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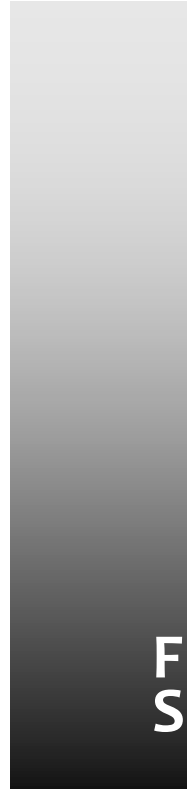

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FOREWORD

The Agricultural Indicators System (AIS) is one of the statistical frameworks maintained by the Bureau of Agricultural Statistics (BAS). It has twelve (12) modules and these are being updated and released annually. This is the seventh module entitled Food Sufficiency and Security. It provides information on self-sufficiency ratio, and import dependency ratio of selected major agricultural commodities and data on rice and corn stocks. The reference years are 2006 to 2010.

The AIS hopes to cover more agricultural development indicators to support the information needs of BAS clientele and stakeholders. Hence, the readers are encouraged to give their comments and suggestions on the improvement of the AIS, in general, and the report, in particular.

The BAS would like to acknowledge the National Statistics Office (NSO) and National Food Authority (NFA) for providing the basic data on this module.

ROMEO S. RECIDE
Director

Quezon City. Philippines
November 2011

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Self-Sufficiency Ratio

Self-sufficiency ratio (SSR) measures the extent to which a country relies on its own production to meet the domestic requirements of the populace.

In 2010, the production of rice was inadequate to provide the local needs of the country. This was evident as self-sufficiency ratio (SSR) even declined to 81.27 percent by 4.56 percentage points from the 2009 ratio. On the other hand, SSR of corn went up by 2.76 percentage points to 98.64 percent in 2010. Self-sufficiency was maintained for coconut and sugarcane. For coffee, SSR dropped to 93.27 percent or by 4.02 percentage points from previous year's record (Table 1).

Adequacy in production was continuously reported for fruits such as calamansi, papaya and pomelo. For vegetables and rootcrops, sufficiency in the production of tomato, cabbage, eggplant and sweet potato was sustained in 2010. SSR of garlic improved to 35.40 percent by 11.51 percentage points. Onion's SSR slightly went up to 97.90 percent. SSRs of peanut and mongo stayed at 30.10 percent and 47.10 percent, respectively. Cassava production in 2010 became insufficient as its SSR declined to 98.89 percent. Likewise, potato's SSR went down to 94.76 percent.

Except for chevon and chicken egg, the production of all the livestock and poultry products became more insufficient in 2010 as indicated by their declining SSRs.

Self-sufficiency was still achieved for the fishery products except for oyster. Tuna recovered from the previous year's low production level and became sufficient in 2010 with SSR going up to 101.26 percent from 92.92 percent in 2009. Shrimps and prawns exhibited higher but declining SSR. In 2010, it dropped to 111.19 percent.

Import Dependency Ratio

Import dependency ratio (IDR) indicates the extent of dependency on importation in relation to domestic consumption. A high ratio implies greater dependency on importation.

Import dependency ratio (IDR) of rice in 2010 further increased to 18.73 percent in 2010. It was higher by 4.56 percentage points from last year's record. Reduction in the importation of corn was noted as its IDR decreased to 1.36 percent or by 2.77 percentage points. Coffee's importation rose in 2010 and pushed up its IDR to 6.76 percent (Table 2).

The country's supply of garlic, peanut and mongo relied heavily on importation. IDRs of peanut and mongo in 2010 increased to 69.90 percent and 53.64 percent, respectively. However, IDR of garlic at 64.60 percent was reduced by 11.51 percentage points. Minimal importation for onion, cassava and potato was noted.

In the case of livestock and poultry, IDRs were higher for beef at 20.45 percent and for carabeef at 31.77 percent. Chicken's IDR rose to 10.21 percent. There was low importation of duck.

