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FISHERIES SITUATIONER

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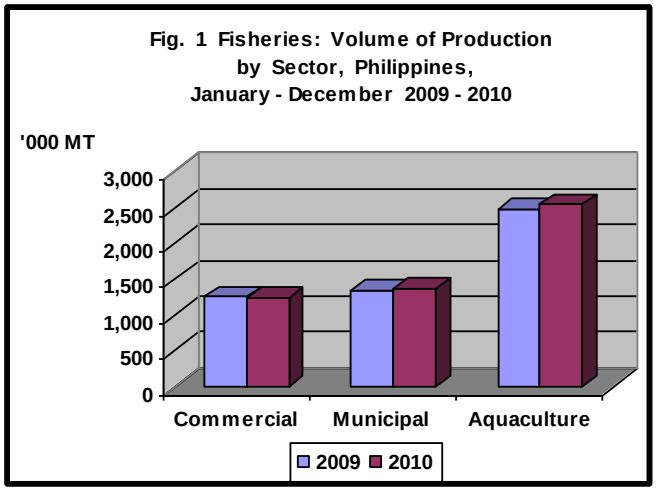
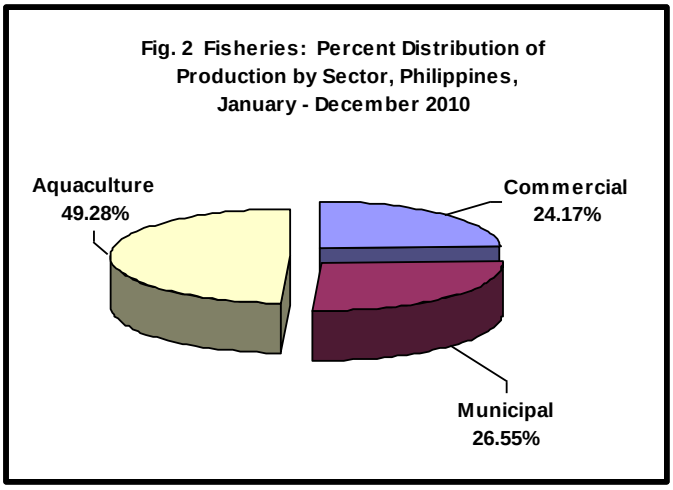
HIGHLIGHTS





The total volume of fisheries production in 2010 was 1.61 percent or 82,024.82 metric tons lower than last year's level. Municipal fisheries and aquaculture outdid their 2009 volume of production levels with aquaculture providing the biggest push to the total fisheries production growth in 2010. The volume of municipal fisheries production grew by 1.62 percent while that of aquaculture surpassed last year's record by 2.68 percent. Commercial fisheries, on the other hand, experienced a 0.49 percent decline in volume of production (Table 1).

In 2010, commercial fisheries production reached 1,247,761.33 metric tons. It was down by 0.49 percent or 6,179 .65 metric tons from the 2009 level. Eight (8) regions recorded production shortfalls while another (8) regions managed to post output gains. The decline in production was largely attributed to the lower volume of fish unloading in Sarangani and South Cotabato as fishing grounds for tuna became limited. This was the result of restriction on the use of purse seine in some foreign waters such as Indonesia and Papua New Guinea. The production increments were due to more fishing operations as encouraged by generally fair weather conditions that prevailed in the regions. Abundant catch of in-season species was reported, specifically Indian sardines, that were unloaded in the private landing center in Zamboanga City during the third quarter of 2010. Heavy unloadings of commercial fish catch were observed in the landing centers of Zamboanga Peninsula, SOCCSKSARGEN and Western Visayas. Commercial fishermen unloaded a total of 320,052.45 metric tons of fish in private landing centers, 268,537.51 metric tons in Philippine Fisheries Development Authority (PFDA)-managed ports and 82,564.48 metric tons in LGU-managed landing centers. The bulk of 576,606.89 metric tons of commercial fish catch were unloaded at traditional landing centers. Commercial fisheries accounted for about 24.17 percent of the total fisheries production in 2010.

Municipal fisheries production was estimated at 1,370,520.13 metric tons in 2010. This was 21,876.16 metric tons more than the 2009 production level. Marine municipal fisheries shared 1,183,267.50 metric tons or 86.34 percent while inland municipal fisheries contributed 187,252.63 metric tons or 13.33 percent to the total municipal fisheries production. Considering the total municipal fisheries production, 11 regions exhibited upward production trends while six (6) regions recorded production shortfalls. Marine municipal fisheries production increased by six (6) percent during the third quarter of 2010 while 5.63 percent increment was observed during the fourth quarter. The positive performance was largely attributed to generally fair weather that prevailed in most parts of the regions during the second half of the year. On the other hand, the cuts in production were traced to the effects of the El Niño phenomenon during the first half of 2010. Unloadings of about 211,880.18 metric tons of marine municipal fish catch were noted in MIMAROPA. Municipal fisheries accounted for 26.55 percent of the total fisheries production in 2010.

Aquaculture production at 543,720.34 metric tons was 66,328.31 metric tons more than the 2009 level. Production gains were observed in all mariculture environments, especially, seaweeds. Seaweeds accounted for more than half (70.73 percent) of the total volume of aquaculture production in 2010. Seaweed farmers produced 1,799,196.91 metric tons this year and this was 3.40 percent or 59,201.94 metric tons higher than in 2009. Output

increases were particularly noted in Zamboanga Peninsula, Western Visayas and MIMAROPA. Good quality planting materials, good climatic condition and lesser incidence of ice-ice disease were reported in Zambonga Peninsula during the first and third quarters of 2010. The increasing demand and better prices offered by traders and processors prompted seaweed growers to expand their area planted/harvested. However, setbacks were apparent in all types of aqua farm from brackishwater environment while aqua farms in freshwater environment displayed positive prospects with the exception of freshwater fishpond. About 29 percent of the total aquaculture production were fins and shellfishes. Aquaculture accounted for about 49.28 percent of the total fisheries production in 2010.

COMMERCIAL FISHERIES

Commercial fisheries produced 1,247,661.33 metric tons of fish catch in 2010. This was 0.49 percent or 6,179.65 metric tons lower than last year's record of 1,253,940.98 metric tons. Reduced production was noted in eight (8) regions, namely: Ilocos Region, Central Luzon, Western Visayas, Central Visayas, Eastern Visayas, Zamboanga Peninsula, Northern Mindanao and SOCCSKSARGEN. The drop in production was traced to the stoppage of operation of the six (6) commercial fishing vessels in Pangasinan during the first and second quarters of 2010 due to bankruptcy caused by the damage brought by typhoons Cosme, Emong and Pepeng. It was, likewise, reported that 10 commercial fishing boats in Bohol stopped operation due to non-renewal of their licenses. Other fishing boats in Zamboanga Sibugay, Misamis Occidental, Misamis Oriental and Iloilo underwent dry-docking for repair and maintenance during the first quarter of 2010. The permanent closure of commercial landing centers in Bataan starting first quarter of 2010 because of the conversion of Bataan economic zone to free port area for eco-tourism contributed to the reduced output. The volume of fish unloadings in Sarangani and South Cotabato dropped as fishing grounds for tuna became limited as a result of restrictions on the use of purse seine in foreign waters of Indonesia and Papua New Guinea. The ban on the use of purse seine was imposed by the Western and Central Pacific Fisheries Commission (WCPFC) on its member countries to replenish stocks of the highly migratory tuna species. Likewise, lesser volume of unloadings of frozen fish for canneries by foreign fishing vessels at the PFDA-managed port in General Santos City was observed during the second and fourth quarters of 2010 (Table 2).

