REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY
REGION II – CAGAYAN VALLEY

SPECIAL RELEASE

Fish production in the region fell short anew

Date of Release : March 25, 2020
Reference No. : SR-2020-010

The fishing industry in Cagayan Valley has been in perturbed condition owing to the declining pattern of production for the past years. Since 2015, average annual reduction in fisheries production in the region was estimated at about three thousand metric tons or more than five percent decrease per year. The latest estimated production at 45,382 metric tons is 4.6 percent lower than the 2018 total fish production of 47,572 metric tons and almost one third lower than the highest production realized in 2011 at 64,876 metric tons.

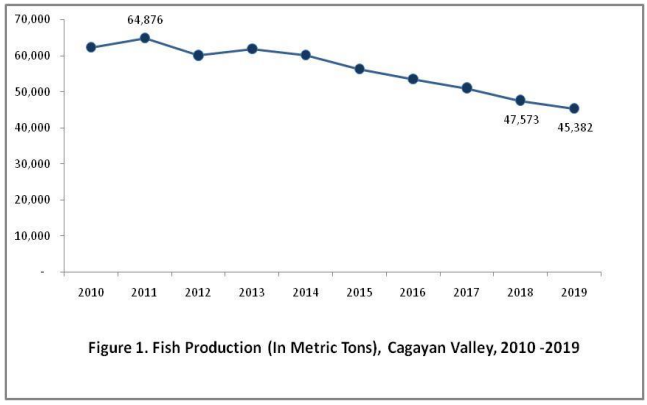


Figure 1. Fish Production (In Metric Tons), Cagayan Valley, 2010 -2019

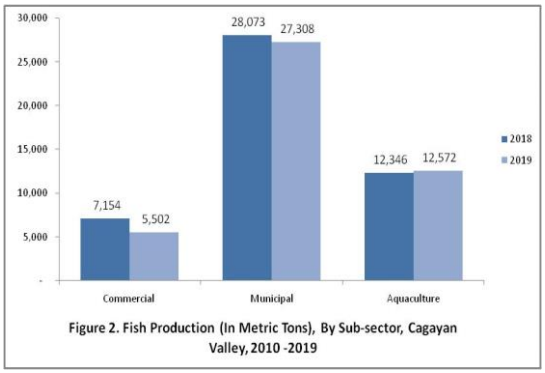


Figure 2. Fish Production (In Metric Tons), By Sub-sector, Cagayan Valley, 2010 -2019

Specifically, *commercial* and *municipal fishing* sub-sectors registered lower output this year viz-a-viz its production a year ago. *Municipal fishing* production which accounted to about 60.2 percent in the total fisheries output in 2019 registered only about 27,308 metric tons, short by 765 metric tons from the 2018 reported estimates of 28,073 metric tons or about 2.7 percent decrease. Withal, *commercial fishing* production in 2019 at 5,502 metric tons is short by 1,652 metric tons or about 23.1 percent less from the 2018 reported production of 7,154 metric tons. This sub-sector moored in about 12.1 percent of the total fisheries production in the region in 2019. On the positive note, *aquaculture* production gained 1.8 percent in its latest output of 12,572 metric tons or about 226 metric tons above the 2018 production estimate of 12,346 metric tons. *Aquaculture* shared 27.7 percent in the total pie of fisheries production last year.

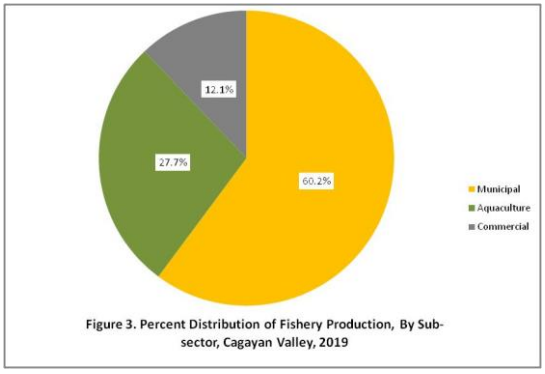


Figure 3. Percent Distribution of Fishery Production, By Sub-sector, Cagayan Valley, 2019

