

AGRICULTURAL INDICATORS SYSTEM (AIS)

# OUTPUT AND PRODUCTIVITY

REPORT No. 2017-1



Republic of the Philippines  
Philippine Statistics Authority

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## FOREWORD

The Agricultural Indicators System (AIS) is one of the statistical indicator frameworks maintained by the Philippine Statistics Authority (PSA). AIS has twelve (12) modules which are updated and released annually. This is the first module entitled Output and Productivity. It provides information on productivity of the different components of agricultural sector such as crops, livestock and poultry and fisheries. The reference years are 2012 to 2016.

The AIS hopes to cover more agricultural development indicators to support the information needs of our data users. We encourage the readers to give their comments and suggestions on the improvement of the AIS, in general, and this report, in particular.



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## TABLE OF CONTENTS

<b>FOREWORD</b>	i
<b>LIST OF TABLES</b>	iii
<b>OUTPUT AND PRODUCTIVITY</b>	
Table 1a. Indices of area harvested of agricultural crops, Philippines, 2012-2016	6
Table 1b. Growth rates in area harvested of agricultural crops, Philippines, 2012-2016	7
Table 2a. Indices of production of agricultural crops, Philippines, 2012-2016	8
Table 2b. Growth rates in production of agricultural crops, Philippines, 2012-2016	9
Table 3a. Yield indices of agricultural crops, Philippines, 2012-2016	10
Table 3b. Growth rates in yield of agricultural crops, Philippines, 2012-2016	11
Table 4a. Indices of volume of livestock and poultry production, Philippines, 2012-2016	12
Table 4b. Growth rates in volume of livestock and poultry production, Philippines, 2012-2016	13
Table 5a. Indices of volume of fish production by subsector, Philippines, 2012-2016	14
Table 5b. Growth rates in volume of fish production by subsector, Philippines, 2012-2016	15

OUTPUT  
AND PRODUCTIVITY



## Crops

The performance of the crops industry can be monitored by looking at the changes in area, production and yield through the use of indices and growth rates. Indices of area harvested can indicate among others, the probable shift in the utilization of the country's arable land. Production indices measure the trends of increases/decreases in the volume of crop production. Yield indices indicate the productivity changes through the years compared with that of a given year.

## Area

In 2016, the country's harvested area of agricultural crops totalled 13.09 million hectares. This area was 5.66 percentage points higher than the 12.39 million hectares recorded in 2006. By crop, palay area in 2016 increased to 4.56 million hectares by 9.52 percentage points from the base year area of 4.16 million hectares. Corn area was reduced to 2.48 million hectares in 2016 which was 3.35 percentage points lower than the 2006 area of 2.57 million hectares. There was a 6.82 percentage point increment in coconut area, from 2006's 3.34 million hectares to 3.57 million hectares in 2016. Likewise, sugarcane had an area increase of 4.54 percentage points to 0.41 million hectares in 2016 from the base year's area of 0.39 million hectares. For the other major crops, rubber exhibited the biggest expansion in harvested area at 136.66 percentage points. Larger area expansions in 2016 were also noted for onion at 53.84 percentage points, pineapple at 30.94 percentage points and tobacco at 23.47 percentage points. Below the base year areas were continuously reported in coffee, abaca, camote, peanut, garlic, tomato and calamansi (Table 1a).

From 2012 to 2016, the total crop area contracted annually by an average of 0.50 percent. Harvested areas of palay and corn decreased by yearly averages of 0.71 percent and 1.06 percent, respectively. Similarly, on the average, there was area reduction in coconut at 0.06 percent and sugarcane at 1.36 percent. Declining trends were exhibited by most of the other major crops during the five-year period. Camote and onion indicated the biggest area declines, corresponding to average negative growth rates of 4.29 percent and 3.33 percent per year. Average yearly decreases ranging from 1.54 to 2.57 percent were registered in cabbage,

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tomato, mongo and peanut. Meanwhile, increases in harvested areas during the reference years were noted in rubber, pineapple and cassava with respective average gains of 6.29 percent, 2.79 percent and 1.42 percent (Table 1b).

