



REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY
 BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO

SPECIAL RELEASE

Aquaculture Production in ARMM (4th Quarter of 2018)

Date of Release : 02 May 2019

Reference No. : 2018-018

Aquaculture production in ARMM increased by 5.3 percent in the fourth quarter of 2018

In the fourth quarter of 2018, ARMM was considered as the largest producer of aquaculture in Mindanao with a share of 74.2 percent. The volume of aquaculture production in the region increased by 5.3 percent in the fourth quarter of 2018 (Q4 2018) with a total of 198,986.22 metric tons (MT) from 189,010.88 MT in the same period of the previous year.

Production of seaweed recorded the greatest contribution with almost 100.0 percent of the region's whole aquaculture production in Q4 2018. It increased by 4.5 percent with a total of 190,718.79 MT from 182,565.63 MT in Q4 2017. On the other hand, production of marine pen recorded the lowest with a total of 0.3 MT in Q4 2018.

Table 1. Volume of Production of Aquaculture in ARMM, by Aquafarm and by Species: Q4 2017 – Q4 2018 (in MT)

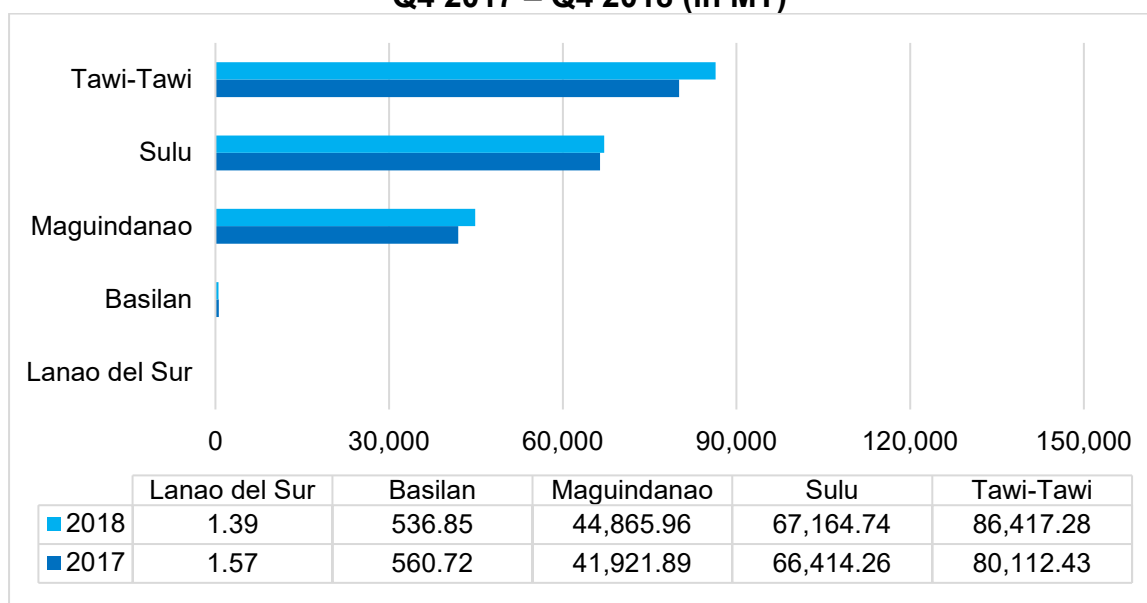
Species	Production (in MT)	
	2017	2018
BRACKISHWATER FISHPOND	2,186.25	2,182.70
BF - Milkfish	1,993.54	1,987.21
BF - Tilapia	23.43	23.46
BF - Tiger prawn	36.53	37.55
BF - Mudcrab	79.38	80.33
BF - White shrimp	53.37	54.16
FRESHWATER FISHPOND	60.81	62.71
FF - Milkfish	..	0.02
FF - Tilapia	19.90	20.69
FF - Catfish	40.92	41.99
FRESHWATER PEN	4,167.35	5,979.74
FP - Milkfish	729.02	870.89
FP - Tilapia	3,438.33	5,108.85
FRESHWATER CAGE	30.84	42.24
FC - Milkfish	11.56	14.41
FC - Tilapia	19.28	27.83
MARINE PEN	..	0.03
MP - Others	..	0.03