On the other hand, eight (8) regions managed to surpass their last year's records, and these were: Cagayan Valley, National Capital Region, CALABARZON, MIMAROPA, Bicol Region, Davao Region, ARMM and Caraga. Their production increments were the results of more fishing operations as encouraged by generally fair weather conditions. There was abundant catch of in-season species such as big-eyed scad, frigate tuna, acetes, anchovies, caesio, roundscads, mackerels and frigate sardines. The third quarter came up with the biggest at 9.65 percent or 25,875.42 metric tons more than last year's level. Fish production in the National Capital Region (NCR), which grew by 67.23 percent, served as the major source of growth. It recorded a production gain of 9,571.14 metric tons of which 9,457.81 metric tons were registered in PFDA-managed port in Navotas. The production increment was largely attributed to the increased unloadings of Commercial fishing vessels from 268 in September 2009 to 530 in September 2010 as reported by PFDA personnel. The increase of 3,056.87 metric tons in production was likewise attributed to the large volume of in-season Indian sardines unloaded in private landing center in Zamboanga City. The uptrend in production was also traced to the increased volume of unloadings of 8,809.67 metric tons from foreign and local fishing vessels at PFDA fish port in General Santos City due to greater demand and high buying price from canneries.

The ports managed by PFDA posted the biggest increase in the volume of unloadings at 12.12 percent or 29,024.96 metric tons. Fish unloadings at Local Government Unit-managed landing centers recorded a 3.63 percent growth. In private and traditional landing centers, unloadings were cut by 10.17 percent and 0.32 percent, respectively. The bulk of commercial fish catch at 576,606.89 metric tons were unloaded at traditional landing centers.

Unloadings of commercial fish catch were heavier in the landing centers of Zamboanga Peninsula, followed by SOCCSKSARGEN and Western Visayas. Commercial fisherman unloaded 339, 749.11 metric tons of fish catch in Zamboanga Peninsula of which 81.14 percent or 275,687.81 metric tons were unloaded in Zamboanga City landing centers. It was further observed that 85.24 percent or 235,005.82 metric tons of fish catch in Zamboanga City were unloaded at private landing centers. Commercial fishermen in SOCCSKSARGEN produced 211,020.04 metric tons of fish catch. About 97.47 percent or 205,678.70 metric tons of these fish catch were unloaded in South Cotabato of which 70.30 percent of 144,600.48 were unloaded in PFDA-managed landing center. Moreover, 105,000.13 metric tons of fish catch were unloaded in Western Visayas.

MUNICIPAL FISHERIES

Production from marine municipal fisheries started slowing down during the first half of 2010, with 1.15 percent decrease over the same period of 2009. The volume of fish unloaded was reduced by 2.71 percent during the second quarter of the year as a result of the El Niño phenomenon. Fish tended to migrate to cooler temperature and veered away from the sea surface making them difficult to capture. The scarcity of school of fish discouraged fishermen to venture out into the sea during those months. This was observed in Iloilo, Palawan, Leyte, Zamboanga City, Surigao del Sur, South Cotabato and Agusan del Norte (Table 3).

On the third quarter, marine municipal fisheries recovered and posted an output increase of six (6) percent. This positive performance continued till the fourth quarter of the year with 5.63 increment over the same quarter of 2009. The good production performance of marine municipal fisheries was caused primarily by fair weather conditions that prevailed in most parts of the country during the second half of the year.

Compared to the fourth quarter of 2009, lesser weather disturbances were reported in most regions during the last months of 2010. This led to 4.95 percent increase on the total municipal fish production. Other factors that boosted fish catch were the species that aggregated in “payaos”, close monitoring of Bantay Dagat on the use of illegal fishing gears and encroachment of commercial fishing vessels in municipal waters, and support extended by BFAR and LGUs to sustenance fishermen through distribution of fishing gears and boats. The abundant catch of variety of species was also evident during fair weather. Good catch of fishermen was attributed also to fish sanctuaries and fish aggregating devices introduced by the BFAR.

Total production of marine municipal fisheries in 2010 reached 1,183,267.47 metric tons or 2.01 percent higher in last year’s 1,159,922.03 metric tons. Output increases in marine municipal fisheries were attained by 11 regions. MIMAROPA, Western Visayas, Bicol Region, Zamboanga Peninsula, Eastern Visayas and ARMM were the top gainers. Total volume of fish landed in these six (6) regions shared 71.09 percent in the annual production of marine municipal fisheries.

Luzon contributed 44.44 percent to the combined output of marine and inland fisheries of 1,370,520.13 metric tons. Mindanao followed with 31.69 percent share and Visayas with 23.87 percent. By region, big increases in volume of fish landed by municipal fishing boats were recorded in Zamboanga Peninsula (9,005.05 metric tons), Bicol Region (8,704.14 metric tons), ARMM (6,951.90 metric tons) and Eastern Visayas (5,658.76 metric tons). By province, the biggest contributors to the production of marine municipal fisheries were Palawan, Iloilo, Masbate, Zamboanga City, Surigao del Norte, Zamboanga del Norte and Cebu.

On the other hand, the total volume of unloadings in Ilocos Region, MIMAROPA, SOCCSKSARGEN, Caraga and Central Luzon dropped in 2010 due to scarcity of species in fishing grounds, high cost of inputs in fishing operations, occurrence of scattered rains and hot weather. South Cotabato reflected declining volume of fish landed by municipal fishermen in all quarters. The same was true with Agusan del Norte. Other provinces maintained their levels of production and kept the trend throughout the year.

Major fish species unloaded by municipal fishing boats were big-eyed scad (matang-baka), roundscad (galunggong), frigate tuna (tulingan), Indian sardines (tamban), fimbriated sardines (tunsoy), yellowfin tuna (tambakol), anchovies (dilis), skipjack (gulyasan), Indian mackerel (alumahan) and squid (pusit).

Inland fisheries produced 187,252.63 metric tons in 2010 and posted a decrease of 0.78 percent. Fish catch from rivers, lakes, dams, swamps, marshes, declined during the first and second quarters of the year when fish habitats were affected by extreme heat brought by El Niño. On the third and fourth quarters of the year, inland fisheries recovered from the long, hot spell with output gains of 2.94 and 1.66 percent, respectively. However, these increases were not enough to offset the losses experienced in the first half of the year.

Low water level in communal bodies of water caused by prolonged dry spell resulted in the dwindling catch in Cagayan, Tarlac, Pampanga, Camarines Sur, Albay and North Cotabato. Other inland fishermen in Nueva Ecija, Surigao del Norte, Davao Oriental, Agusan del Sur, temporarily shifted to crop farming and construction jobs to augment household income.

Drop in fish catch of households was particularly noted in North Cotabato (1,748.12 metric tons), Iloilo (1,414.65 metric tons), Laguna (1,205.16 metric tons), Pampanga (750.13 metric tons) and Pangasinan (668.82 metric tons). In Sorsogon, the decline in fish catch from inland fishing was attributed to the eruption of Mt. Bulusan that caused mud flows and prevented fishermen from engaging in fishing activities. Heavy rains flooded some parts of Nueva Ecija during the fourth quarter. The clearing of Agno River with fishing gear structures like fish corrals for navigational purposes reduced fishing activities in Pangasinan.

AQUACULTURE

The volume of aquaculture production in 2010 was estimated at 2.5 million metric tons. It recorded a 2.68 percent increase from the previous year's level. Production growth was observed in all mariculture environments, especially, seaweeds. On the contrary, there were setbacks in all brackishwater environments while production of aquafarms from freshwater environment displayed positive prospects (Table 4).

Seaweed production, which constituted about 71 percent of the total aquaculture, grew by 3.40 percent. The major sources of the output increase were Zamboanga Peninsula, Western Visayas and MIMAROPA. Good quality planting materials, good climatic condition and lesser incidence of ice-ice disease prevailed in Zamboanga Peninsula during the first and third quarters of the year. Western Visayas, specifically Antique, relied on spinosium variety throughout the year because it was more resistant to pests and diseases. Seaweed area expansion as a result of the distribution of planting materials by BFAR in Palawan pushed seaweed production up in MIMAROPA especially during the fourth quarter of 2010.

Harvests from brackishwater fishponds declined by 0.06 percent due to the El Niño phenomenon that affected Western Visayas and Central Luzon during the second quarter of the year. Production from brackishwater pens and cages decreased by 79.01 percent and 59.22 percent, respectively. These cuts were attributed to the LGU's clean-up drive of rivers for navigational purposes in Ilocos Region, particularly in Pangasinan.

In the case of freshwater environment, the volume of species harvested from fishponds went down by 1.37 percent because of the prolonged hot weather that extended during the first half of 2010 in Central Luzon. Intensive feeding and good farm management paved the way for more harvests from freshwater pens and cages in CALABARZON.

