

ASEAN Agricultural Commodity outlook

No. 16 June 2016

ASEAN Food Security Information System (AFSIS)



Released by AFSIS Secretariat

Office of Agricultural Economics (OAE)

Ministry of Agriculture and Cooperatives

Bangkok, Thailand

<http://www.aptfsis.org>



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INFORMATION SYSTEM (AFSIS)**

Report on

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Foreword

Agricultural Commodity Outlook (ACO) Report is published semi-annually by the ASEAN Food Security Information System (AFSIS) Secretariat, using the data gathered from 10 ASEAN member states. Like previous editions, this report covers a current situation and a prospect of 5 main commodities including rice, maize, sugarcane soybeans, and cassava.

In this latest of *Agricultural Commodity Outlook*, it provides both national and regional information on production, utilization, stock, trade, and FOB prices. The explanation for significant changes and unusual phenomena is also showed in this report. Furthermore, the report is scrutinized by all member states before publication.

The AFSIS Secretariat would like to record its appreciation to Dr. Apichart Pongsrihadulchai, the AFSIS Consultant for his kind support to the development of this report.

AFSIS Secretariat

Office of Agricultural Economics (OAE)

Ministry of Agriculture and Cooperatives

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Highlights of Rice Outlook for 2017

- An increase in the production is the main reason for increasing in ASEAN rice supply (milled rice) forecast, the increasing expected to be approximately 4 percent or about 7.14 million tons from 171.97million tons in 2016 to 179.12 million tons in 2017 (Table 1)
- Rice production is forecasted to increase about 5 percent, from 129.55 million tons in 2016 to 136.20 million tons in 2017 while import is expected to decrease about 36 percent or 1.00 million tons from 2.77 million tons in 2016 to 1.77 million tons in 2017.
- Rice export is expected to slightly decrease about 3 percent or 19.03 million tons in 2016 to 18.47 million tons in 2017.
- The ratio of production to domestic utilization ratio (self-sufficiency ratio) for the region is expected to increase about 4 percent from 115.89 percent in 2016 to 119.91 percent in 2017. The beginning stock to domestic utilization ratio (food security ratio) is estimated to increase about 1 percent from 35.46 percent in 2016 to 36.22 percent in 2017 (Table 1).

Table 1 Summary of the ASEAN rice situation, 2016-2017 (milled rice)

Unit: Million tons

Items	2016	2017	Change	
			Quantity	%
Supply (Million tons)	171.97	179.12	7.14	4.15
Beginning stock	39.64	41.14	1.50	3.78
Production	129.55	136.20	6.65	5.13
Import	2.77	1.77	-1.00	-36.19
Demand (Million tons)	171.97	179.12	7.14	4.15
Domestic utilization	111.80	113.59	1.79	1.60
Export	19.03	18.47	-0.57	-2.98
Ending stock	41.14	47.06	5.92	14.38
Ratio of production to domestic utilization (%)	115.89	119.91	4.02	-
Ratio of beginning stock to domestic utilization (%)	35.46	36.22	0.76	-

ASEAN Rice Situation in 2016

Production

ASEAN paddy production in 2016 (crop year 2015/16) was estimated at 211.35 million tons, the slightly decrease of 4,564 tons which is 2.11 percent from 215.912 million tons in 2015. The decrease was due to the decline in planted area and yield. The decrease in production was found in 5 countries namely, Brunei, Myanmar, the Philippines, Thailand and Vietnam. For Cambodia, Indonesia, Lao PDR and Malaysia, the estimated production has increased. (Table 2-5, Figure 1-4).

For **Brunei**, the decrease in production attributed to the decrease in yield. The area has increased because of the government policy.

For **Cambodia**, the slight increase in production derived from the increase in yield.

For **Indonesia**, the increase in production came from the increase in area due to the government policy which continue to increase rice planted area.

For **Lao PDR**, the increase in production came from the increase in area.

For **Malaysia**, the increase in production derived from the increase in planted area and yield.

For **Myanmar**, the decrease in production came from the decrease in yield.

For **the Philippines**, the decrease in production derived from the decrease in planted area and yield.

For **Thailand**, the decrease in production derived from the decrease in planted area and yield due to unfavorable weather and farmers responded to the price decrease and yield was decreased by the drought.

In **Vietnam**, the slight decrease in production derived from the decrease in area and yield. The decrease in the yield was due to the unfavorable weather.

Utilization and Stock

The domestic utilization of rice (milled rice) within ASEAN in 2016 (calendar year) was estimated to be 111.8 million tons, slightly increase from 110.8 million tons in 2015. The increase was about 0.97. million tons or 0.87 percent (Table 7-8).

The ratio of production to domestic utilization (self-sufficient ratio) of ASEAN in 2016 was estimated at 115.89 percent compared to 118.93 percent in 2015, up about 3 percent, indicated that rice production in ASEAN in year 2016, aggregately, is sufficient for rice demand in ASEAN. The decrease in the ratio of production to domestic utilization occurs in most of the countries in the region except 3 countries namely Indonesia, Lao PDR, and Malaysia. However, on the country by country basis, some countries in the region were still needed to import rice for their domestic consumption. The highest ratios were found in Cambodia and Thailand respectively while the lowest ratio was in Brunei (Table 10, Figure 12).

The beginning stock in 2016 (January 2016) of ASEAN was estimated at 39.6 million tons up about 3 million tons from 36.5 million tons in 2015 or about 8.54 percent. Thailand carried 25.8 million tons or about 65 percent of the ASEAN stock and followed by Myanmar about 4.8 million tons or about 12 percent of the total stock in the ASEAN.

The ratio of the beginning stock to the domestic utilization in 2016 for the whole ASEAN was estimated at about 35 percent, up about 3 percent from the previous year. However, many countries in ASEAN have the ratio below 20 percent optimum level which included Indonesia, Malaysia, and Vietnam while the Cambodia is at the optimum level (Table 11, Figure 13).

Trade

In 2016, ASEAN as a whole exported 19.03 million tons of milled rice, a decrease of about 1.89 million tons or about 9 percent from 20.93 million tons exported in 2015. Thailand, the major exporting countries in the region, the rice export have increased.

The total import by the ASEAN in 2016 reported to be 2.77 million tons, down 0.29 million tons or about 10 percent from 3.07 million tons in 2015. The Philippines was the biggest importer in the region, which imported about 1.20 million tons (Table 7-8, Figure 8-9).

The quantity and value of rice exported from ASEAN countries by countries of destination and the quantity and value of imported by countries of origin are given in Table 12-13.

Prices

Monthly FOB prices of rice export and CIF prices for rice import in selected countries in ASEAN during 2015-2016 (January – Mar) are shown in Table 14-15.

For Myanmar, the average price of 5% milled rice was 364US\$/ton in 2016. For Thailand, the average price was 393US\$/ton while Vietnam, the average price was 451US\$/ton.

For CIF prices, the average price of the grade between 10% to 25% broken milled rice in the Philippines was 300 in 2016. The average CIF prices in Indonesia and Singapore in 2016 was 409 US\$/ton and 636 US\$/ton respectively.

Damaged Area

The damaged area of paddy in ASEAN in 2016 (crop year 2015/16) was reported to be about 0.7 million hectares of which 0.51 million hectares or about 73.7 percent caused by the drought. The damage has occurred the most in Thailand, which equals to 0.44 million hectares or about 85.27 percent of the whole ASEAN. The damage was caused by many factors such as the drought, flood and pests (Table 6).

Prospects for Rice in 2017

Production

ASEAN paddy production in 2016 (crop year 2015/16) was estimated at 221.23 million tons, the slightly increase of about 9,880 tons which is 4.67 percent from 211.348 million tons in 2016. The increase was due to the rise in planted area and yield. The increase in production was found in 7 countries namely, Brunei, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines and Thailand. For Cambodia and Vietnam, the estimated production has decreased. (Table 2-5, Figure 1-4).

Utilization and Stock

The domestic utilization of paddy rice in 2017 is projected to be 113.6 million tons, increase about 1.8 million tons or about 1.6 percent compared to 111.8 million tons in 2016 (Table 8-9).

The beginning stock in 2017 is predicted to be 41.1 million tons, up about 1.5 million tons or 3.8 percent from 39.6 million tons in 2016. The ending stock in 2017 is forecasted to be 47.1 million tons, an increase of 5.9million tons or 14.4 percent from 41.1 million tons in 2016 (Table 8-9, Figure 11).

The ratio of production to domestic utilization is forecasted to be about 120 percent in 2017, a increase of 4 percent from 2016, indicated that rice production in ASEAN is still enough for consumption within the region (Table 10, Figure 12).

The ratio of the beginning stock to the domestic utilization in ASEAN in 2017 is forecasted to increase from 35.46 percent in 2016 to 36.22 percent in 2017 (Table 11, Figure 13).

Trade

Rice export from ASEAN is forecasted to decrease from 19.03 million tons in 2016 to 18.47 million tons in 2017 (Table 8-9, Figure 5 and 7).The decrease in export is forecast in Cambodia, Lao PDR, Malaysia, the Philippines and Thailand.

For the import, the whole ASEAN is forecasted to import 1.77 million tons in 2017, an decrease of 1.0 million tons or about 36 percent compared to 2.77 million tons in 2016 (Table 8-9, Figure 8 and 10).

Table 2 Paddy production in ASEAN countries, 2015-2017

Unit: 1,000 Tons

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	215,912.16	211,348.09	-4,564.06	-2.11	221,228.39	9,880.29	4.67
Brunei	3.05	2.44	-0.62	-20.16	2.51	0.07	3.00
Cambodia	9,324.42	9,335.28	10.87	0.12	8,973.31	-361.97	-3.88
Indonesia	75,361.25	77,245.27	1,884.02	2.50	79,370.27	2,125.00	2.75
Lao PDR	4,048.19	4,200.00	151.82	3.75	4,339.47	139.47	3.32
Malaysia	3,238.22	3,492.08	253.85	7.84	3,692.57	200.49	5.74
Myanmar	28,193.08	27,724.59	-468.48	-1.66	30,637.01	2,912.42	10.50
Philippines	18,911.48	17,485.51	-1,425.97	-7.54	18,798.81	1,313.30	7.51
Singapore	-	-	-	-	-	-	-
Thailand	31,616.88	28,088.23	-3,528.65	-11.16	31,982.59	3,894.36	13.86
Vietnam	45,215.60	43,774.70	-1,440.90	-3.19	43,431.85	-342.85	-0.78

Table 3 Paddy planted area in ASEAN countries, 2015-2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	50,090.25	49,139.52	-950.73	-1.90	50,298.84	1,159.32	2.36
Brunei	1.43	1.53	0.10	6.98	1.58	0.05	3.00
Cambodia	3,055.51	3,051.41	-4.10	-0.13	2,903.80	-147.61	-4.84
Indonesia	14,512.63	14,545.18	32.56	0.22	14,767.14	221.96	1.53
Lao PDR	984.93	1,020.50	35.57	3.61	1,017.49	-3.01	-0.29
Malaysia	706.68	715.30	8.62	1.22	730.15	14.84	2.08
Myanmar	7,172.14	7,211.89	39.75	0.55	7,518.20	306.31	4.25
Philippines	4,741.81	4,561.23	-180.59	-3.81	4,666.16	104.93	2.30
Singapore	-	-	-	-	-	-	-
Thailand	11,080.22	10,259.88	-820.34	-7.40	10,905.33	645.45	6.29
Vietnam	7,834.90	7,772.60	-62.30	-0.80	7,789.00	16.40	0.21

Table 4 Paddy harvested area in ASEAN countries, 2015-2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	49,167.22	48,441.83	-725.39	-1.48	50,018.76	1,576.93	3.26
Brunei	1.30	1.39	0.09	6.98	1.44	0.04	3.01
Cambodia	3,028.84	3,025.63	-3.21	-0.11	2,901.30	-124.33	-4.11
Indonesia	14,115.48	14,512.47	396.99	2.81	14,767.14	254.67	1.75
Lao PDR	965.15	1,020.50	55.35	5.73	1,017.49	-3.01	-0.29
Malaysia	699.62	708.15	8.53	1.22	722.84	14.70	2.08
Myanmar	7,152.52	7,101.11	-51.41	-0.72	7,518.20	417.09	5.87
Philippines	4,704.49	4,526.99	-177.50	-3.77	4,666.16	139.17	3.07
Singapore	-	-	-	-	-	-	-
Thailand	10,664.92	9,772.99	-891.93	-8.36	10,635.19	862.20	8.82
Vietnam	7,834.90	7,772.60	-62.30	-0.80	7,789.00	16.40	0.21

Note: Vietnam reported only planted area.

Table 5 Paddy yield in ASEAN countries, 2015-2017

Unit: Ton/Hectare

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	4.39	4.36	-0.03	-0.68	4.42	0.06	1.38
Brunei	2.34	1.75	-0.59	-25.21	1.75	0.00	0.00
Cambodia	3.08	3.09	0.01	0.32	3.09	0.00	0.00
Indonesia	5.34	5.32	-0.02	-0.37	5.37	0.05	0.94
Lao PDR	4.19	4.12	-0.07	-1.67	4.26	0.14	3.40
Malaysia	4.63	4.93	0.30	6.48	5.11	0.18	3.65
Myanmar	3.94	3.90	-0.04	-1.02	4.08	0.18	4.62
Philippines	4.02	3.86	-0.16	-3.98	4.03	0.17	4.40
Singapore	-	-	-	-	-	-	-
Thailand	2.96	2.87	-0.09	-3.04	3.01	0.14	4.88
Vietnam	5.77	5.63	-0.14	-2.43	5.58	-0.05	-0.89

Note: Yield related to harvested area except Vietnam which related to planted area.

Table 6 Paddy damaged area in ASEAN by cause of damage, 2016

Country	Cause of Damage (Hectares)						Total
	Flood	Drought	Pests	Diseases	Other	Unspecified	
ASEAN	115,120	513,904	39,237	16,388	681	12,366	697,695
Brunei	16	75	22	26	-	-	139
Cambodia	-	25,782	-	-	-	-	25,782
Indonesia	4,909	27,290	516	-	-	-	32,714
Lao PDR	-	-	-	-	-	-	0
Malaysia	112	685	4,601	1,755	-	-	7,153
Myanmar	110,083	-	16	-	681	-	110,780
Philippines	-	21,874	-	-	-	12,366	34,240
Singapore	-	-	-	-	-	-	0
Thailand	-	438,198	34,082	14,607	-	-	486,887
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 7 Rice balance sheet of ASEAN countries, 2015 (milled rice)

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	36,523,337	131,809,660	3,068,356	171,401,354	110,828,837	20,928,665	39,643,852	171,401,354
Brunei	21,398	1,983	25,540	48,922	33,333	-	15,589	48,922
Cambodia	577,951	5,197,887	-	5,775,838	2,311,128	2,986,558	478,152	5,775,838
Indonesia	1,151,065	42,370,545	981,998	44,503,608	42,939,266	1,077	1,563,266	44,503,608
Lao PDR	349,146	2,428,911	16,151	2,794,208	2,272,211	23,738	498,259	2,794,208
Malaysia	613,774	2,040,080	-	2,653,854	2,247,550	-	406,304	2,653,854
Myanmar	1,918,158	17,795,470	-	19,713,628	13,521,625	1,409,067	4,782,936	19,713,628
Philippines	2,662,000	11,869,994	1,481,504	16,013,498	12,814,478	220	3,198,800	16,013,498
Singapore	75,201	-	421,276	496,477	284,233	137,043	75,201	496,477
Thailand	26,926,623	20,867,140	26,887	47,820,650	12,238,000	9,795,763	25,786,887	47,820,650
Vietnam	2,228,021	29,237,650	115,000	31,580,671	22,167,013	6,575,200	2,838,458	31,580,671

Table 8 Rice balance sheet of ASEAN countries, 2016 (milled rice)

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	39,643,852	129,554,329	2,773,918	171,972,099	111,795,490	19,033,608	41,143,001	171,972,099
Brunei	15,589	1,583	32,334	49,506	33,977	-	15,529	49,506
Cambodia	478,152	5,056,584	-	5,534,736	2,319,020	2,889,043	326,673	5,534,736
Indonesia	1,563,266	43,429,804	981,998	45,975,068	42,952,266	1,077	3,021,725	45,975,068
Lao PDR	498,259	2,520,000	16,160	3,034,419	2,326,595	14,811	693,013	3,034,419
Malaysia	406,304	2,200,007	-	2,606,311	2,267,553	-	338,758	2,606,311
Myanmar	4,782,936	17,499,763	-	22,282,699	13,745,777	284,416	8,252,506	22,282,699
Philippines	3,198,800	11,854,757	1,203,795	16,257,352	13,298,115	-	2,959,237	16,257,352
Singapore ^{1/}	75,201	-	400,000	475,201	270,000	130,000	75,201	475,201
Thailand	25,786,887	18,538,231	14,630	44,339,748	12,284,000	9,883,289	22,172,459	44,339,748
Vietnam	2,838,458	28,453,600	125,000	31,417,058	22,298,187	5,830,973	3,287,898	31,417,058

Note: ^{1/}The value is estimated by AFSIS

Table 9 Rice balance sheet of ASEAN countries, 2017(milled rice)

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	41,143,001	136,202,847	1,770,304	179,116,152	113,589,367	18,466,398	47,060,387	179,116,152
Brunei	15,529	1,631	33,304	50,464	34,997	-	15,468	50,464
Cambodia	326,673	5,223,688	-	5,550,361	2,408,640	2,900,122	241,599	5,550,361
Indonesia	3,021,725	44,624,550	-	47,646,275	42,952,266	1,077	4,692,932	47,646,275
Lao PDR	693,013	2,603,683	11,000	3,307,696	2,573,321	20,552	713,823	3,307,696
Malaysia	338,758	2,326,318	-	2,665,076	2,289,548	-	375,528	2,665,076
Myanmar	8,252,506	19,338,080	-	27,590,586	14,554,551	-	13,036,035	27,590,586
Philippines	2,959,237	12,745,590	1,200,000	16,904,827	13,457,692	-	3,447,135	16,904,827
Singapore ^{1/}	75,201	-	400,000	475,201	268,353	131,647	75,201	475,201
Thailand	22,172,459	21,108,507	18,000	43,298,966	12,435,000	9,500,000	21,363,966	43,298,966
Vietnam	3,287,898	28,230,800	108,000	31,626,698	22,615,000	5,913,000	3,098,698	31,626,698

Note: ^{1/}The value is estimated by AFSIS

Table 10 Ratio of rice production to domestic utilization in ASEAN countries, 2015-2017

Unit: Tons

Country	2015			2016			2017		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
ASEAN	131,809,660	110,828,837	118.93	129,554,329	111,795,490	115.89	136,202,847	113,589,367	119.91
Brunei	1,983	33,333	5.95	1,583	33,977	4.66	1,631	34,997	4.66
Cambodia	5,197,887	2,311,128	224.91	5,056,584	2,319,020	218.05	5,223,688	2,408,640	216.87
Indonesia	42,370,545	42,939,266	98.68	43,429,804	42,952,266	101.11	44,624,550	42,952,266	103.89
Lao PDR	2,428,911	2,272,211	106.90	2,520,000	2,326,595	108.31	2,603,683	2,573,321	101.18
Malaysia	2,040,080	2,247,550	90.77	2,200,007	2,267,553	97.02	2,326,318	2,289,548	101.61
Myanmar	17,795,470	13,521,625	131.61	17,499,763	13,745,777	127.31	19,338,080	14,554,551	132.87
Philippines	11,869,994	12,814,478	92.63	11,854,757	13,298,115	89.15	12,745,590	13,457,692	94.71
Singapore	-	284,233	-	-	270,000	-	-	268,353	-
Thailand	20,867,140	12,238,000	170.51	18,538,231	12,284,000	150.91	21,108,507	12,435,000	169.75
Vietnam	29,237,650	22,167,013	131.90	28,453,600	22,298,187	127.60	28,230,800	22,615,000	124.83

Table 11 Ratio of rice beginning stock to domestic utilization in ASEAN countries, 2015-2017

Unit: Tons

Country	2015			2016			2017		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
ASEAN	36,523,337	110,828,837	32.95	39,643,852	111,795,490	35.46	41,143,001	113,589,367	36.22
Brunei	21,398	33,333	64.20	15,589	33,977	45.88	15,529	34,997	44.37
Cambodia	577,951	2,311,128	25.01	478,152	2,319,020	20.62	326,673	2,408,640	13.56
Indonesia	1,151,065	42,939,266	2.68	1,563,266	42,952,266	3.64	3,021,725	42,952,266	7.04
Lao PDR	349,146	2,272,211	15.37	498,259	2,326,595	21.42	693,013	2,573,321	26.93
Malaysia	613,774	2,247,550	27.31	406,304	2,267,553	17.92	338,758	2,289,548	14.80
Myanmar	1,918,158	13,521,625	14.19	4,782,936	13,745,777	34.80	8,252,506	14,554,551	56.70
Philippines	2,662,000	12,814,478	20.77	3,198,800	13,298,115	24.05	2,959,237	13,457,692	21.99
Singapore	75,201	284,233	26.46	75,201	270,000	27.85	75,201	268,353	28.02
Thailand	26,926,623	12,238,000	220.02	25,786,887	12,284,000	209.92	22,172,459	12,435,000	178.31
Vietnam	2,228,021	22,167,013	10.05	2,838,458	22,298,187	12.73	3,287,898	22,615,000	14.54

