 July - September 2010

## HIGHLIGHTS




The total volume of fisheries production grew by 3.48 percent during the third quarter of 2010 compared to that of the same quarter in 2009. All sectors managed to outdo their 2010 third quarter production performances. Commercial fisheries exhibited a 6.48 percent increase in production. Municipal fisheries production was 5.32 percent higher this year. Aquaculture, on the other hand, surpassed last year's production record by 0.71 percent.

Commercial fishermen unloaded 285,582.97 metric tons of fish catch this quarter or 17,388.01 metric tons over last year's level. Fish production in 12 regions recorded gains while in four (4) regions, production shortfalls were registered. The uptrend in production was largely attributed to favorable weather conditions that enabled commercial fishermen to increase their fishing trips. The production increments were also traced to abundant catch of in-season species and increased volume of unloadings from foreign and local fishing vessels at Philippine Fisheries Development Authority (PFDA) in General Santos City fish port. More unloadings of commercial fish catch were noted in Zamboanga Peninsula with a total volume of $84,228.36$ metric tons. All types of landing centers recorded increased volume of unloadings. The bulk of commercial fish catch at $126,170.32$ metric tons were unloaded at traditional landing centers. Commercial fisheries contributed about 25.65 percent to the total fisheries production (Table 1).

Municipal fisheries produced a total of $327,546.41$ metric tons this third quarter of 2010 or $16,557.02$ metric tons more than in 2009. Production of marine and inland municipal fisheries grew by 5.78 percent and 2.94 percent, respectively. Thirteen (13) regions recorded production increments while three (3) regions exhibited a downward trend in production. Heavy unloadings amounted to $45,132.82$ metric tons of municipal fish catch were observed in MIMAROPA while 40,248.14 metric tons were unloaded in Palawan. On the other hand, almost 50 percent of total inland production came from Rizal and Laguna provinces. Municipal fisheries accounted for 29.42 percent of the total fisheries production.

Aquaculture production at 500,225.99 metric tons was $3,524.77$ metric tons higher than the record in same quarter last year. Seaweed production, at 330,613.44 metric tons, contributed more than half or 66.09 percent to the total aquaculture production. Fins fishes and shellfishes, on the other hand, contributed 33.91 percent. Seaweed farmers produced $7,629.67$ or 2.36 percent more seaweeds this year. This was attributed to the increase in area harvested in Zamboanga Sibugay due to availability of quality planting materials and the good weather conditions which favored the growth of seaweed during the quarter. The top three (3) seaweed producing provinces were Tawi-Tawi, Sulu and Palawan. Aquaculture accounted for 44.93 percent of the total fisheries production.

## COMMERCIAL FISHERIES

Commercial fisheries produced 6.48 percent more output during the third quarter of 2010 compared to 2009 level. Production increased by 17,388.01 metric tons over last year's level of 268,194.96 metric tons to $285,582.97$ metric tons this year. Fish production in National Capital Region (NCR), which grew by 68.40 percent, served as the major source of growth. It recorded a production gain of $9,737.59$ metric tons of which $9,624.26$ metric tons were registered in PFDA in Navotas. The production increment was largely attributed to favorable weather conditions that prevailed during the quarter, increased unloadings of commercial fishing vessels from 268 in September last year to 530 in September this year as reported by PFDA personnel. More unloadings of commercial fish catch were noted in Zamboanga Peninsula with a total volume of 84, 228.36 metric tons. The uptrend in production was mainly attributed to the large volume of in-season Indian sardines unloaded in Zamboanga City. This increased by 4,628.30 metric tons this quarter compared to same quarter last year.

Ten (10) other regions managed to surpass their last year's records and these were: llocos Region, Cagayan Valley, MIMAROPA, Bicol Region, Western Visayas, Central Visayas, Davao Region, SOCCSKSARGEN, ARMM, and Caraga. Their 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 such as big-eyed scad, frigate tuna, acetes, anchovies, caesio, roundscads, mackerels, and more appearance of school of fish were reported. The uptrend in production was also traced to the increased volume of unloadings of $7,221.81$ 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 and presence of more wholesale buyers.

On the other hand, four (4) regions namely: Central Luzon, CALABARZON, Eastern Visayas and Northern Mindanao registered production shortfalls. This situation was largely attributed to the dry docking of some commercial fishing vessels for repair and maintenance. Commercial landing centers in Bataan were permanently closed due to the conversion of economic zone to free port area for tourism purposes. Nonrenewal of licenses of some commercial fishing vessels also contributed to the decline in production.

The ports managed by PFDA posted the biggest increase in the volume of unloading at 31.83 percent. Fish unloaded at private landing centers recorded a 0.22 percent growth while volume of fish catch unloaded at Local Government Unit-managed landing centers grew by 0.16 percent. Traditional landing centers accounted for the bulk of commercial fish catch unloaded. This added up to $126,170.32$ metric tons and registered a 2.00 percent increase (Table 2).

## MUNICIPAL FISHERIES

The combined production of marine and inland municipal fisheries for the third Quarter of 2010 marked a 5.32 percent increase. From 310,989.39 metric tons in the third quarter of last year, production rose to $327,546.41$ metric tons this year. Output from marine reached $51,621.66$ metric tons or 2.94 percent more than last year's record.