## **Production**

Palay production in 2016 was estimated at 17.63 million metric tons and this was 15.01 percentage points above the base year record of 15.33 million metric tons. Corn production at 7.22 million metric tons in 2016 was up by 18.69 percentage points from 6.08 million metric tons in 2006. Coconut production at 13.83 million metric tons and sugarcane production at 22.37 million metric tons in 2016 were below the base year records by 7.57 percentage points and 8.11 percentage points, respectively. Among the other major crops, onion still maintained the biggest output increment. However, production slowed down by 61.37 percentage points. Production growths were, likewise, higher in cassava at 56.82 percentage points, tobacco at 47.18 percentage points and pineapple at 42.45 percentage points. Production levels of coffee, mango, camote, garlic and calamansi went down in 2016 and remained lower than their respective 2006 production records. Peanut production dropped in 2016 and went below the base year record (Table 2a).

Over the five-year period, the outputs of palay and corn decreased by yearly averages of 0.52 percent and 0.58 percent, respectively. A similar trend was exhibited by 9 major crops namely, coconut, sugarcane, banana, coffee, rubber, peanut, garlic, calamansi and cabbage. Calamansi posted a significant decline averaging 9.06 percent. This was followed by coffee at 6.16 percent, rubber at 4.69 percent and sugarcane at 3.97 percent. In contrast, production growth was biggest in cassava, showing yearly increases averaging 5.54 percent (Table 2b).

## **Yield**

Yield of palay per hectare in 2016 at 3.87 metric tons improved by 5.01 percentage points from the 2006 yield of 3.68 metric tons. A yield increment of 22.81 percentage points was registered for corn; from the base year record of 2.37 metric tons to 2.91 metric tons per hectare in 2016. Cassava obtained the biggest yield increase at 39.63 percentage points. About 21.98 to 30.98 percentage point gains in the 2016 yields were noted for banana, eggplant, cabbage, tomato and camote. The 2016

yield levels of coconut, sugarcane, coffee, mango, rubber and calamansi were sustained below the base year yields. Meanwhile, the yield of garlic in 2016 dropped significantly and it fell lower than the 2006 record (Table 3a).

From 2012 to 2016, the annual yield of palay inched up by an average of 0.18 percent. Corn yield went up by 0.45 percent per year. Over these years, increasing yield levels were exhibited by most of the other major crops. Onion posted the biggest yearly yield growth, averaging 6.14 percent. This was followed by tobacco at 5.39 percent and camote at 5.19 percent. In contrast, declining yields were reported in banana, pineapple, garlic, sugarcane, coconut, rubber, coffee and calamansi. The highest average annual reductions were registered in rubber at 10.27 percent and calamansi at 7.92 percent (Table 3b).

### **Livestock and Poultry**

Production indices measure the growth of each livestock and poultry component in a given period compared with that of a base year. On the other hand, the changes in the production of livestock and poultry describe the performance of each animal type. Livestock covers carabao, cattle, hog, goat and dairy while poultry includes chicken and duck meat and eggs.

The 2016 volume of production of all livestock products stayed higher than the base year levels. Hogs dominated the livestock sector with 2.23 million metric tons of production in 2016. This was higher by 21.54 percentage points than the base year record of 1.84 million metric tons. Carabao output at 0.14 million metric tons in 2016 was 10.95 percentage points bigger than the base year record of 0.13 million metric tons. Production gains were, likewise, reported for cattle at 13.49 percentage points and goat at 3.52 percentage points. The highest production increment in 2016 was obtained in dairy at 65.44 percentage points, from 12,800 metric tons in 2006 to 21,200 metric tons in 2016. For poultry products, production levels of chicken meat at 1.67 million metric tons and chicken eggs at 0.46 million metric tons were higher by 38.85 percentage points and 39.79 percentage points, respectively, from the base year records. Below the base year production levels were still posted by duck meat and eggs in 2016 (Table 4a).