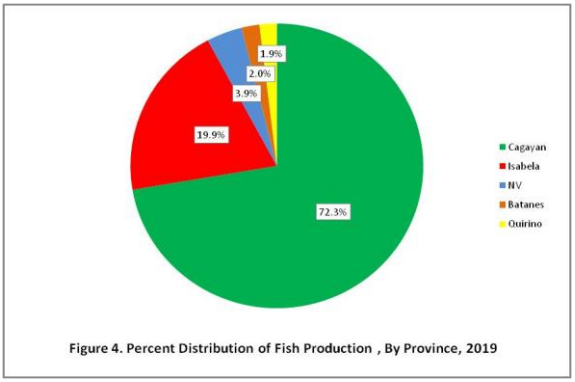


Figure 4. Percent Distribution of Fish Production , By Province, 2019

In terms of the distribution of the volume of fish production across provinces in 2019, Cagayan province contributed almost three fourths of the region's output or about 72.3 percent. Isabela province complemented about twenty percent while Nueva Vizcaya shared about four percent. Batanes and Quirino provinces netted the remaining four percent with about two percent contribution each.

Production in marine fishing grounds pulled down municipal fisheries output

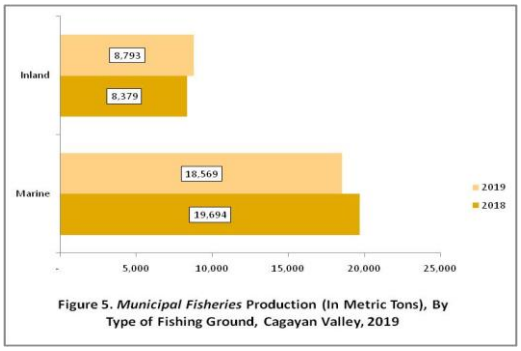


Figure 5. *Municipal Fisheries* Production (In Metric Tons), By Type of Fishing Ground, Cagayan Valley, 2019

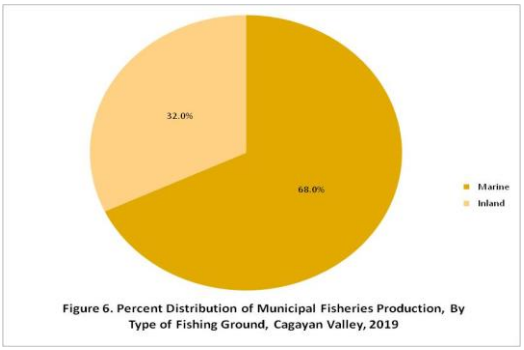


Figure 6. Percent Distribution of Municipal Fisheries Production, By Type of Fishing Ground, Cagayan Valley, 2019

Overall *municipal fisheries* production in 2019 was dictated by the decrement in marine municipal production which is short by 5.7 percent. The 2019 production in the *marine municipal fishing* at 18,569 metric tons is 1,125 metric tons below the 2018 output of 19,694 metric tons. The above presumption is supported by the fact that about 68.0 percent of the total *municipal fisheries* production in 2019 was caught through marine municipal gears. *Inland municipal fisheries* production, on the other hand, while it appreciated by 4.3 percent, was not able to augment the sub-sector's deficit with its increment of only 414 metric tons or from 2018 fish caught in freshwater fishing grounds of 8,379 metric tons to 8,793 metric tons in 2019. Inland municipal fisheries filled-in 32.0 percent in the total *municipal fishing* production in the region.