Except for tilapia, all the reference fishery products showed dependence on importation in 2010. Tuna indicated declining dependency on importation as IDR dropped to 3.96 percent in 2010 from 9.66 percent in 2009. IDR of shrimps and prawns was up to 3.30 percent. IDRs of milkfish, roundscad, crabs and oyster ranged from 0.01 to 0.09 percent.

Cereals Stocks

Information on supply condition is vital to be able to maintain food balance. The occurrence of typhoons and other calamities as well as volatile grains market structures necessitate the need to monitor

stocks situation of the staple grains to ensure supply and demand equilibrium, access and price stability. Information on monthly stockholdings can guide policy makers on how much and whether to export or import rice or corn in the future.

In 2010, the biggest volume of rice stocks was reported in December at 3.91 million metric tons. The biggest shares of rice stocks came from National Food Authority (NFA) at 45.4 percent and from the households at 36.7 percent. Only 17.9 percent were held by commercial warehouses (Table 3a).

Rice inventory was low in March at 2.25 million metric tons. Of this volume, about 43.0 percent were kept at NFA. Households accounted for 39.9 percent and commercial warehouses had the remaining 17.1 percent.

In the case of corn stocks, October was the peak month with 0.35 million metric tons of corn. Households shared the biggest volume at 67.1 percent. Commercial warehouses contributed 31.5 percent while NFA held only 1.4 percent of the total corn stocks. On the other hand, July recorded the lowest volume of corn stock at 0.11 million metric tons. Commercial holdings and households accounted for 53.6 percent and 34.1 percent of the total corn stocks, respectively. NFA shared the least at 12.3 percent (Table 3b).

Table 1.
Self-sufficiency ratio (SSR) of selected agricultural commodities, Philippines, 2006-2010

COMMODITY	2006	2007	2008	2009R	2010P
Rice	85.38	85.47	81.90	85.83	81.27
Corn	95.21	97.79	99.70	95.88	98.64
Coconut	100.01	100.01	100.01	100.01	100.02
Sugarcane	100.00	100.00	100.00	100.00	100.00
Coffee	84.86	68.73	72.87	97.29	93.27
Calamansi	100.00	100.00	100.01	100.02	100.02
Papaya	102.36	102.53	101.60	101.32	100.85
Pomelo	100.00	100.00	100.00	100.00	100.00
Tomato	100.00	100.00	100.00	100.00	100.00
Garlic	25.56	18.23	17.11	23.89	35.40
Onion	61.31	106.36	68.45	97.43	97.90
Cabbage	100.00	100.00	100.00	100.00	100.00
Eggplant	100.00	100.00	100.00	100.00	100.00
Peanut	36.46	62.15	65.48	30.17	30.10
Mongo	45.80	46.78	43.98	47.55	47.10
Cassava	99.85	100.05	100.04	100.05	98.89
Sweet potato	100.00	100.00	100.00	100.00	100.00
Potato	89.97	95.75	95.69	98.55	94.76
Beef	83.25	79.91	78.72	82.02	79.55
Carabeef	58.27	63.95	61.56	68.33	68.23
Chevon	100.00	100.00	100.00	99.97	100.00
Chicken (dressed)	95.20	95.55	95.25	93.56	90.36
Duck (dressed)	99.41	99.88	99.43	99.42	99.28
Chicken egg	99.97	99.93	100.00	99.91	100.00
Milkfish	100.35	100.43	100.47	100.81	100.83
Roundscad	100.04	100.26	100.07	100.11	100.25
Tilapia	100.00	100.01	100.09	100.00	100.00
Tuna	97.66	98.69	99.16	92.92	101.26
Shrimps & Prawns	133.57	120.73	114.01	113.22	111.19
Crabs	99.83	104.19	103.72	107.16	107.94
Oysters	100.00	100.02	99.94	99.93	99.99