Luzon had 40 percent share in total marine fish production and the bulk came from CALABARZON (11,746.20 metric tons), MIMAROPA ( $45,132.82$ metric tons) and Bicol Region ( $32,886.01$ metric tons). Meanwhile, production in Western Visayas at $38,930.44$ metric tons increased by 11.10 percent. ARMM and Caraga were the biggest producers in Mindanao with unloadings of $21,158.37$ and $16,284.20$ metric tons, respectively.


Growth in production was significant in the PFDA-managed fish port in Navotas, Metro Manila (28.99 percent), Central Luzon ( 15.41 percent), Western Visayas ( 11.10 percent) and Davao Region ( 10.22 percent). In terms of absolute values, Western Visayas topped the list with additional $3,888.09$ metric tons of unloadings. The continuous operation of "lambaklad" (Otoshi-ami) in Antique, the opening of Pilar Municipal Fish Port in Capiz, big volume of unloadings of mullet, round herring, flying fish in Negros Occidental and increase in number of shell gatherers in lloilo all contributed to the bigger production in the region. Palawan, the leading province for marine municipal, recorded total unloadings of $40,248.14$ metric tons this quarter. This was equivalent to 14.59 percent share in the total volume of unloadings. These developments were the result of good weather conditions that prevailed during the quarter. Fishermen were given the chance to explore fishing grounds and lengthen their fishing hours.

Only three (3) regions reported declines in marine fish production this year. These were llocos Region, Central Visayas and SOCCSKSARGEN. In the provinces of llocos Sur, La Union and Pangasinan, the reasons cited by fisherfolk were scarcity of species brought by the warm sea temperature and less number of boats in operation. On the other hand, municipal fishermen in Sarangani were affected by the ban on the use of fish aggregating devices (payaos) while those in Cebu and Negros Oriental reported minimal catches of snapper, squid and other pelagic species.

Fishing in inland waters also improved in the third quarter. The 2.94 percent increase in production came from CALABARZON, Western Visayas and llocos Region. Almost 50 percent of total inland production were from Rizal and Laguna. Large volumes of milkfish, tilapia and big-head carp were caught by sustenance fishermen around Laguna Lake after typhoon Basyang destroyed some fishpens and fish cages. SOCCSKSARGEN and ARMM had respective shares of 11.81 and 11.10 percent in total fish catch of $51,621.66$ metric tons.

Improved catch from rivers, lakes and marshes in North Cotabato, Maguindanao, Lanao del Sur and Sultan Kudarat boosted production of these provinces during the third quarter of this year (Table 3).

## AQUACULTURE

During the third quarter of 2010, aquaculture production at 500 thousand metric tons increased by 0.71 percent from its last year's level. Higher production increases were observed in seaweed and brackishwater fishpond while freshwater environment experienced downtrend.

Seaweed, which constituted 66 percent of the total aquaculture output, gained 2.36 percent from last year's production. The bulk of the increase came from Zamboanga Peninsula. Good quality of planting materials and good weather conditions favored growth of seaweeds in Zamboanga Sibugay. The same situation was noted in Palawan that paved the way to 7.75 percent increase in seaweed output in MIMAROPA. On the other hand, seaweed production decreased by 36.69 percent and 2.29 percent in CALABARZON and ARMM, respectively. Insufficient supply of planting materials constrained seaweed operations in Quezon while ice-ice infestation brought about by sudden change of water temperature was reported in Maguindanao, Sulu and Tawi-Tawi.

A 2.94 percent output increase was noted in brackishwater fishponds. CALABARZON had the highest gain among the regions as a result of high survival rate and sufficient natural food in Quezon.

Harvests from freshwater fishponds decreased by 15 percent. Lesser productivity was evident in Cagayan Valley provinces due to dried up ponds caused by El Niño phenomenon during the previous quarter. Further cut on production was reported in freshwater fish pens and fish cages. Fish pens and fish
 cages in Laguna and Batangas were damaged by typhoon Basyang while fish kill incident was recorded in Batangas (Table 4).

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

## Type of Aquafarm/Environment

Brackishwater fishpond
Brackishwater fish pen
Brackishwater fish cage
Freshwater fishpond
Freshwater fish pen
Freshwater fish cage
Rice fish
Small farm reservoir
Marine fish pen
Marine fish cage
Oyster Mussel Seaweed

## \% Increase (Decrease)

2.94
22.30
7.74
9.35
2.57
2.36

## SELECTED AQUACULTURE SPECIES

## MilKfish

In the third quarter of 2010, production of milkfish at 97,043.59 metric tons was 0.75 percent higher than last year's level of $96,320.11$ metric tons. The output gain was attributed to the good farm management, availability of fry/fingerlings and absence of destructive typhoon (Table 5).


Output from brackishwater fishponds grew by 2.83 percent. Increased stocking, better water salinity, and good farm management were observed in Capiz and Pangasinan. On the other hand, Bulacan, Iloilo, Negros Occidental and Pampanga posted output losses of 7.32 percent, 2.60 percent, 10.84 percent and 6.56 percent, respectively. Accordingly, harvesting was delayed due to high cost of inputs, low water level, and poor quality of fingerlings.