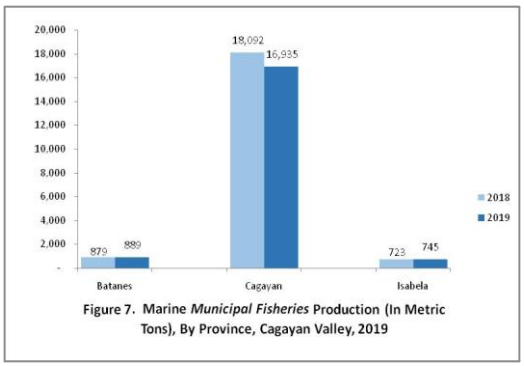
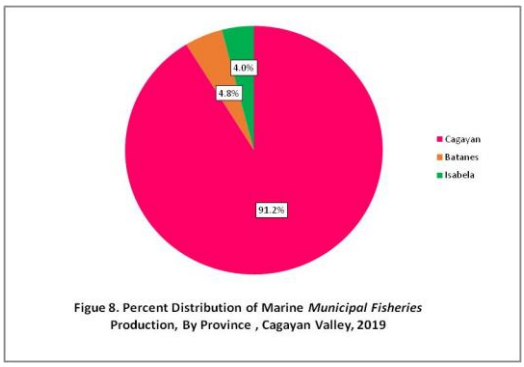


Figure 7. Marine *Municipal Fisheries* Production (In Metric Tons), By Province, Cagayan Valley, 2019



Figue 8. Percent Distribution of Marine *Municipal Fisheries* Production, By Province , Cagayan Valley, 2019

Across provinces, production of *marine municipal fishing* in the province of Cagayan pulled down solely the regions production in marine fishing grounds. The 2019 production of the province slid down by 1,157 metric tons or about 6.4 percent decrease from its 2018 estimated production of 18,092 metric tons. Production along coastal towns of Isabela and the province of Batanes trimmed down the deficit with

its 3.0 and 1.1 percent increase, respectively. Of the total *marine municipal fisheries* production for the year 2019, Cagayan province accounted a whopping 91.0 percent while Batanes and Isabela provinces shared 5.0 and 4.0 percent, respectively.

The dominant species captured during the period were in-season species like frigate tuna, anchovies, hairtail, roundscad and yellow fin tuna contributing almost half of the total output or about 43.0 percent while 56.0 percent comprised all other species caught in the different coastal areas of the region.

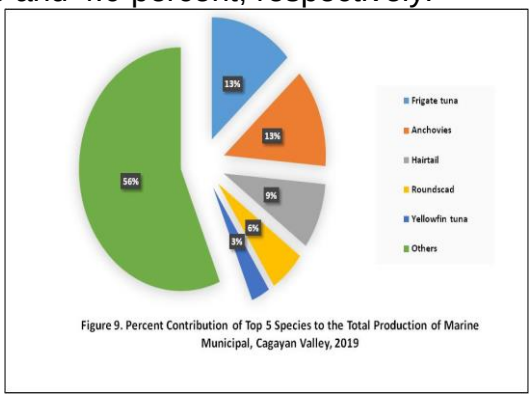


Figure 9. Percent Contribution of Top 5 Species to the Total Production of Marine Municipal, Cagayan Valley, 2019

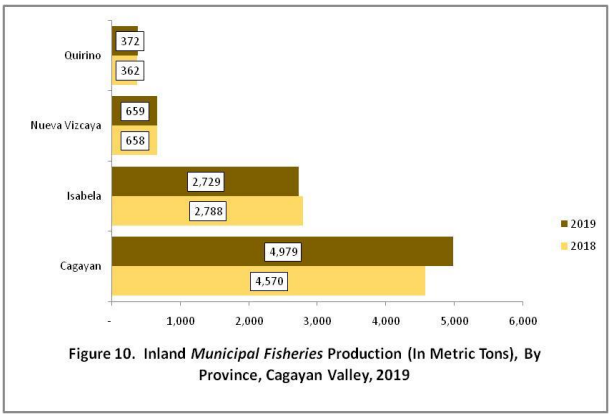
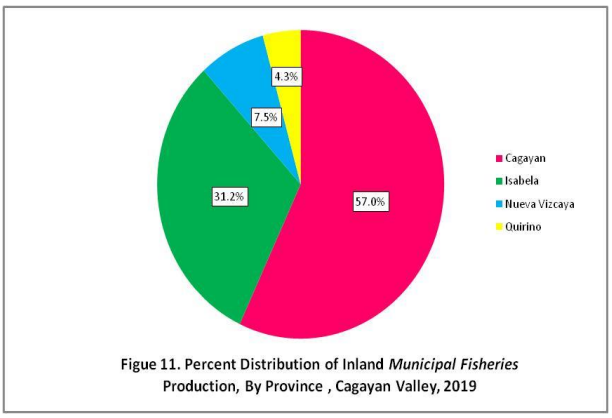