The following table shows the percentage change by aquafarm type from 2009 to 2010:

Type of Aquafarm/Environment	% Increase (Decrease)
Brackishwater fishpond	(0.06)
Brackishwater fish pen	(79.01)
Brackishwater fish cage	(59.22)
Freshwater fishpond	(1.37)
Freshwater fish pen	0.83
Freshwater fish cage	0.99
Rice fish	1,460.45
Small farm reservoir	14.29
Marine fish pen	24.01
Marine fish cage	4.99
Oyster	13.02
Mussel	4.72
Seaweed	3.40

SELECTED AQUACULTURE SPECIES

MILKFISH

Production of milkfish in 2010 went up by 0.54 percent. From 347,566.52 metric tons in 2009, production expanded to 349,432.01 metric tons this year. The slight growth was attributed to the good farm management, availability of fry/fingerling and better water salinity (Table 5).

Milkfish production from freshwater fish cages grew by 1.72 percent, marine fish pens, by 24.73 percent and from marine fish cages, by 4.81 percent. From freshwater fish cages, Batangas registered a 1.67 increase in production due to quality fingerlings stocked and intensive feeding. In marine fish pens and fish cages, bigger sizes of harvested species were reported in Pangasinan because of better water salinity, absence of destructive typhoons and non-occurrence of fish kill. Proper management, intensive feeding and availability of fingerlings were noted by marine fish pen operators in Davao del Sur and Iloilo. It was also observed that production of milkfish in Zambales increased by 20.11 percent due to proper feeding management. Moreover, additional fish cages were established in Silanguin Bay in San Antonio during the second quarter of 2010. On the other hand, harvests in Davao del Sur and Samar from marine cages posted output losses of 6.74 percent and 3.37 percent, respectively.

Volume of milkfish produced from fishponds, fish pens and fish cages, all from brackishwater and freshwater fish pens, indicated lower production this year. Milkfish came mostly from brackishwater fishponds where a 0.87 percent reduction in harvests was noted. Fish farm operators from Bulacan, Iloilo, Negros Occidental and Pampanga observed that abrupt changes of water temperature brought by the El Niño phenomenon affected the growth of the species. It was also reported that there was a delay in harvest due to high cost of inputs, low water level, poor quality of fingerlings and damage in some stocks by predators.

The combined production from brackishwater fish pens and fish cages dropped by 74.21 percent. This was caused by low water level, smaller sizes of fishes and hot weather condition, particularly, in La Union and Agusan del Norte.

Harvests from freshwater fish pens registered a 2.23 percent decrease in milkfish production. The decrease of milkfish production in Rizal was attributed to the low water level along Laguna Lake and damages on fish pens caused by strong winds brought about by typhoon Basyang during the third quarter. In Sultan Kudarat and National Capital Region, production declined by 8.5 percent and 10.91 percent, respectively. Smaller sizes were harvested due to abrupt changes in water temperature and less area were utilized due to high cost of commercial feeds. Meanwhile in NCR, fish farmers decreased their stocking rate due to high cost of material inputs and more pens were damaged by strong winds brought about by typhoons. On the other hand, milkfish production in Maguindanao increased by 37.42 percent as low mortality rate and good water condition was observed in the province.

TILAPIA

The 2010 tilapia production from all types of aquafarm, which was estimated at 258,667.31 metric tons, showed a 0.86 percent decrease from the 2009 level. About 95 percent of the total tilapia production came from freshwater environment and the remaining five (5) percent from brackishwater (Table 6).

The drop in production was attributed to the decrease in output from freshwater fishponds at 1.50 percent from brackishwater fishponds, 6.17 percent from brackishwater fish pens/fish cages, 24.05 percent. On the contrary, production increase was noted from harvests in freshwater fish pens and freshwater fish cages with 0.10 percent and 0.96 percent, respectively.

Harvests from freshwater fishponds went down by 1.50 percent this year. Decreases were noted in Pampanga, Tarlac, Nueva Eciia and Isabela with 1.71 percent, 19.53 percent, 10.03 percent and 15.57 percent, respectively. The decrease of harvest in major tilapia producing provinces of Central Luzon and Isabela was attributed to hot water temperature brought about by the El Niño phenomenon and poor quality fingerlings during the first and second quarters of 2010. Moreover, forced harvesting of smaller than marketable-sized tilapia was effected due to the presence of turtles that ravaged the tilapia fingerlings during the third quarter. On the other hand, the increment in Pangasinan was attributed to the availability of natural food in fishponds that encouraged operators in Binmaley to expand their area for tilapia culture. Intensive feeding also allowed fish farmers to harvest bigger sizes of tilapia during the second quarter of the year.

Harvests from freshwater fish cages increased by 0.96 percent this year. Provinces contributing to the output increase were Batangas and South Cotabato with output gains of 4.42 percent and 4.18 percent, respectively. Production increment in Batangas was due to the availability of quality fingerlings and the early harvest with the advisory of Philvocs for possible eruption of Taal Volcano during the second quarter. The high stocking rate, intensive feeding and good farm management of fish cage operators in Batangas accelerated harvests of tilapia during the fourth quarter. Meanwhile, the output gain in South Cotabato was attributed to the high survival rate and the extended culture period that enhanced the growth of tilapia during the second quarter 2010.

Output from freshwater fish pens increased by 0.10 percent and the sources of growth were Rizal, Maguindanao and Davao del Norte with respective gains of 1.41 percent, 6.09 percent and 86.04 percent. The opening of Napindan Channel paved the way for the growth of natural food in Laguna Lake. This encouraged aqua farm operators in Rizal to increase their stocks and experienced to harvest bigger sizes of tilapia during the second and fourth quarters of the year. In Maguindanao, mortality rate was low due to favorable weather condition during the first quarter. Also cited was BFAR's fingerling dispersal and seminars provided to fish farmers during the fourth quarter. In Davao del Norte, quality fingerlings were stocked and bigger-sized tilapia were harvested during the third quarter. Meanwhile, harvests were reduced in Sultan Kudarat and Laguna by 5.26 percent and 7.20 percent, respectively. In Sultan Kudarat, water level was low because of the prolonged dry spell during the first quarter. In Laguna, some operators deferred harvesting due to damages in fish pens brought by typhoon Basyang.

Production of tilapia from brackishwater fishponds dropped by 6.17 percent. Provinces contributing to the decrease were Pampanga, Cagayan, Bulacan, and Zamboanga Sibugay which recorded output losses of 2.07 percent, 17.94 percent, 15.43 percent and 38.11 percent, respectively. Smaller sizes of tilapia were harvested due to the El Niño phenomenon during the first quarter while there was delayed stocking during the third quarter. In contrast, Zamboanga del Sur recorded an output increase of 4.83 percent because of shifting of some areas from tiger prawn culture during the first quarter. Proper management and higher stocking density were noted during the third quarter of the year.

The combined output from brackishwater fish pens and fish cages dropped by 24.02 percent. All tilapia producing provinces from brackishwater fish pens and fish cages noted the abrupt change in water temperature brought about by El Niño phenomenon during the first quarter. It was also observed that some fish cages were damaged by typhoons and not yet repaired and some operators temporarily shifted to milkfish culture during the second and fourth quarters of 2010.

Rice fish and small farm reservoirs (SFRs) produced more in 2010 due to less destructive typhoons and higher water level in Ilocos Norte and Bulacan. Increased area harvested was recorded in Buenavista and San Lorenzo in Guimaras. Aquafarm operators in North Cotabato recovered from their losses because of the drought during the first quarter of 2010.

TIGER PRAWN

The 2010 production of tiger prawn at 48,161.94 metric tons was 0.69 percent higher than last year's level of 47,829.92 metric tons (Table 7). There were large increases of harvests in Bulacan by 989.88 metric tons and in Zamboanga Sibugay by 625.64 metric tons as a result of bigger sizes harvested, high survival rate and the temporary shifting from tilapia culture during the second quarter. In Zamboanga del Sur, the 0.20 percent increase in production was achieved because of increased stocking, improved and proper pond management and high survival rate.