The volume of milkfish harvests from marine fish pens and fish cages grew by 26.82 percent and 7.81 percent, respectively. Operators from Negros Occidental intensified their harvesting to respond to demand and to avail of better market price. It was also noted that bigger sizes of milkfish were harvested in Davao del Sur because of good quality fingerlings and absence of fish kill and destructive typhoon were reported in Pangasinan this quarter.

The combined production from brackishwater fish pens and fish cages dropped by 22.43 percent despite the output gain in La Union. This was caused by the scarcity of fingerlings, lesser species were harvested particularly in Agusan del Norte because of the local ordinance to regulate construction of cages to prevent water pollution. Low water level was experienced because of the long dry spell last quarter.

Rizal and Batangas were the major producing provinces of milkfish from freshwater fish pens and fish cages. However, output reductions of 9.44 percent from Rizal and 6.85 percent from Batangas were noted. In Rizal, it was due to the damages on fish pens caused by strong winds brought about by typhoon Basyang. Pollution and high temperature of water were the causes of fish kill in Batangas.

## TILAPIA

Tilapia production from all types of aquafarm dropped by 10.26 percent during the third quarter of 2010 compared to the same quarter of 2009. About 54.13 percent of production came from freshwater fish cages, 28.11 percent from freshwater fishponds, 12.80 percent from freshwater fish pens, and 4.84 percent from brackishwater
 fishponds. Harvests from brackishwater fish pens/cages and small farm reservoirs shared the remaining 0.12 percent (Table 6).

Harvests from freshwater fish cages went down by 9.51 percent this quarter. The provinces that contributed to the decrease in production were Batangas, Laguna, Camarines Sur, Rizal and South Cotabato. In Batangas, the decline was the result of last year's dismantling of fish cages and fish kill due to too much heat and pollution. Furthermore, about 100 fish cages in Subic llaya and Agoncillo were no longer operational due to conversion of the area into a beach resort. Production in Laguna and Rizal went down due to the overflfowing of fish cages in Biñan and San Pedro. This was caused by strong winds and heavy rains brought about by typhoon Basyang. Meanwhile, the harvest reduction in Camarines Sur was traced to fish kill in Lake Buhi caused by oxygen depletion. In South Cotabato, the 16.50 percent drop was the result of lesser area stocked because of limited supply of fingerlings.

Production from freshwater fishponds dropped by 15.44 percent this quarter and the losses was contributed by Central Luzon provinces. In Pampanga, poor quality of tilapia fingerlings and presence of turtle that ravaged the tilapia fingerlings in San Luis were reported. High mortality rate, fish kill, poaching and movement of harvesting to the next quarter were the reasons cited for 17.24 percent decrease in Nueva Ecija. In Tarlac, the limited supply of quality fingerlings resulted in less area stocked. In Bulacan, the decrease was attributed to the insufficient water caused by the low water elevation of Angat Dam.

Freshwater fish pens recorded an output decrease of 5.01 percent this year. The provinces that contributed to the decrease were Rizal and Laguna with 9.32 percent and 5.57 percent reductions, respectively. Some operators in Rizal held back their harvesting because of bad taste of tilapia and strong winds brought by typhoon Basyang. Some operators in Laguna deferred harvesting tilapia for the next quarter due to the damages of fish pens. On the contrary, Maguindanao and Sultan Kudarat recorded output increments of 1.53 percent and 2.17 percent, respectively. These gains were attributed to proper care of fish pens, availability of quality fingerlings and good weather conditions. Higher demand in the local market and neighboring provinces, likewise, encouraged fish farmers to produce more than before.

The volume of production from brackishwater fishponds grew by 2.32 percent. The provinces with increased outputs were Zamboanga del Sur with 4.91 percent and Zamboanga Sibugay with 76.06 percent. The increment in Zamboanga del Sur was explained by the proper management and higher stocking density. In Zamboanga Sibugay, it was reported that some areas for tiger prawn were temporarily utilized for tilapia culture. In contrast, Cagayan, Pampanga and Negros Occidental recorded decreases of 2.79 percent, 1.93 percent and 2.96 percent, respectively. The negative growth in Cagayan was due to the lesser areas utilized and smaller sizes of tilapia were harvested because of El Niño. Similarly, lower stocking density and high salinity of water caused the reported drop in Pampanga. The reduction of harvests in Negros Occidental was due to smaller sizes of harvests and delayed stocking.


Output from brackishwater fish cages and fish pens dropped by 25.65 percent compared to production of same quarter last year. Production from llocos Norte and La Union recorded decreases of 38.96 percent and 16.67 percent, respectively. In llocos Norte, there was shifting of tilapia to milkfish culture due to high water salinity forcing operators to untimely harvest of their stocks. In La Union, it was reported that there was insufficient supply of fingerlings, and harvests were smaller than the marketable size. However, harvests in Cagayan and llocos Sur rose by 13.40 percent and 7.86 percent, respectively. It was noted that there were additional areas in Buguey and Sta. Ana, Cagayan and that some fish cage operators resumed their operations.

Harvests from small farm reservoirs (SFRs) slipped by 29.83 percent. This was mainly attributed to El Niño that forced operators to harvest stocks outside their usual schedule.