Table 12 Quantity and Value of Rice Export by Countries of Destination in 2016

Quantity: Tons Values: US\$

Exporting Country	Country of Destination													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia									54,914					
Indonesia									25	27,120				
Lao PDR														
Malaysia						9,825,557								223
Myanmar					14,325	5,701,350								
Philippines														
Singapore	69	93,987			10,280	4,516,328			441	147,694	1	2,827	16	19,787
Thailand	4,053	3,299,936	1,218	422,255	317,100	124,431,576	90,481	30,561,447	189,784	72,385,408	10,611	3,796,884	148,206	53,210,312
Vietnam	20,120	9,152,488			876,813	347,869,188			223,243	103,018,885			481,088	204,871,620

Exporting Country	Country of Destination						Total within ASEAN		Total outside ASEAN		Total		
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values	
	Quantity	Values	Quantity	Values	Quantity	Values							
Brunei							0	0			0	0	
Cambodia							54,914	0	406,936		461,850	0	
Indonesia	15.0	20817	525	190,511			565	238,448	512	206,400	1,077	444,848	
Lao PDR						11,883	3,876,646	11,883	3,876,646	2,928	1,540,013	14,811	5,416,659
Malaysia		37,273						0	9,863,053		93,416	0	9,956,469
Myanmar	20,982	5,954,900						35,307	11,656,250	249,109	15,071,122	284,416	26,727,372
Philippines								0	0	18	27,494	18	27,494
Singapore			3	4,947	83	54,414	10,893	4,839,983	1,062	465,696	11,955	5,305,678	
Thailand	28,723	22,372,241			4,699	2,538,210	794,875	313,018,270	2,057,042	934,904,872	2,851,917	1,247,923,142	
Vietnam	92,113	46,618,515					1,693,375	711,530,695	4,137,598	1,908,295,375	5,830,973	2,619,826,070	

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 13 Quantity and Value of Rice Import by Countries of Origin in 2016

Quantity: Tons Values: US\$

Importing Country	Country of Origin													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia														
Indonesia									656	270			0	0
Lao PDR														
Malaysia				6,369,816										
Myanmar														
Philippines														
Singapore			1,718	1,299,917	79	135,475			164	94,571	1,346	492,652		
Thailand														
Vietnam														

Importing Country	Country of Origin						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei			25,540				25,540	0			25,540	0
Cambodia							0	0	538,396		538,396	0
Indonesia			471,452	198,053	500,650	198,409	972,757	396,732	9,241	4,630	981,998	401,362
Lao PDR			8,691	3,550,624	611	344,872	9,302	3,895,496	6,858	3,983,742	16,160	7,879,238
Malaysia				78,084,406		14,909,517	0	99,363,740		21,628,739	0	120,992,479
Myanmar							0	0			0	0
Philippines	3,997	1,486,171	105,253	40,243,369	138,776	54,681,112	248,026	96,410,652	1,390	4,612,769	249,416	101,023,421
Singapore			46,445	35,866,088	30,022	15,559,551	79,774	53,448,254	46,856	27,263,491	126,630	80,711,745
Thailand							0	0	3,320	2,433,699	3,320	2,433,699
Vietnam							0	0			0	0

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 14 FOB Price of rice in selected ASEAN countries

Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	Glutinous Rice	2015	539	1,191	350	1,190	513	416	514	560	1,092	1,231	624	427	721
		2016	486	376	1,146										
Myanmar	Milled Rice 25%	2015	353	332	384	368	367	367	377	374	371	374	370	366	367
		2016	351	368	371	367									
Thailand	Milled Rice 5%	2015	420	420	408	398	381	377	395	372	354	373	368	361	386
		2016	369	383	385	395	435								
	Hommati Rice	2015	953	947	926	927	887	867	900	859	824	828	793	742	871
		2016	741	741	733	724	747								
Vietnam	Milled Rice 5%	2015	472	436	420	436	431	415	419	445	410	411	425	425	426
		2016	444	422	447	468	474	450							

Table 15 CIF Price of rice in selected ASEAN countries

Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	Not specified	2015	500	399	423	402	460	448	419	453	442	498	395	395	436
		2016	407	409	411										
Philippines	Rice upon prior certification of NEDA that shortage exist	2015	396	419	417	397	410	502	677	588		382		413	425
		2016	376	375											
	Other rice, more than 10% but not 25% broken	2015		381	360	374		840		2,579	324	307		408	356
		2016		300											
	Broken rice	2015							1,063				197		1,019
	Other rice not more than 5% broken	2015		400	394	429					351	367		397	378
2016		362	383											365	
Singapore	Not specified	2015	561	610	676	679	623	626	609	637	660	740	773	764	663
		2016	663	624	627	633	634								636

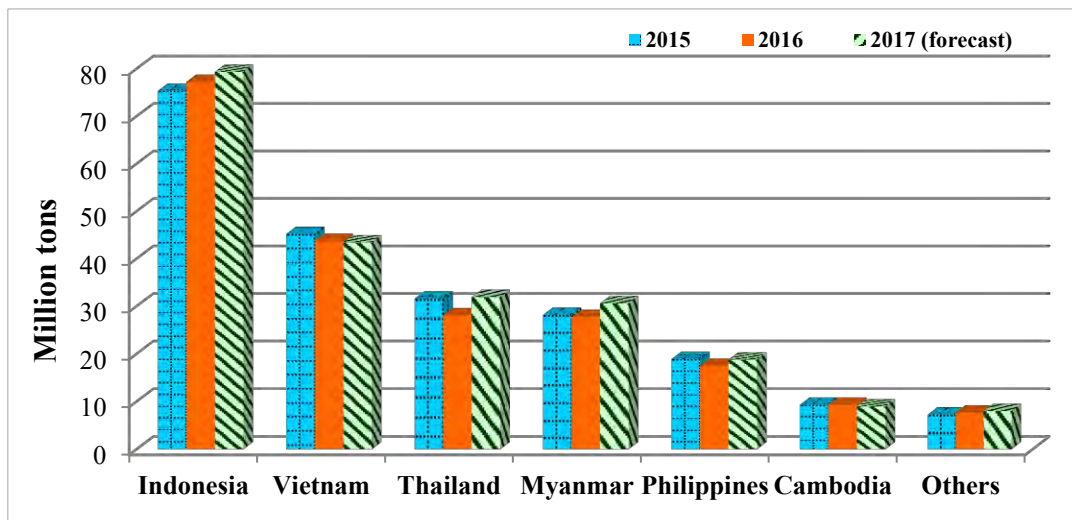


Figure 1 Paddy production of selected countries in ASEAN, 2015-2017

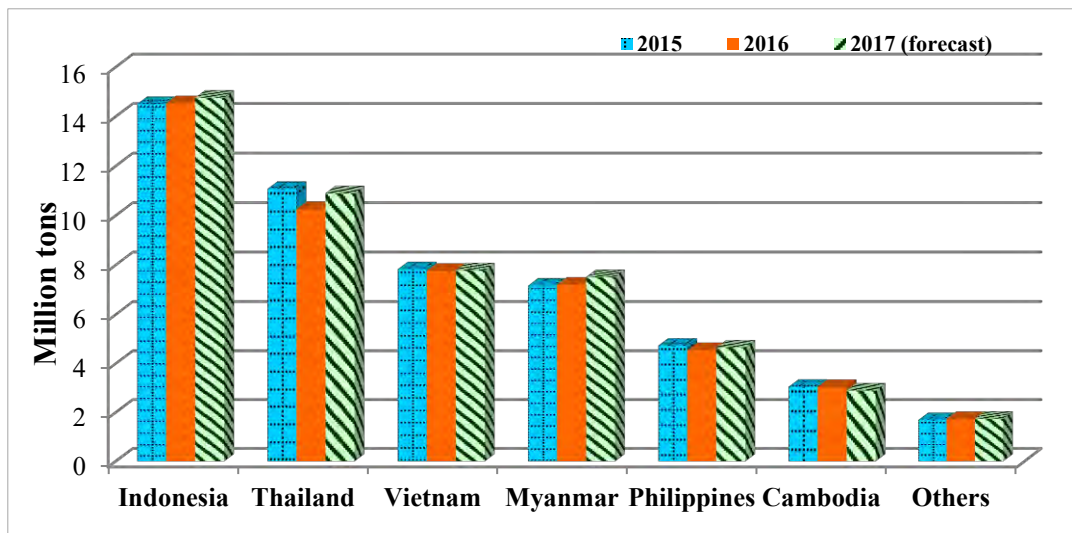


Figure 2 Paddy planted area of selected countries in ASEAN, 2015-2017

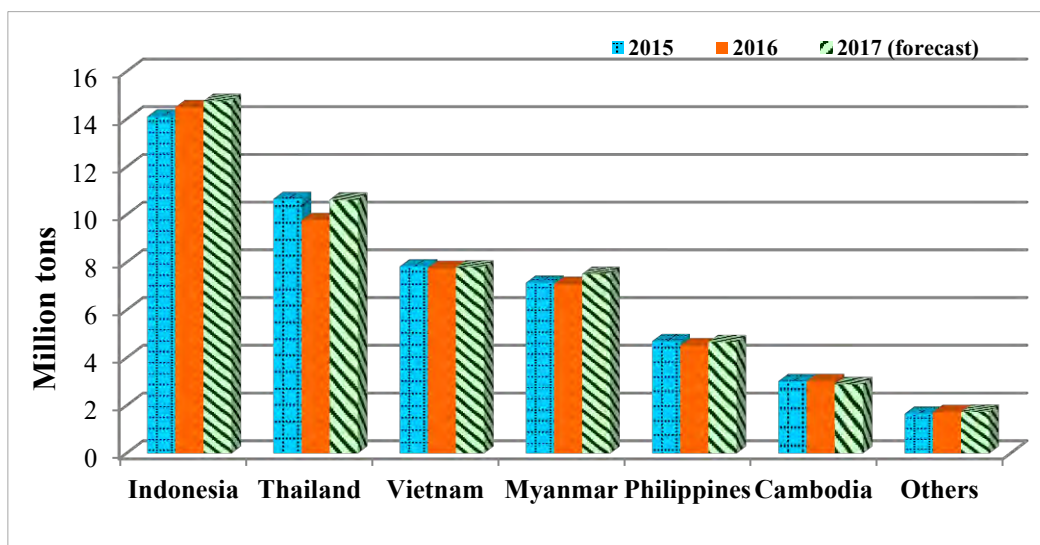


Figure 3 Paddy harvested area of selected countries in ASEAN, 2015-2017

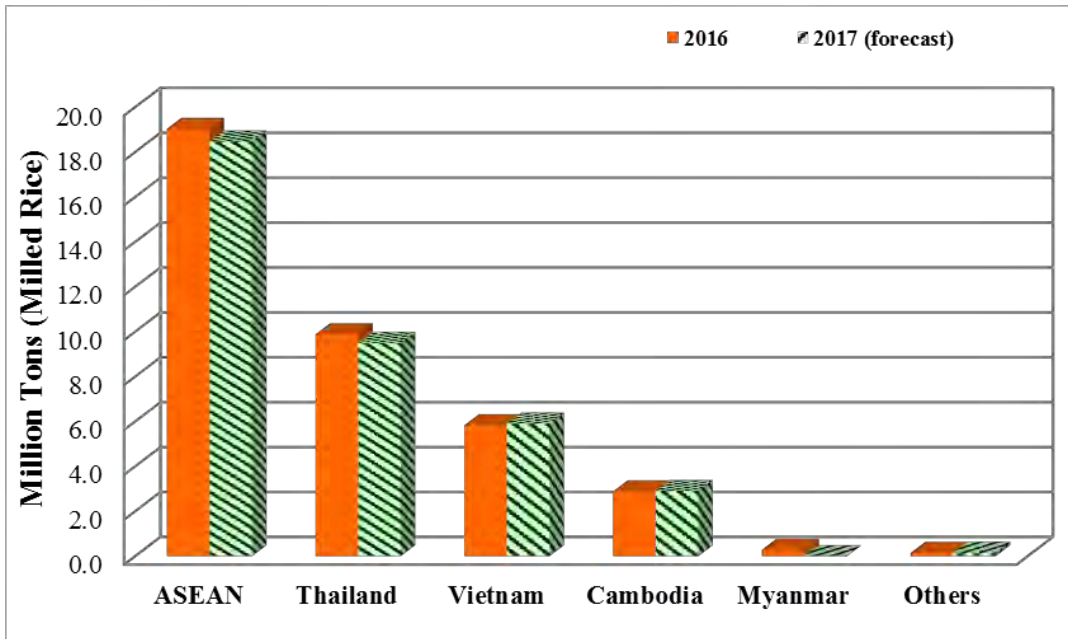


Figure 4 Paddy yield of countries in ASEAN, 2015-2017

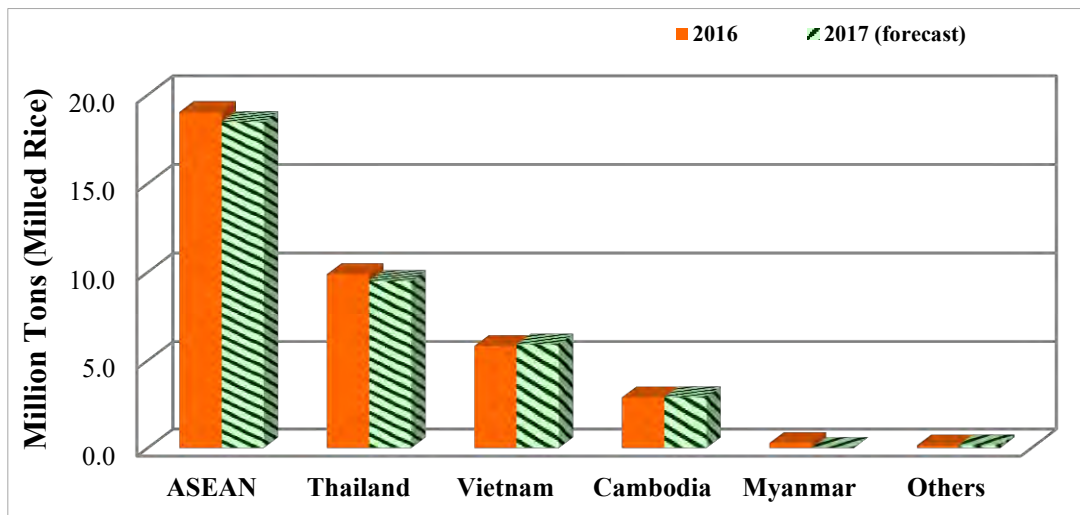


Figure 5 Amount of rice export (million tons) of selected countries in ASEAN in 2016-2017

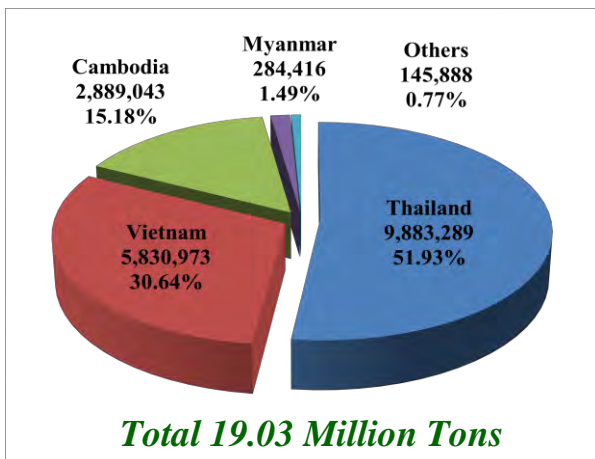


Figure 6 Share of rice export (tons) among ASEAN countries, 2016

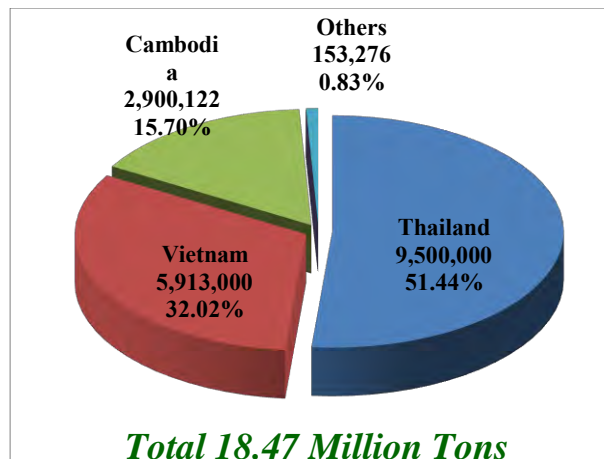


Figure 7 Share of rice export (tons) among ASEAN countries, 2017

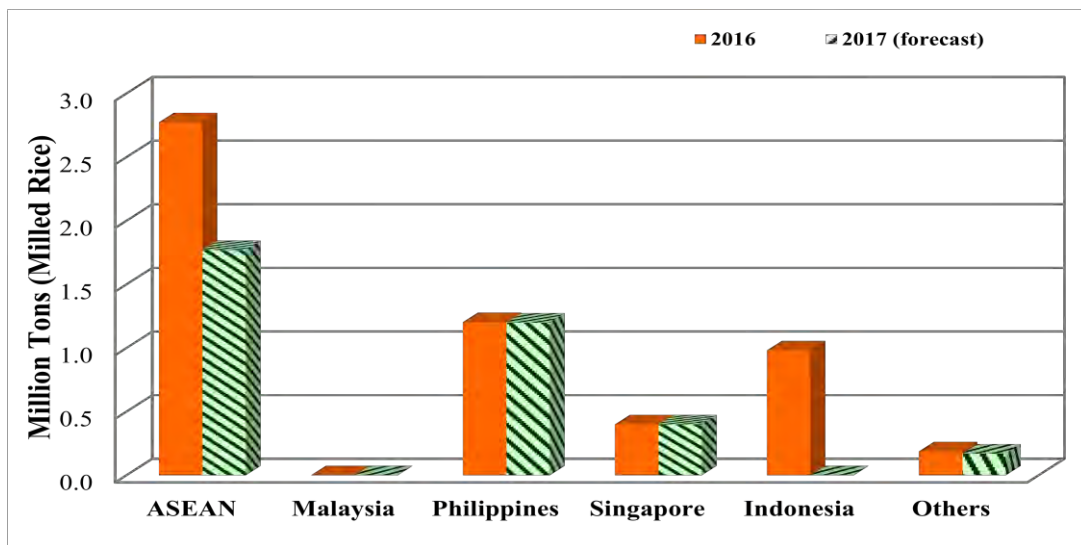


Figure 8 Amount of rice import (million tons) by selected countries in ASEAN in 2016-2017

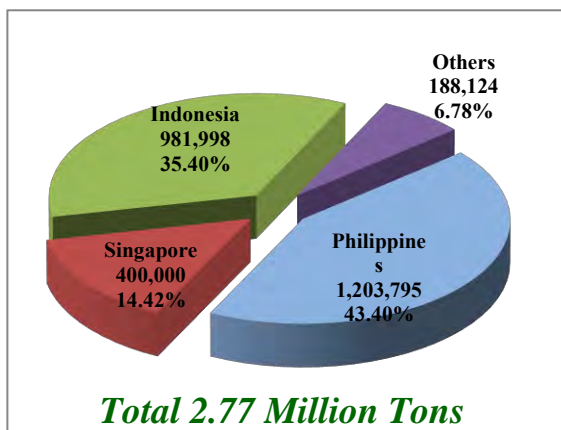


Figure 9 Share of rice import (tons) among ASEAN countries, 2016

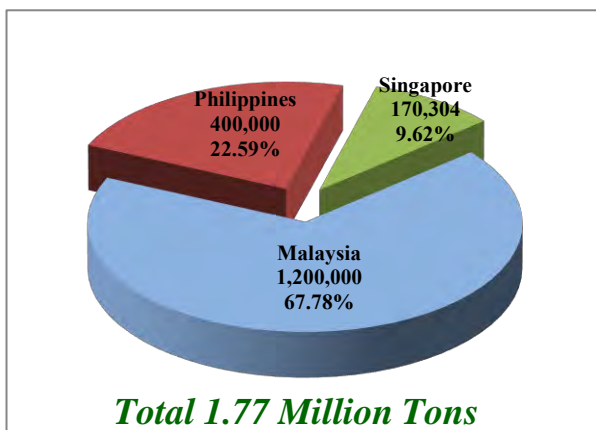


Figure 10 Share of rice import (tons) among ASEAN countries, 2017

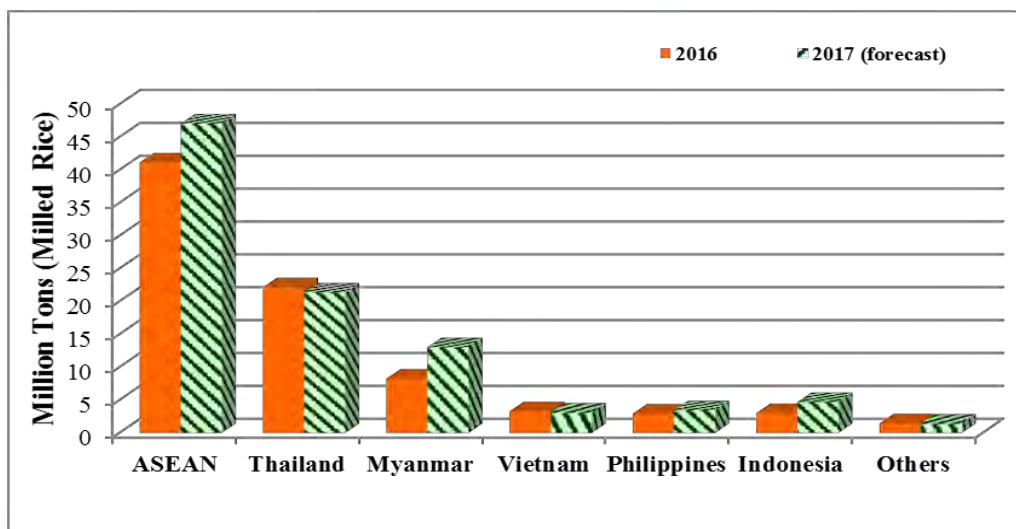


Figure 11 Amount of ending stock of rice in ASEAN countries, 2016-2017

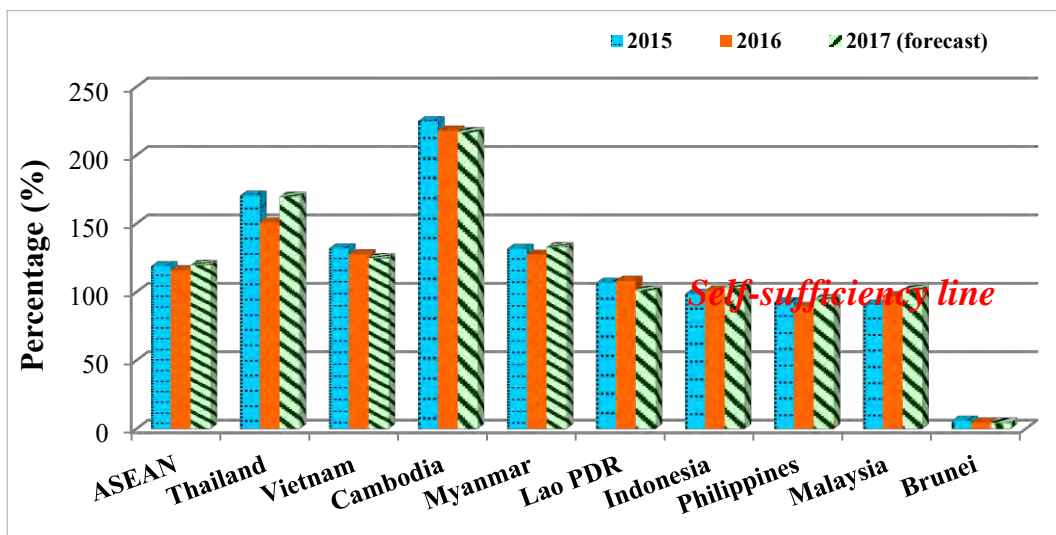


Figure 12 Ratio of rice production to domestic utilization in ASEAN countries, 2015-2017

