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Table 6. Aquaculture: Tilapia Production of Top Producing Provinces, by Culture Environment and Type of Aquafarm, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Culture Environment/ Type of Aquafarm/Province	2008	2009	% Change 09/08
PHILIPPINES	**257,110.41**	**260,911.05**	**1.48**
Brackishwater Fishpond	**14,957.22**	**14,920.58**	**(0.24)**
Cagayan	2,844.02	2,803.27	(1.43)
Pampanga	4,905.20	4,639.38	(5.42)
Bulacan	1,606.85	1,814.11	12.90
Zamboanga Sibugay	985.17	1,187.53	20.54
Zamboanga del Sur	788.95	919.81	16.59
Other Provinces	3,827.03	3,556.48	(7.07)
Brackishwater Fishcage/Pens	**242.92**	**178.34**	**(26.59)**
Cagayan	118.75	63.90	(46.19)
Ilocos Norte	37.71	27.77	(26.35)
La Union	70.38	73.60	4.57
Other Provinces	16.09	13.07	(18.75)
Freshwater Fishpond	**139,040.79**	**140,543.20**	**1.08**
Pampanga	97,610.45	102,179.21	4.68
Tarlac	5,962.60	6,645.60	11.45
Isabela	4,582.31	4,587.06	0.10
Nueva Ecija	6,267.03	4,506.22	(28.10)
Pangasinan	4,675.15	4,342.32	(7.12)
Other Provinces*	19,943.26	18,282.79	(8.33)
Freshwater Fish Cage	**81,747.89**	**83,748.84**	**2.45**
Batangas	56,277.28	60,330.17	7.20
Laguna	8,944.73	9,114.09	1.89
Camarines Sur	7,202.40	5,844.23	(18.86)
Rizal	1,945.32	1,658.84	(14.73)
Albay	1,799.76	1,991.28	10.64
Other Provinces	5,578.41	4,810.23	(13.77)
Freshwater Fish Pen	**21,119.58**	**21,512.26**	**1.86**
Rizal	11,396.02	10,986.24	(3.60)
Sultan Kudarat	5,658.33	6,376.55	12.69
Maguindanao	3,394.04	3,548.58	4.55
Laguna	601.30	551.90	(8.22)
Davao del Norte	19.04	25.53	34.10
Other Provinces	50.86	23.46	(53.87)
Marine Fishcage/Pen	2.00	7.84	

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* Including those from SFR, Rice Fish

Table 7. Aquaculture: Tiger Prawn, Mud Crab, Carp and Catfish Production of Top Producing Provinces by Culture Environment and Type of Aquafarm, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Species/Province	2008	2009	% Change 09/08
TIGER PRAWN	**45,342.42**	**47,829.75**	**5.49**
Brackishwater Fishpond			
Pampanga	18,546.51	19,460.64	4.93
Lanao del Norte	6,258.24	7,074.38	13.04
Bulacan	3,591.60	3,768.95	4.94
Zamboanga del Sur	2,728.55	3,099.52	13.60
Zamboanga Sibugay	2,577.31	3,482.20	35.11
Other Provinces	11,640.21	10,944.06	(5.98)
MUD CRAB	**11,625.07**	**13,729.83**	**18.11**
Brackishwater Fishpond			
Pampanga	3,801.36	3,999.72	5.22
Lanao del Norte	3,552.15	5,292.74	49.00
Misamis Occidental	468.50	485.25	3.58
Camarines Sur	195.40	175.91	(9.97)
Camarines Norte	121.86	131.26	7.71
Oher Provinces*	3,485.80	3,644.95	4.57
CARP	**20,735.70**	**15,691.00**	**(24.33)**
Freshwater Fishpond	**627.14**	**450.62**	**(28.15)**
Lanao del Norte	204.58	185.22	(9.46)
Laguna	201.24		(100.00)
Pampanga	74.30	75.89	2.14
Tarlac	44.08	114.03	158.69
Quezon	33.11	20.04	(39.47)
Others Provinces	69.83	55.44	(20.61)
Freshwater Fish Pen/Cage	**20,099.94**	**15,234.13**	**(24.21)**
Rizal	18,944.78	14,132.21	(25.40)
Laguna	1,060.91	1,008.38	(4.95)
Metro Manila	65.15	63.58	(2.41)
Other Provinces	29.10	29.96	2.96
Small Farm Reservoir	**8.54**	**5.93**	**(30.56)**
Pangasinan	1.37		
Cagayan	1.81	1.89	
Quirino	4.93	3.65	(25.96)
Other Provinces	0.43	0.39	
Rice Fish	**0.08**	**0.32**	**300.00**
Pangasinan	0.08	0.32	300.00
CATFISH	**2,695.29**	**2,857.52**	**6.02**
Freshwater Fishpond			
Iloilo	341.57	593.14	73.65
Pampanga	317.50	337.29	6.23
Davao City	250.52	306.36	22.29
Bulacan	600.87	298.03	(50.40)
Nueva Ecija	168.05	263.37	56.73
Other Provinces	1,016.79	1,059.33	4.18