## Tiger Prawn



Production of tiger prawn in the third quarter of 2010 was estimated at $10,231.58$ metric tons or 5.05 percent lower than the previous year's level (Table 7). There was a 33.94 percent decrease in production in Zamboanga Sibugay due to high mortality rate of post larvae which were affected by luminous bacteria. Consequently, operators temporarily shifted from tiger prawn to tilapia culture. In Lanao del Norte, the 2.98 percent decrease was the result of reduced area harvested and high cost of inputs in the municipalities of Kapatagan and Lala.

On the other hand, there were output increases of 6.91 percent and 5.13 percent in Misamis Occidental and Zamboanga del Sur, respectively. Reports indicated increased stocking density, improved and proper pond management and high survival rate.


In the third quarter of 2010, mud crab production of 2,970 .18 metric tons was 13.29 percent higher than the previous year's level of $2,621.71$ metric tons (Table 7). Of the top five (5) producing provinces, only Pampanga suffered a cut in harvests which was estimated at 3.20 percent. This was attributed to the slow growth of mud crab due to long hot season which made operators to opt for delaying their harvesting.

The output increases in Lanao del Norte, Misamis Occidental, Sorsogon and Northern Samar were results of increased stocking density because of good market demand and quality crablets. Together, the other producing provinces registered a 23.44 percent gain due to better pond management which resulted in big sizes of mud crab harvested.

## CARP

Production of carps was 9.28 percent below last year's level. The volume of carps harvested from fish pens and fish cages in the top producing provinces of Rizal, Laguna and Metro Manila
 were reduced during the third quarter of 2010. In Rizal, most stocks had not reached their marketable sizes and the demand was low due to their "gilik" taste. Typhoon Basyang's strong winds damaged some pens and cages in Rizal and Metro Manila that resulted in loss of stocks. Laguna operators, on the other hand, deferred harvesting from third to fourth quarter as the market price of carps went down. They said they needed to recover yet from losses incurred during the second quarter of this year.

In the small farm reservoirs of Cagayan and Isabela, smaller sizes of carps were harvested due to low water level brought about by El Niño. Similarly, lower volume of carps was harvested in the rice fish paddies of Pangasinan.

Only freshwater fishpond production grew and during the reference period there was 6.51 percent increase. The producing province of Lanao del Norte had good pond water level and salinity. Nueva Ecija's 150 percent production increase was solely accounted for by natural entry carps.

Other producing provinces of carps from fishponds reported output declines due to poor growth of carps caused by limited feeds and poor quality of fingerlings used. Moreover, there were ponds that had low water level. As for other provinces producing carps from fish pens and fish cages, there was less or zero production due to fish kill caused by oxygen depletion (Table 7).


Catfish production came mostly from freshwater fishponds. Total volume of catfish harvested during the third quarter of 2010 was 524.61 metric tons or 13.54 percent lower than that of the same quarter last year (Table 7).

Iloilo registered a 10.71 percent drop in production as a result of dry spell and unavailability of fingerlings. Production in Davao City went down by 16.81 percent due to low survival rates because of inbreed fingerlings used and scarcity of catfish fingerlings. Consequently, some catfish operators shifted to breeding hatchery operations. In Bulacan, insufficient water caused by low water elevation in Angat Dam pulled
production down by 24.19 percent. The decline of 2.86 percent in Camarines Sur was the result of hot weather during the second quarter causing some operators to harvest their produce early without reaching the marketable size. On the other hand, the output in Maguindanao grew by 7.94 percent due to stable peace and order situation and big sizes of catfish harvested.

## Seaweeds

Seaweed production was higher by 2.36 percent than last year's record. Among the factors that contributed to this performance was the increase in area harvested in Zamboanga Sibugay as quality planting materials were made available and favorable weather conditions encouraged the growth of seaweeds during the quarter. Higher buying price offered by traders coupled with increased demand from processors led farmers in Bohol and Palawan to expand their areas planted to seaweed.

On the other hand, the drop in production of seaweed in Tawi-Tawi and Sulu was due to ice-ice disease caused by sudden change of temperature (Table 8).


## Oyster



The uptrend in oyster production continued with a 9.35 percent gain this period. In Capiz, which is the biggest producer, farmers were persuaded by BFAR and LGU to shift to the hanging method of oyster culture. This method allowed producers to harvest more oysters. Zamboanga Sibugay recorded a 451.00 percent increase in oyster production. More farmers ventured into oyster farming due to availability of quality spats, favorable weather conditions and lesser disturbances in the culture areas for oyster. Full grown and bigger sizes of oysters were harvested during the quarter in La Union, where a 1.42 percent increase in oyster was reported.

On the contrary, oyster production in Bohol and Bulacan went down by 12.38 percent and 12.04 percent, respectively. Some areas in Talibon (Bohol) were under rehabilitation. In Bulacan, the output decrease was due to the poor growth that resulted in small sizes of oysters harvested (Table 8).