Meanwhile, the 4.43 percent decrease in Lanao del Norte was the result of reduced area harvested and the high costs of inputs and these were particularly noted in the municipalities of Kapatagan and Lala during the third quarter. The production increase in Pampanga during the fourth quarter did not offset the 2.21 percent overall cut in 2010 production due to high water salinity, stunted growth and luminous bacteria infestation resulting from the El Niño phenomenon.

Other provinces indicated a production cut of 4.99 percent due to low quality of post larvae and stunted growth.

MUD CRAB

Production of mud crab for 2010 increased by 5.15 percent (Table 7). This was attributed to the increased stocking density, availability of quality crablets and good price in the market that encouraged operators to produce more this year.

In Lanao del Norte, the 6.62 percent increase from last year's level was because of the resumption of fishponds operation and the technical assistance from BFAR. In like manner, the output increases of 17.90 percent in Sorsogon and 4.45 percent in Misamis Occidental were the result of good water salinity and increased stocking density of quality crablets by the demand and good price in the market. Other provinces also registered production gain since more natural entry crabs and big sizes were harvested.

CARP

Carp production in 2010 was bigger by 16,714.43 metric tons or 6.52 percent . This was mainly contributed by the harvests in fish pens and fish cages in Rizal, the top producing province of carps. The province posted a 7.61 percent annual growth despite the production decline during the first half of 2010. Production increased by 15.04 percent during the fourth quarter as some operators increased the number of fish pens and fish cages stocked due to availability of quality carp fingerlings. In Metro Manila, the 25.04 percent increase in 2010 was accounted for by the rehabilitated and re-stocked fish cages whereby 39 metric tons of carps were harvested in the fourth quarter of 2010. No production of carp was recorded in the same quarter of 2009 (Table 7).

On the contrary, fishpond production of carps went down by 0.90 percent during the reference year. Production from the top producing provinces of Lanao del Norte and Tarlac slid by 6.67 percent and 13.70 percent, respectively. In Lanao del Norte, bigger production cuts were observed during the first and second quarters. On the fourth quarter of 2010, the 9.17 percent decrease was a result of lower stocking rate due to financial problems experienced by fishpond operators. In Tarlac, production increased by 12.93 percent and 16.35 percent during the third and fourth quarters of 2010, respectively. Good growth and the harvest of more natural entry carps were cited. However, the bigger 49.28 percent cut during the second quarter set Tarlac's overall production cut at 13.70 percent. Quezon, Pangasinan and Pampanga had bigger production increases of 88.15 percent, 58.31 percent and 2.69 percent in 2010, respectively. The combined production, however, was not enough to push upward the overall production of carps from fishponds.

Laguna's carp production in fish cages and fish pens went down in 2010. Though production increased by 4.74 percent during the fourth quarter, the output decline on the first three quarters pulled carp production of Laguna down by 5.39 percent.

Production of carps in the rice paddies increased, from 0.32 metric tons in 2009 to 7.28 metric tons in 2010. Pampanga's first harvest was on the fourth quarter of 2010 while Pangasinan production rose from 0.32 metric tons to 3.48 metric tons during the cited years.

There was less volume of carps harvested from small farm reservoirs in Quirino, Cagayan and Isabela on the first three quarters of 2010, thus, a 17.10 percent reduction in the 2010 production. This was reportedly due to the low water level brought about by the prolonged dry spell in 2010 which affected growth of carps.

The other carp producing provinces from fishponds, fish pens and fish cages had lower production this 2010 due to prolonged dry season that adversely affected carp's growth. There was also limited feeds and poor quality fingerlings used.

CATFISH

Catfish production was noted mostly in freshwater fishponds. Total volume of catfish harvested this 2010 was estimated at 2,971.80 metric tons or four (4) percent more than the 2009 level. The increment in production was contributed by Iloilo, Pampanga and Nueva Ecija. The production gain of 4.91 percent in Iloilo was attributed to more area utilized in Zarraga because of the increasing demand for catfish. In Pampanga, the 6.36 percent growth was caused by high demand from ihaw-ihaw stands and good weather condition during the fourth quarter of 2010. Harvest of catfish in Nueva Ecija rose by 34.85 percent this year due to increase in area harvested in the municipality of Llanera. Moreover, the quality fingerlings coupled with good management practices during the fourth quarter of this year contributed to the increase. In contrast, harvests of catfish in Bulacan and Davao City dropped by 4.02 percent and 6.35 percent, respectively. In Bulacan, it was attributed to insufficient water caused by low water elevation in Angat Dam during the third quarter of 2010. Furthermore, there was a low stocking due to slow hatching of catfish breeders during the fourth quarter of this year. In Davao City, it was attributed to the intense heat which was experienced during the second quarter and the shifting of some operators to fingerlings production instead of producing marketable-sized catfish. Consequently, some catfish operators did not stock due to scarcity of fingerlings which resulted in low survival rates during the third quarter of the year (Table 7).

SEAWEEDS

The 2010 production of seaweed went up by 3.40 percent compared with the previous year's level. The top producing provinces, which accounted for 71.80 percent of the total seaweed output, performed well during the year. Zamboanga Sibugay recorded the biggest growth at 16.96 percent. Availability of quality planting materials, moderate tidal movement due to good weather condition which prevailed in the area during the third and fourth quarters of the year, encouraged farmers to plant more. Proper care and regular cleaning of the plants also improved the productivity of seaweed. Similarly, production in Bohol, Sulu and Palawan grew by 6.53 percent, 3.39 percent and 1.87 percent, respectively. The increasing demand and better prices offered by traders and processors prompted seaweed growers to expand their area planted/harvested. Other contributing factors were the continuous distribution of planting materials, financial and technical support from BFAR and LGU specifically in the municipalities of the seaweed producing provinces (Table 8).

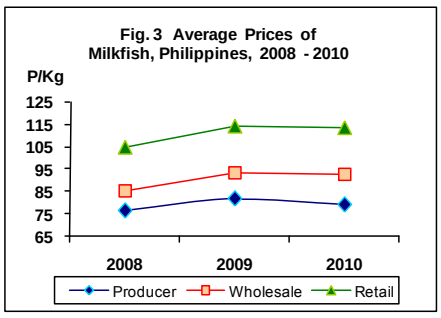
However, the decline in production in Tawi-Tawi was traced to ice-ice disease caused by sudden change of temperature due to long dry spell in the first half of 2010

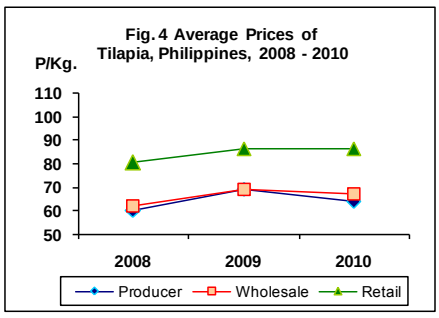
OYSTER

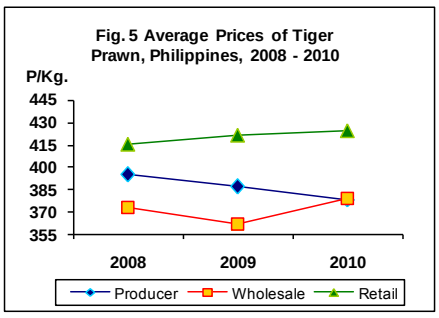
Production of oyster at 22,525.52 metric tons was 13.02 percent higher than the 2009 production of 19,930.59 metric tons. Oyster production in the provinces of Cavite and Pangasinan went up by 44.95 percent and 41.67 percent, respectively. This was attributed to availability of better quality spats and good water condition that resulted in full grown and bigger sizes of oysters harvested. In Pangasinan, no predators that usually cling to oyster shell that hinder their growth were observed. Realignment of pens and fish corals in Bacoor Bay resulted in good growth of oysters in Cavite. Moreover, higher prices of the commodity encouraged farmers in Bulacan to increase their harvest areas. Negros Occidental suffered a 5.82 percent decrease in production due to poor quality of oysters harvested caused by intense heat during the first quarter of 2010 (Table 8).