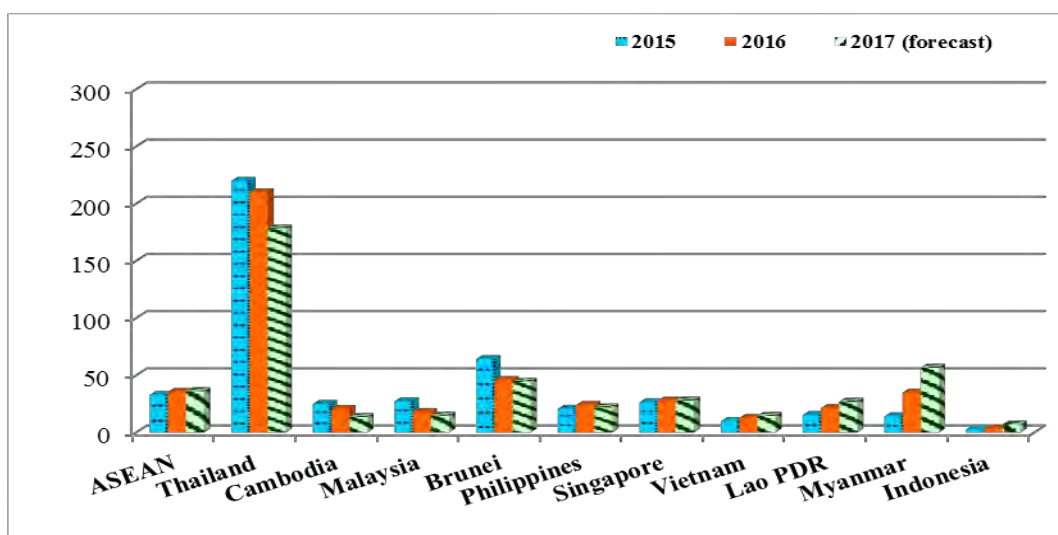


Figure 13 Ratio of rice beginning stock to domestic utilization in ASEAN countries, 2015-2017

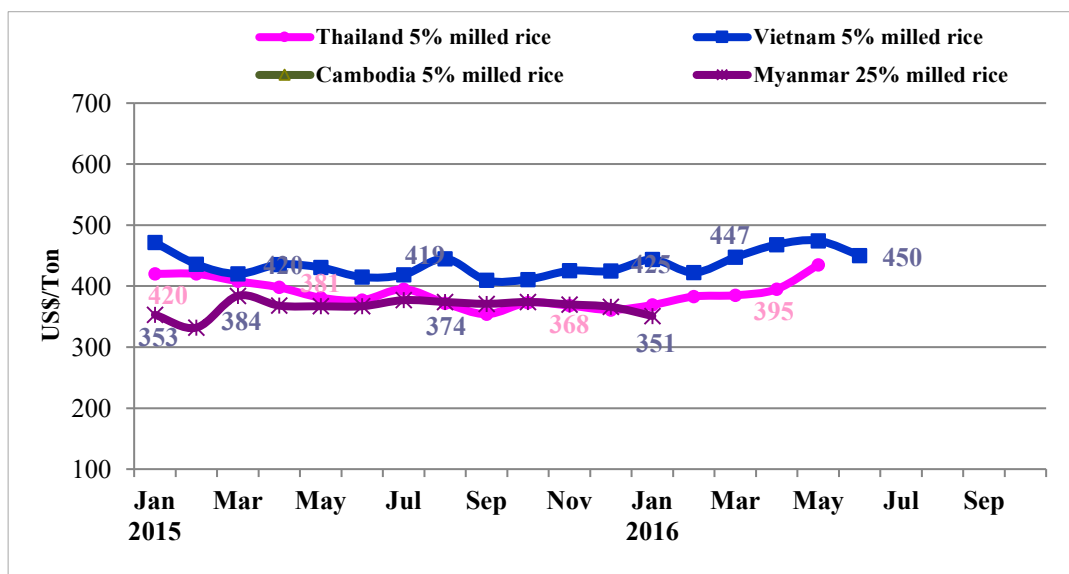


Figure 14 FOB price (US\$/Ton) of milled rice of selected countries in ASEAN in 2015-2016

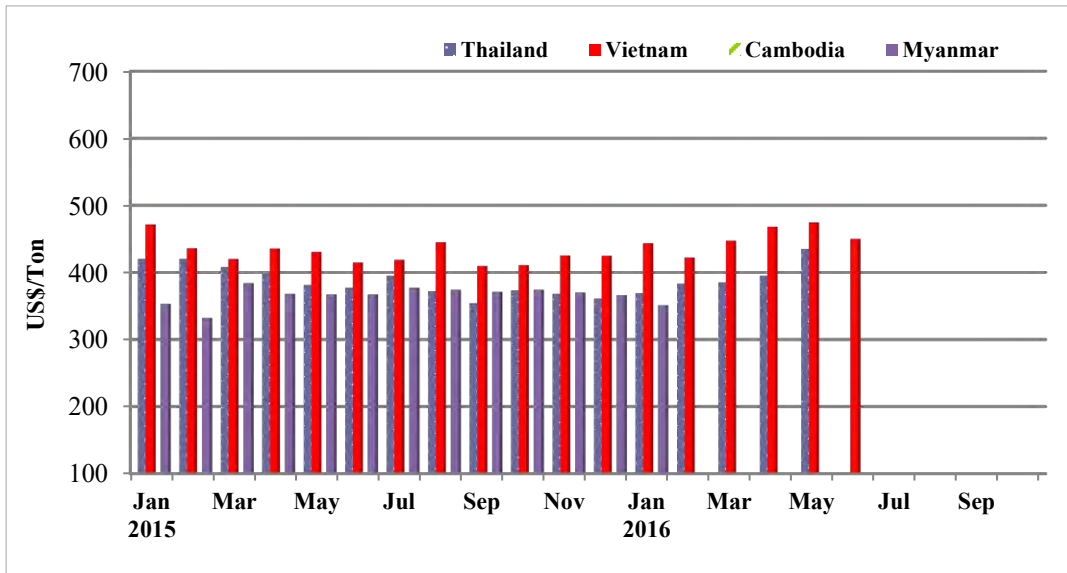


Figure 15 FOB price (US\$/Ton) of milled rice of selected countries in ASEAN in 2015-2016

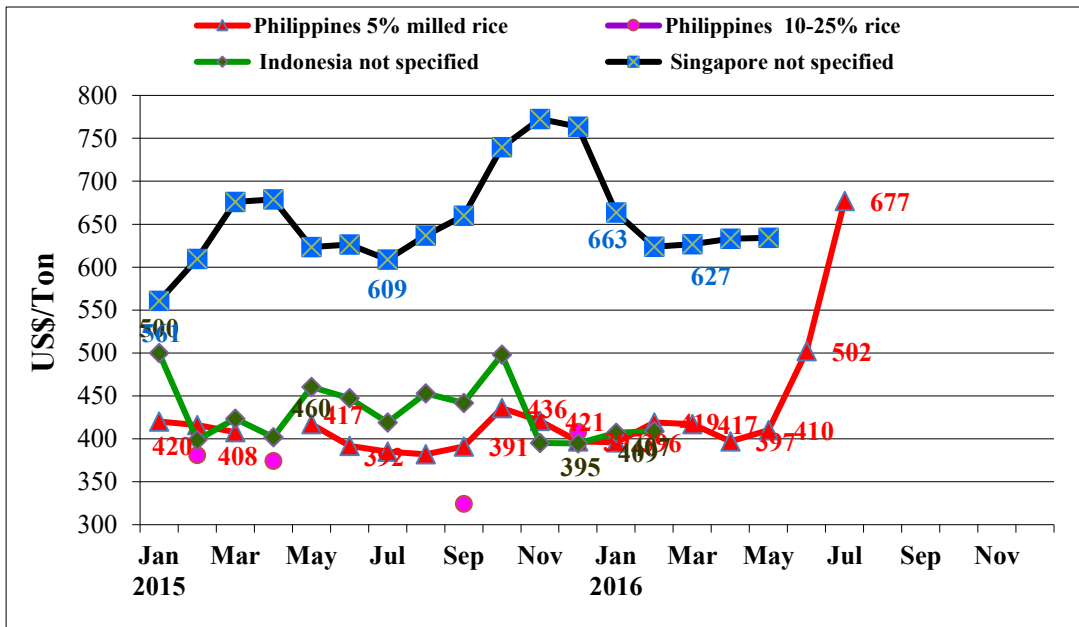


Figure 16 CIF price (US\$/Ton) of milled rice of selected countries in ASEAN in 2015-2016

Highlights of Maize Outlook for 2017

- In 2017 (crop year 2016/17) maize supply in ASEAN is forecasted to be 71.02 million tons, an increase of 3.06 million tons or 4.51 percent from 67.95 million tons in 2016 (crop year 2015/16) due to the increase in production from the previous year (Table 16).
- Maize production is predicted to be 43.49 million tons in 2017, an increase of about 1.49 million tons or around 3.54 percent, compared to 42.00 million tons in 2016 (Table 16).
- The beginning stock is forecasted to increase from 6.28 million tons in 2016 to 8.76 million tons in 2017 while the ending stock is forecasted to increase from 8.76 million tons in 2016 to 19.11 million tons in 2017.
- Maize export from ASEAN is predicted to be 1.19 million tons in 2017 compared to 1.44 million tons in 2016. For the import, it is forecasted to be 18.77 million tons in 2017, a slight decrease of 4.61 percent from 19.67 million tons in 2016.
- The production to domestic utilization ratio (self-sufficiency ratio) is forecasted to be about 85.74 percent in 2017, increase from the previous year. This indicated that ASEAN is still not be able to produce maize enough for domestic utilization in the region.
- The beginning stock to domestic utilization ratio (food security ratio) in 2017 is forecasted to increase 6.40 percent from 10.88 percent in 2016 to 17.28 percent in 2017, which indicated that the food (feed) security situation is improving.

Table 16 Summary of the ASEAN maize situation, 2016 – 2017

Unit: Million tons

Items	2016	2017	Change	
			Quantity	%
Supply (Million tons)	67.95	71.02	3.06	4.51
Beginning stock	6.28	8.76	2.48	39.49
Production	42.00	43.49	1.49	3.54
Import	19.67	18.77	-0.91	-4.61
Demand (Million tons)	67.95	71.02	3.07	4.51
Domestic utilization	57.75	50.72	-7.03	-12.17
Export	1.44	1.19	-0.26	-17.71
Ending stock	8.76	19.11	10.35	118.17
Ratio of production to domestic utilization (%)	72.73	85.74	13.01	-
Ratio of beginning stock to domestic utilization (%)	10.88	17.28	6.40	-

ASEAN Maize Situation in 2016

Production

Maize production in ASEAN in 2016 (crop year 2015/16) was estimated at 41.88 million tons, an increase of 1.31 million tons or about 3 percent from 40.56 million tons in 2015. The increase has occurred in Indonesia, Myanmar, and Lao PDR. The most increase in term of quantity was found in Indonesia approximately 2 million tons (11.34 percent). (Table 17, Figure 17).

The increase in production in **Indonesia** came from the increase in planted area and yield due to the favorable weather and the government policy combined with the farmer use more improved variety and use more fertilizer as well as taking care their crop better.

The decrease in production and planted area in the **Philippines** due to the prolonged dry spell, planted area was damaged and unable to plant, yield was affected by drought, pests, and El Nino phenomenon.

The decrease in production in **Vietnam** cause by the planted area, farmer responded to the price decrease.

For **Thailand**, the production has decreased attributed to the decrease in planted area due to price of competing crop has increased.

For **Myanmar**, the increase in production came from the increase in planted area. The increase was due to farmers responded to price increase.

For **Lao PDR**, the increase in production and planted area.

For **Cambodia**, production has decreased due to the decrease in both planted area and yield. The decrease was due to unfavorable weather. (Table 17-20, Figure 17-20).

Utilization and Stock

Maize utilization in ASEAN in 2016 was estimated at 57.75 million tons, an increase of about 2.03 million tons or 3.64 percent compared to 55.72 million tons in 2015 (Table 22-23). Most of the maize production in ASEAN is used for animal feed. The increase in domestic utilization of maize has occurred in most countries except the Philippines.

The beginning stock of maize in ASEAN in 2016 was estimated at 6.28 million tons, an increase of 0.83 million tons from 5.46 million tons in year 2015. The ratio of maize production to domestic utilization for the whole ASEAN in 2016 was estimated at 72.73 percent compared to 72.53 percent in year 2015. This indicated that ASEAN by itself has not produced maize sufficient for regional consumption (Table 25, Figure 28). On the country basis, Cambodia, Lao PDR, and Myanmar have the ratio well above 100 percent. For Indonesia and the Philippines the ratio is at the border line of self-sufficiency. For Thailand and Vietnam the ratio are less than 100 percent.

The ratio of beginning stock to the domestic utilization for the ASEAN year 2016 was estimated to be 10.88 percent, indicated that the region is not secured enough in terms of feed requirement (Table 26, Figure 29). Cambodia is the only country in the region that have the

ratio above 20 percent which, in general, is considered as the optimum level for food/feed security.

Trade

The maize exported from ASEAN in 2016 is forecasted to be 1.44 million tons compared to 19.67 million tons of maize imported. Thailand is the major maize exporter in the region and followed by Myanmar, and Lao PDR respectively. In 2016, Thailand, the biggest exporter in ASEAN, is expected to export 0.58 million tons or about 40.34 percent of the total maize export from the ASEAN.

The major importing countries in the region are Vietnam, Malaysia, and Thailand (Table 23, Figure 21, 22, 24 and 25). The quantity and value of maize exported by countries of destination and the quantity and value of imported by countries of origin are given in Table 27-28.

Prices

The monthly FOB prices for maize exporting countries and CIF prices for importing countries between 2015 – 2016 are shown in Table 29 – 30 and Figure 30 – 31. The annual average of Indonesia FOB prices in 2016 (January – March) was 357 US\$/ton, higher than other countries and up from 274 US\$/ton in 2015. For Myanmar and Thailand average FOB price of 2016 were between 235 – 264 US\$/ton. The average CIF prices in Indonesia, Singapore and Vietnam were 220, 252, and 195 respectively.

Damaged Area

The damaged area of maize in 2016 was reported to be 109,183 hectares of which 83,600 hectares caused by the drought and 9,966 hectares caused by the flood. The most affected area caused by the drought was occurred in the Philippines while the most affected area by flood was found in Cambodia, and Myanmar (Table 21).

Prospects for Maize in 2017

Production

Maize production in ASEAN in 2017 (crop year 2016/17) was estimated at 43.49 million tons, an increase of 1.49 million tons or about 4 percent from 42.00 million tons in 2016. The increase has occurred in most of the country except Myanmar and Vietnam. The most increase in term of quantity was found in Indonesia approximately 0.84 million tons (3.84 percent)

Indonesia, the biggest maize producer in ASEAN, is expected to increase in both planted area and yield due to the favorable weather and the special assistance by the government policy and the farmers use more improved variety and fertilizer and they taking care their crop better.

The Philippines is forecasted to increase its planted area.

In **Vietnam** and **Myanmar**, the decrease in production is forecasted because farmer expected the product price will be decrease, the planted area will be decreased.

For **Cambodia** and **Lao PDR**, the maize production is projected to increase which come from the increase in area since the favorable weather and price increase are expected.

For **Thailand**, the increase in production is predicted due to the increase in planted area and yield as a result of farmer respond to price increase. The slight increase in yield is forecasted because farmers will take care of their crop better in respond to the expectation that the price of maize will continue to increase with favorable weather is expected (Table 17-20, Figure 17-20).

Utilization and Stock

The domestic utilization of maize in ASEAN is forecasted to be 50.72 million tons in 2017, a decrease of 7.03 million tons from 57.75 million tons in 2016 (Table 23-24). The estimate of the beginning stock for the year 2017 is about 8.76 million tons, an increase of 2.48 million tons from 6.28 million tons in 2016.

In 2017 the ratio of production to domestic utilization is expected to be 85.74 percent, a slight increase of about one percent from 72.73 percent in year 2016 (Table 25, Figure 28). The ratio of beginning stock to domestic utilization ratio is expected to be 17.28 percent, which increases from 10.88 percent in 2016 (Table 26, Figure 29).

Trade

The maize export from ASEAN is projected to be 1.19 million tons in 2017, a decrease of 0.26 million tons compared to 1.44 million tons in 2016. For the import by the ASEAN, it is forecasted to be 18.77 million tons in 2017, a slight decrease from 19.67 million tons in 2016 about 0.91 million tons. (Table 23-24, Figure 21, 23, 24 and 26).