#### Abstract

Mussel

Mussel production grew by 2.57 percent from last year's level. The increasing demand and presence of local buyers encouraged the expansion in mussel production in Capiz and Samar. Negros Occidental recorded a significant 82.92 percent production increase. More farmers ventured into mussel farming due to good water salinity and quality spats that produced larger sizes of mussels harvested during the quarter. The 65.72 percent decline of production in Cavite, was the effect of typhoon Basyang as several stakes of mussels were washed out. On the other hand, the poor growth of mussel in Bataan was caused by the depletion of old seedlings due to pollution that resulted in lower production (Table 8).




Fish Prices




Average prices of the six (6) selected fish species generally went down this third quarter of 2010 from their 2009 same quarter prices. At the producer level, bigger price cuts of 7.18 percent and 4.64 percent were observed in milkfish and frigate tuna, respectively. Average price of tilapia was down by 2.64 percent while that of tiger prawn had the smallest decline of 0.68 percent. Only roundscad and indian mackerel posted price gains which corresponded to 3.81 percent and 0.32 percent, respectively.

At the wholesale level, prices of selected fish species also dropped from their 2009 quotations. Bigger price cuts were recorded by indian mackerel at 7.01 percent, tilapia, 5.83 percent and roundscad, at 5.39 percent. Wholesale prices of frigate tuna and milkfish decreased by around two (2) percent compared to their 2009 levels. Again, tiger prawn posted the least wholesale price cut of 0.87 percent among the fish species.

Except for tilapia, the retail prices of the selected fish species also declined by almost the same rates as their wholesale prices. Price of tilapia gained by 1.33 percent.

The producer-retail price margins were wider in tiger prawn at P52 and indian mackerel at P40. Those of milkfish, roundscad and frigate tuna were in the P30 range. The narrowest margin was seen in prices of tilapia at P18.


Table 1. Fisheries: Volume of Fish Production by Sub-Sector, by Region, Philippines, July - September 2009-2010 ${ }^{\text {P }}$

| Region/ <br> Sub-Sector | Fisheries |  | \% <br> Change 10/09 | Commercial |  | \% Change 10/09 | Municipal |  | \% <br> Change <br> 10/09 | Aquaculture |  | $\begin{gathered} \% \\ \text { Change } \\ \text { 10/09 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 |  | 2009 | 2010 |  | 2009 | 2010 |  | 2009 | 2010 |  |
| PHILIPPINES | 1,075,885.57 | 1,113,355.37 | 3.48 | 268,194.96 | 285,582.97 | 6.48 | 310,989.39 | 327,546.41 | 5.32 | 496,701.22 | 500,225.99 | 0.71 |
| NCR | 16,840.31 | 26,442.91 | 57.02 | 14,236.65 | 23,974.24 | 68.40 | 1,368.28 | 1,676.48 | 22.52 | 1,235.38 | 792.19 | (35.87) |
| CAR | 812.26 | 706.67 | (13.00) |  |  |  | 218.30 | 212.67 | (2.58) | 593.96 | 494.00 | (16.83) |
| 1 | 21,562.88 | 22,836.40 | 5.91 | 1,162.84 | 1,281.20 | 10.18 | 9,346.48 | 8,521.61 | (8.83) | 11,053.56 | 13,033.59 | 17.91 |
| 11 | 16,070.82 | 14,187.71 | (11.72) | 3,918.83 | 4,152.91 | 5.97 | 7,606.63 | 7,546.36 | (0.79) | 4,545.36 | 2,488.44 | (45.25) |
| III | 40,822.63 | 39,840.27 | (2.41) | 1,095.55 | 831.51 | (24.10) | 9,371.51 | 9,962.48 | 6.31 | 30,355.57 | 29,046.28 | (4.31) |
| IV-A | 132,174.01 | 121,072.00 | (8.40) | 19,224.64 | 18,563.62 | (3.44) | 34,974.77 | 37,700.57 | 7.79 | 77,974.60 | 64,807.81 | (16.89) |
| IV-B | 97,270.97 | 103,129.72 | 6.02 | 11,193.62 | 11,591.23 | 3.55 | 43,374.05 | 45,424.78 | 4.73 | 42,703.30 | 46,113.71 | 7.99 |
| V | 67,165.75 | 70,300.64 | 4.67 | 16,236.04 | 16,499.55 | 1.62 | 32,836.17 | 34,346.40 | 4.60 | 18,093.54 | 19,454.69 | 7.52 |
| VI | 105,035.36 | 112,196.96 | 6.82 | 25,237.76 | 25,547.59 | 1.23 | 37,025.52 | 41,080.92 | 10.95 | 42,772.08 | 45,568.45 | 6.54 |
| VII | 49,626.09 | 52,394.56 | 5.58 | 9,015.77 | 9,372.86 | 3.96 | 11,817.72 | 11,733.03 | (0.72) | 28,792.60 | 31,288.67 | 8.67 |
| VIII | 50,706.96 | 49,141.81 | (3.09) | 13,807.67 | 12,774.51 | (7.48) | 23,915.19 | 25,192.33 | 5.34 | 12,984.10 | 11,174.97 | (13.93) |
| IX | 164,727.77 | 184,928.26 | 12.26 | 79,486.75 | 84,228.36 | 5.97 | 28,682.51 | 30,463.26 | 6.21 | 56,558.51 | 70,236.64 | 24.18 |
| X | 43,702.56 | 44,313.06 | 1.40 | 10,783.17 | 10,221.76 | (5.21) | 10,661.97 | 11,256.83 | 5.58 | 22,257.42 | 22,834.47 | 2.59 |
| XI | 14,578.28 | 15,663.03 | 7.44 | 2,475.24 | 2,700.04 | 9.08 | 6,413.87 | 7,075.05 | 10.31 | 5,689.17 | 5,887.94 | 3.49 |
| XII | 56,433.90 | 57,334.78 | 1.60 | 39,629.72 | 41,493.19 | 4.70 | 11,705.15 | 11,127.15 | (4.94) | 5,099.03 | 4,714.44 | (7.54) |
| Caraga | 25,479.54 | 25,751.84 | 1.07 | 1,620.65 | 2,009.12 | 23.97 | 16,555.01 | 17,335.93 | 4.72 | 7,303.88 | 6,406.79 | (12.28) |
| ARMM | 172,875.48 | 173,114.77 | 0.14 | 19,070.06 | 20,341.28 | 6.67 | 25,116.26 | 26,890.56 | 7.06 | 128,689.16 | 125,882.93 | (2.18) |