Figure 10. Inland *Municipal Fisheries* Production (In Metric Tons), By Province, Cagayan Valley, 2019



Figue 11. Percent Distribution of Inland *Municipal Fisheries* Production, By Province , Cagayan Valley, 2019

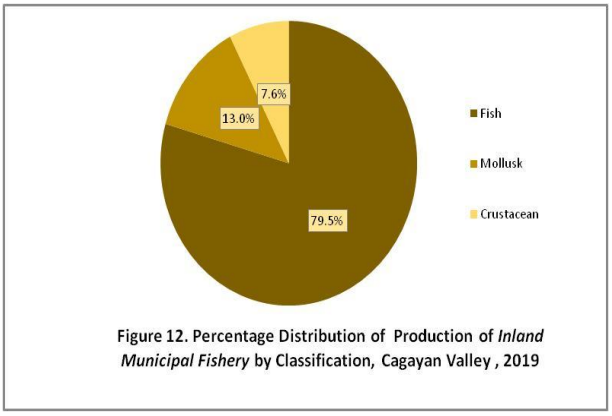


Figure 12. Percentage Distribution of Production of *Inland Municipal Fishery* by Classification, Cagayan Valley , 2019

In terms of production across freshwater fishing grounds (*inland municipal fishing*) in the different provinces of the region, almost all provinces displayed increases in volume of produced in 2019 except in Isabela province which recorded a slight decrease of 2.13 percent. Cagayan province reported the highest increment at almost nine percent while production in Qurino and Nueva Vizcaya nailed its increases at 2.8 and 0.2 percent, respectively. Last year, Cagayan province still dominated *inland municipal fisheries* production in the region with its production of about 4,979 metric tons comprising more than half of the total *inland municipal fisheries* production of the region. Isabela province contributed 31.0 percent while Nueva Vizcaya and Quirino provinces shared about eight percent and four percent, accordingly. As to distribution of volume of production according to inland fishing classification, fish contributed 79.5 percent of the total output, followed by Mollusks sharing 13.0 percent while Crustaceans supplied the remaining 7.6 percent to the total output of 8,739 metric tons. The top five major species captured in the different Communal Bodies of Water (CBW's) throughout the region during the period were tilapia, carp, eel, mudfish and freshwater clams (tulya).