Table 17 Maize production in ASEAN countries, 2015 – 2017

Unit: 1,000 Tons

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
			ASEAN	40,564.46		41,875.16	1,310.70
Brunei	-	-	-	-	-	-	-
Cambodia	549.61	399.65	-149.96	-27.28	407.64	7.99	2.00
Indonesia	19,611.70	21,835.89	2,224.18	11.34	22,673.50	837.61	3.84
Lao PDR	1,110.00	1,112.78	2.78	0.25	1,229.15	116.38	10.46
Malaysia	-	-	-	-	-	-	-
Myanmar	1,720.57	1,748.86	28.29	1.64	1,721.71	-27.16	-1.55
Philippines	7,671.63	6,964.12	-707.51	-9.22	7,628.48	664.36	9.54
Singapore	-	-	-	-	-	-	-
Thailand	4,619.95	4,561.87	-58.07	-1.26	4,602.95	41.08	0.90
Vietnam	5,281.00	5,252.00	-29.00	-0.55	5,223.00	-29.00	-0.55

Table 18 Maize planted area in ASEAN countries, 2015 – 2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	9,532.67	9,627.54	94.87	1.00	9,814.09	186.55	1.94
Brunei							
Cambodia	143.52	112.57	-30.94	-21.56	114.83	2.25	2.00
Indonesia	3,810.38	4,078.04	267.66	7.02	4,107.52	29.48	0.72
Lao PDR	200.00	200.50	0.50	0.25	201.50	1.00	0.50
Malaysia							
Myanmar	459.05	471.93	12.88	2.81	467.05	-4.88	-1.03
Philippines	2,593.94	2,485.33	-108.60	-4.19	2,648.27	162.94	6.56
Singapore							
Thailand	1,146.48	1,114.16	-32.32	-2.82	1,116.92	2.76	0.25
Vietnam	1,179.30	1,165.00	-14.30	-1.21	1,158.00	-7.00	-0.60

Table 19 Maize harvested area in ASEAN countries, 2015 – 2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change		2017 (2016/17)	change	
			Quantities	(%)		Quantities	(%)
ASEAN	9,434.91	9,518.35	83.44	0.88	9,774.61	256.26	2.69
Brunei							
Cambodia	136.00	104.16	-31.84	-23.41	106.18	2.02	1.94
Indonesia	3,786.82	4,071.05	284.23	7.51	4,107.52	36.47	0.90
Lao PDR	200.00	200.50	0.50	0.25	201.50	1.00	0.50
Malaysia							
Myanmar	458.29	469.75	11.46	2.50	467.05	-2.70	-0.57
Philippines	2,561.42	2,419.19	-142.23	-5.55	2,648.27	229.09	9.47
Singapore							
Thailand	1,113.09	1,088.71	-24.39	-2.19	1,086.09	-2.62	-0.24
Vietnam	1,179.30	1,165.00	-14.30	-1.21	1,158.00	-7.00	-0.60

Table 20 Maize Yield in ASEAN countries, 2016 – 2017

Unit: Ton/Hectare

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	4.30	4.40	0.10	2.33	4.45	0.05	1.14
Brunei							
Cambodia	4.04	3.84	-0.20	-4.95	3.84	0.00	0.00
Indonesia	5.18	5.36	0.18	3.47	5.52	0.16	2.99
Lao PDR	5.55	5.55	0.00	0.00	6.10	0.55	9.91
Malaysia							
Myanmar	3.75	3.72	-0.03	-0.80	3.69	-0.03	-0.81
Philippines	3.00	2.88	-0.12	-4.00	2.88	0.00	0.00
Singapore							
Thailand	4.15	4.19	0.04	0.96	4.24	0.05	1.19
Vietnam	4.48	4.51	0.03	0.67	4.51	0.00	0.00

Table 21 Maize damaged area in ASEAN by cause of damage, 2016

Country	Cause of Damage (Hectares)						Total
	Flood	Drought	Pests	Diseases	Unspecified	Others	
ASEAN	9,966	83,600	2,923	2,412	-	-	109,183
Brunei							
Cambodia	5,951	2,466	-	-	-	-	8,417
Indonesia	1,836	4,909	123	121	-	-	6,989
Lao PDR	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-
Myanmar	2,179	-	-	-	-	-	2,179
Philippines	-	55,863	-	-	10,282	-	66,145
Singapore							
Thailand	-	20,362	2,800	2,291	-	-	25,453
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 22 Maize balance sheet of ASEAN countries, 2015

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	5,456,713	40,411,585	18,249,526	64,117,823	55,718,151	2,117,469	6,282,203	64,117,823
Brunei	–	–	872	872	872	–	–	872
Cambodia		549,607		549,607	240,814	56,422	252,371	549,607
Indonesia	3,042,820	19,611,704	2,502,296	25,156,820	21,363,623	211,034	3,582,163	25,156,820
Lao PDR	75,610	1,110,000	2,105	1,187,715	834,383	296,058	57,274	1,187,715
Malaysia ^{1/}	389,885	–	4,500,000	4,889,885	4,550,000	7,000	332,885	4,889,885
Myanmar	250,533	1,720,571	1,264	1,972,368	574,862	1,360,477	37,029	1,972,368
Philippines	184,000	7,518,756	712,424	8,415,180	8,027,688	492	387,000	8,415,180
Singapore	–	–	42,255	42,255	40,909	1,346	–	42,255
Thailand	1,092,865	4,619,947	2,866,610	8,579,422	7,590,000	80,640	908,782	8,579,422
Vietnam	421,000	5,281,000	7,621,700	13,323,700	12,495,000	104,000	724,700	13,323,700

Note: ^{1/} The value is estimated by AFSIS

Table 23 Maize balance sheet of ASEAN countries, 2016

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	6,282,203	41,997,818	19,672,859	67,952,880	57,748,758	1,441,514	8,762,607	67,952,880
Brunei	–	–	898	898	898	–	–	898
Cambodia	252,371	399,649		652,020	319,488	98,767	233,765	652,020
Indonesia	3,582,163	21,835,885	2,502,296	27,920,344	22,652,512	211,034	5,056,798	27,920,344
Lao PDR	57,274	1,112,775	2,529	1,172,578	862,634	244,593	65,351	1,172,578
Malaysia	332,885	–	4,559,653	4,892,538	4,628,680	7,836	256,022	4,892,538
Myanmar	37,029	1,748,864	1,586,600	3,372,493	1,299,577	276,486	1,796,430	3,372,493
Philippines	387,000	7,086,773	172,818	7,646,591	7,579,598	217	66,776	7,646,591
Singapore ^{1/}	–	–	41,413	41,413	40,371	1,042	–	41,413
Thailand	908,782	4,561,872	3,624,450	9,095,104	7,820,000	581,539	693,565	9,095,104
Vietnam	724,700	5,252,000	7,182,200	13,158,900	12,545,000	20,000	593,900	13,158,900

Note: ^{1/} The value is estimated by AFSIS

Table 24 Maize balance sheet of ASEAN countries, 2017

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	8,762,607	43,486,426	18,767,497	71,016,530	50,719,079	1,185,206	19,112,246	71,016,530
Brunei	–	–	925	925	925	–	–	925
Cambodia	233,765	407,641		641,406	134,457	74,899	432,050	641,406
Indonesia	5,056,798	22,673,496	2,502,296	30,232,590	22,652,512	211,034	7,369,045	30,232,590
Lao PDR	65,351	1,229,150	1,289	1,295,790	935,638	298,939	61,213	1,295,790
Malaysia	256,022	–	4,611,177	4,867,199	4,718,534	8,265	140,399	4,867,199
Myanmar	1,796,430	1,721,705	–	3,518,135	1,352,181		2,165,954	3,518,135
Philippines	66,776	7,628,483	58,210	7,753,469			7,753,469	7,753,469
Singapore ^{1/}	–	–	41,900	41,900	39,832	2,068	–	41,900
Thailand	693,565	4,602,951	3,930,000	9,226,516	8,100,000	590,000	536,516	9,226,516
Vietnam	593,900	5,223,000	7,621,700	13,438,600	12,785,000		653,600	13,438,600

Note: ^{1/} The value is estimated by AFSIS

Table 25 Ratio of maize production to domestic utilization in ASEAN countries, 2015 – 2017

Unit: Tons

Country	2015			2016			2017		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
ASEAN	40,411,585	55,718,151	72.53	41,997,818	57,748,758	72.73	43,486,426	50,719,079	85.74
Brunei	–	872	0.00	–	898	0.00	–	925	0.00
Cambodia	549,607	240,814	228.23	399,649	319,488	125.09	407,641	134,457	303.18
Indonesia	19,611,704	21,363,623	91.80	21,835,885	22,652,512	96.39	22,673,496	22,652,512	100.09
Lao PDR	1,110,000	834,383	133.03	1,112,775	862,634	129.00	1,229,150	935,638	131.37
Malaysia	–	4,550,000	0.00	–	4,628,680	0.00	–	4,718,534	0.00
Myanmar	1,720,571	574,862	299.30	1,748,864	1,299,577	134.57	1,721,705	1,352,181	127.33
Philippines	7,518,756	8,027,688	93.66	7,086,773	7,579,598	93.50	7,628,483	–	–
Singapore	–	40,909	0.00	–	40,371	0.00	–	39,832	0.00
Thailand	4,619,947	7,590,000	60.87	4,561,872	7,820,000	58.34	4,602,951	8,100,000	56.83
Vietnam	5,281,000	12,495,000	42.26	5,252,000	12,545,000	41.87	5,223,000	12,785,000	40.85

Table 26 Ratio of maize beginning stock to domestic utilization in ASEAN countries, 2015 – 2017

Unit: Tons

Country	2015			2016			2017		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
ASEAN	5,456,713	55,718,151	9.79	6,282,203	57,748,758	10.88	8,762,607	50,719,079	17.28
Brunei	–	872	–	–	898	–	–	925	–
Cambodia	–	240,814	–	252,371	319,488	78.99	233,765	134,457	173.86
Indonesia	3,042,820	21,363,623	14.24	3,582,163	22,652,512	15.81	5,056,798	22,652,512	22.32
Lao PDR	75,610	834,383	9.06	57,274	862,634	6.64	65,351	935,638	6.98
Malaysia	389,885	4,550,000	8.57	332,885	4,628,680	7.19	256,022	4,718,534	5.43
Myanmar	250,533	574,862	43.58	37,029	1,299,577	2.85	1,796,430	1,352,181	132.85
Philippines	184,000	8,027,688	2.29	387,000	7,579,598	5.11	66,776	–	–
Singapore	–	40,909	–	–	40,371	–	–	39,832	–
Thailand	1,092,865	7,590,000	14.40	908,782	7,820,000	11.62	693,565	8,100,000	8.56
Vietnam	421,000	12,495,000	3.37	724,700	12,545,000	5.78	593,900	12,785,000	4.65

Table 27 Quantity and Value of Maize Export by Countries of Destination in 2016

Quantity: Tons Values: US\$

Exporting Country	Country of Destination													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia														
Indonesia									191	76,774			3,571	1,400,586
Lao PDR														
Malaysia		261,170				3,184,344								
Myanmar									1	200				
Philippines														
Singapore	0.21	1,413	0.42	1,413	973	352,628			8	13,427	0.09			
Thailand					6,600	1,662,445	90	20,398					52,585	12,916,381
Vietnam														

Exporting Country	Country of Destination						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei							0	0			0	0
Cambodia							0	0			0	0
Indonesia	105	65,171	903	327,270	96	181,070	4,866	2,050,871	1,557	301,326	6,423	2,352,197
Lao PDR			16,640	102,200			16,640	102,200	227,953	32,399,380	244,593	32,501,580
Malaysia		747,511					0	4,193,026		420,356	0	4,613,382
Myanmar	299	74,520	5,410	1			5,710	74,721	270,776	67	276,486	74,789
Philippines					216	648,013	216	648,013	1	29,786	217	677,799
Singapore			0.01				982	368,882	2	4,947	984	373,828
Thailand							59,275	14,599,224	172	64,691	59,447	14,663,915
Vietnam							0	0			0	0

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 28 Quantity and Value of Maize Import by Countries of Origin in 2016

Quantity: Tons Values: US\$

Importing Country	Country of Origin													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei									12	18,034			8	35,989
Cambodia														
Indonesia									383	367,921				
Lao PDR														
Malaysia						25,236								5,855
Myanmar														
Philippines														
Singapore					168	108,611			11,301	2,523,654	184	50,139	0.07	313
Thailand							53,150	7,659,758			5,060	1,462,944		
Vietnam			9,365	2,378,640			1,363	273,994						

Importing Country	Country of Origin						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei	4	9,072	0.33	9,446			24	72,541	848	481,776	872	554,317
Cambodia							0	0			0	0
Indonesia	515	206,305	6,679	1,812,796			7,577	2,387,022	740,840	161,286,618	748,417	163,673,640
Lao PDR			2,529	111,562			2,529	111,562			2,529	111,562
Malaysia		55		249,591			0	280,737		224,680,809	0	224,961,547
Myanmar			300,000	660,000			300,000	660,000	1,286,600	886,918	1,586,600	1,546,918
Philippines			51,235	15,457,854	25,246	6,686,665	76,481	22,144,519	96,337	20,805,856	172,818	42,950,375
Singapore			20	28,233			11,673	2,710,951	752	399,693	12,425	3,110,644
Thailand							58,210	9,122,702			58,210	9,122,702
Vietnam			8,323	25,128,991			19,051	27,781,625	7,163,155	1,380,885,804	7,182,206	1,408,667,429

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 29 FOB Price of maize (feed grain) in selected ASEAN countries

Unit: US\$/Ton

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	2015	292	409	302	269	250	246	233	230	232	236	362	228	274
	2016	307	443	321										357
Myanmar	2015	280		260	281	286	291	298	294	286	250	243	238	273
	2016	228	231	342	255									264
Thailand	2015	257	257	260	261	256	276	275	261	239	237	235	232	254
	2016	235												235

Table 30 CIF Price of maize (feed grain) in selected ASEAN countries

Unit: US\$/Ton

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average	
Indonesia	2015	232	245	232	248	226	239	219	213	218	215	224	218	227	
	2016	215	223	221										220	
Philippines	In-quota	2015	336		480	441	444	351	1,269	419	245	247	247	224	268
		2016	208	223											215
	Out-quota	2015	516	432	289	320	304	381	539	410			321		437
		2016	199												199
Singapore	2015	234	232	258	235	236	269	251	241	248	240	283	257	249	
	2016	248	260	243	247	260								252	
Vietnam	2015	234	228	236	225	229	223	216	211	206	202	207	203	217	
	2016	197	200	197	192	190	196							195	

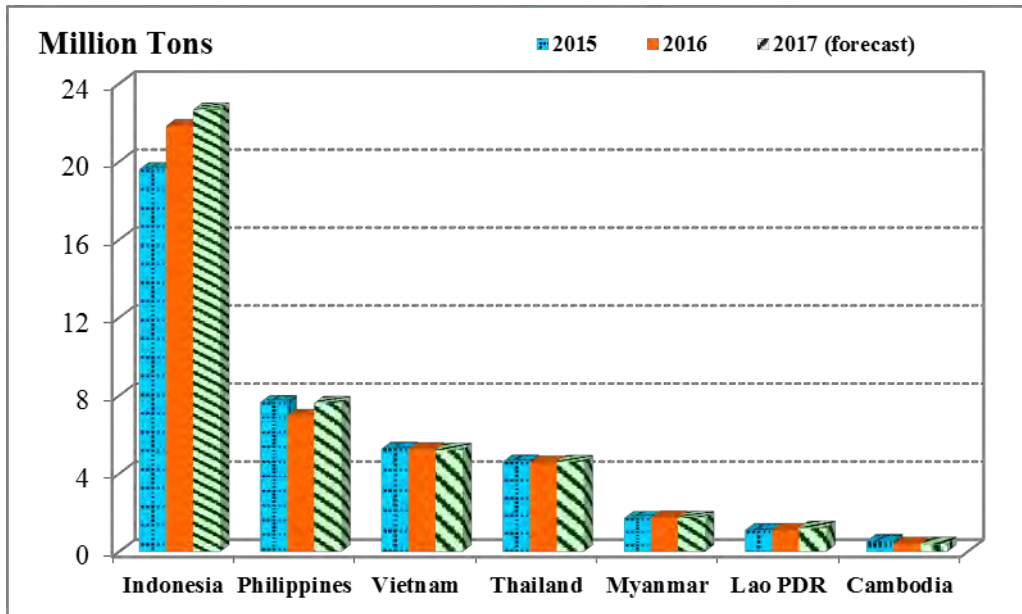


Figure 17 Maize production of selected countries in ASEAN, 2015 – 2017

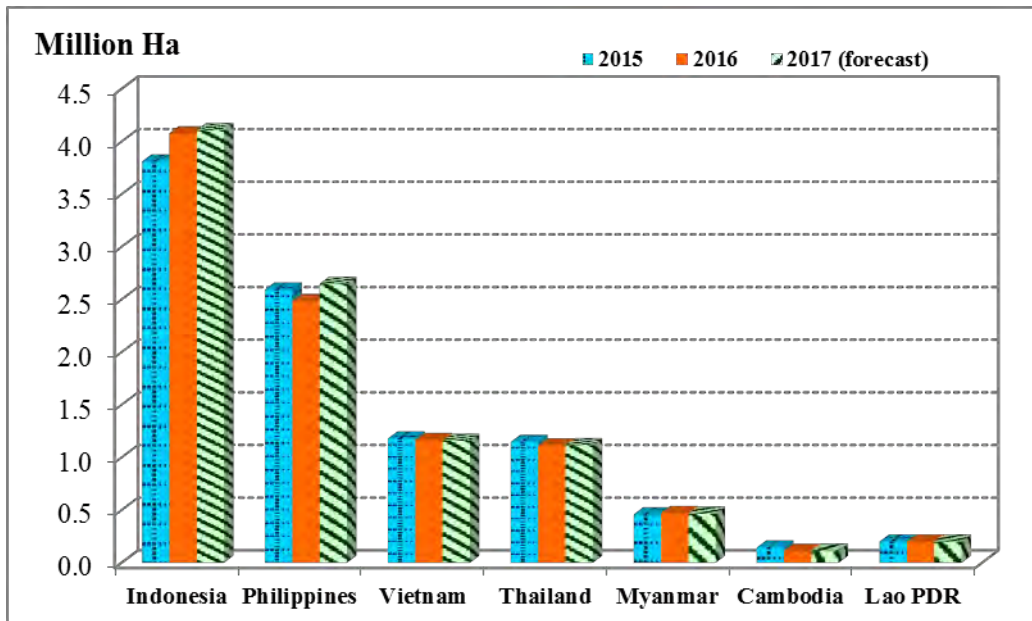


Figure 18 Maize planted area of selected countries in ASEAN, 2015 – 2017

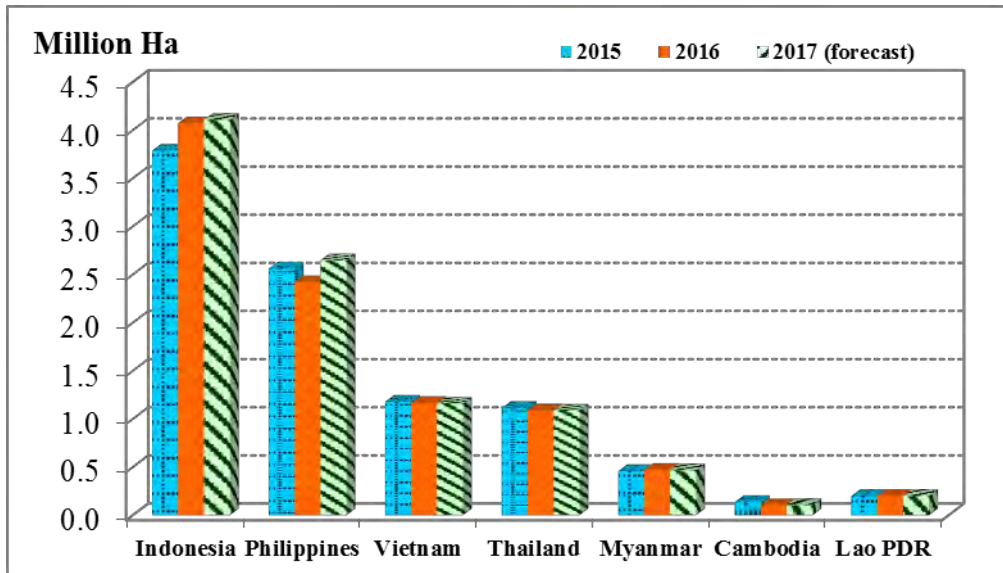


Figure 19 Maize harvested area of selected countries in ASEAN, 2015 – 2017

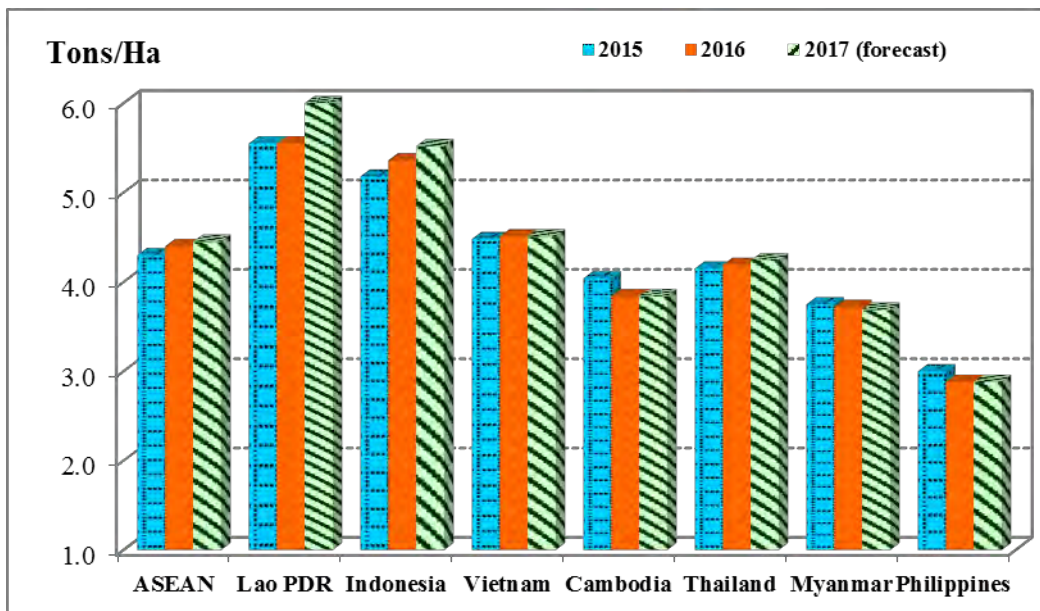


Figure 20 Maize yield of countries in ASEAN, 2015 – 2017

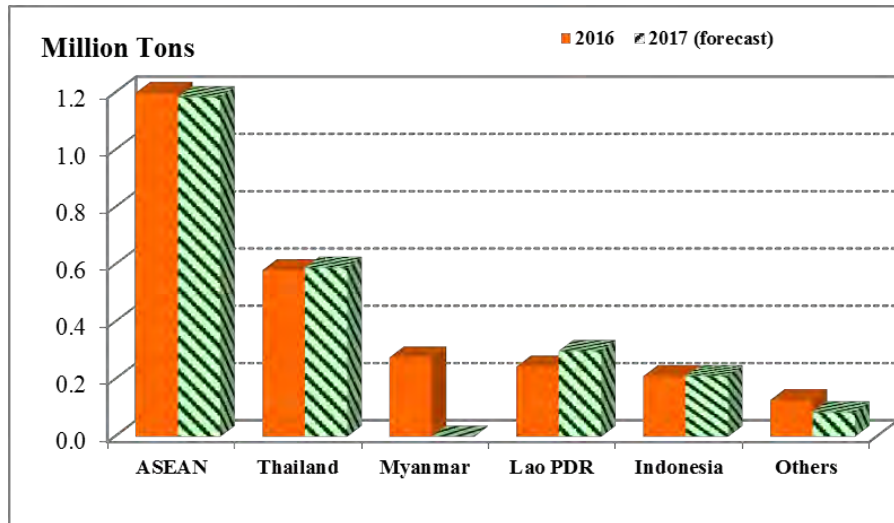


Figure 21 Amount of maize export (million tons) of selected countries in ASEAN in 2016 – 2017