P - Preliminary
Table 2. Commercial Fisheries: Volume of Fish Unloading by Region, by Type of Landing Center, Philippines, July - September 2009-2010 ${ }^{\text {P }}$

P-Preliminary
Table 3. Municipal Fish Production by Region, Philippines, July - September 2009-2010 ${ }^{\text {P }}$


[^0]Table 4. Aquaculture Production by Type of Aquafarm, by Environment and by Region, July - September 2009-2010 ${ }^{\mathrm{P}}$


Table 5. Aquaculture: Milkfish Production of Top Producing Provinces by Culture Environment and Type of Aquafarm, Philippines, July - September 2009-2010 ${ }^{\text {P }}$
(Metric Tons)

| Culture Environment/ <br> Type of Aquafarm/Province | 2009 | 2010 | $\begin{gathered} \text { \% Change } \\ 10 / 09 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| PHILIPPINES | 96,320.11 | 97,043.59 | 0.75 |
| Brackishwater Fishpond | 65,659.89 | 67,516.85 | 2.83 |
| Capiz | 9,118.13 | 9,843.93 | 7.96 |
| Bulacan | 8,740.70 | 8,100.88 | (7.32) |
| lloilo | 8,315.94 | 8,100.00 | (2.60) |
| Negros Occidental | 7,116.51 | 6,345.10 | (10.84) |
| Pangasinan | 4,023.52 | 4,600.09 | 14.33 |
| Pampanga | 3,814.16 | 3,563.95 | (6.56) |
| Other Provinces | 24,530.94 | 26,962.90 | 9.91 |
| Brackishwater Fish pen | 494.59 | 151.08 | (69.45) |
| La Union | 103.68 | 136.06 | 31.23 |
| Agusan del Norte | 0.25 | 5.53 | 2110.00 |
| Other Provinces | 390.66 | 9.49 | (97.57) |
| Brackishwater Fish cage | 781.95 | 135.28 | (82.70) |
| Agusan del Norte | 487.53 | 88.97 | (81.75) |
| La Union | 10.00 | 16.00 | 60.00 |
| Davao del Norte | 20.86 | 11.79 | (43.46) |
| Other Provinces | 263.56 | 18.51 | (92.98) |
| Freshwater Fish pen | 6,219.96 | 5,493.57 | (11.68) |
| Rizal | 4,241.24 | 3,840.87 | (9.44) |
| Sultan Kudarat | 771.97 | 796.91 | 3.23 |
| NCR | 852.22 | 500.17 | (41.31) |
| Other Provinces | 354.53 | 355.62 | 0.31 |
| Freshwater Fish cage | 11,684.72 | 10,887.11 | (6.83) |
| Batangas | 11,665.43 | 10,866.35 | (6.85) |
| Other Provinces | 19.28 | 20.76 | 7.66 |
| Marine Fish pen | 2,547.65 | 3,230.84 | 26.82 |
| Pangasinan | 1,499.87 | 2,372.94 | 58.21 |
| Davao del Sur | 566.14 | 590.88 | 4.37 |
| Negros Occidental | 46.22 | 74.45 | 61.06 |
| Other Provinces | 435.42 | 192.56 | (55.78) |
| Marine Fish cage | 8,931.35 | 9,628.87 | 7.81 |
| Pangasinan | 3,499.22 | 4,481.10 | 28.06 |
| Davao del Sur | 1,821.75 | 1,824.66 | 0.16 |
| Western Samar | 1,234.00 | 1,100.00 | (10.86) |
| Other Provinces | 2,376.38 | 2,223.11 | (6.45) |

[^1]Table 6. Aquaculture: Tilapia Production of Top Producing Provinces, by Culture Environment and Type of Aquafarm, Philippines,