MUSSEL

Mussel production was up by 4.72 percent this year. Operators from the provinces of Cavite, Samar and Negros Occidental expanded their areas and increased stocks due to availability of spats. This was attributed to good water quality that allowed the growth of more spats that produced larger sizes of mussel. The cleaning of Bacoor Bay and realigning of poles allowed the water current to enter and washed out pollutants and other waste materials in Cavite. The presence of buyers in the locality and the high demand from nearby provinces were reported in Negros Occidental and Samar. However, there was reduction of harvests in Bataan due to red tide phenomenon. Operators temporarily stopped harvesting mussels during the fourth quarter. The decrease in Capiz was traced to smaller sizes of mussel harvested which was caused by too much heat specifically during the first and second quarters that affected the growth of mussel (Table 8).







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Milkfish. Annual average producer, wholesale and retail prices dropped in 2010 from their 2009 levels by 3.30 percent, 1.03 percent and 0.73 percent, respectively. Quarterly average prices declined starting second quarter.

Tilapia. Annual prices at all levels went down in 2010. At the producer level, bigger price cuts on the first and second quarters brought down the annual price by 7.40 percent. At the wholesale level, average prices were going down every quarter thus, the annual price dropped by 2.44 percent. The retail price also slid by 0.21 percent as two quarters recorded price drop of about one percent.

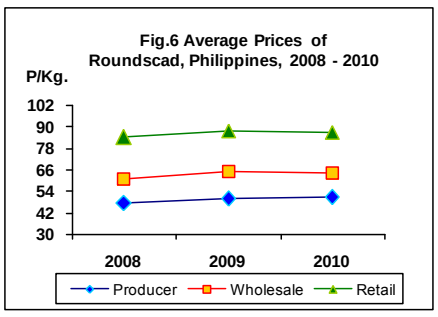
Tiger Prawn. Wholesale and retail prices moved up in 2010 by 4.68 percent and 0.83 percent, respectively. On a quarterly basis, wholesale prices steadily went up except for a 0.01 percent slippage on the third quarter. At retail level, increments on the first two quarters offset the decreases on the last two quarters. The producer price was 2.21 percent short of its 2009 level.

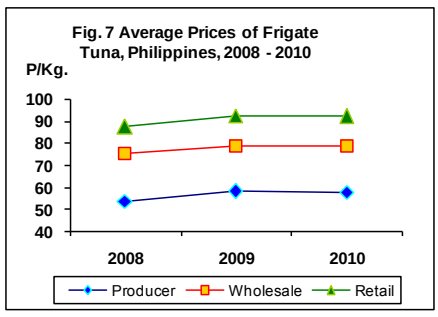
Roundscad. The 2010 producer price rose by 1.88 percent as quarterly prices went upward starting on the second quarter. On the contrary, the quarterly price decrements on the wholesale and retail levels pushed their average annual prices down by 1.62 percent and 1.23 percent, respectively.

Frigate Tuna. Annual producer, wholesale and retail prices were 0.65 percent, 0.48 percent and 0.37 percent lower this 2010, respectively.

Indian mackerel. The annual producer price was higher this 2010 by 5.05 percent. On the second quarter, it registered a 19.76 percent increase. On the other hand, annual wholesale and retail prices were 3.19 percent and 1.90 percent below their 2009 levels, respectively.

The producer-retail price margins were wider for Indian mackerel and tiger prawn at P48.36 and P46.49, respectively. That of roundscad was P36.45 while those of frigate tuna and milkfish were around P34.00. The smallest margin was recorded by tilapia at P22.46.





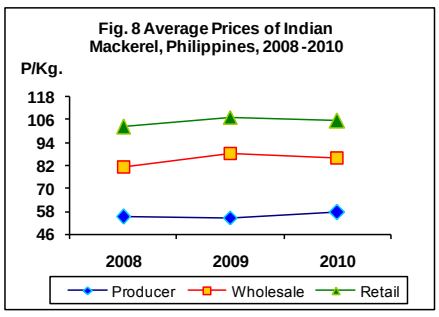


Table 1. Fisheries: Volume of Fish Production by Sub-Sector, by Region, Philippines, January - December 2009 - 2010[P]

(Metric Tons)

Region/ Sub-Sector	Fisheries		% Change	Commercial		% Change	Municipal		% Change	Aquaculture		% Change
	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09
PHILIPPINES	**5,079,976.98**	**5,162,001.80**	**1.61**	**1,253,940.98**	**1,247,761.33**	**(0.49)**	**1,348,643.97**	**1,370,520.13**	**1.62**	**2,477,392.03**	**2,543,720.34**	**2.68**
NCR	68,723.50	98,333.19	43.09	62,371.40	91,761.40	47.12	4,215.36	4,343.13	3.03	2,136.74	2,228.66	4.30
CAR	4,228.72	3,534.22	(16.42)				940.21	915.49	(2.63)	3,288.51	2,618.73	(20.37)
I	137,691.90	137,770.57	0.06	5,052.39	3,981.17	(21.20)	50,124.57	42,802.22	(14.61)	82,514.94	90,987.18	10.27
II	63,481.86	62,170.73	(2.07)	15,676.64	16,086.96	2.62	32,469.31	33,810.95	4.13	15,335.91	12,272.82	(19.97)
III	272,113.90	264,679.04	(2.73)	5,873.27	4,335.78	(26.18)	41,950.71	40,559.61	(3.32)	224,289.92	219,783.65	(2.01)
IV-A	415,579.60	413,213.19	(0.57)	82,489.83	85,112.49	3.18	122,233.78	127,190.28	4.05	210,855.99	200,910.42	(4.72)
IV-B	720,734.55	726,498.18	0.80	44,850.25	47,980.27	6.98	219,386.03	211,880.18	(3.42)	456,498.27	466,637.73	2.22
V	273,536.83	290,621.79	6.25	65,337.61	68,978.69	5.57	139,165.34	147,532.97	6.01	69,033.88	74,110.13	7.35
VI	433,230.56	441,557.87	1.92	109,158.74	105,000.13	(3.81)	168,936.60	170,911.90	1.17	155,135.22	165,645.84	6.78
VII	233,765.08	240,648.48	2.94	47,205.60	44,608.53	(5.50)	54,727.20	55,447.56	1.32	131,832.28	140,592.39	6.64
VIII	206,830.88	209,109.33	1.10	71,694.09	68,499.18	(4.46)	95,301.09	100,845.75	5.82	39,835.70	39,764.40	(0.18)
IX	731,841.21	757,214.34	3.47	357,124.70	339,749.11	(4.87)	127,082.97	136,066.81	7.07	247,633.54	281,398.42	13.64
X	155,525.19	160,601.08	3.26	45,983.43	43,564.72	(5.26)	42,392.12	43,338.77	2.23	67,149.64	73,697.59	9.75
XI	66,539.14	68,867.29	3.50	11,348.11	12,778.41	12.60	26,586.35	28,085.42	5.64	28,604.68	28,003.46	(2.10)
XII	304,821.10	281,721.95	(7.58)	230,714.89	211,020.04	(8.54)	48,645.63	46,249.04	(4.93)	25,460.58	24,452.87	(3.96)
Caraga	103,656.61	101,189.70	(2.38)	6,676.21	7,221.67	8.17	70,380.89	69,069.02	(1.86)	26,599.51	24,899.01	(6.39)
ARMM	887,676.35	904,270.87	1.87	92,383.82	97,082.78	5.09	104,105.81	111,471.03	7.07	691,186.72	695,717.06	0.66

P - Preliminary

Table 2. Commercial Fisheries: Volume of Fish Unloading by Region, by Type of Landing Center, Philippines, January - December 2009 - 2010[P]

(Metric Tons)