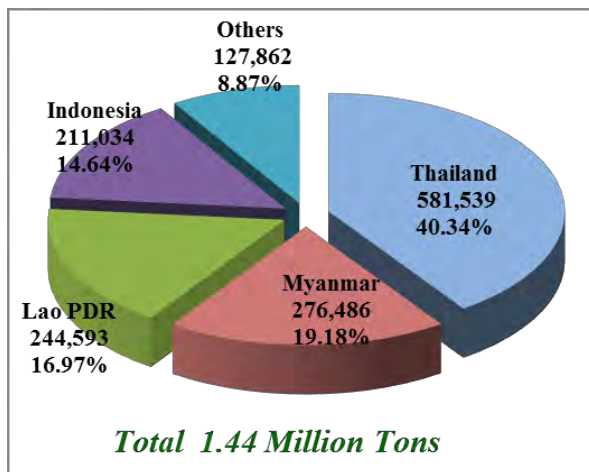


Figure 22 Share of maize export (tons) among ASEAN countries, 2016

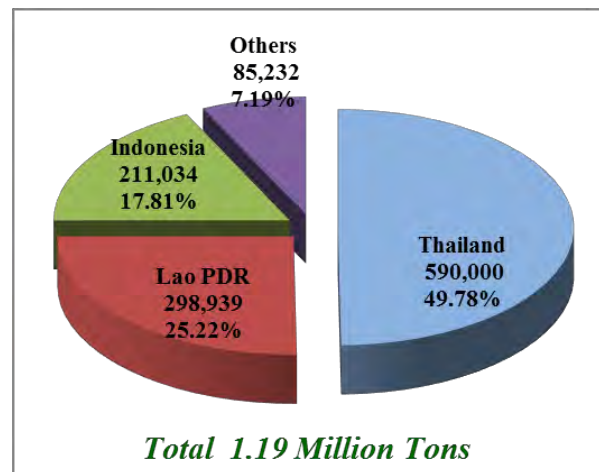


Figure 23 Share of maize export (tons) among ASEAN countries, 2017

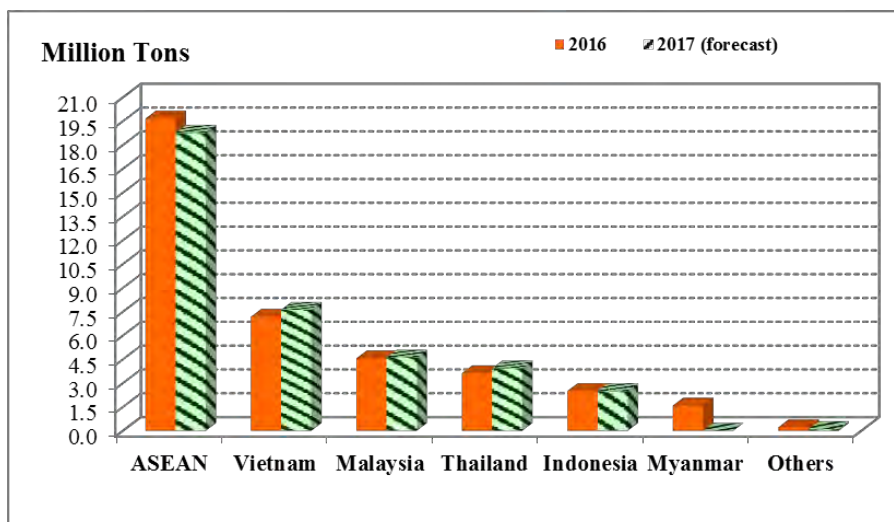


Figure 24 Amount of maize import (million tons) by selected countries in ASEAN in 2016 – 2017

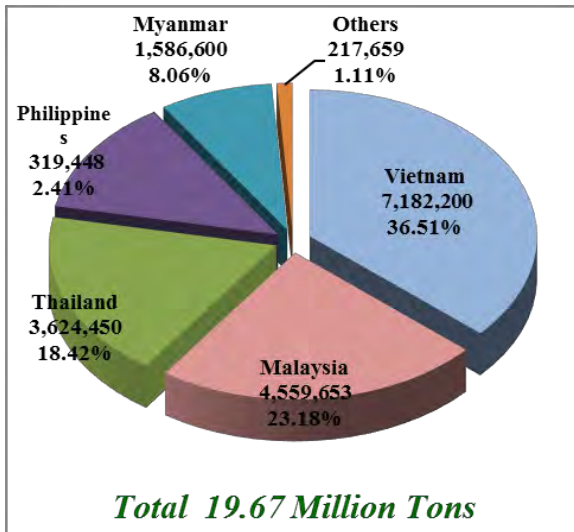


Figure 22 Share of maize import (tons) among ASEAN countries, 2016

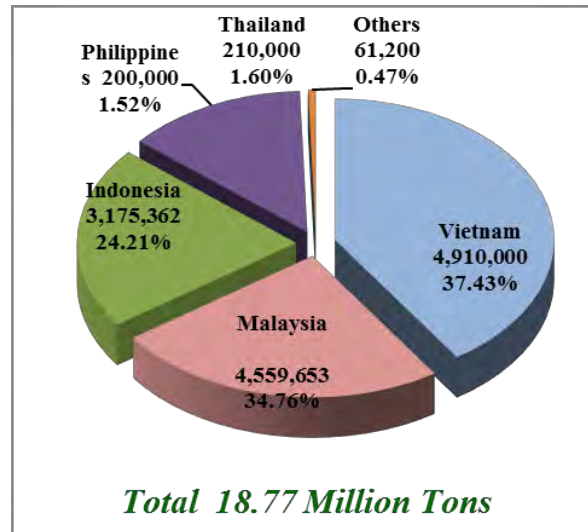


Figure 23 Share of maize import (tons) among ASEAN countries, 2017

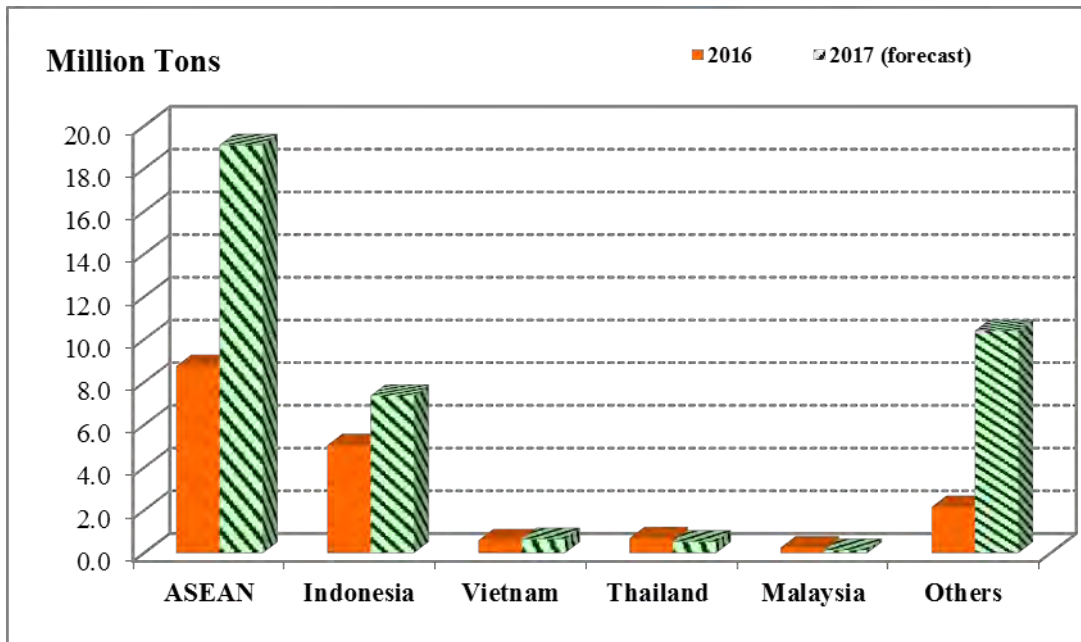


Figure 27 Amount of ending stock of Maize in ASEAN countries in 2016 – 2017

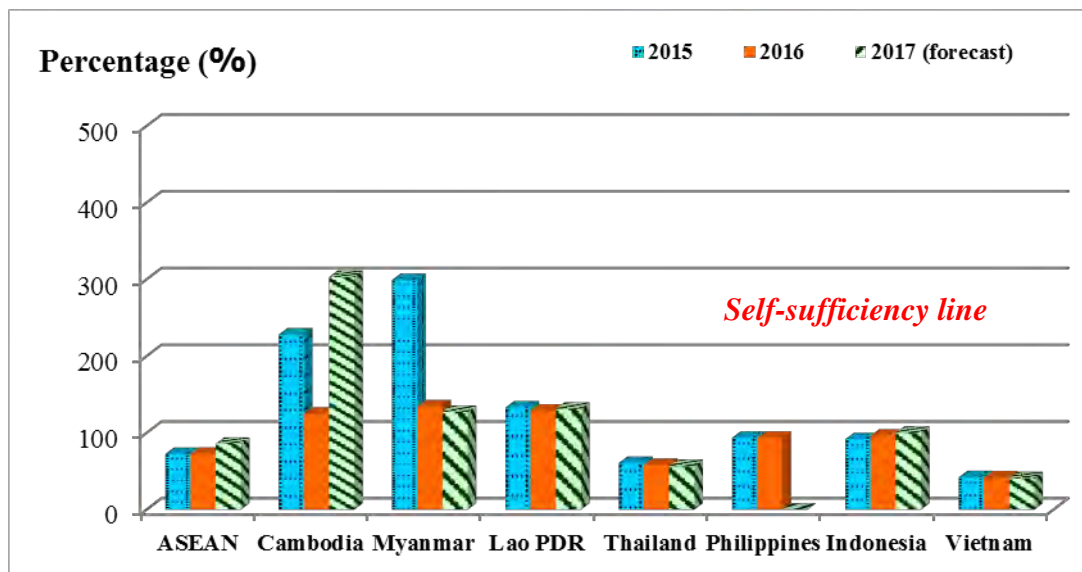


Figure 28 Ratio of maize production to domestic utilization in ASEAN countries, 2015 – 2017

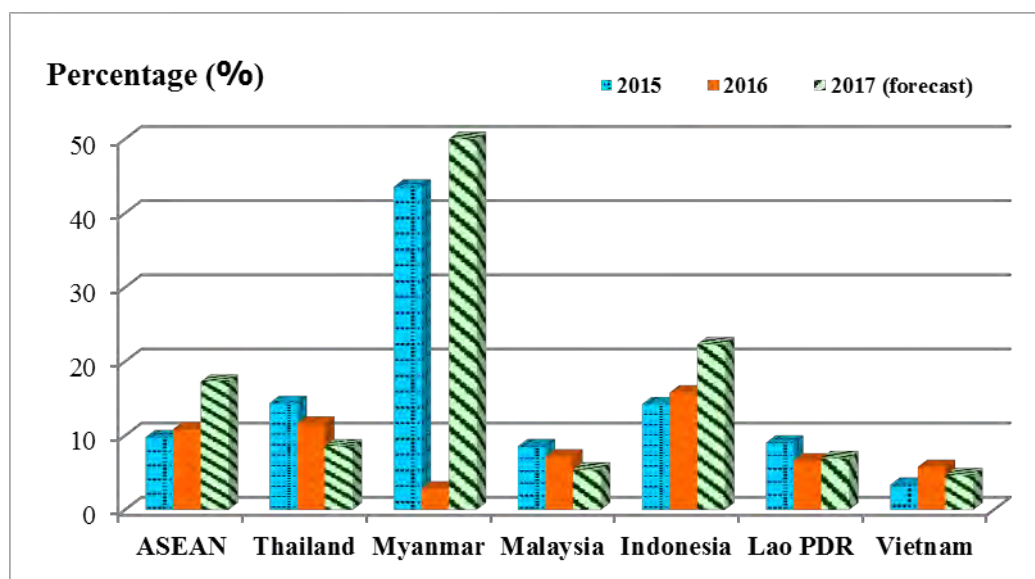


Figure 29 Ratio of maize beginning stock to domestic utilization in ASEAN countries, 2015 – 2017

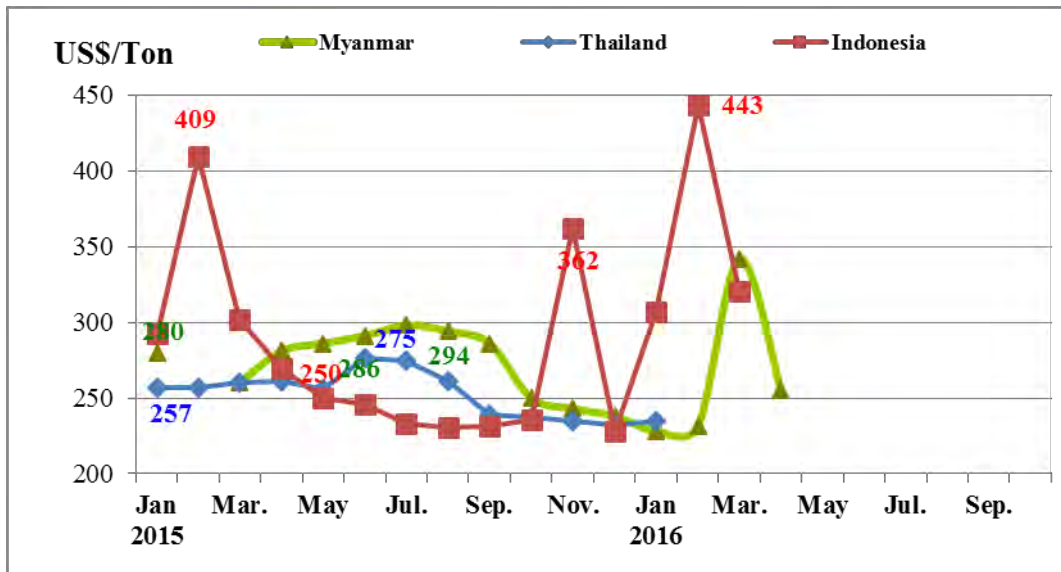


Figure 30 FOB price (US\$/Ton) of maize of selected countries in ASEAN in 2015 – 2016

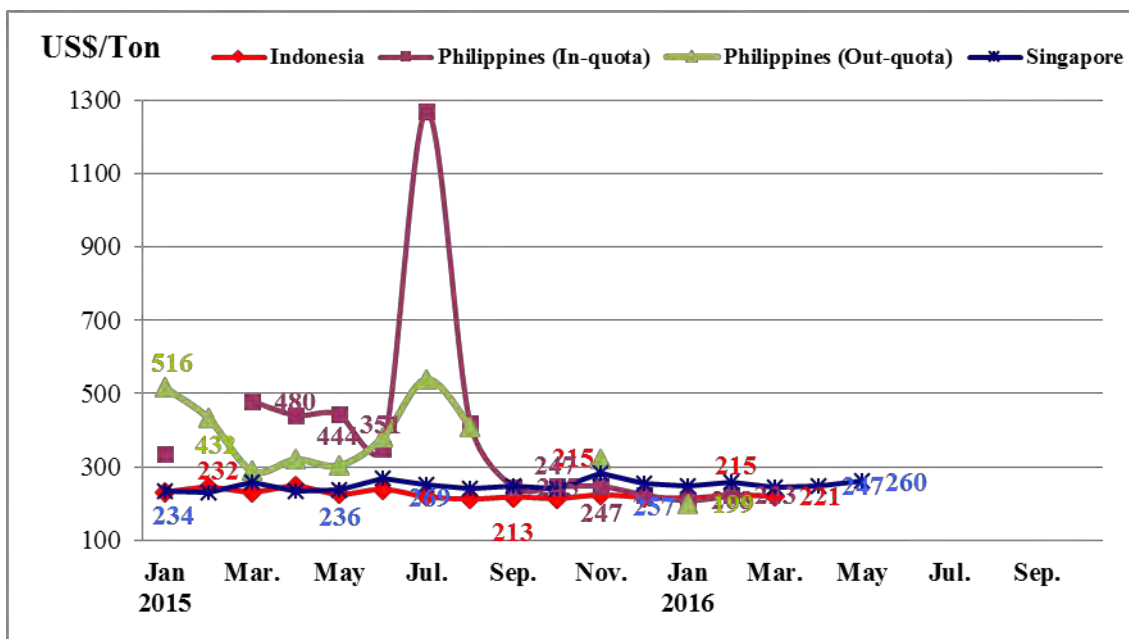


Figure 31 CIF price (US\$/Ton) of maize of selected countries in ASEAN in 2015 – 2016

Highlight of Sugar Outlook for 2017

- ASEAN sugar supply is forecasted to increase about 1 percent or 0.5 million tons from 37.61 million tons in 2016 to 38.11 million tons in 2017 mainly due to the increase in production.
- The beginning stock of sugar in 2017 is estimated at 14.39 million tons, slightly down from 14.52 million tons in 2016.
- The sugar export from ASEAN in 2017 is expected to slightly increase from 6.89 million tons in 2016 to 8.23 million tons in 2017 (Table 31).
- The sugar import is forecasted to decrease about 1 percent from 5.85 million tons in 2016 to 5.79 million tons in 2017.
- The production to domestic utilization ratio for sugar in 2017 is forecasted to be about 111 percent which is increased from about 106 percent in 2016.
- The beginning stock to domestic utilization ratio in 2017 is forecasted to be about 89 percent, which is about the same as 2016.

Table 31 Summary of the ASEAN sugar situation, 2016-2017

Unit: Million Tons

Items	2016	2017	Change	
			Quantity	%
Supply (Million tons)	37.61	38.11	0.50	1.33
Beginning stock	14.52	14.39	-0.13	-0.92
Production	17.24	17.92	0.69	3.99
Import	5.85	5.79	-0.06	-0.94
Demand (Million tons)	37.61	38.11	0.50	1.33
Domestic utilization	16.32	16.16	-0.17	-1.02
Export	6.89	8.23	1.34	19.36
Ending stock	14.39	13.72	-0.67	-4.65
Ratio of production to domestic utilization (%)	105.59	110.93	5.34	-
Ratio of beginning stock to domestic utilization (%)	88.98	89.07	0.09	-

ASEAN Sugar Situation in 2016

Production

The sugarcane production in ASEAN in 2016 (2015/16 crop year) was estimated at 163.77 million tons, down 15.18 million tons from 178.96 million tons in 2015 or about 8 percent (Table 32, Figure 32). The decrease in production was due to the decrease in planted area in many countries except Cambodia, Lao PDR and Thailand (Table 33). The yield of sugarcane in ASEAN in 2016 was estimated at 59.50 tons per hectare, significantly decrease from 64.86 tons in 2015 (Table 35, Figure 35).

Thailand, the largest sugar producing country in the region, the production estimated to decrease due to the decrease in yield which was damage by drought.

For **the Philippines**, it was estimated to increase in its production due to the increase in yield.

The production in Vietnam was estimated to decrease due to the decrease in planted area in responded to the price decrease.

The production in Indonesia was estimated to decrease due to the decrease in planted area and yield.

In **Myanmar**, the estimated production has decreased from the decrease in planted area while the yield is estimated to increase.

For **Lao PDR**, the estimated production has slight increased due to the favorable weather and farmer used more fertilizer.

For **Cambodia**, the increase in sugarcane production came from the expansion of planted area and the yield increased.

Utilization and Stock

Regarding domestic utilization of sugar in the ASEAN, it has increased from 15.56 million tons in 2015 to 16.32 million tons in 2016 (Table 38). The beginning stock of sugar in ASEAN in 2016 was estimated at 14.52 million tons, up from 13.30 million tons in 2015, which is about 1.22 million tons or about 9 percent. The ending stock of sugar in ASEAN in 2016 was estimated to be about 14.39 million tons, about the same as 2015.

The ratio of sugar production to domestic utilization in 2016 was estimated to be about 151 percent, indicated that the production of sugar in ASEAN was sufficient for the consumption within the region (Table 40, Figure43).

The ratio of beginning stock to domestic utilization was estimated to be about 89 percent in 2016, compared to about 85 percent in 2015, indicated that the sugar availability in the region has improved (Table 41, Figure 44)

Trade

The sugar export from ASEAN in 2016 is 6.89 million tons compared to 8.48 million tons in 2015, a decrease of about 1.58 million tons or 19 percent (Table 37 and 38, Figure 37 and 38). Thailand is the major sugar exporting country in the region constituted about 87 percent of the total ASEAN export or about 5.98 million tons.

For the import, ASEAN in 2016 as a whole imported sugar about 5.85 million tons, a decrease about 4 percent from the previous year. (Table 38, Figure 40 and 41).

The quantity and value of sugar export by countries of destination and the quantity and value of import by countries of origin are given in table 42 and 43.

Prices

The FOB and CIF prices of sugar in exporting and importing countries in ASEAN during 2015 – 2016 are shown in Table 44 – 45. For FOB prices of both raw sugar and white sugar of Thailand in 2016 (Jan-May) is 316 and 408 respectively, the prices of raw sugar in 2016 was lower than in 2015 while the white sugar price of 2016 is higher than 2015. Similarly for CIF prices for Singapore, the CIF price in 2016 was also lower than in 2015.

Damaged Area

The sugar damaged area in ASEAN in 2016 was reported to be 58,656 hectares. Most of the damages were caused by the drought which happened the most in Thailand and the affected area was 55,515 hectares (Table 36).