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The five year production levels of livestock products, on the average, registered positive growth rates. Hog and dairy posted the biggest production increases at yearly averages of 3.13 percent and 3.43 percent, respectively. Cattle came next at 1.58 percent. Carabao and goat production inched up annually by an average of less than one (1) percent each. In the case of poultry products, chicken meat showed continuously increasing production and posted an average yearly gain of 3.17 percent. An average of 2.39 percent growth per year was estimated for chicken egg production. Duck meat showed negative growth rate in production, averaging 1.19 percent per year. For duck eggs, production exhibited year to year increases which averaged 2.67 percent (Table 4b).

### **Fisheries**

Information on the indices of fish production provides a measure of the development of the fisheries industry through the years. Growth rates show the year to year variation in the volume of fish production by component and by environment. Fisheries cover commercial, municipal and aquaculture fishing.

In 2016, the production in the commercial fisheries slowed down to 1.02 million metric tons. Lower by 5.90 percentage points than the 2006 record of 1.08 million metric tons. Output reduction continued in the municipal fisheries at 1.14 million metric tons in 2016 or 7.90 percentage points below the base year record of 1.24 million metric tons. In particular, marine municipal fish production showed a continuous downtrend to 0.98 million metric tons in 2016 which was 9.05 percentage points less than the 2006 record. Meanwhile, inland municipal fisheries made a turnaround in 2016, as production slid to 0.16 million metric tons which was below the base year level by 0.25 percentage point. Among the fisheries subsectors, only aquaculture maintained production level in 2016 above the base year record. However, the production increase was minimal as it grew by 5.19 percentage points to 2.20 million metric tons in 2016 from the 2006's 2.09 million metric tons. Under aquaculture, marine fishcage/pen maintained a notable output growth at 94.00 percentage points. Production increases ranging from 21.09 to 23.12 percentage points were recorded in brackishwater fishpond, freshwater fishcage/pen and fishpond. In 2016, seaweed production dropped to 1.40 million metric tons, which was lower than the 2006 level of 1.47 million metric tons. Mussel still exhibited outputs below the 2006 record (Table 5a).

Over the years in review, production downtrend was noted in the three subsectors of fisheries. Negative growth rates averaged 0.54 percent for commercial fisheries, 2.89 percent for municipal fisheries and 3.49 percent for aquaculture. Production in marine and inland municipal fisheries contracted by yearly averages of 2.55 percent and 4.35 percent, respectively. For aquaculture production, the decline was due to the output reductions from freshwater fishcage/pen by 1.54 percent, oyster by 1.17 percent, mussel by 6.54 percent and seaweed by 5.20 percent. High production increment was observed in brackishwater fishpond at an average of 1.58 percent per year (Table 5b).