Region	Commercial		% Change	Private		% Change	PFDA		% Change	LGU		% Change	Traditional		% Change
	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09
PHILIPPINES	**1,253,940.98**	**1,247,761.33**	**(0.49)**	**356,298.13**	**320,052.45**	**(10.17)**	**239,512.55**	**268,537.51**	**12.12**	**79,674.60**	**82,564.48**	**3.63**	**578,455.70**	**576,606.89**	**(0.32)**
NCR	62,371.40	91,761.40	47.12				59,578.62	88,765.73	48.99				2,792.78	2,995.67	7.26
CAR															
I	5,052.39	3,981.17	(21.20)				416.23	794.56	90.89	98.85		(100.00)	4,537.31	3,186.61	(29.77)
II	15,676.64	16,086.96	2.62										15,676.64	16,086.96	2.62
III	5,873.27	4,335.78	(26.18)	4,783.84	3,491.40	(27.02)				152.57	92.18	(39.58)	936.86	752.20	(19.71)
IV-A	82,489.83	85,112.49	3.18				15,390.92	17,929.13	16.49	6,048.88	8,059.01	33.23	61,050.03	59,124.35	(3.15)
IV-B	44,850.25	47,980.27	6.98										44,850.25	47,980.27	6.98
V	65,337.61	68,978.69	5.57	11,389.19	11,371.50	(0.16)				18,789.49	19,562.29	4.11	35,158.93	38,044.90	8.21
VI	109,158.74	105,000.13	(3.81)	7,618.08	5,122.32	(32.76)	1,694.21	3,239.72	91.22	25,148.69	23,461.01	(6.71)	74,697.76	73,177.08	(2.04)
VII	47,205.60	44,608.53	(5.50)							3,015.20	2,582.23	(14.36)	44,190.40	42,026.30	(4.90)
VIII	71,694.09	68,499.18	(4.46)	901.99	737.45	(18.24)				8.70	10.75	23.56	70,783.40	67,750.98	(4.28)
IX	357,124.70	339,749.11	(4.87)	252,338.36	236,974.33	(6.09)	11,849.13	9,233.35	(22.08)	16,121.00	14,322.43	(11.16)	76,816.21	79,219.00	3.13
X	45,983.43	43,564.72	(5.26)							7,760.24	9,115.43	17.46	38,223.19	34,449.29	(9.87)
XI	11,348.11	12,778.41	12.60	688.04	836.71	21.61	3,425.59	3,974.54	16.02	2,530.98	5,359.15	111.74	4,703.50	2,608.01	(44.55)
XII	230,714.89	211,020.04	(8.54)	78,578.63	61,518.74	(21.71)	147,157.85	144,600.48	(1.74)				4,978.41	4,900.82	(1.56)
Caraga	6,676.21	7,221.67	8.17										6,676.21	7,221.67	8.17
ARMM	92,383.82	97,082.78	5.09										92,383.82	97,082.78	5.09

P - Preliminary

Table 3. Municipal Fish Production by Region, Philippines, January - December 2009 - 2010[P]

(Metric Tons)

Region	Municipal		% Change	Marine		% Change	Inland		% Change
	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09
PHILIPPINES	**1,348,643.97**	**1,370,520.13**	**1.62**	**1,159,922.03**	**1,183,267.50**	**2.01**	**188,721.94**	**187,252.63**	**(0.78)**
NCR	4,215.36	4,343.13	3.03	4,215.36	4,343.13	3.03			
CAR	940.21	915.49	(2.63)				940.21	915.49	(2.63)
I	50,124.57	42,802.22	(14.61)	44,012.90	37,335.10	(15.17)	6,111.67	5,467.12	(10.55)
II	32,469.31	33,810.95	4.13	20,879.85	21,984.59	5.29	11,589.46	11,826.36	2.04
III	41,950.71	40,559.61	(3.32)	28,637.18	28,319.65	(1.11)	13,313.53	12,239.96	(8.06)
IV-A	122,233.78	127,190.28	4.05	39,099.35	41,339.88	5.73	83,134.43	85,850.40	3.27
IV-B	219,386.03	211,880.18	(3.42)	218,379.24	210,977.32	(3.39)	1,006.79	902.86	(10.32)
V	139,165.34	147,532.97	6.01	133,120.43	141,824.57	6.54	6,044.91	5,708.40	(5.57)
VI	168,936.60	170,911.90	1.17	160,326.14	163,801.91	2.17	8,610.46	7,109.99	(17.43)
VII	54,727.20	55,447.56	1.32	54,493.22	55,259.49	1.41	233.98	188.07	(19.62)
VIII	95,301.09	100,845.75	5.82	93,670.24	99,329.00	6.04	1,630.85	1,516.75	(7.00)
IX	127,082.97	136,066.81	7.07	125,987.94	134,992.99	7.15	1,095.03	1,073.82	(1.94)
X	42,392.12	43,338.77	2.23	38,944.86	39,139.74	0.50	3,447.26	4,199.03	21.81
XI	26,586.35	28,085.42	5.64	26,445.54	27,919.69	5.57	140.81	165.73	17.70
XII	48,645.63	46,249.04	(4.93)	22,599.70	21,867.03	(3.24)	26,045.93	24,382.01	(6.39)
Caraga	70,380.89	69,069.02	(1.86)	65,794.14	64,565.57	(1.87)	4,586.75	4,503.45	(1.82)
ARMM	104,105.81	111,471.03	7.07	83,315.94	90,267.84	8.34	20,789.87	21,203.19	1.99

P - Preliminary

Table 4. Aquaculture Production by Culture Environment, by Type of Aquafarm and by Region, January - December 2009 - 2010[P]

(Metric Tons)

Region	Aquaculture		% Change	Brackishwater Fishpond		% Change	Brackishwater Fish Pen		% Change	Brackishwater Fish Cage		% Change	Freshwater Fishpond		% Change	Freshwater Fish Pen		% Change	Freshwater Fish Cage		% Change
	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09
PHILIPPINES	**2,477,392.03**	**2,543,720.34**	**2.68**	**302,849.64**	**302,659.35**	**(0.06)**	**3,349.74**	**703.09**	**(79.01)**	**2,240.57**	**913.61**	**(59.22)**	**144,724.13**	**142,740.59**	**(1.37)**	**62,002.28**	**62,516.17**	**0.83**	**101,610.97**	**102,621.85**	**0.99**
NCR	2,136.74	2,228.66	4.30	471.91	593.48	25.76	-	-	-	-	-	-	-	-	-	1,183.08	1,053.95	(10.91)	341.88	445.20	30.22
CAR	3,288.51	2,618.73	(20.37)	-	-	-	-	-	-	-	-	-	1,829.01	1,646.78	(9.96)	-	-	-	1,459.50	971.94	(33.41)
I	82,514.94	90,987.18	10.27	18,439.26	18,848.46	2.22	3,297.84	655.22	(80.13)	1,162.63	318.21	(72.63)	5,301.21	8,534.79	61.00	0.31	0.18	(42.47)	36.55	37.17	1.70
II	15,335.91	12,272.82	(19.97)	3,842.20	3,071.07	(20.07)	-	-	-	93.75	86.70	(7.53)	7,538.82	5,933.38	(21.30)	-	-	-	942.97	390.39	(58.60)
III	224,289.92	219,783.65	(2.01)	96,182.45	94,320.69	(1.94)	-	-	-	0.72	0.87	20.36	120,307.37	116,658.83	(3.03)	-	-	-	-	0.60	-
IV-A	210,855.99	200,910.42	(4.72)	10,466.94	12,590.72	20.29	-	-	-	-	-	-	1,728.46	1,755.86	1.59	43,828.58	44,739.86	2.08	88,866.26	90,914.68	2.31
IV-B	456,498.27	466,637.73	2.22	4,537.38	4,376.56	(3.54)	0.43	-	-	1.77	-	-	570.03	559.98	(1.76)	-	-	-	-	-	-
V	69,033.88	74,110.13	7.35	6,801.96	7,732.62	13.68	-	-	-	1.00	-	-	1,573.76	1,624.49	3.22	-	-	-	7,890.23	7,720.68	(2.15)
VI	155,135.22	165,645.84	6.78	80,346.53	78,130.67	(2.76)	20.68	27.20	31.57	11.99	8.82	(26.44)	1,265.25	1,059.75	(16.24)	0.08	0.75	900.00	3.45	-	-
VII	131,832.28	140,592.39	6.64	9,260.27	8,950.03	(3.35)	0.01	-	-	10.53	6.65	(36.82)	178.59	162.62	(8.94)	-	0.10	-	7.83	10.49	34.00
VIII	39,835.70	39,764.40	(0.18)	6,187.68	7,147.56	15.51	13.74	13.53	(1.51)	19.45	51.49	164.74	278.76	385.27	38.21	6.96	8.19	17.63	46.57	53.03	13.87
IX	247,633.54	281,398.42	13.64	21,649.08	22,298.32	3.00	-	-	-	0.79	0.44	(44.77)	159.94	180.65	12.94	0.29	1.36	376.21	-	-	-
X	67,149.64	73,697.59	9.75	25,587.78	26,181.69	2.32	-	-	-	0.10	-	-	1,358.02	1,240.83	(8.63)	-	-	-	0.56	1.68	198.54
XI	28,604.68	28,003.46	(2.10)	5,158.59	4,577.99	(11.25)	-	0.82	-	66.39	56.80	(14.44)	1,303.02	1,746.87	34.06	25.53	47.53	86.19	2.24	2.86	28.01
XII	25,460.58	24,452.87	(3.96)	8,416.20	7,808.93	(7.22)	-	-	-	-	-	-	936.42	845.10	(9.75)	12,436.53	11,585.28	(6.84)	1,660.29	1,731.80	4.31
Caraga	26,599.51	24,899.01	(6.39)	2,369.03	2,384.58	0.66	17.05	6.31	(62.99)	871.44	383.63	(55.98)	193.85	188.00	(3.02)	-	-	-	119.65	90.27	(24.56)
ARMM	691,186.71	695,717.06	0.66	3,132.3862	3,645.9790	16.40	-	-	-	-	-	-	201.62	217.39	7.82	4,520.95	5,078.98	12.34	232.99	251.07	7.76