Prospects for Sugar in 2017

Production

Sugarcane production in ASEAN is forecasted to increase from 163.77 million tons in 2016 to 177.55 million tons in 2017. Most of ASEAN countries are forecasted to increase in its production except Vietnam. The most increase in terms of quantity and percentage is found in Thailand. Thailand is expected to increase in its production from 94.14 million tons in 2016 to 105.15 million tons in 2017 by the increase in both area and yield. The expansion of planted area in Thailand comes from the government policy to shift area from unsuitable area of paddy field to sugarcane combined with the increase in yield due to farmers used more improved variety and more fertilizer as well as taking care their crop better (Table 32, Figure 32-35).

Utilization and Stock

The domestic utilization of sugar in ASEAN is forecasted to increase from 16.32 million tons of sugar in 2016 to 16.16 million tons in 2017, which is about 0.17 million tons decrease (Table 39). The beginning stock in ASEAN is estimated at 14.39 million tons of sugar, a slight decrease of 0.13 million tons or compared to 14.52 million tons in the previous year. The ending stock of sugar in ASEAN in 2017 is forecasted to be 13.72 million tons which is about 0.67 million tons down from the previous year.

The ratio of production to domestic utilization in 2017 is forecasted to be about 111 percent, which is increase from the previous year (Table 40, Figure 43).

The ratio of the beginning stock to domestic utilization in 2017 is forecasted to be about 89 percent which is about the same as 2016 (Table 41, Figure44). This indicates that the domestic availability of sugar in the region is expected to be in a better situation.

Trade

The export is predicted to increase from 6.89 million tons in 2016 to 8.23 million tons in 2017 (Table 38 and 39, Figure 37 and 38). For the import, it is forecasted to slightly decrease from 5.85 million tons in 2016 to 5.79 million tons in 2017. (Table 38 and 39, Figure 40 and 41).

Table 32 Sugarcane production in ASEAN countries, 2015-2017

Unit: 1,000 Tons

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	178,957.52	163,773.85	-15,183.66	-8.48	177,554.18	13,780.33	8.41
Brunei	-	-	-	-	-	-	-
Cambodia	709.18	723.36	14.18	2.00	737.83	14.47	2.00
Indonesia	16,236.58	14,448.95	-1,787.63	-11.01	16,025.03	1,576.08	10.91
Lao PDR	1,749.75	1,821.00	71.25	4.07	1,944.00	123.00	6.75
Malaysia	-	-	-	-	-	-	-
Myanmar	11,128.42	10,142.38	-986.03	-8.86	10,827.71	685.33	6.76
Philippines	22,654.01	22,996.89	342.89	1.51	24,064.06	1,067.16	4.64
Singapore	-	-	-	-	-	-	-
Thailand	106,327.79	94,138.47	-12,189.32	-11.46	105,154.00	11,015.54	11.70
Vietnam	20,151.80	19,502.80	-648.99	-3.22	18,801.56	-701.24	-3.60

Table 33 Sugarcane planted area in ASEAN countries, 2015-2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	2,826.40	2,811.15	-15.25	-0.54	2,864.98	53.82	1.91
Brunei	-	-	-	-	-	-	-
Cambodia	19.51	19.90	0.39	2.00	20.20	0.30	1.50
Indonesia	454.17	445.52	-8.65	-1.90	453.46	7.94	1.78
Lao PDR	28.85	30.00	1.15	3.99	32.00	2.00	6.67
Malaysia	-	-	-	-	-	-	-
Myanmar	180.86	161.91	-18.95	-10.48	172.99	11.08	6.84
Philippines	401.73	396.54	-5.18	-1.29	412.91	16.37	4.13
Singapore	-	-	-	-	-	-	-
Thailand	1,456.78	1,482.27	25.49	1.75	1,508.42	26.14	1.76
Vietnam	284.50	275.00	-9.50	-3.34	265.00	-10.00	-3.64

Table 34 Sugarcane harvested area in ASEAN countries, 2015-2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	2,759.04	2,752.50	-6.54	-0.24	2,805.36	52.87	1.92
Brunei	-	-	-	-	-	-	-
Cambodia	19.24	19.63	0.38	2.00	19.92	0.29	1.50
Indonesia	445.65	444.22	-1.43	-0.32	452.14	7.92	1.78
Lao PDR	28.85	30.00	1.15	3.99	32.00	2.00	6.67
Malaysia	-	-	-	-	-	-	-
Myanmar	178.32	161.84	-16.48	-9.24	172.99	11.15	6.89
Philippines	401.73	396.54	-5.18	-1.29	412.91	16.37	4.13
Singapore	-	-	-	-	-	-	-
Thailand	1,400.75	1,425.26	24.51	1.75	1,450.40	25.14	1.76
Vietnam	284.50	275.00	-9.50	-3.34	265.00	-10.00	-3.64

Table 35 Sugarcane yield in ASEAN countries, 2015-2017

Unit: Ton/Hectare

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016		
			Quantities	(<i>%</i>)		Quantities	(<i>%</i>)	
								ASEAN
Brunei	-	-	-	-	-	-	-	-
Cambodia	36.85	36.86	0.01	0.03	37.04	0.18	0.49	
Indonesia	36.43	32.53	-3.90	-10.71	35.44	2.91	8.95	
Lao PDR	60.65	60.70	0.05	0.08	60.75	0.05	0.08	
Malaysia	-	-	-	-	-	-	-	
Myanmar	62.41	62.67	0.26	0.42	62.59	-0.08	-0.13	
Philippines	56.39	57.99	1.60	2.84	58.28	0.29	0.50	
Singapore	-	-	-	-	-	-	-	
Thailand	75.91	66.05	-9.86	-12.99	72.50	6.45	9.77	
Vietnam	70.83	70.92	0.09	0.13	70.95	0.03	0.04	

Table 36 Sugarcane damaged area in ASEAN by cause of damage, 2016

Country	Cause of Damage (Hectares)						
	Flood	Drought	Pests	Diseases	Others	Unspecified	Total
ASEAN	277	55,515	850	700	14	1,300	58,656
Brunei	-	-	-	-	-	-	-
Cambodia	277	-	-	-	-	-	277
Indonesia	-	-	-	-	-	1,300	1,300
Lao PDR.	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-
Myanmar	-	55	-	-	14	-	69
Philippines	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-
Thailand	-	55,460	850	700	-	-	57,010
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 37 Sugar balance sheet of ASEAN countries, 2015

Unit: Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	13,298,887	19,166,674	6,091,151	38,556,712	15,555,222	8,477,990	14,523,500	38,556,712
Brunei	1,725	-	5,775	7,500	5,477	-	2,023	7,500
Cambodia	-	70,918	-	70,918	33,902	37,016	-	70,918
Indonesia	3,406,357	2,497,998	3,375,010	9,279,365	5,992,161	2,237	3,284,967	9,279,365
Lao PDR	11,455	364,200	7,259	382,914	351,651	23,124	8,139	382,914
Malaysia	20,800		1,960,000	1,980,800	1,660,000	300,000	20,800	1,980,800
Myanmar	42,112	890,273	309,639	1,242,024	868,763	45,920	327,341	1,242,024
Philippines	516,779	2,172,199		2,688,978	2,120,644	68,130	500,204	2,688,978
Singapore	-		342,969	342,969	272,734	70,235	-	342,969
Thailand	9,079,659	11,339,086	499	20,419,244	2,484,890	7,591,328	10,343,026	20,419,244
Vietnam	220,000	1,832,000	90,000	2,142,000	1,765,000	340,000	37,000	2,142,000

Table 38 Sugar balance sheet of ASEAN countries, 2016

Unit: Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	14,523,500	17,234,777	5,848,523	37,606,800	16,322,137	6,894,348	14,390,315	37,606,800
Brunei	2,023	-	5,954	7,977	5,493	-	2,484	7,977
Cambodia	-	72,336		72,336	34,580	37,756	-	72,336
Indonesia	3,284,967	2,222,971	3,320,750	8,828,688	6,530,554	2,552	2,295,582	8,828,688
Lao PDR	8,139	364,200	-	372,339	351,872	14,249	6,218	372,339
Malaysia ^{1/}	20,800	-	2,041,020	2,061,820	1,683,819	300,000	78,001	2,061,820
Myanmar	327,341	811,391	-	1,138,732	936,528	135,547	66,657	1,138,732
Philippines	500,204	2,204,880	-	2,705,084	2,200,000	135,508	369,576	2,705,084
Singapore ^{1/}	-	-	293,599	293,599	254,291	39,308	-	293,599
Thailand	10,343,026	9,786,000	2,200	20,131,226	2,600,000	5,979,428	11,551,798	20,131,226
Vietnam	37,000	1,773,000	185,000	1,995,000	1,725,000	250,000	20,000	1,995,000

Note: 1/The value is estimated by AFSIS.

Table 39 Sugar balance sheet of ASEAN countries, 2017

Unit: Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	14,390,315	17,921,697	5,793,882	38,105,894	16,155,368	8,229,180	13,721,346	38,105,894
Brunei	2,484	-	6,132	8,616	5,658	-	2,958	8,616
Cambodia	-	73,783	-	73,783	35,000	38,783	-	73,783
Indonesia	2,295,582	2,465,451	3,320,750	8,081,783	6,532,930	2,552	1,546,301	8,081,783
Lao PDR	6,218	388,800	-	395,018	359,651	21,846	13,521	395,018
Malaysia ^{1/}	78,001	-	2,000,000	2,078,001	1,700,000	300,000	78,001	2,078,001
Myanmar 1/	66,657	866,217	-	932,874	799,129	-	133,745	932,874
Philippines	369,576	2,307,196	-	2,676,772	2,200,000	100,000	376,772	2,676,772
Singapore ^{1/}	-	-	300,000	300,000	255,000	45,000	-	300,000
Thailand	11,551,798	10,111,000	2,000	21,664,798	2,600,000	7,511,000	11,553,798	21,664,798
Vietnam	20,000	1,709,250	165,000	1,894,250	1,668,000	210,000	16,250	1,894,250

Note: 1/The value is estimated by AFSIS, n.a. = not available.

Table 40 Ratio of sugar production to domestic utilization in ASEAN countries, 2015-2017

Unit: Ton

Country	2015			2016			2017		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
ASEAN	19,166,674	15,555,222	123.22	17,234,777	16,322,137	105.59	17,921,697	16,155,368	110.93
Brunei	-	5,477	-	-	5,493	-	-	5,658	-
Cambodia	70,918	33,902	209.18	72,336	34,580	209.18	73,783	35,000	210.81
Indonesia	2,497,998	5,992,161	41.69	2,222,971	6,530,554	34.04	2,465,451	6,532,930	37.74
Lao PDR	364,200	351,651	103.57	364,200	351,872	103.50	388,800	359,651	108.10
Malaysia	-	1,660,000	-	-	1,683,819	-	-	1,700,000	-
Myanmar	890,273	868,763	102.48	811,391	936,528	86.64	866,217	799,129	108.40
Philippines	2,172,199	2,120,644	102.43	2,204,880	2,200,000	100.22	2,307,196	2,200,000	104.87
Singapore	-	272,734	-	-	254,291	-	-	255,000	-
Thailand	11,339,086	2,484,890	456.32	9,786,000	2,600,000	376.38	10,111,000	2,600,000	388.88
Vietnam	1,832,000	1,765,000	103.80	1,773,000	1,725,000	102.78	1,709,250	1,668,000	102.47

Table 41 Ratio of sugar beginning stock to domestic utilization in ASEAN countries, 2015-2017

Unit: Ton

Country	2015			2016			2017		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
ASEAN	13,298,887	15,555,222	85.49	14,523,500	16,322,137	88.98	14,390,315	16,155,368	89.07
Brunei	1,725	5,477	31.50	2,023	5,493	36.83	2,484	5,658	43.91
Cambodia	-	33,902	-	-	34,580	-	-	35,000	-
Indonesia	3,406,357	5,992,161	56.85	3,284,967	6,530,554	50.30	2,295,582	6,532,930	35.14
Lao PDR	11,455	351,651	3.26	8,139	351,872	2.31	6,218	359,651	1.73
Malaysia	20,800	1,660,000	-	20,800	1,683,819	-	78,001	1,700,000	-
Myanmar	42,112	868,763	4.85	327,341	936,528	34.95	66,657	799,129	8.34
Philippines	516,779	2,120,644	24.37	500,204	2,200,000	22.74	369,576	2,200,000	16.80
Singapore	-	272,734	-	-	254,291	-	-	255,000	-
Thailand	9,079,659	2,484,890	365.39	10,343,026	2,600,000	397.81	11,551,798	2,600,000	444.30
Vietnam	220,000	1,765,000	12.46	37,000	1,725,000	2.14	20,000	1,668,000	1.20

Table 42 Quantity and Value of Sugar Export by Countries of Destination in 2016

Quantity: Tons Values: US\$

Exporting Country	Country of Destination													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia														
Indonesia														
Lao PDR														
Malaysia						5,747,602						840,499		1,181,000
Myanmar														
Philippines									2	2,768				
Singapore	673	488,309	12	21,907	4,071	1,889,636			2,011	1,057,178	14	36,040	485	269,241
Thailand			173,112	69,975,991	835,115	258,351,996	43,775	18,452,457	69,437	26,375,528	206,184	83,436,877	80,825	32,138,294
Vietnam														

Exporting Country	Country of Destination						Total within ASEAN		Total outside ASEAN		Total		
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values	
	Quantity	Values	Quantity	Values	Quantity	Values							
Brunei													
Cambodia													
Indonesia													
Lao PDR									71,245	3,154,235	71,245	3,154,235	
Malaysia		7,355,599				472,750		15,597,449		15,735,796		31,333,246	
Myanmar			3,000					3,000	0.08	132,547	6.06	135,547	6.14
Philippines								2	2,768	158,251	84,206,955	158,253	84,209,723
Singapore					30	157,587		7,296	3,919,898	5,297	4,420,928	12,593	8,340,826
Thailand	26,713	11,206,469			59,130	20,701,583		1,494,291	520,639,195	503,559	181,559,002	1,997,850	702,198,197
Vietnam													

Table 43 Quantity and Value of Sugar Import by Countries of Origin in 2016

Quantity: Tons Values: US\$

Importing Country	Country of origin													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia														
Indonesia														
Lao PDR														
Malaysia														4,146
Myanmar														
Philippines														
Singapore					55	60,778			28,542	12,728,456	2	1,037	0.44	1,159
Thailand														
Vietnam														

Importing Country	Country of origin						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei			5,156				5,156	0			5,156	0
Cambodia							0	0			0	0
Indonesia							0	0			0	0
Lao PDR							0	0			0	0
Malaysia		24,113		15,619,121			0	15,647,380		158,034,309	0	173,681,689
Myanmar							0	0			0	0
Philippines							0	0			0	0
Singapore			36,522	16,378,951	42	21,358	65,164	29,191,739	61,846	26,364,837	127,010	55,556,576
Thailand	0.00	13					0	13	34	72,202	34	72,215
Vietnam							0	0			0	0

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 44 FOB Price of sugar in selected ASEAN countries

Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	White Sugar	2015	419	408											413
Myanmar	Not specified	2015			450	600	597	31	27					26	289
		2016	51	48	50	50									50
Philippines	Muscovado Sugar In-Quota	2015	1,329	1,537	1,600	1,533	1,525	1,658	1,641						1,546
	Centrifugal Sugar In-Quota	2015	1,067	746	493	482	812	448	515						652
Thailand	Raw Sugar	2015	381	379	380	351	312	320	338	293	302	308	293	286	324
		2016	305	313	317	326	318								316
	White Sugar	2015	432	409	401	403	361	365	353	356	350	358	360	380	372
		2016	389	409	412	416	416								408

Table 45 CIF Price of sugar in selected ASEAN countries

Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Singapore	Raw Sugar	2015	477	486	471	482	448	426	418	413	439	440	461	415	448
		2016	405	472	427	452	461								443