SEAWEED	182,565.63	190,718.79
Total	189,010.88	198,986.22

Source: Philippine Statistics Authority

Among the provinces of ARMM, Tawi-Tawi has the largest share of aquaculture production in Q4 2018 with a total production of 86,417.28 MT which is 43.4 percent of the aquaculture production of the region. The volume of aquaculture production in the said province increased by 7.9 percent from 80,122.43 MT in Q4 2017. On the other hand, Lanao del Sur the least contribution with 1.39 MT total production.

**Figure 1. Volume of Aquaculture Production in ARMM, by Province:
Q4 2017 – Q4 2018 (in MT)**



Source: Philippine Statistics Authority

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 designed used was a two-stage stratified random sampling with the landing centers as the first-stage sampling units and 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 brackish water 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.

Concepts and Definition:

Aquaculture - fishery operation involving all forms of raising and culturing of fish and other fishery species in marine, brackish and fresh water environment. Examples are fishponds, fish pens, fish cages, mussel, oyster, seaweed farms and hatcheries.

Aquafarm - the farming facilities used in the culture or propagation of aquatic species including fish, mollusk, crustaceans and aquatic plants for purposes of rearing to enhance production.

Brackish water – is a mixture of seawater and freshwater with salinity that varies with the tide. Examples are estuaries, mangroves and mouths of rivers where seawater enters during high tide.

Commercial fishing – is the catching of fish with the use of fishing boats with a capacity of more than three gross tons for trade, business or profit beyond subsistence or sports fishing.

Fisheries - all activities relating to the act or business of fishing, culturing, preserving, processing, marketing, developing, conserving and managing aquatic resources and the fishery areas including the privilege to fish or take aquatic resources thereof (RA 8550).

Fisheries Sector - the sector engaged in the production, growing, harvesting, processing, marketing, developing, conserving and managing of aquatic resources and fishery areas.

Fish Cage - stationary or floating fish enclosure made of synthetic net wire/bamboo screen or other materials set in the form of inverted mosquito net ("happa" type) with or without cover with all sides either tied to poles stacked to the water bottom or with anchored floats for aquaculture purposes.

Fishing Gear - any instrument or device and its accessories utilized in taking fish and other fishery species.

Fishing Grounds - areas in any body of water where fish and other aquatic resources congregate and become target of capture.

Fish Pen - an artificial enclosure constructed within a body of water for culturing fish and fishery/ aquatic resources made up of bamboo poles closely arranged in an enclosure with wooden materials, screen or nylon netting to prevent escape of fish.

Fishpond - a body of water (artificial or natural) where fish and other aquatic products are cultured, raised or cultivated under controlled conditions. This is land-based type of aquafarm. Note that the setting-up of fish cages in ponds does not make the operation of fish cage and at the same time a fishpond.

Freshwater – is water without salt or marine origin, such as generally found in lakes, rivers, canals, dams, reservoirs, paddy fields and swamps.

Landing Center - place where the fish catch and other aquatic products are unloaded and traded.

Inland Municipal Fishing - the catching of fish, crustaceans, mollusks and all other aquatic animals and plants in inland water like lakes, rivers, dams, marshes, etc. using simple gears and fishing boats some of which are non-motorized with a capacity of three gross tons or less; or fishing not requiring the use of fishing boats.

Municipal Fishing - covers fishing operation carried out with or without the use of a boat weighing three gross tons or less.



RAZULDEN A. MANSELEN, MPA, MDM
OIC-Regional Director

MHS/FSL/NCC