Region	Marine Fish Pen		% Change	Marine Fish Cage		% Change	Oyster		% Change	Mussel		% Change	Seaweed		% Change	Rice Fish		% Change	Small Farm Reservoir		% Change
	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09	2009	2010	10/09
PHILIPPINES	**21,574.30**	**26,753.90**	**24.01**	**59,026.13**	**61,968.82**	**4.99**	**19,930.59**	**22,525.52**	**13.02**	**19,936.50**	**20,876.79**	**4.72**	**1,739,994.97**	**1,799,196.91**	**3.40**	**4.83**	**75.29**	**1,460.45**	**147.38**	**168.45**	**14.29**
NCR	-	-	-	-	-	-	-	-	-	139.87	136.03	(2.74)	-	-	-	-	-	-	-	-	-
CAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I	10,211.05	14,024.71	37.35	38,112.99	40,824.52	7.11	4,979.22	6,868.20	37.94	777.19	653.82	(15.87)	189.95	178.21	(6.18)	3.61	28.87	700.04	3.14	14.81	371.09
II	-	-	-	-	0.02	-	527.18	713.51	35.34	-	-	-	2,272.84	2,007.12	(11.69)	-	-	-	118.14	70.64	(40.21)
III	-	-	-	2,120.89	2,543.22	19.91	3,425.58	4,059.40	18.50	2,069.44	1,717.86	(16.99)	177.87	373.17	109.80	-	45.66	-	5.60	63.34	1,031.27
IV-A	-	-	-	1.04	0.55	(47.34)	676.69	977.53	44.46	4,297.15	5,494.04	27.85	60,990.88	44,437.18	(27.14)	-	-	-	-	-	-
IV-B	-	-	-	445.48	541.27	21.50	-	-	-	6.00	-	-	450,937.17	461,159.92	2.27	-	-	-	-	-	-
V	69.00	150.28	117.80	13.17	20.59	56.27	-	-	-	-	-	-	52,684.76	56,861.47	7.93	-	-	-	-	-	-
VI	1,160.82	899.85	(22.48)	43.71	175.46	301.39	8,820.92	8,281.72	(6.11)	9,200.35	9,162.61	(0.41)	54,256.43	67,893.77	25.13	0.93	0.76	(18.14)	4.10	4.49	9.32
VII	94.74	145.50	53.58	552.19	580.85	5.19	444.22	591.08	33.06	-	-	-	121,273.17	130,135.94	7.31	-	-	-	10.74	9.13	(14.97)
VIII	40.45	63.32	56.53	6,842.30	5,715.05	(16.47)	34.01	44.12	29.71	3,446.08	3,712.37	7.73	22,919.62	22,570.48	(1.52)	0.07	-	-	-	-	-
IX	-	-	-	132.43	72.42	(45.31)	633.48	713.93	12.70	0.28	-	-	225,057.24	258,131.30	14.70	-	-	-	-	-	-
X	0.48	-	-	1,318.64	1,991.82	51.05	3.14	0.97	(69.06)	0.14	0.07	(48.15)	38,879.91	44,279.10	13.89	-	-	-	0.87	1.43	63.13
XI	9,849.00	11,429.16	16.04	7,469.37	6,878.99	(7.90)	386.15	275.07	(28.76)	-	-	-	4,344.19	2,987.37	(31.23)	0.22	-	-	-	-	-
XII	-	-	-	1,740.40	2,147.22	23.38	-	-	-	-	-	-	265.95	329.92	24.05	-	-	-	4.79	4.61	(3.62)
Caraga	141.26	39.34	(72.15)	227.08	352.37	55.18	-	-	-	-	-	-	22,660.16	21,454.52	(5.32)	-	-	-	-	-	-
ARMM	7.51	1.74	(76.90)	6.43	124.46	1,835.71	-	-	-	-	-	-	683,084.83	686,397.45	0.48	-	-	-	-	-	-

P - Preliminary

Table 5. Aquaculture: Milkfish Production of Top Producing Provinces by Culture Environment and Type of Aquafarm, Philippines, January - December 2009 - 2010[P]

(Metric Tons)

Culture Environment/ Type of Aquafarm/Province	2009	2010	% Change 10/09
PHILIPPINES	**347,566.52**	**349,432.01**	**0.54**
Brackishwater Fishpond	**219,977.16**	**218,066.51**	**(0.87)**
Bulacan	29,711.93	27,004.62	(9.11)
Capiz	22,136.61	23,487.28	6.10
Iloilo	24,271.05	20,854.09	(14.08)
Negros Occidental	20,293.20	19,674.78	(3.05)
Pampanga	19,826.35	19,566.02	(1.31)
Pangasinan	14,407.76	14,461.48	0.37
Other Provinces	89,330.25	93,018.25	4.13
Brackishwater Fish pen	**3,269.28**	**636.90**	**(80.52)**
La Union	601.32	573.55	(4.62)
Aklan	20.31	26.41	30.05
Other Provinces	2,647.65	36.95	(98.60)
Brackishwater Fish cage	**2,073.45**	**740.56**	**(64.28)**
Agusan del Norte	865.49	364.80	(57.85)
La Union	291.14	188.17	(35.37)
Davao del Norte	66.39	56.80	(14.44)
Other Provinces	850.43	130.78	(84.62)
Freshwater Fish pen*	**27,040.62**	**26,437.25**	**(2.23)**
Rizal	18,628.30	18,333.99	(1.58)
Sultan Kudarat	6,059.15	5,544.15	(8.50)
Maguindanao	944.29	1,297.60	37.42
NCR	1,183.08	1,053.95	(10.91)
Other Provinces	225.80	207.55	(8.08)
Freshwater Fish cage	**16,074.20**	**16,351.37**	**1.72**
Batangas	16,010.88	16,277.82	1.67
Other Provinces	63.32	73.55	16.16
Marine Fish pen	**21,390.33**	**26,680.20**	**24.73**
Pangasinan	10,209.86	14,024.71	37.36
Davao del Sur	9,848.20	11,429.06	16.05
Iloilo	185.06	311.06	68.08
Other Provinces	1,147.22	915.37	(20.21)
Marine Fish cage	**57,741.47**	**60,519.21**	**4.81**
Pangasinan	37,964.52	40,771.57	7.39
Davao del Sur	5,039.34	4,699.44	(6.74)
Samar	3,022.20	2,920.45	(3.37)
Zambales	2,105.97	2,529.41	20.11
Other Provinces	9,609.43	9,598.34	(0.12)

P - Preliminary
* - Included data on freshwater fishpond and small farm reservoir

Table 6. Aquaculture: Tilapia Production of Top Producing Provinces, by Culture Environment and Type of Aquafarm, Philippines, January - December 2009 - 2010[P]

(Metric Tons)