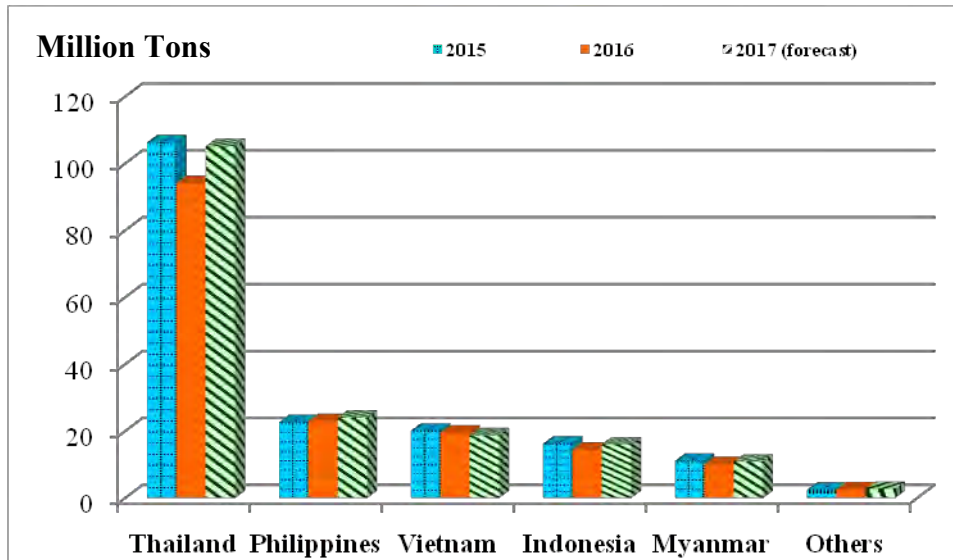


Figure 32 Sugarcane production of selected countries in ASEAN, 2015-2017

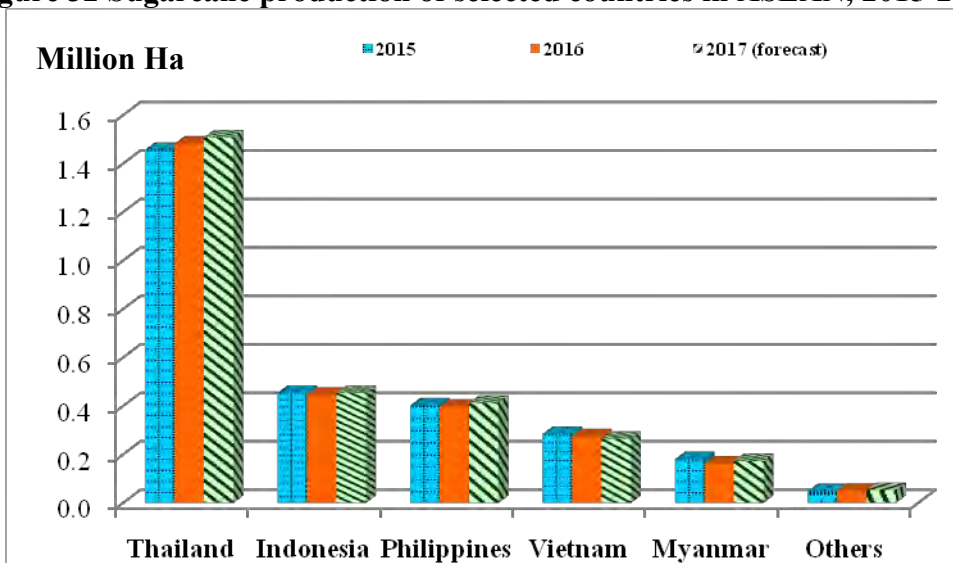


Figure 33 Sugarcane planted area of selected countries in ASEAN, 2015-2017

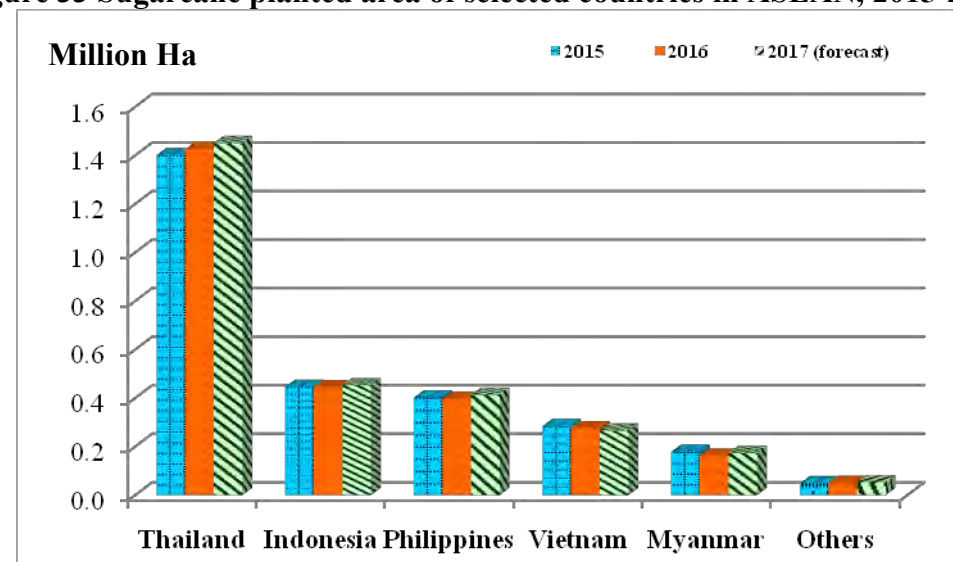


Figure 34 Sugarcane harvested area of selected countries in ASEAN, 2015-2017

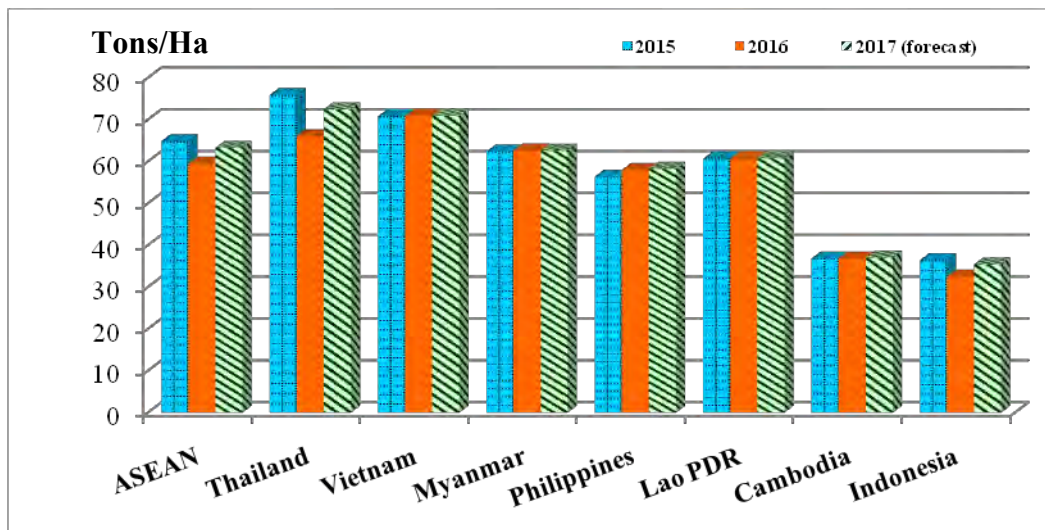


Figure 35 Sugarcane yield of selected countries in ASEAN, 2015-2017

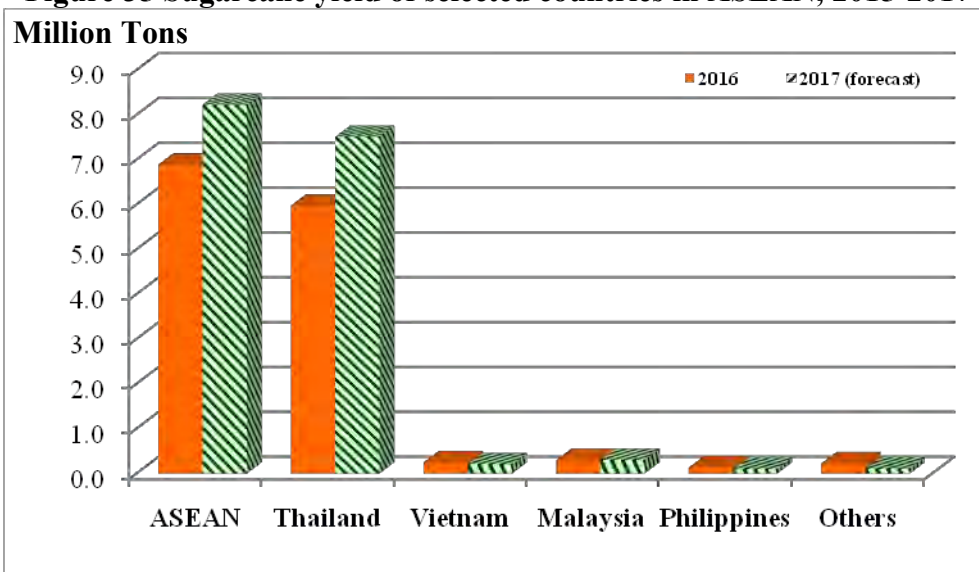


Figure 36 Amount of Sugar export (million tons) of selected countries in ASEAN in 2015-2017

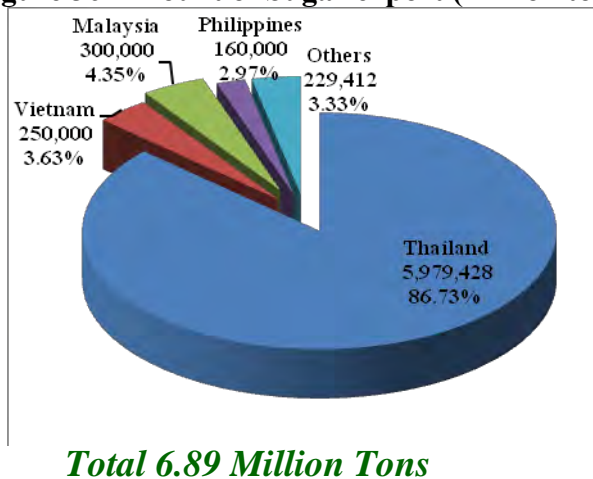


Figure 37 Share of sugar export (tons) among ASEAN countries, 2016

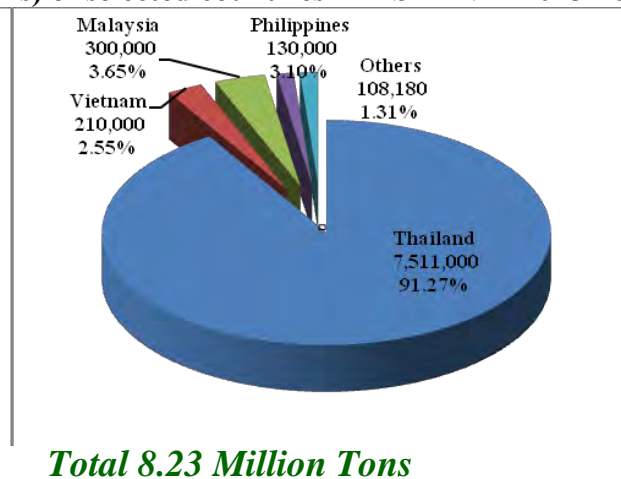


Figure 38 Share of sugar export (tons) among ASEAN countries, 2017

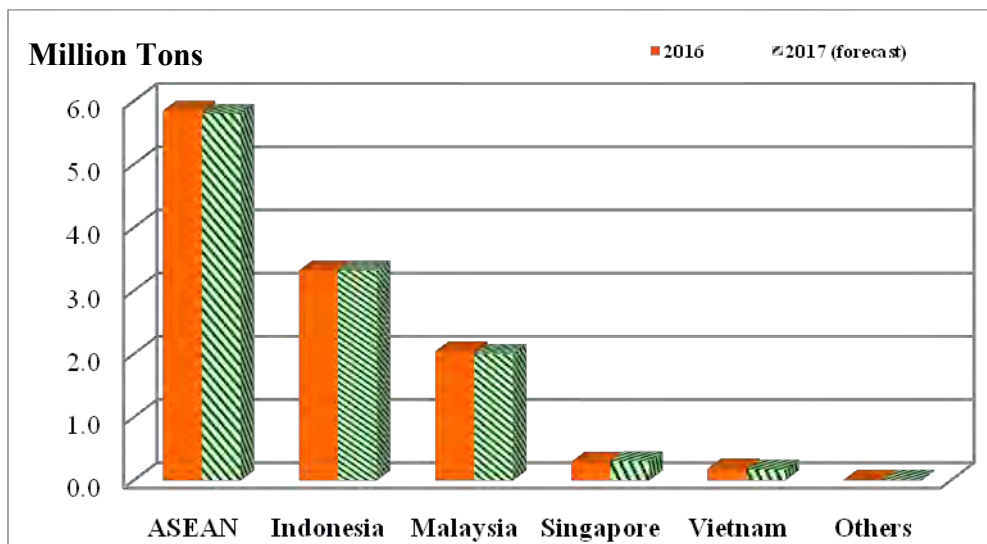


Figure 39 Amount of sugar import (million tons) by selected countries in ASEAN in 2015-2017

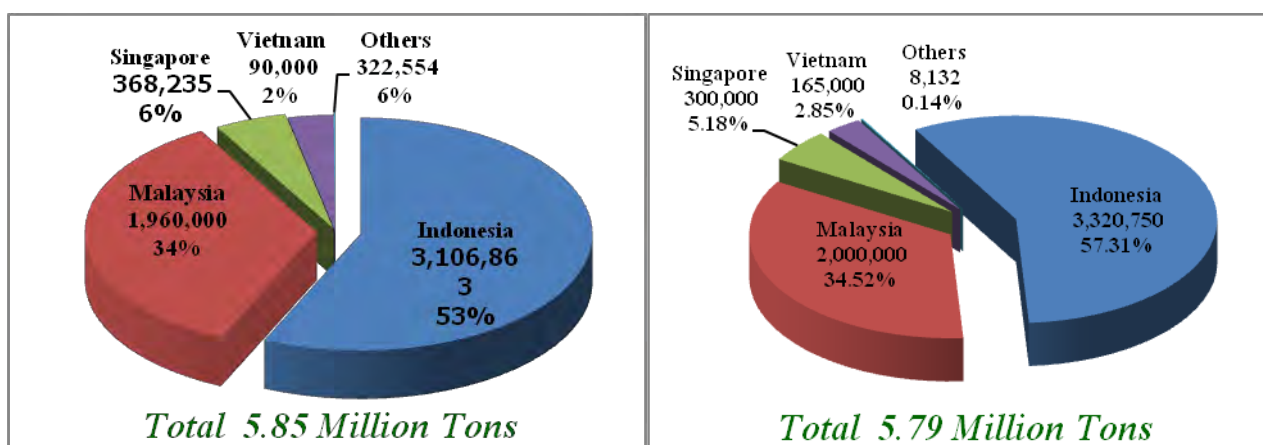


Figure 40 Share of sugar import (ton) among ASEAN countries, 2016

Figure 41 Share of sugar import (ton) among ASEAN countries, 2017

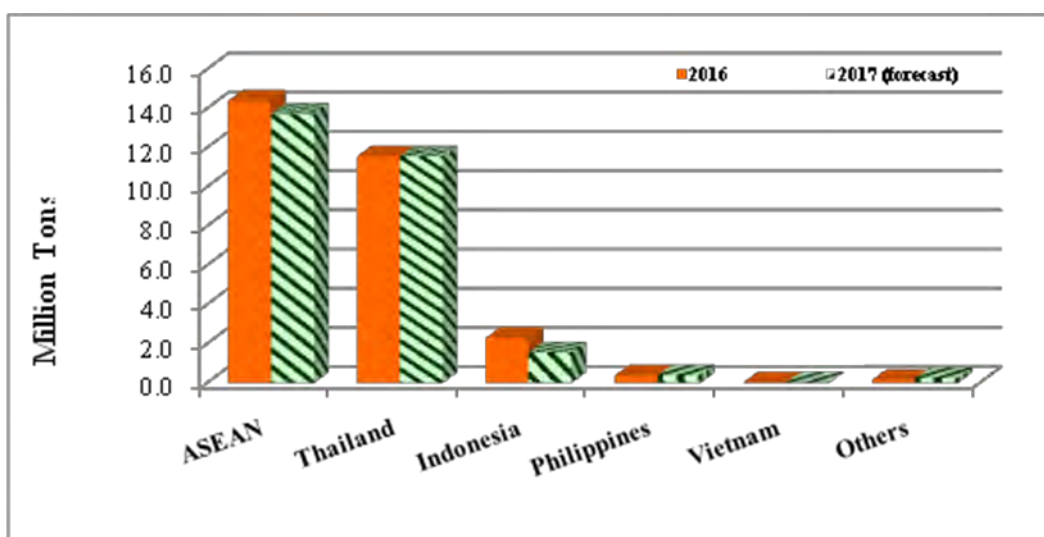


Figure 42 Amount of ending stock of Sugar in ASEAN countries in 2016 - 2017

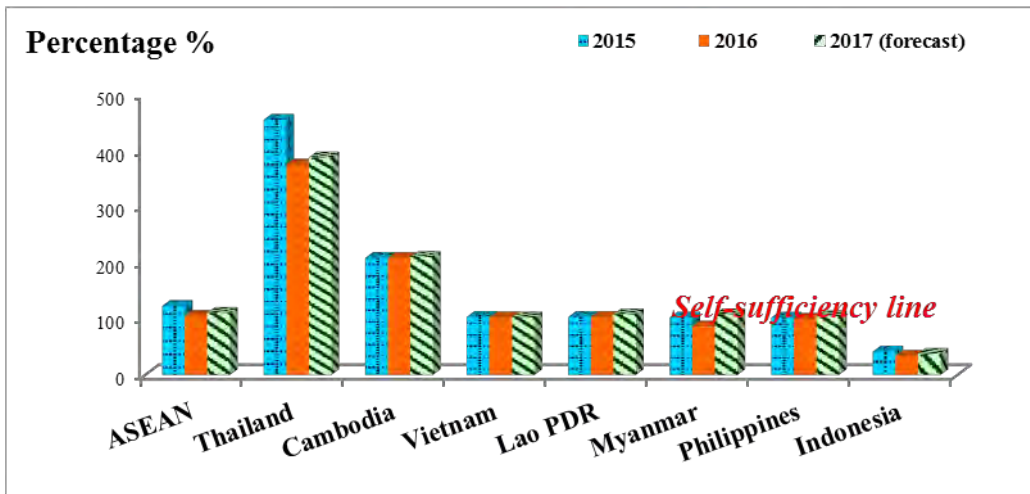


Figure 43 Ratio of sugar production to domestic utilization in ASEAN countries, 2015-2017

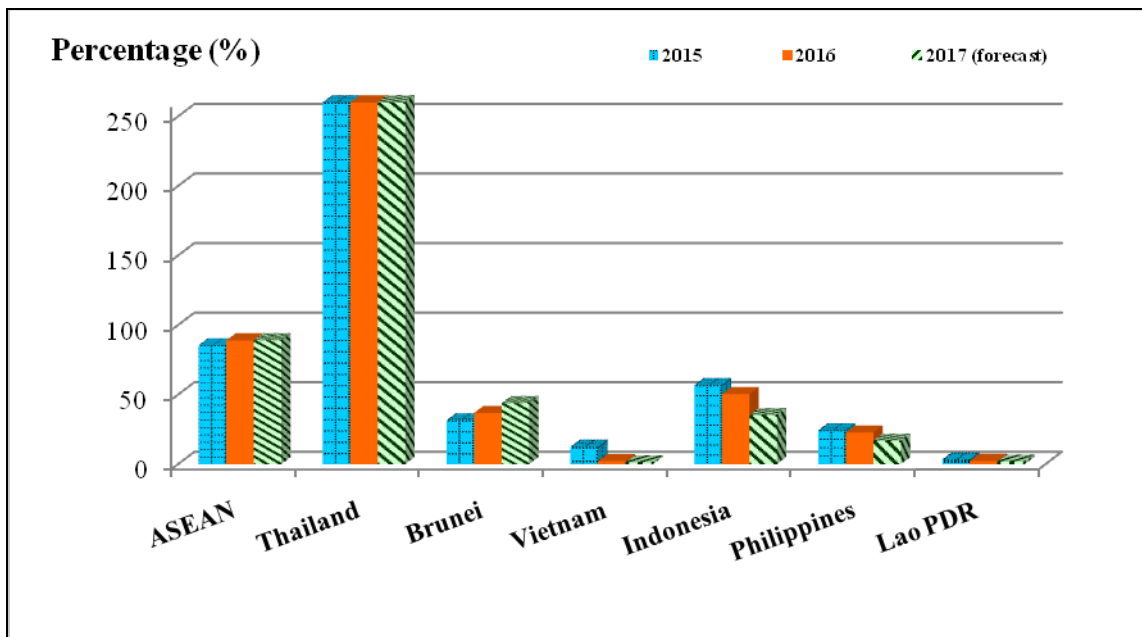


Figure 44 Ratio of sugar beginning stock to domestic utilization in ASEAN countries, 2015-2017

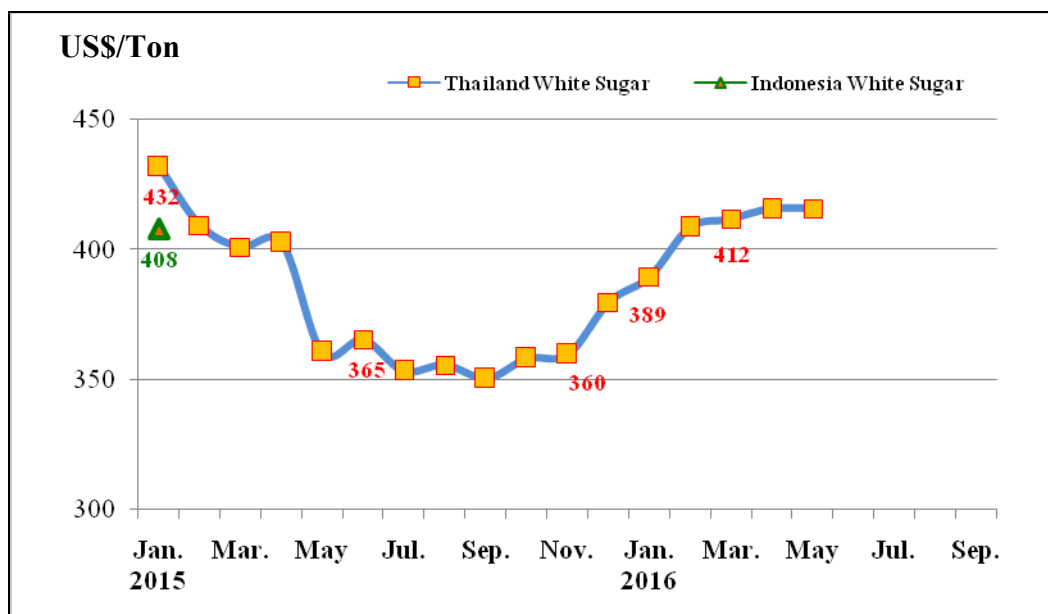


Figure 45 FOB price (US\$) of white sugar of selected countries in ASEAN in 2015-2016

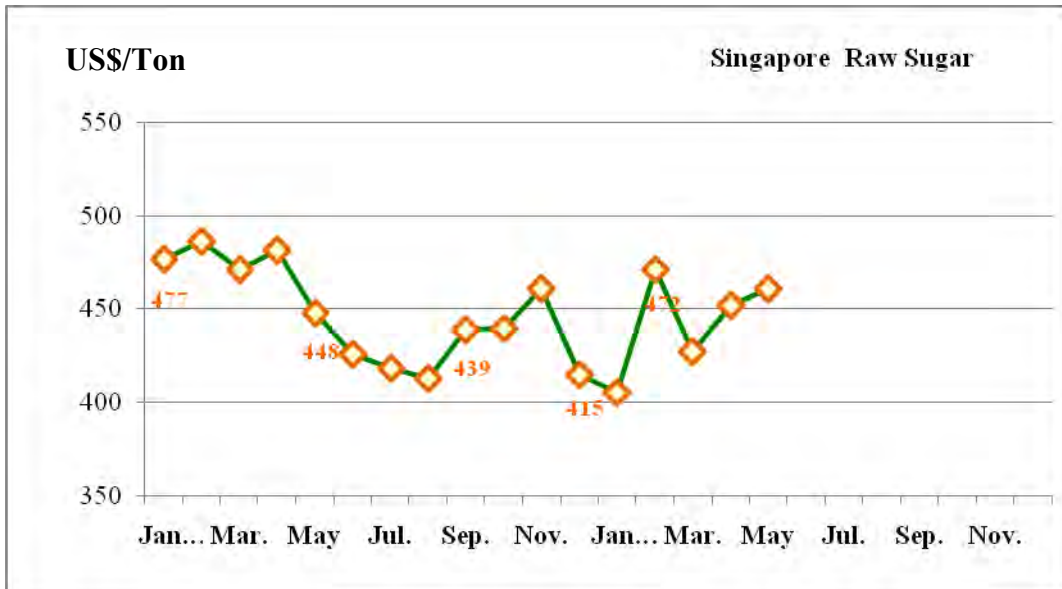


Figure 46 CIF price (US\$) of raw sugar of selected countries in ASEAN in 2015-2016

Highlights of Soybean Outlook for 2017

- The supply of ASEAN soybean is forecasted to increase from 10.78 million tons in 2016 to 11.49 million tons or approximately 6.59 percent in 2017 (Table 46). The increase in supply mainly comes from the increase in the beginning stock, which increases approximately 31.44 percent.
- The soybean production is predicted to be 1.53 million tons, slightly increase from the previous year 2.00 percent.
- The beginning stock of soybean in ASEAN in 2017 is forecasted to increase to 3.01 million tons, up 0.72 million tons from 2.29 million tons in 2016. The ending stock is expected to be 3.69 million tons in 2017, an increase of 0.68 million ton or approximately 23 percent from 3.01 million tons in 2016.
- In terms of soybean demand in ASEAN in 2017, the domestic utilization is estimated at 7.71 million tons, compared to 7.67 million tons in 2016. The export of soybean from the ASEAN in 2017 is forecasted to be 0.10 million tons, slightly increase from previous year approximately 11 percent.
- The soybean import is forecasted to decrease from 6.98 million tons in 2016 to 6.95 million tons in 2017. ASEAN exports very few of soybeans.
- The production to domestic utilization ratio (self-sufficiency ratio) in 2017 is forecasted to be approximately 19.91 percent, slightly increased from the previous year.
- The beginning stock to domestic utilization ratio (food security ratio) is predicted to be 39.07 percent in 2017, which increased approximately 9 percent from 2016, indicated that the soybeans situation is improving.