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* Includes marine fish cage and marine fish pen

Table 8. Aquaculture: Mariculture Production by Species and by Province, Philippines, January - December 2008 - 2009[P]

(Metric Tons)

Species/Province	2008	2009	% Change 09/08
Seaweed	**1,666,556.26**	**1,739,994.97**	**4.41**
Palawan	444,355.44	447,752.74	0.76
Tawi-Tawi	377,892.27	386,648.56	2.32
Sulu	199,205.59	210,250.91	5.54
Bohol	105,641.56	113,794.61	7.72
Zamboanga Sibugay	102,586.74	103,306.45	0.70
Other Provinces	436,874.65	478,241.71	9.47
Oyster	**20,174.82**	**19,930.59**	**(1.21)**
Capiz	5,852.11	6,009.77	2.69
Pangasinan	4,972.81	4,585.83	(7.78)
Bulacan	3,551.67	3,413.35	(3.89)
Iloilo	1,425.23	1,517.40	6.47
Negros Occidental	843.34	1,052.95	24.86
Other Provinces	3,529.67	3,351.29	(5.05)
Mussel	**23,017.22**	**19,936.50**	**(13.38)**
Capiz	7,576.68	7,702.50	1.66
Cavite	7,300.58	4,297.15	(41.14)
Samar	3,329.37	3,444.53	3.46
Bataan	2,290.40	2,069.44	(9.65)
Negros Occidental	936.01	1,022.52	9.24
Other Provinces	1,584.18	1,400.36	(11.60)

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Table 9. Annual Average Producer, Wholesale and Retail Prices and Price Margins of Selected Fish Species, Philippines, 2007 - 2009

(Peso per Kilogram)

Species	Producer			% Change 09/08	Wholesale*			% Change 09/08	Retail*			% Change 09/08	Price Margins					
													Producer - Wholesale			Producer - Retail		
	2007	2008	2009		2007	2008	2009		2007	2008	2009		2007	2008	2009	2007	2008	2009
Milkfish	63.89	76.36	81.90	7.26	75.50	85.30	93.89	10.07	96.54	104.88	114.40	9.08	11.61	8.94	11.99	32.65	28.52	32.50
Tilapia	57.06	60.19	68.95	14.55	56.39	61.96	68.99	11.35	74.12	80.35	86.48	7.63	(0.67)	1.77	0.04	17.06	20.16	17.53
Tiger Prawn	375.26	395.10	386.95	(2.06)	373.58	370.39	363.70	(1.81)	409.43	415.48	421.43	1.43	(1.68)	(24.71)	(23.25)	34.17	20.38	34.48
Roundscad	39.16	47.05	49.53	5.27	53.06	61.18	65.30	6.73	75.33	84.14	88.27	4.91	13.90	14.13	15.77	36.17	37.09	38.74
Frigate Tuna	45.62	53.71	58.14	8.25	62.95	75.39	78.79	4.51	75.86	87.68	92.78	5.82	17.33	21.68	20.65	30.24	33.97	34.64
Indian Mackerel	51.63	54.92	54.43	(0.89)	72.21	81.03	88.04	8.65	93.56	102.09	107.87	5.66	20.58	26.11	33.61	41.93	47.17	53.44

**** BAS AMSAD data***