**Table 1a**  
**Indices of area harvested of agricultural crops, Philippines, 2012-2016**  
(2006=100)  
(in percent)

ITEM	2006 AREA (‘000 has.)	INDICES					2016 AREA (‘000 has.)
		2012	2013	2014	2015	2016	
All Crops	12,389.88	107.79	107.72	107.78	106.77	105.66	13,091.19
A.Cereals	6,730.60	108.22	108.61	109.22	107.24	104.60	7,040.51
<i>Palay</i>	4,159.93	112.74	114.09	113.94	111.93	109.52	4,556.04
<i>Corn</i>	2,570.67	100.90	99.73	101.59	99.66	96.65	2,484.47
B.Major Crops	5,227.88	108.13	107.58	106.95	107.02	107.81	5,636.24
<i>Coconut</i>	3,337.38	107.11	106.41	104.93	105.40	106.82	3,565.06
<i>Sugarcane</i>	392.28	110.46	111.42	110.13	107.40	104.54	410.10
<i>Banana</i>	428.80	105.94	104.01	103.25	103.40	103.28	442.87
<i>Pineapple</i>	49.81	117.34	121.98	123.75	126.10	130.94	65.22
<i>Coffee</i>	126.06	95.19	92.38	93.17	90.22	91.10	114.84
<i>Mango</i>	171.71	109.90	109.45	109.54	109.73	109.39	187.83
<i>Tobacco</i>	26.32	129.26	130.88	137.08	125.73	123.47	32.50
<i>Abaca</i>	135.88	101.94	101.83	99.18	98.76	98.93	134.43
<i>Rubber</i>	94.35	186.80	196.59	230.73	235.94	236.66	223.28
<i>Cassava</i>	204.58	106.20	106.14	105.96	108.98	112.31	229.77
<i>Camote</i>	118.83	85.07	79.82	74.87	72.20	71.32	84.75
<i>Peanut</i>	27.64	94.46	92.62	90.62	89.00	85.10	23.52
<i>Mongo</i>	35.73	124.12	121.99	120.28	116.14	115.72	41.35
<i>Onion</i>	8.44	177.82	182.85	187.67	176.50	153.84	12.99
<i>Garlic</i>	4.45	60.16	57.09	57.44	60.70	59.51	2.65
<i>Tomato</i>	17.13	101.27	100.60	97.75	94.58	94.57	16.20
<i>Eggplant</i>	20.90	102.79	101.62	101.23	100.47	100.65	21.04
<i>Cabbage</i>	7.32	116.49	115.24	113.47	111.97	109.48	8.02
<i>Calamansi</i>	20.25	102.91	100.05	99.07	98.72	97.88	19.82
C.Other Crops	431.40	96.90	95.61	95.51	96.41	96.07	414.44

**Table 1b**  
**Growth rates in area harvested of agricultural crops,**  
**Philippines, 2012-2016**  
 (in percent)

ITEM	2012 AREA ('000 has.)	GROWTH RATES				AVERAGE GROWTH RATES 2012-2016
		12-13	13-14	14-15	15-16	
All Crops	13,354.85	-0.06	0.06	-0.94	-1.04	-0.50
A.Cereals	7,283.98	0.35	0.56	-1.81	-2.46	-0.84
<i>Palay</i>	4,690.06	1.19	-0.14	-1.76	-2.15	-0.71
<i>Corn</i>	2,593.92	-1.16	1.86	-1.90	-3.02	-1.06
B.Major Crops	5,652.84	-0.51	-0.59	0.07	0.73	-0.07
<i>Coconut</i>	3,574.61	-0.65	-1.39	0.45	1.35	-0.06
<i>Sugarcane</i>	433.30	0.87	-1.15	-2.48	-2.66	-1.36
<i>Banana</i>	454.26	-1.81	-0.73	0.14	-0.11	-0.63
<i>Pineapple</i>	58.45	3.95	1.45	1.90	3.84	2.79
<i>Coffee</i>	120.00	-2.95	0.85	-3.16	0.97	-1.07
<i>Mango</i>	188.72	-0.41	0.08	0.18	-0.31	-0.12
<i>Tobacco</i>	34.03	1.25	4.73	-8.28	-1.80	-1.02
<i>Abaca</i>	138.52	-0.11	-2.60	-0.43	0.17	-0.74
<i>Rubber</i>	176.24	5.24	17.37	2.26	0.31	6.29
<i>Cassava</i>	217.26	-0.05	-0.17	2.85	3.06	1.42
<i>Camote</i>	101.09	-6.18	-6.20	-3.56	-1.22	-4.29
<i>Peanut</i>	26.11	-1.95	-2.16	-1.79	-4.38	-2.57
<i>Mongo</i>	44.35	-1.72	-1.40	-3.44	-0.36	-1.73
<i>Onion</i>	15.01	2.83	2.63	-5.95	-12.83	-3.33
<i>Garlic</i>	2.68	-5.11	0.61	5.69	-1.96	-0.19
<i>Tomato</i>	17.35	-0.66	-2.83	-3.24	-0.02	-1.69
<i>Eggplant</i>	21.49	-1.14	-0.38	-0.75	0.18	-0.52
<i>Cabbage</i>	8.53	-1.07	-1.54	-1.32	-2.22	-1.54
<i>Calamansi</i>	20.84	-2.79	-0.97	-0.36	-0.85	-1.24
C.Other Crops	418.03	-1.33	-0.11	0.95	-0.36	-0.21