All species caught through commercial fisheries operation down

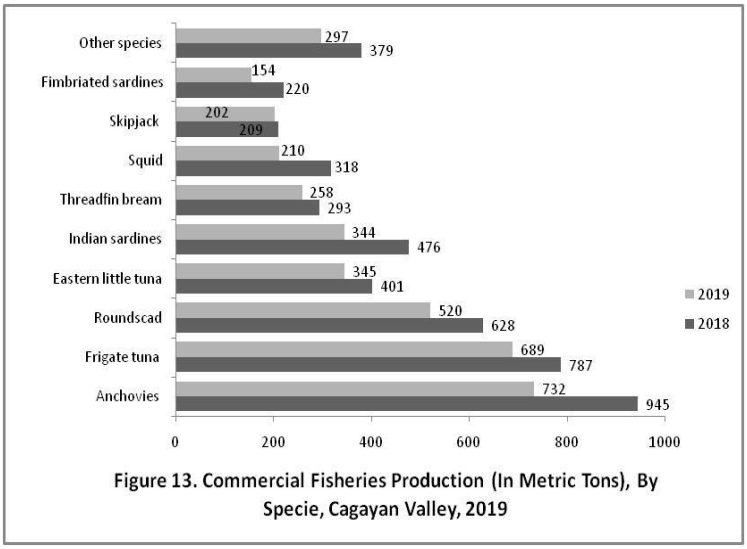


Figure 13. Commercial Fisheries Production (In Metric Tons), By Specie, Cagayan Valley, 2019

Among the three fisheries sub-sectors, *commercial fishing* registered the biggest loss in 2019 estimated at 1,652 metric tons, from 7,154 metric tons in 2018 down to 5,502 metric tons this year owing to closure of two commercial landing centers in the region. As a result, production of all the sixteen identified species caught in commercial fishing operations declined in 2019 compared to its 2018 levels. Specifically, anchovies production which shares almost one fifth or 19.5 percent in the total *commercial fisheries* production in the region fell short by 22.6 percent or from its 2018 production of 945 metric tons to only 732 metric tons in 2019. Similarly, frigate tuna caught through commercial fishing operations was only registered at 689 metric tons last year, down by 12.4 percent from the 2018 production of 787 metric tons. The specie occupied 18.4 percent in the commercial fisheries production in 2019. Roundscad, eastern little tuna, Indian sardines and threadfin bream production with a combined share of about 39.2 percent in the *commercial fisheries* production pie also went down by 17.3, 14.1, 27.7 and 12.2 percent, respectively. Squid production registered the highest percentage loss at 33.9 percent while skipjack production was noted as the lowest in terms percentage deficit at 3.4 percent. Both species contributed 11.0 percent in the total *commercial fisheries* production in the region. Fimbriated sardines also registered a 30.1 percent deficit in production while other species flipped down by 21.5 percent. Other species with about 7.9 percent share includes indo-pacific mackerel, crevalle, Indian mackerel, big eyed tuna, grouper and blue crab.

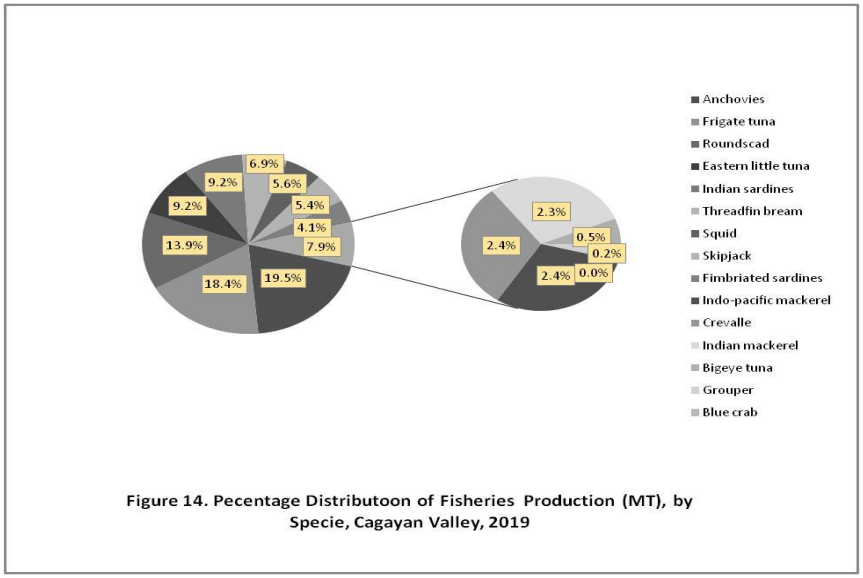


Figure 14. Pecentage Distributoon of Fisheries Production (MT), by Specie, Cagayan Valley, 2019

Due its topography and proximity to bodies of marine waters, Cagayan is the only province that operates commercial fishing in the region.