Culture Environment/ Type of Aquafarm/Province	2009	2010	% Change 10/09
PHILIPPINES	**260,911.06**	**258,667.31**	**(0.86)**
Brackishwater Fishpond	**14,920.58**	**13,999.29**	**(6.17)**
Pampanga	4,639.38	4,543.16	(2.07)
Cagayan	2,803.27	2,300.38	(17.94)
Bulacan	1,814.11	1,534.23	(15.43)
Zamboanga del Sur	919.81	964.21	4.83
Zamboanga Sibugay	1,187.53	735.02	(38.11)
Other Provinces	3,556.48	3,922.29	10.29
Brackishwater Fishcage/Pens	**178.34**	**135.50**	**(24.02)**
Cagayan	63.90	57.11	(10.63)
Ilocos Norte	27.77	15.82	(43.04)
La Union	59.90	58.68	(2.04)
Other Provinces	26.76	3.90	(85.44)
Freshwater Fishpond	**140,543.20**	**138,435.04**	**(1.50)**
Pampanga	102,179.21	100,434.99	(1.71)
Pangasinan	4,342.32	7,526.81	73.34
Tarlac	6,645.60	5,347.53	(19.53)
Nueva Ecija	4,506.22	4,054.37	(10.03)
Isabela	4,587.06	3,873.00	(15.57)
Other Provinces*	18,282.79	17,198.34	(5.93)
Freshwater Fish Cage	**83,748.84**	**84,556.91**	**0.96**
Batangas	60,330.17	62,994.46	4.42
Laguna	9,114.09	8,399.85	(7.84)
Camarines Sur	5,844.23	5,724.58	(2.05)
Albay	1,991.28	1,981.76	(0.48)
South Cotabato	1,652.47	1,721.62	4.18
Other Provinces	4,816.60	3,734.63	(22.46)
Freshwater Fish Pen	**21,512.26**	**21,533.37**	**0.10**
Rizal	10,986.24	11,140.65	1.41
Sultan Kudarat	6,376.55	6,041.13	(5.26)
Maguindanao	3,548.58	3,764.69	6.09
Laguna	551.90	512.15	(7.20)
Davao del Norte	25.53	47.49	86.04
Other Provinces	23.46	27.27	16.23
Marine Fishcage/Pen	**7.84**	**7.20**	**(8.12)**
All Provinces	7.84	7.20	(8.12)

P - Preliminary

* 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 2009 - 2010[P]

(Metric Tons)

Species/Province	2009	2010	% Change 10/09
TIGER PRAWN	**47,829.92**	**48,161.94**	**0.69**
Brackishwater Fishpond			
Pampanga	19,460.64	19,030.08	(2.21)
Lanao del Norte	7,074.38	6,760.92	(4.43)
Bulacan	3,768.95	4,758.83	26.26
Zamboanga Sibugay	3,482.20	4,107.85	17.97
Zamboanga del Sur	3,099.52	3,105.85	0.20
Other Provinces	10,944.22	10,398.40	(4.99)
MUD CRAB	**13,729.83**	**14,437.60**	**5.15**
Brackishwater Fishpond			
Lanao del Norte	5,292.74	5,643.19	6.62
Pampanga	3,999.72	3,926.82	(1.82)
Sorsogon	1,223.98	1,443.12	17.90
Capiz	1,230.09	1,163.43	(5.42)
Misamis Occidental	485.25	506.83	4.45
Other Provinces	1,498.05	1,754.21	17.10
CARP	**15,691.00**	**16,714.43**	**6.52**
Freshwater Fishpond	**450.62**	**446.59**	**(0.90)**
Lanao del Norte	185.22	172.86	(6.67)
Tarlac	114.03	98.41	(13.70)
Pampanga	75.89	77.94	2.69
Quezon	20.04	37.71	88.15
Pangasinan	18.20	28.81	58.31
Others Provinces	37.25	30.86	(17.15)
Freshwater Fish Pen/Cage	**15,234.13**	**16,255.64**	**6.71**
Rizal	14,132.21	15,207.80	7.61
Laguna	1,008.38	954.01	(5.39)
Metro Manila	63.58	79.50	25.04
Other Provinces	29.96	14.33	(52.16)
Small Farm Reservoir	**5.93**	**4.92**	**(17.10)**
Quirino	3.65	2.58	(29.32)
Cagayan	1.89	1.07	(43.50)
Pangasinan		1.10	
Other Provinces	0.39	0.17	(55.84)
Rice Fish	**0.32**	**7.28**	**2,175.00**
Pangasinan	0.32	3.48	987.50
Pampanga		3.80	
CATFISH	**2,857.52**	**2,971.80**	**4.00**
Freshwater Fishpond			
Iloilo	593.14	622.24	4.91
Pampanga	337.29	358.75	6.36
Nueva Ecija	263.37	355.16	34.85
Bulacan	298.03	286.93	(3.72)
Davao City	306.36	286.91	(6.35)
Other Provinces	1,059.33	1,061.81	0.23

P - Preliminary

Table 8. Aquaculture: Mariculture Production by Species and by Province, Philippines, January - December 2009 - 2010[P]

(Metric Tons)

Species/Province	2009	2010	% Change 10/09
Seaweed	**1,739,994.97**	**1,799,196.91**	**3.40**
Palawan	447,752.74	456,145.60	1.87
Tawi-Tawi	386,648.56	376,270.72	(2.68)
Sulu	210,250.91	217,376.59	3.39
Bohol	113,794.61	121,220.27	6.53
Zamboanga Sibugay	103,306.45	120,824.61	16.96
Other Provinces	478,241.71	507,359.12	6.09
Oyster	**19,930.59**	**22,525.52**	**13.02**
Pangasinan	4,585.83	6,496.92	41.67
Capiz	6,009.77	6,109.46	1.66
Bulacan	3,413.35	4,045.30	18.51
Negros Occidental	1,052.95	991.62	(5.82)
Cavite	673.23	975.84	44.95
Other Provinces	4,195.46	3,906.38	(6.89)
Mussel	**19,936.50**	**20,876.79**	**4.72**
Capiz	7,702.50	7,371.89	(4.29)
Cavite	4,297.15	5,494.04	27.85
Samar	3,444.53	3,708.15	7.65
Bataan	2,069.44	1,717.86	(16.99)
Negros Occidental	1,022.52	1,342.10	31.25
Other Provinces	1,400.36	1,242.76	(11.25)

P - Preliminary

Table 9. Annual Average Producer, Wholesale and Retail Prices and Price Margins of Selected Fish Species, Philippines, 2008 - 2010

(Peso per Kilogram)

Species	Producer			% Change 10/09	Wholesale*			% Change 10/09	Retail*			% Change 10/09	Price Margins					
													Producer - Wholesale			Producer - Retail		
	2008	2009	2010		2008	2009	2010		2008	2009	2010		2008	2009	2010	2008	2009	2010
Milkfish	76.36	81.90	79.20	(3.30)	85.22	93.58	92.62	(1.03)	104.93	114.37	113.54	(0.73)	8.86	11.68	13.42	28.57	32.47	34.34
Tilapia	60.19	68.95	63.85	(7.40)	62.12	68.99	67.31	(2.44)	80.38	86.49	86.31	(0.21)	1.93	0.04	3.46	20.19	17.54	22.46
Tiger Prawn	395.10	386.95	378.39	(2.21)	373.66	361.83	378.75	4.68	415.32	421.39	424.88	0.83	(21.44)	(25.12)	0.36	20.22	34.44	46.49
Roundscad	47.05	49.53	50.46	1.88	61.08	64.82	63.77	(1.62)	84.04	87.99	86.91	(1.23)	14.03	15.29	13.31	36.99	38.46	36.45
Frigate Tuna	53.71	58.14	57.76	(0.65)	75.16	78.93	78.55	(0.48)	87.56	92.65	92.31	(0.37)	21.45	20.79	20.79	33.85	34.51	34.55
Indian Mackerel	54.92	54.43	57.18	5.05	81.04	88.50	85.67	(3.20)	102.20	107.59	105.54	(1.91)	26.12	34.07	28.49	47.28	53.16	48.36

* BAS AMSAD data
P - Preliminary