**Table 2a****Indices of production of agricultural crops, Philippines, 2012-2016**

(2006=100)

(in percent)

ITEM	2006	INDICES					2016
	PROD'N ('000 mt.)	2012	2013	2014	2015	2016	PROD'N ('000 mt.)
<b>A. Cereals</b>							
<i>Palay</i>	15,326.71	117.65	120.31	123.76	118.42	115.01	17,627.24
<i>Corn</i>	6,082.11	121.78	121.29	127.76	123.62	118.69	7,218.82
<b>B. Major Crops</b>							
<i>Coconut</i>	14,957.91	106.06	102.65	98.25	98.51	92.43	13,825.08
<i>Sugarcane</i>	24,345.11	108.42	100.98	102.81	94.17	91.89	22,370.55
<i>Banana</i>	6,794.56	135.80	127.25	130.76	133.69	131.04	8,903.68
<i>Pineapple</i>	1,833.91	130.74	134.06	136.71	140.83	142.45	2,612.47
<i>Coffee</i>	104.09	85.45	75.54	72.49	69.50	66.12	68.82
<i>Mango</i>	919.03	83.61	88.83	96.30	98.23	88.58	814.05
<i>Tobacco</i>	38.36	125.33	140.13	160.11	146.49	147.18	56.46
<i>Abaca</i>	69.81	98.14	93.04	97.48	100.78	102.91	71.84
<i>Rubber</i>	351.56	126.01	126.53	128.87	113.25	103.15	362.63
<i>Cassava</i>	1,756.86	126.54	134.42	144.59	154.50	156.82	2,755.15
<i>Camote</i>	566.78	91.20	93.20	91.72	94.57	93.42	529.47
<i>Peanut</i>	29.15	99.95	99.80	100.16	100.15	95.78	27.92
<i>Mongo</i>	25.95	124.72	124.94	123.87	129.57	131.17	34.04
<i>Onion</i>	75.97	164.39	176.70	268.07	238.53	161.37	122.59
<i>Garlic</i>	12.58	70.01	71.43	71.48	82.86	59.38	7.47
<i>Tomato</i>	175.59	115.95	118.27	122.20	122.31	120.01	210.72
<i>Eggplant</i>	191.91	110.41	114.59	117.54	121.34	122.78	235.63
<i>Cabbage</i>	91.24	138.51	139.70	140.27	137.83	134.90	123.08
<i>Calamansi</i>	196.59	90.82	83.47	81.76	82.75	60.15	118.25