Fishponds output raised aquaculture production in 2019.

Production from *aquaculture* in the region, as pointed out earlier, exhibited a slight increase of 1.8 percent in 2019 or from a production volume of 12,346 metric tons in 2018 to 12,572 metric tons this year. Aquafarm types that performed this year are brackish water fishpond (1.7 percent), freshwater fishpond (2.5 percent), oyster farms (3.8 percent) and small farm reservoir (14.2 percent). On the downward side are brackish water ponds, brackish water cages and seaweed farms that posted negative outputs of less than one percent, 11.5 percent and 16.3 percent, respectively. By culture environment, freshwater fishpond owners produced more than half of the *aquaculture* production in Cagayan Valley in 2019. This was followed by the production from brackish water fishponds contributing 32.9 percent to total *aquaculture* output. Oyster farms and freshwater cages added six percent and two percent, respectively while the rest aquaculture types complete the remaining two percent.

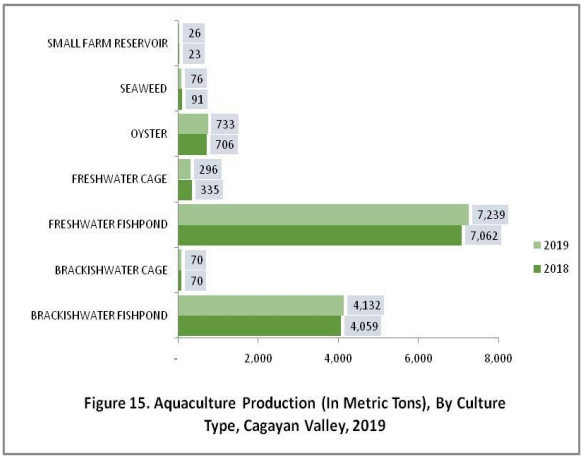


Figure 15. Aquaculture Production (In Metric Tons), By Culture Type, Cagayan Valley, 2019

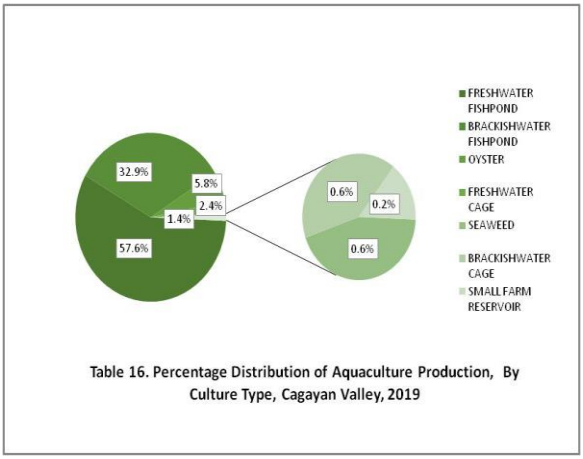


Table 16. Percentage Distribution of Aquaculture Production, By Culture Type, Cagayan Valley, 2019

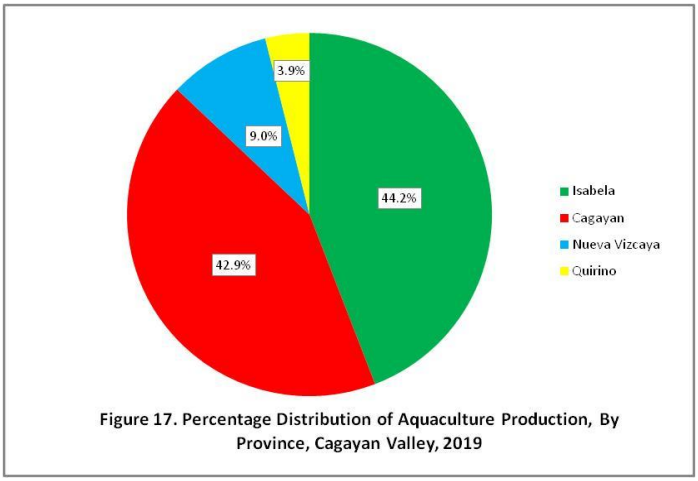


Figure 17. Percentage Distribution of Aquaculture Production, By Province, Cagayan Valley, 2019