July - September 2009-2010 ${ }^{\text {P }}$
(Metric Tons)

| Culture Environment/ <br> Type of Aquafarm/Province | 2009 | 2010 | $\begin{gathered} \text { \% Change } \\ 10 / 09 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| PHILIPPINES | 51,575.74 | 46,285.97 | (10.26) |
| Brackishwater Fishpond | 2,190.79 | 2,241.70 | 2.32 |
| Cagayan | 617.82 | 600.59 | (2.79) |
| Pampanga | 420.69 | 412.57 | (1.93) |
| Zamboanga del Sur | 161.58 | 169.52 | 4.91 |
| Zamboanga Sibugay | 88.68 | 156.12 | 76.06 |
| Negros Occidental | 152.93 | 148.41 | (2.96) |
| Other Provinces | 749.08 | 754.50 | 0.72 |
| Brackishwater Fishcage/fishpen | 42.02 | 31.24 | (25.65) |
| Cagayan | 14.52 | 16.46 | 13.40 |
| llocos Norte | 16.35 | 9.98 | (38.96) |
| La Union | 5.45 | 4.55 | (16.67) |
| llocos Sur | 0.24 | 0.26 | 7.86 |
| Other provinces | 5.46 |  |  |
| Freshwater Fishpond** | 15,388.78 | 13,012.61 | (15.44) |
| Pampanga | 7,256.43 | 6,903.04 | (4.87) |
| Nueva Ecija | 1,263.70 | 1,045.79 | (17.24) |
| Camarines Sur | 472.54 | 478.87 | 1.34 |
| Tarlac | 572.43 | 460.52 | (19.55) |
| Bulacan | 692.88 | 435.13 | (37.20) |
| Other Provinces | 5,130.80 | 3,689.25 | (28.10) |
| Freshwater Fish cage | 27,685.83 | 25,053.69 | (9.51) |
| Batangas | 20,962.09 | 18,876.36 | (9.95) |
| Laguna | 2,354.99 | 2,330.97 | (1.02) |
| Camarines Sur | 2,070.60 | 1,984.04 | (4.18) |
| Rizal | 1,125.02 | 1,019.49 | (9.38) |
| South Cotobato | 248.22 | 207.27 | (16.50) |
| Other Provinces | 924.92 | 635.56 | (31.28) |
| Freshwater Fish pen | 6,236.63 | 5,924.48 | (5.01) |
| Rizal | 3,695.07 | 3,350.69 | (9.32) |
| Maguindanao | 1,352.45 | 1,373.14 | 1.53 |
| Sultan Kudarat | 1,000.23 | 1,021.93 | 2.17 |
| Laguna | 181.95 | 171.82 | (5.57) |
| Other Provinces | 6.93 | 6.89 | (0.53) |
| Small Farm Reservoir | 31.70 | 22.24 | (29.83) |
| Quirino | 10.50 | 10.50 |  |
| Cagayan | 5.37 | 3.87 | (28.00) |
| Isabela | 9.43 | 2.90 | (69.23) |
| Bohol | 2.09 | 1.90 | (9.10) |
| North Cotabato | 1.83 | 1.83 |  |
| Other Provinces | 2.48 | 1.25 | (49.59) |

P - Preliminary

Table 7. Aquaculture: Tiger Prawn, Mud Crab, Carp and Catfish Production of Top Producing Provinces by Culture Environment and Type of Aquafarm, Philippines, July - September 2009-2010
(Metric Tons)

| Species/Province | 2009 | 2010 | \% Change 10/09 |
| :---: | :---: | :---: | :---: |
| TIGER PRAWN | 10,776.26 | 10,231.58 | (5.05) |
| Brackishwater Fishpond |  |  |  |
| Lanao del Norte | 4,158.05 | 4,034.14 | (2.98) |
| Pampanga | 2,993.67 | 2,867.34 | (4.22) |
| Zamboanga del Sur | 596.10 | 626.68 | 5.13 |
| Misamis Occidental | 543.25 | 580.79 | 6.91 |
| Zamboanga Sibugay | 516.78 | 341.39 | (33.94) |
| Other Provinces | 1,968.41 | 1,781.25 | (9.51) |
| MUD CRAB | 2,628.49 | 2,979.28 | 13.35 |
| Brackishwater Fishpond | 2,621.71 | 2,970.18 | 13.29 |
| Pampanga | 1,161.53 | 1,124.36 | (3.20) |
| Lanao del Norte | 667.72 | 883.46 | 32.31 |
| Misamis Occidental | 278.41 | 292.33 | 5.00 |
| Sorsogon | 56.59 | 94.83 | 67.58 |
| Northern Samar | 59.89 | 84.44 | 41.00 |
| Other Provinces | 397.57 | 490.76 | 23.44 |
| Marine Fish Cage | 6.78 | 9.10 | 34.22 |
| Eastern Samar | 6.75 | 9.00 | 33.33 |
| Camiguin | 0.03 | 0.10 | 233.33 |
| CARP | 3,228.57 | 2,928.81 | (9.28) |
| Freshwater Fishpond | 77.59 | 82.64 | 6.51 |
| Lanao del Norte | 62.49 | 66.89 | 7.04 |
| Nueva Ecija | 1.70 | 4.25 | 150.00 |
| Pampanga | 4.03 | 3.72 | (7.66) |
| Other Provinces | 9.37 | 7.78 | (16.96) |
| Freshwater Fish Pen/Cage | 3,149.86 | 2,845.43 | (9.66) |
| Rizal | 2,830.99 | 2,549.67 | (9.94) |
| Laguna | 264.32 | 259.04 | (2.00) |
| Metro Manila | 45.52 | 34.04 | (25.21) |
| Other Provinces | 9.03 | 2.68 | (70.35) |
| Small Farm Reservoir | 0.81 | 0.46 | (43.56) |
| Cagayan | 0.69 | 0.43 | (37.49) |
| Other Provinces | 0.12 | 0.03 | (78.33) |
| Rice Fish | 0.32 | 0.28 | (12.50) |
| Cagayan | 0.32 | 0.28 | (12.50) |
| CATFISH | 606.74 | 524.61 | (13.54) |
| Freshwater Fishpond |  |  |  |
| Iloilo | 112.00 | 100.00 | (10.71) |
| Davao City | 75.80 | 63.06 | (16.81) |
| Maguindanao | 55.17 | 59.55 | 7.94 |
| Bulacan | 77.21 | 58.54 | (24.19) |
| Camarines Sur | 52.69 | 51.18 | (2.86) |
| Other Provinces | 233.86 | 192.28 | (17.78) |