**Table 2b**  
**Growth rates in production of agricultural crops, Philippines, 2012-2016**  
 (in percent)

ITEM	2012 PROD'N ( <sup>'000</sup> mt.)	GROWTH RATES				AVERAGE GROWTH RATES 2012-2016
		12-13	13-14	14-15	15-16	
<b>A. Cereals</b>						
<i>Palay</i>	18,032.53	2.26	2.87	-4.31	-2.88	-0.52
<i>Corn</i>	7,407.07	-0.40	5.33	-3.24	-3.99	-0.58
<b>B. Major Crops</b>						
<i>Coconut</i>	15,863.80	-3.21	-4.29	0.26	-6.18	-3.35
<i>Sugarcane</i>	26,395.91	-6.86	1.81	-8.40	-2.42	-3.97
<i>Banana</i>	9,226.77	-6.29	2.76	2.24	-1.98	-0.82
<i>Pineapple</i>	2,397.75	2.54	1.98	3.02	1.15	2.17
<i>Coffee</i>	88.94	-11.59	-4.04	-4.13	-4.86	-6.16
<i>Mango</i>	768.41	6.24	8.41	2.00	-9.82	1.71
<i>Tobacco</i>	48.07	11.81	14.26	-8.51	0.47	4.51
<i>Abaca</i>	68.51	-5.19	4.77	3.38	2.11	1.27
<i>Rubber</i>	443.00	0.41	1.85	-12.12	-8.92	-4.69
<i>Cassava</i>	2,223.18	6.22	7.57	6.85	1.50	5.54
<i>Camote</i>	516.91	2.19	-1.59	3.10	-1.22	0.62
<i>Peanut</i>	29.14	-0.15	0.36	0.00	-4.36	-1.04
<i>Mongo</i>	32.37	0.17	-0.86	4.60	1.24	1.29
<i>Onion</i>	124.89	7.49	51.71	-11.02	-32.35	3.96
<i>Garlic</i>	8.81	2.02	0.07	15.92	-28.34	-2.58
<i>Tomato</i>	203.59	2.00	3.32	0.09	-1.88	0.88
<i>Eggplant</i>	211.89	3.79	2.58	3.23	1.19	2.70
<i>Cabbage</i>	126.38	0.86	0.41	-1.75	-2.13	-0.65
<i>Calamansi</i>	178.55	-8.10	-2.04	1.20	-27.31	-9.06

**Table 3a****Yield indices of agricultural crops, Philippines, 2012-2016**

(2006=100)

(in percent)

ITEM	2006 YIELD mt./ha.	INDICES					2016 YIELD mt./ha.
		2012	2013	2014	2015	2016	
Palay	3.68	104.36	105.45	108.62	105.80	105.01	3.87
Corn	2.37	120.69	121.62	125.77	124.04	122.81	2.91
Coconut	4.48	99.02	96.47	93.63	93.46	86.52	3.88
Sugarcane	62.06	98.16	90.64	93.35	87.68	87.90	54.55
Banana	15.85	128.19	122.34	126.65	129.30	126.88	20.10
Pineapple	36.82	111.42	109.91	110.47	111.68	108.79	40.05
Coffee	0.83	89.77	81.77	77.81	77.03	72.58	0.60
Mango	5.35	76.08	81.16	87.91	89.52	80.97	4.33
Tobacco	1.46	96.96	107.07	116.80	116.51	119.20	1.74
Abaca	0.51	96.27	91.37	98.29	102.05	104.02	0.53
Rubber	3.73	67.46	64.36	55.85	48.00	43.58	1.62
Cassava	8.59	119.16	126.64	136.46	141.77	139.63	11.99
Camote	4.77	107.21	116.77	122.51	130.97	130.98	6.25
Peanut	1.05	105.81	107.75	110.53	112.54	112.56	1.19
Mongo	0.73	100.48	102.42	102.98	111.56	113.35	0.82
Onion	9.00	92.45	96.63	142.84	135.14	104.89	9.44
Garlic	2.83	116.38	125.12	124.45	136.50	99.77	2.82
Tomato	10.25	114.49	117.56	125.01	129.32	126.90	13.01
Eggplant	9.18	107.41	112.77	116.11	120.77	121.98	11.20
Cabbage	12.46	118.90	121.22	123.63	123.09	123.21	15.35
Calamansi	9.71	88.25	83.43	82.53	83.82	61.45	5.96