Table 2.
Import dependency ratio (IDR) of selected agricultural commodities, Philippines, 2006-2010

COMMODITY	2006	2007	2008	2009R	2010P
Rice	14.62	14.53	18.11	14.17	18.73
Corn	4.81	2.21	0.33	4.13	1.36
Coconut	-	-	-	-	-
Sugarcane	-	-	-	-	-
Coffee	15.36	31.29	27.16	2.71	6.76
Calamansi	-	-	-	-	-
Papaya	-	-	-	-	-
Pomelo	-	-	-	-	
Tomato	-	-	-	-	-
Garlic	82.26	81.78	82.93	76.11	64.60
Onion	49.49	2.20	35.18	7.62	7.79
Cabbage	-	-	-	-	-
Eggplant	-	-	-	-	-
Peanut	63.66	38.30	35.10	69.83	69.90
Mongo	54.24	53.43	56.04	52.48	53.64
Cassava	0.18	-	-	-	1.15
Sweet potato	-	-	-	-	-
Potato	10.03	4.25	4.31	1.45	5.24
Beef	16.75	20.12	21.28	17.98	20.45
Carabeef	41.73	36.05	38.44	31.77	31.77
Chevon	-	-	-	0.03	-
Chicken (dressed)	4.86	4.91	5.13	6.96	10.21
Duck (dressed)	0.59	0.12	0.57	0.58	0.72
Chicken egg	0.03	0.07	-	0.09	-
Milkfish	0.02	0.01	0.00	0.01	0.01
Roundscad	0.07	0.01	0.22	0.22	0.09
Tilapia	-	0.01	0.01	0.00	-
Tuna	5.82	5.21	5.40	9.66	3.96
Shrimps & Prawns	3.33	3.81	3.09	2.57	3.30
Crabs	0.30	0.11	0.06	0.03	0.09
Oysters	-	-	0.06	0.07	0.01

Table 3a.
Stocks of rice: Highest and lowest levels and percentage shares of households, commercial warehouses and NFA, Philippines, 2006-2010

ITEM	2006	2007	2008	2009	2010
			HIGHEST STOCKS		
Month	December	December	December	November	December
Quantity ('000 MT)	2,580.4	2,291.5	2,954.1	2,958.6	3,908.0
Percent share					
Households	61.5	64.6	50.2	45.6	36.7
Commercial	17.3	19.9	17.4	15.7	17.9
NFA	21.2	15.5	32.4	38.7	45.4
			LOWEST STOCKS		
Month	September	September	March	March	March
Quantity ('000 MT)	1,649.5	1,131.8	1,688.7	2,167.7	2,251.9
Percent share					
Households	36.8	52.4	58.8	45.9	39.9
Commercial	19.4	20.3	24.3	16.5	17.1
NFA	43.8	27.3	16.9	37.6	43.0

Sources of basic data: Bureau of Agricultural Statistics and National Food Authority

Table 3b.
Stocks of corn: Highest and lowest levels and percentage shares of households, commercial warehouses and NFA, Philippines, 2006-2010

ITEM	2006	2007	2008	2009	2010
			HIGHEST STOCKS		
Month	October	October	October	September	October
Quantity ('000 MT)	376.6	330.4	345.2	390.8	354.0
Percent share					
Households	81.9	68.4	55.7	39.8	67.1
Commercial	18.1	31.6	44.1	44.4	31.5
NFA	0.0	0.0	0.2	15.8	1.4
			LOWEST STOCKS		
Month	July	July	August	March	July
Quantity ('000 MT)	121.3	96.2	171.6	139.2	109.1
Percent share					
Households	47.2	54.5	40.7	46.2	34.1
Commercial	52.8	45.5	58.9	53.8	53.6
NFA	0.0	0.0	0.4	0.0	12.3

Sources of basic data: Bureau of Agricultural Statistics and National Food Authority

Modules of the Agricultural Indicators System

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

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