P - Preliminary

Table 8. Aquaculture: Mariculture Production by Species and by Province, Philippines, July - September 2009-2010 ${ }^{\text {P }}$
(Metric Tons)

| Species/Province | 2009 | 2010 | $\begin{gathered} \text { \% Change } \\ 10 / 09 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Seaweed | 322,983.77 | 330,613.44 | 2.36 |
| Tawi-Tawi | 61,265.69 | 58,190.16 | (5.02) |
| Sulu | 47,107.52 | 46,862.56 | (0.52) |
| Palawan | 40,070.89 | 42,291.66 | 5.54 |
| Zamboanga Sibugay | 26,419.14 | 40,236.34 | 52.30 |
| Bohol | 24,406.71 | 26,400.63 | 8.17 |
| Other Provinces | 123,713.82 | 116,632.08 | (5.72) |
| Oyster | 3,282.98 | 3,589.78 | 9.35 |
| Capiz | 2,280.36 | 2,456.18 | 7.71 |
| Zamboanga Sibugay | 30.11 | 165.90 | 451.00 |
| Bulacan | 173.45 | 152.57 | (12.04) |
| Bohol | 167.45 | 146.72 | (12.38) |
| La Union | 136.38 | 138.32 | 1.42 |
| Other Provinces | 495.22 | 530.10 | 7.04 |
| Mussel | 3,183.46 | 3,265.18 | 2.57 |
| Samar | 1,734.99 | 1,839.96 | 6.05 |
| Capiz | 528.76 | 564.61 | 6.78 |
| Negros Occidental | 175.27 | 320.60 | 82.92 |
| Bataan | 317.98 | 300.74 | (5.42) |
| Cavite | 268.11 | 91.91 | (65.72) |
| Other Provinces | 158.34 | 147.35 | (6.94) |

[^2]Table 9. Producer, Wholesale and Retail Prices and Price Margins of Selected Fish Species,

| Species | Producer |  |  |  | Wholesale* |  |  |  | Retail ${ }^{\text {* }}$ |  |  |  | Price Margins |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 | 2009 | 2010 |  | 2008 | 2009 | 2010 |  | 2008 | 2009 | 2010 |  | Producer - Wholesale |  |  | Producer - Retail |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | 2008 | 2009 | 2010 | 2008 | 2009 | 2010 |
| Milkfish | 74.87 | 79.98 | 74.24 | (7.18) | 85.68 | 89.31 | 87.50 | (2.03) | 105.84 | 112.27 | 109.63 | (2.35) | 10.81 | 9.33 | 13.26 | 30.97 | 32.29 | 35.39 |
| Tilapia | 66.34 | 70.92 | 69.05 | (2.64) | 63.00 | 71.93 | 67.46 | (6.21) | 82.89 | 86.40 | 87.57 | 1.35 | (3.34) | 1.01 | (1.59) | 16.55 | 15.48 | 18.52 |
| Tiger Prawn | 377.76 | 362.61 | 360.15 | (0.68) | 353.77 | 360.08 | 356.93 | (0.87) | 404.93 | 412.39 | 412.30 | (0.02) | (23.99) | (2.53) | (3.22) | 27.17 | 49.78 | 52.15 |
| Roundscad | 47.73 | 50.37 | 52.29 | 3.81 | 59.23 | 67.03 | 63.13 | (5.82) | 81.41 | 87.95 | 85.42 | (2.88) | 11.50 | 16.66 | 10.84 | 33.68 | 37.58 | 33.13 |
| Frigate Tuna | 54.09 | 60.35 | 57.55 | (4.64) | 73.76 | 78.21 | 75.99 | (2.84) | 86.77 | 91.59 | 89.56 | (2.22) | 19.67 | 17.86 | 18.44 | 32.68 | 31.24 | 32.01 |
| Indian Mackerel | 58.22 | 59.26 | 59.45 | 0.32 | 75.91 | 87.61 | 81.76 | (6.68) | 99.88 | 107.06 | 100.17 | (6.44) | 17.69 | 28.35 | 22.31 | 41.66 | 47.80 | 40.72 |

* BAS AMSAD data


[^0]:    P - Preliminary

[^1]:    P - Preliminary

[^2]:    P-Preliminary