**Table 3b**  
**Growth rates in yield of agriculture crops, Philippines, 2012-2016**  
(in percent)

ITEM	2012 YIELD mt./ha.	GROWTH RATES				AVERAGE GROWTH RATES 2012-2016
		12-13	13-14	14-15	15-16	
Palay	3.84	1.05	3.00	-2.60	-0.74	0.18
Corn	2.86	0.77	3.41	-1.37	-1.00	0.45
Coconut	4.44	-2.58	-2.94	-0.18	-7.42	-3.28
Sugarcane	60.92	-7.66	3.00	-6.07	0.24	-2.62
Banana	20.31	-4.56	3.52	2.10	-1.87	-0.20
Pineapple	41.02	-1.36	0.51	1.10	-2.59	-0.58
Coffee	0.74	-8.90	-4.85	-1.00	-5.78	-5.13
Mango	4.07	6.68	8.32	1.82	-9.54	1.82
Tobacco	1.41	10.43	9.09	-0.25	2.31	5.39
Abaca	0.49	-5.09	7.57	3.83	1.93	2.06
Rubber	2.51	-4.59	-13.22	-14.06	-9.20	-10.27
Cassava	10.23	6.28	7.75	3.89	-1.51	4.10
Camote	5.11	8.92	4.91	6.91	0.00	5.19
Peanut	1.12	1.83	2.58	1.82	0.02	1.56
Mongo	0.73	1.93	0.55	8.33	1.61	3.10
Onion	8.32	4.53	47.82	-5.39	-22.39	6.14
Garlic	3.29	7.51	-0.54	9.68	-26.91	-2.56
Tomato	11.74	2.68	6.34	3.44	-1.87	2.65
Eggplant	9.86	4.99	2.96	4.01	1.00	3.24
Cabbage	14.81	1.95	1.98	-0.43	0.10	0.90
Calamansi	8.57	-5.46	-1.08	1.57	-26.69	-7.92



**Table 4a****Indices of volume livestock and poultry production , Philippines, 2012-2016**

(2006=100)

(in percent)

ITEM	2006	INDICES					2016
	PROD'N ('000 mt)	2012	2013	2014	2015	2016	PROD'N ('000 mt)
<b>A. Livestock</b>							
<i>Carabao</i>	130.41	109.44	108.49	109.68	108.92	110.95	144.68
<i>Cattle</i>	238.27	106.59	108.47	109.67	112.01	113.49	270.42
<i>Hog</i>	1,836.14	107.49	109.59	110.68	115.48	121.54	2,231.66
<i>Goat</i>	74.82	101.13	100.80	101.71	103.56	103.52	77.45
<i>Dairy</i>	12.79	144.64	152.67	154.25	159.39	165.44	21.16
<b>B. Poultry</b>							
<i>Chicken</i>	1,205.96	122.68	128.95	130.33	137.72	138.85	1,674.50
<i>Duck</i>	45.99	73.60	74.92	75.26	73.80	70.05	32.22
<b>C. Eggs</b>							
<i>Chicken eggs</i>	330.29	127.48	129.49	125.84	134.59	139.79	461.72
<i>Duck eggs</i>	50.03	79.45	82.09	82.97	84.76	88.27	44.16

**Table 4b**  
**Growth rates in volume of livestock and poultry production,**  
**Philippines 2012-2016**  
 (in percent)

ITEM	2012 PROD'N ( '000 mt)	GROWTH RATES				AVERAGE GROWTH RATES 2012-2016
		12-13	13-14	14-15	15-16	
A. Livestock						
<i>Carabao</i>	142.73	-0.88	1.10	-0.69	1.86	0.35
<i>Cattle</i>	253.98	1.76	1.11	2.13	1.32	1.58
<i>Hog</i>	1,973.62	1.95	1.00	4.33	5.25	3.13
<i>Goat</i>	75.67	-0.33	0.91	1.81	-0.03	0.59
<i>Dairy</i>	18.50	5.55	1.03	3.34	3.80	3.43
B. Poultry						
<i>Chicken</i>	1,479.44	5.11	1.07	5.67	0.82	3.17
<i>Duck</i>	33.85	1.80	0.46	-1.94	-5.08	-1.19
C. Eggs						
<i>Chicken eggs</i>	421.06	1.57	-2.81	6.95	3.86	2.39
<i>Duck eggs</i>	39.75	3.33	1.07	2.15	4.14	2.67