Across provinces, Isabela and Cagayan provinces had almost identical share of *aquaculture* production in the region at 44.2 percent and 42.9 percent, respectively. In Isabela, bulk of produced came from freshwater fishponds while brackish water farm owners in Cagayan contributed the bulk of its output. Nueva Vizcaya ranked third in percentage contribution cornering nine percent of the region's total *aquaculture* production while Quirino province complemented the remaining two percent.

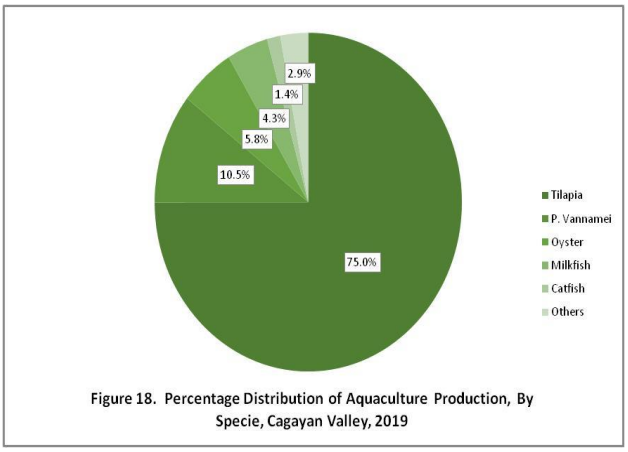


Figure 18. Percentage Distribution of Aquaculture Production, By Specie, Cagayan Valley, 2019

Majority aquafarms in Cagayan Valley raised tilapia specie as it comprised 75.0 percent of the total output in the region in 2019 and cultured in fresh and brackish water ponds and cages. P. Vannamei specie production contributed 10.5 percent while oyster and milkfish added 5.8 percent and 4.3 percent to the total output. The rest of the common species cultured complemented the remaining 4.3 percent to the total output of *aquaculture* in the region last year

MARILYN T. ESTRADA
Regional Director

//GMB/JCB

TECHNICAL NOTES

- The Fisheries Production Survey of the Philippine Statistics Authority (PSA) is divided into four (4) major fisheries surveys. These are the Quarterly Commercial Fisheries Survey (QCFS), Quarterly Municipal Fisheries Survey (QMFS), Quarterly Inland Fisheries Survey (QIFS) and Quarterly Aquaculture Survey (QAqS). The commercial and municipal fisheries surveys aim to provide quarterly data on volume and value of fish production by species, by region and by province. The aquaculture surveys are intended to generate quarterly data on volume and value of cultured species by environment, by type of aquafarm, by region and by province.

- The survey on commercial fisheries production covered 57 provinces and cities. For municipal fisheries and aquaculture surveys 81 provinces and cities were covered.

- The sampling frames for the surveys of commercial and municipal fisheries were established in 2000 through a nationwide listing of landing centers (LCs). Updating of the lists was conducted over the years. The design used was a two-stage stratified random sampling with the landing centers as the first-stage sampling units and the fishing boats as the second stage sampling units.

- The landing centers were stratified based on volume of fish unloaded. The province was the domain of the survey. Inland municipal fisheries included fishing in inland waters such as lakes, rivers, dams, marshes, swamps, etc. Household engaged in inland fishing was the unit of enumeration.

- For aquaculture survey, the lists of brackishwater fishponds, freshwater fishponds, freshwater fish pens/fish cages, marine fish pens/fish cages, oyster/mussel and seaweed farms by province served as the sampling frames. Updating of list frames for aquaculture was done simultaneously with the landing center during the previous years.