**Table 5a**  
**Indices of volume of fish production by subsector, Philippines, 2012-2016**  
 (2006=100)  
 (in percent)

ITEM	2006		INDICES					2016
	PROD'N ('000 mt)		2012	2013	2014	2015	2016	PROD'N ('000 mt)
A. Commercial	1,080.68		96.45	98.79	102.45	100.36	94.10	1,016.95
B. Municipal	1,235.50		103.67	102.34	100.71	98.46	92.10	1,137.93
Marine	1,074.10		100.87	98.88	95.84	94.20	90.95	976.94
Inland	161.40		122.30	125.34	133.15	126.83	99.75	160.99
C. Aquaculture	2,092.32		121.49	113.43	111.72	112.23	105.19	2,200.85
Brackishwater fishpond <sup>1/</sup>	281.32		113.82	116.38	114.71	115.74	121.09	340.65
Freshwater fishcage/pen <sup>2/</sup>	126.60		130.65	134.68	118.80	122.91	121.78	154.18
Freshwater fishpond	118.30		122.32	125.36	125.87	124.77	123.12	145.66
Marine fishcage/pen	60.60		188.61	204.29	206.27	192.74	194.00	117.56
Others	1,505.50		119.39	106.50	105.65	106.45	95.84	1,442.81
Oyster	16.90		121.89	130.77	131.95	120.12	115.46	19.51
Mussel	19.70		130.46	116.24	95.43	80.71	95.30	18.77
Seaweed	1,468.90		119.21	106.09	105.49	106.64	95.62	1,404.52

<sup>1/</sup> Includes Brackishwater fishcage and fishpen

<sup>2/</sup> Includes small farm reservoir and ricefish

**Table 5b**  
**Growth rates in volume of fish production by subsector, Philippines, 2012-2016**  
 (in percent)

ITEM	2012 PROD'N ('000 mt)	GROWTH RATES					AVERAGE GROWTH RATES 2012-2016
		12-13	13-14	14-15	15-16		
A. Commercial	1,042.30	2.43	3.71	-2.04	-6.24	-0.54	
B. Municipal	1,280.80	-1.28	-1.59	-2.23	-6.46	-2.89	
Marine	1,083.40	-1.97	-3.08	-1.71	-3.45	-2.55	
Inland	197.40	2.48	6.23	-4.75	-21.35	-4.35	
C. Aquaculture	2,542.00	-6.63	-1.51	0.45	-6.27	-3.49	
Brackishwater fishpond*	320.20	2.25	-1.44	0.90	4.62	1.58	
Freshwater fishcage/pen	165.40	3.08	-11.79	3.46	-0.91	-1.54	
Freshwater fishpond	144.70	2.49	0.40	-0.87	-1.32	0.18	
Marine fishcage/pen	114.30	8.31	0.97	-6.56	0.65	0.84	
Others	1,797.40	-10.79	-0.80	0.75	-9.97	-5.20	
Oyster	20.60	7.28	0.90	-8.97	-3.88	-1.17	
Mussel	25.70	-10.89	-17.90	-15.43	18.08	-6.54	
Seaweed	1,751.10	-11.00	-0.57	1.09	-10.33	-5.20	

\* Includes Brackishwater fishcage and fishpen

## **MODULES OF THE AGRICULTURAL INDICATORS SYSTEM**

- 1. Output and Productivity**
2. Agricultural Structures and Resources
3. Agricultural Credit
4. Food Sufficiency and Security
5. Food Consumption and Nutrition
6. Population and Labor Force
7. Redistribution of Land
8. Agricultural Exports and Imports
9. Gender-based Indicators of Labor and Employment in Agriculture
10. Economic Growth: Agriculture
11. Prices and Marketing of Agricultural Commodities
12. Inputs

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