Table 46 Summary of the ASEAN soybean situation, 2016 – 2017

Items	2016	2017	Unit: Million tons	
			Change	
			Quantity	%
Supply (Million tons)	10.78	11.49	0.71	6.59
Beginning stock	2.29	3.01	0.72	31.44
Production	1.50	1.53	0.03	2.00
Import	6.98	6.95	-0.03	-0.43
Demand (Million tons)	10.78	11.49	0.71	6.59
Domestic utilization	7.67	7.71	0.04	0.52
Export	0.09	0.10	0.01	11.11
Ending stock	3.01	3.69	0.68	22.59
Ratio of production to domestic utilization (%)	19.61	19.91	0.30	-
Ratio of beginning stock to domestic utilization (%)	29.86	39.07	9.21	-

ASEAN Soybean Situation 2016

Production

The estimate of soybean production in ASEAN in 2016 (crop year 2015/16) was 1.50 million tons, a decrease of 0.008 million tons or less than one percent from 1.51 million tons in 2015. The decrease in production was due to the decline in area while the yield was estimated to be about the same as the previous year. Indonesia is ranked first in soybean production in the region, followed by Myanmar, Vietnam, Cambodia, Thailand, Lao PDR, and the Philippines. The productions of soybean producing countries in ASEAN have decreased in many countries in the region, except Cambodia, Indonesia, and Lao PDR.

For **Indonesia**, the estimated soybean production in 2016 has increased to 0.97 million tons, increase approximately 1 percent from 0.96 million tons in 2015. The increase in production was due to the increase in planted area, harvested area. The area expansion attributed to farmer responded to price increase, the government policy and the favorable weather. However, the decrease in yield caused by the flood, draught and unfavorable weather in some part of the country.

For **Myanmar**, the second largest soybean producing country in ASEAN, the production has slightly decreased due to the reduction of the planted and yield.

For **Lao PDR**, the increase in production was due to the increase in area attributed to the favorable weather.

Cambodia, the increase in production was due to the increase in area.

Utilization and Stock

The domestic utilization of soybean in ASEAN in 2016 was estimated at 7.67 million tons, an increase of 0.15 million tons or about 2 percent from 7.52 million tons in 2015. In 2016, the beginning stock was estimated at 2.29 million tons, an increase of about 0.85 million tons or about 59 percent from 1.44 million tons in 2015. Indonesia, Vietnam, and Thailand had the most of soybean stocks in the region (Table 52-53).

The ratio of production to domestic utilization (self – sufficiency ratio) of ASEAN in 2016 was about 20 percent, a slightly decrease from the previous year, indicated that the soybean production in ASEAN is not yet sufficient for the soybean demand in ASEAN. Moreover, only Cambodia has the ratio above 100 percent indicating that the country is self-sufficient in soybeans. (Table 55, Figure 58). The ratio of the beginning stock to the domestic utilization of ASEAN in 2016 was estimated to be about 30 percent (Table 56, Figure 59).

Trade

In 2016, ASEAN altogether exported soybean 0.09 million tons, which decreased about 0.01 million ton compared to 0.08 million ton in 2015. Cambodia is the largest soybean exporting country in the ASEAN, which exported about 0.05 million tons or about 54 percent of the total export from the ASEAN in 2016 (Table 52-53, Figure 51-52).

The quantity and value of soybean exported by countries of destination and the quantity and value of soybean imported by countries of origin are given in Table 57-58.

Prices

The FOB prices of Indonesia and Myanmar between years 2015-2016 are shown in Table 59 and CIF price for importing countries are shown in table 60. The annual average FOB price in 2016 in Indonesia was 1,255 US\$/ton and the average FOB price in Myanmar was 591 US\$/ton respectively (Table 59).

For CIF prices of 2016, is lower than in 2015, the annual average of 2016 in Indonesia was 389 US\$/ton, in Singapore was 654 US\$/ton, in Thailand was 718 US\$/ton and in Vietnam was 403 US\$/ton (Table 60).

Damaged Area

The total damaged area of soybean in the ASEAN in 2016 was reported to be 3,746 hectares. The major cause of damage was the flood which constituted about 76 percent of overall damage area, the majority of flooded area consist of 2,688 hectares in Indonesia and 164 hectares in Myanmar. Draught was also another important cause of damage, which was found in Indonesia and Thailand (Table 51).

Prospects for Soybean in 2017

Production

Soybean production of ASEAN in 2017 is forecasted to be 1.53 million tons, which is slightly increase from 2016 approximately 2 percent (Table 47, Figure 47). The increase in production is expected in most of the country except the Philippines, Thailand, and Vietnam. Indonesia, the biggest soybean producing country in ASEAN, is forecasted to increase in its production from 0.97 million tons in 2016 to 0.99 million tons in 2017, about 2 percent increase. The increase is derived from the increase in area and yield. (Table 49-50, Figure 47-50).

Utilization and Stock

The domestic utilization of soybeans in ASEAN is forecasted to increase about 0.42 percent from 7.67 million tons in 2016 to 7.70 million tons in 2017 (Table 54).

The beginning stock in ASEAN in 2017 is forecasted to increase 0.72 million ton or about 32 percent from 2.29 million ton in 2016 to 3.01 million ton in 2017. The ending stock is forecasted to increase about 23 percent from 3.01 million tons in 2016 to 3.69 million tons in 2017 (Table 53, Figure 57).

The ratio of production to domestic utilization (self-sufficiency ratio) is forecasted to be about 19.91 percent, which is slightly increase from the previous year (Table 55, Figure 58). The ratio of beginning stock to the domestic utilization (food security ratio) is forecasted to be about 39 percent, which increase about 9 percent from the previous year (Table 56, Figure 58).

Trade

In 2017, the export of soybeans from the ASEAN is forecasted to be about 0.10 million tons, which is slight increase from the previous year. The total import by the ASEAN in 2017 is forecasted to be 6.95 million tons, compared to 6.98 million tons in 2016 (Table 53-54, Figure 51, 53, 54 and 56). Cambodia and Malaysia are the major exporting countries while Thailand, Indonesia, and Vietnam are the major importing countries. The quantity and value of soybean export by countries of destination and the quantity and value of soybean import by countries of origin are given in Table 57-58.

Table 47 Soybean production in ASEAN countries, 2015 – 2017

Unit: 1,000 Tons

Country	2015 (2014/15)	2016 (2015/16)	change 2015 over 2014		2017 (2016/17)	change 2016 over 2015	
			Quantities	(%)		Quantities	(%)
			ASEAN	1,512.03		1,504.44	-7.60
Brunei	–	–	–	–	–	–	–
Cambodia	96.94	98.88	1.94	2.00	100.86	1.98	2.00
Indonesia	963.10	969.52	6.42	0.67	991.12	21.60	2.23
Lao PDR	17.63	17.94	0.31	1.76	18.10	0.16	0.87
Malaysia	–	–	–	–	–	–	–
Myanmar	228.93	222.28	-6.65	-2.90	241.12	18.84	8.48
Philippines	0.67	0.54	-0.14	-20.10	0.53	-0.01	-1.61
Singapore	–	–	–	–	–	–	–
Thailand	58.36	57.30	-1.06	-1.82	56.21	-1.10	-1.91
Vietnam	146.40	137.97	-8.43	-5.75	126.38	-11.60	-8.41

Table 48 Soybean planted area in ASEAN countries, 2015 – 2017

Unit: 1,000 Tons

Country	2015 (2014/15)	2016 (2015/16)	change 2015 over 2014		2017 (2016/17)	change 2016 over 2015	
			Quantities	(%)		Quantities	(%)
			ASEAN	988.83		983.91	-4.93
Brunei	–	–	–	–	–	–	–
Cambodia	66.82	68.16	1.34	2.00	68.84	0.68	1.00
Indonesia	620.28	625.63	5.36	0.86	626.02	0.38	0.06
Lao PDR	11.30	11.50	0.20	1.77	11.60	0.10	0.87
Malaysia	–	–	–	–	–	–	–
Myanmar	151.19	148.60	-2.59	-1.71	158.18	9.58	6.45
Philippines	0.56	0.48	-0.08	-14.16	0.48	0.00	0.00
Singapore	–	–	–	–	–	–	–
Thailand	37.88	34.53	-3.35	-8.85	33.70	-0.83	-2.40
Vietnam	100.80	95.00	-5.80	-5.75	87.00	-8.00	-8.42

Table 49 Soybean harvested area in ASEAN countries, 2015 – 2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2015 over 2014		2017 (2016/17)	change 2016 over 2015	
			Quantities	(%)		Quantities	(%)
			ASEAN	978.96		980.16	1.20
Brunei	–	–	–	–	–	–	–
Cambodia	66.61	68.00	1.39	2.09	68.68	0.68	1.00
Indonesia	613.89	622.72	8.84	1.44	626.02	3.30	0.53
Lao PDR	11.30	11.50	0.20	1.77	11.60	0.10	0.87
Malaysia	–	–	–	–	–	–	–
Myanmar	150.80	148.44	-2.36	-1.57	158.18	9.74	6.56
Philippines	0.56	0.48	-0.08	-14.16	0.48	0.00	-0.28
Singapore	–	–	–	–	–	–	–
Thailand	35.01	34.02	-0.99	-2.82	33.24	-0.78	-2.29
Vietnam	100.80	95.00	-5.80	-5.75	87.00	-8.00	-8.42

Note: Vietnam reported only planted area.

Table 50 Soybean yield in ASEAN countries, 2015 – 2017

Unit: Ton/Hectare

Country	2015 (2014/14)	2016 (2015/15)	change 2015 over 2014		2017 (2016/16)	change 2016 over 2015	
			Quantities	(%)		Quantities	(%)
			ASEAN	1.54		1.53	-0.01
Brunei	–	–	–	–	–	–	–
Cambodia	1.46	1.45	0.00	-0.09	1.47	0.01	0.99
Indonesia	1.57	1.56	-0.01	-0.76	1.58	0.03	1.69
Lao PDR	1.56	1.56	0.00	-0.01	1.56	0.00	0.00
Malaysia	–	–	–	–	–	–	–
Myanmar	1.52	1.50	-0.02	-1.36	1.52	0.03	1.80
Philippines	1.21	1.13	-0.08	-6.92	1.11	-0.02	-1.34
Singapore	–	–	–	–	–	–	–
Thailand	1.67	1.68	0.02	1.04	1.69	0.01	0.39
Vietnam	1.45	1.45	0.00	0.00	1.45	0.00	0.02

Table 51 Soybean damaged area in ASEAN by cause of damage, 2016

Country	Cause of Damage (Hectares)						Total
	Flood	Drought	Pests	Diseases	Others	Unspecify	
ASEAN	2,852	733	0	–	–	160	3,746
Brunei	–	–	–	–	–	–	–
Cambodia	–	–	–	–	–	160	160
Indonesia	2,688	224	0	–	–	–	2,912
Lao PDR	–	–	–	–	–	–	–
Malaysia	–	–	–	–	–	–	–
Myanmar	164	–	–	–	–	–	164
Philippines	–	–	–	–	–	–	–
Singapore	–	–	–	–	–	–	–
Thailand	–	509	–	–	–	–	509
Vietnam	–	–	–	–	–	–	–

Table 52 Soybean balance sheet of ASEAN countries, 2015

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	1,438,316	1,512,034	6,947,966	9,898,317	7,522,071	84,717	2,291,529	9,898,317
Brunei	n/a	0	728	728	728	0	0	728
Cambodia	1,022	96,942	0	97,964	38,206	34,297	25,461	97,964
Indonesia	1,224,563	963,099	1,991,455	4,179,117	2,260,502	2,844	1,915,772	4,179,117
Lao PDR	2,441	17,630	0	20,071	16,553	2,532	986	20,071
Malaysia	0	0	600,000	600,000	573,000	27,000	0	600,000
Myanmar	15,530	228,928	237	244,695	226,032	3,613	15,050	244,695
Philippines	0	674	67,820	68,494	68,365	0	129	68,494
Singapore	0	0	23,043	23,043	21,928	1,114	0	23,043
Thailand	163,460	58,361	2,557,384	2,779,205	2,605,757	9,317	164,131	2,779,205
Vietnam	31,300	146,400	1,707,300	1,885,000	1,711,000	4,000	170,000	1,885,000

Table 53 Soybean balance sheet of ASEAN countries, 2016

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	2,291,529	1,504,438	6,979,728	10,775,695	7,673,377	92,112	3,010,206	10,775,695
Brunei	0	0	750	750	750	0	0	750
Cambodia	25,461	98,880	0	124,341	48,493	49,736	26,112	124,341
Indonesia	1,915,772	969,522	1,991,455	4,876,749	2,260,502	2,844	2,613,404	4,876,749
Lao PDR	986	17,940	1	18,927	18,066	395	466	18,927
Malaysia ^{1/}	0	0	600,000	600,000	573,000	27,000	0	600,000
Myanmar	15,050	222,282	88,522	325,854	300,992	233	24,629	325,854
Philippines ^{1/}	129	538	70,000	70,667	70,500	0	167	70,667
Singapore ^{1/}	0	0	24,000	24,000	22,500	1,500	0	24,000
Thailand	164,131	57,301	2,600,000	2,821,432	2,650,575	5,404	165,453	2,821,432
Vietnam	170,000	137,975	1,605,000	1,912,975	1,728,000	5,000	179,975	1,912,975

Note: ^{1/}The value is estimated by AFSIS.

Table 54 Soybean balance sheet of ASEAN countries, 2017

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	3,010,206	1,534,311	6,946,227	11,490,743	7,705,272	98,245	3,687,227	11,490,743
Brunei	0	0	772	772	772	0	0	772
Cambodia	26,112	100,857	0	126,969	60,945	50,788	15,236	126,969
Indonesia	2,613,404	991,122	1,991,455	5,595,980	2,260,502	2,844	3,332,635	5,595,980
Lao PDR	466	18,096	0	18,562	18,078	113	371	18,562
Malaysia ^{1/}	0	0	600,000	600,000	573,000	27,000	0	600,000
Myanmar	24,629	241,123	-	265,752	245,475	0	20,277	265,752
Philippines ^{1/}	167	530	70,000	70,697	70,500	0	197	70,697
Singapore ^{1/}	0	0	24,000	24,000	22,500	1,500	0	24,000
Thailand	165,453	56,206	2,650,000	2,871,659	2,695,500	10,000	166,159	2,871,659
Vietnam	179,975	126,377	1,610,000	1,916,352	1,758,000	6,000	152,352	1,916,352

Note: ^{1/}The value is estimated by AFSIS.

Table 55 Ratio of soybean production to domestic utilization in ASEAN countries (Self-sufficiency ratio), 2015 – 2017

Unit: Tons

Country	2015			2016			2017		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
ASEAN	1,512,034	7,522,071	20.10	1,504,438	7,673,377	19.61	1,534,311	7,705,272	19.91
Brunei	-	728	-	-	750	-	-	772	-
Cambodia	96,942	38,206	253.74	98,880	48,493	203.91	100,857	60,945	165.49
Indonesia	963,099	2,260,502	42.61	969,522	2,260,502	42.89	991,122	2,260,502	43.85
Lao PDR	17,630	16,553	106.51	17,940	18,066	99.30	18,096	18,078	100.10
Malaysia	-	573,000	-	-	573,000	-	-	573,000	-
Myanmar	228,928	226,032	101.28	222,282	300,992	73.85	241,123	245,475	98.23
Philippines	674	68,365	0.99	538	70,500	0.76	530	70,500	0.75
Singapore	-	21,928	-	-	22,500	-	-	22,500	-
Thailand	58,361	2,605,757	2.24	57,301	2,650,575	2.16	56,206	2,695,500	2.09
Vietnam	146,400	1,711,000	8.56	137,975	1,728,000	7.98	126,377	1,758,000	7.19

Table 56 Ratio of soybean beginning stock to domestic utilization in ASEAN countries (Food security ratio), 2015 – 2017

Unit: Tons

Country	2015			2016			2017		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
ASEAN	1,438,316	7,522,071	19.12	2,291,529	7,673,377	29.86	3,010,206	7,705,272	39.07
Brunei	n/a	728	-	-	750	-	-	772	-
Cambodia	1,022	38,206	2.67	25,461	48,493	52.50	26,112	60,945	42.85
Indonesia	1,224,563	2,260,502	54.17	1,915,772	2,260,502	84.75	2,613,404	2,260,502	115.61
Lao PDR	2,441	16,553	14.75	986	18,066	5.46	466	18,078	2.58
Malaysia	-	573,000	-	-	573,000	-	-	573,000	-
Myanmar	15,530	226,032	-	15,050	300,992	-	24,629	245,475	10.03
Philippines	-	68,365	-	129	70,500	-	167	70,500	-
Singapore	-	21,928	-	-	22,500	-	-	22,500	-
Thailand	163,460	2,605,757	6.27	164,131	2,650,575	6.19	165,453	2,695,500	6.14
Vietnam	31,300	1,711,000	1.83	170,000	1,728,000	9.84	179,975	1,758,000	10.24

Table 57 Quantity and Value of Soybean Export by Countries of Destination in 2015

Quantity: Tons Values: US\$

Exporting Country	Country of Destination													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia														
Indonesia	19	24,618							546	756,329	15	24,920	13	15,294
Lao PDR														
Malaysia		8,675				2,249,618								
Myanmar														
Philippines														
Singapore					3	11,307			63	106,001			0	707
Thailand							840	442,946	8	10,788	0.76	3,632		
Vietnam														

Exporting Country	Country of Destination						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei							0	0			0	0
Cambodia							0	0			0	0
Indonesia	71	118,832					664	939,993	2,179	2,573,427	2,844	3,513,420
Lao PDR							0	0	395	79,040	395	79,040
Malaysia		1,198,100					0	3,456,392		2,021,823	0	5,478,215
Myanmar	132	77,240					132	77,240	101	0	233	77,240
Philippines							0	0			0	0
Singapore							66	118,014	5	9,187	71	127,201
Thailand	8	15,286			130	80,564	985	553,217	472	279,141	1,458	832,359
Vietnam							0	0			0	0

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 58 Quantity and Value of Soybean Import by Countries of Origin in 2015

Quantity: Tons Values: US\$

Importing Country	Country of Origin													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei									9	10,938				
Cambodia														
Indonesia									9,186	6,751,192				
Lao PDR														
Malaysia						43,136								
Myanmar									2,157	1,163,010				
Philippines														
Singapore					1	23,208			270.518	198,336	0	111		
Thailand														
Vietnam														

Importing Country	Country of origin						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei	4	9,687					13	20,625	715	791,014	728	811,639
Cambodia							0	0			0	0
Indonesia	796	970,660	1,302	1,155,607	2,199.34	721,388	13,483	9,598,847	1,415,451	542,353,258	1,428,935	551,952,105
Lao PDR			1	240			1	240			1	240
Malaysia		14,305					0	57,441		81,341,967	0	81,399,407
Myanmar	7,892	3,353,438	814	313,984	2,115	1,041,553	12,978	5,871,985	75,544	33,095,341	88,522	38,967,326
Philippines							0	0	20,140	9,058,911	20,140	9,058,911
Singapore			0	329			272	221,984	6,891	4,454,243	7,162	4,676,227
Thailand							0.00	0	668,054	268,002,748	668,054	268,002,748
Vietnam							0	0	1,604,948	631,912,731	1,604,948	631,912,731

Remark: The data in this table is obtained from national focal points of member states and may not complete.

Table 59 FOB Price of soybean in selected ASEAN countries

Unit: US\$/Ton

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	2015	1,169	1,143	1,174	1,439	1,209	1,356	1,205	1,232	1,273	1,204	1,415	1,723	1,295
	2016	1,369	1,224	1,171										1,255
Myanmar	2015		565	600	584	587	586	552	552	549	531	540	571	565
	2016	571	590	559	643									591

Table 60 CIF Price of soybean in selected ASEAN countries

Unit: US\$/Ton

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	2015	517	510	488	475	456	429	431	427	442	435	416	403	452
	2016	404	384	378										389
Singapore	2015	812	766	681	772	752	744	743	785	791	772	747	756	760
	2016	679	684	641	639	629								654
Thailand	2015	529	533	517	493	476	494	490	528	558	711	817	778	577
	2016	641	847	732	659	712								718
Vietnam	2015	500	492	470	506	444	432	415	437	448	433	425	411	448
	2016	404	422	395	386	397	417							403

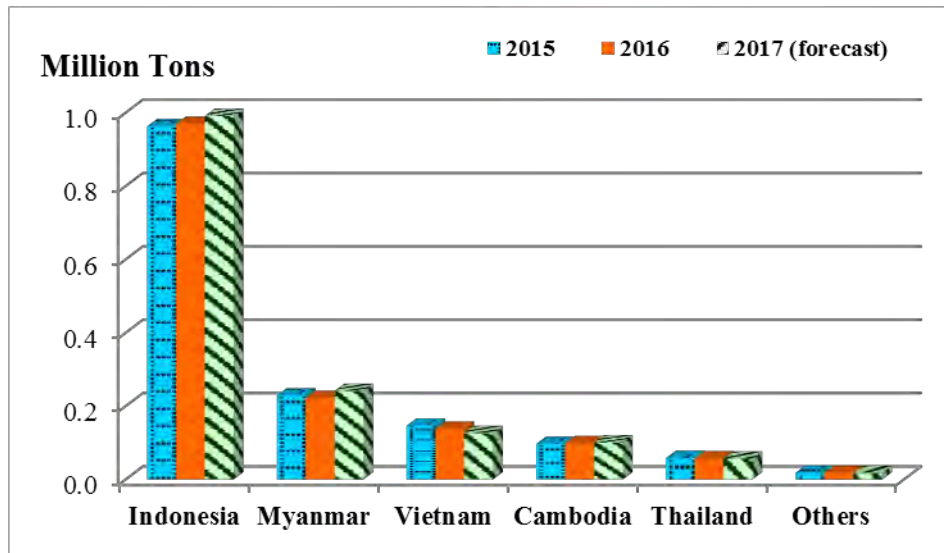


Figure 47 Soybean production of selected countries in ASEAN, 2015 – 2017

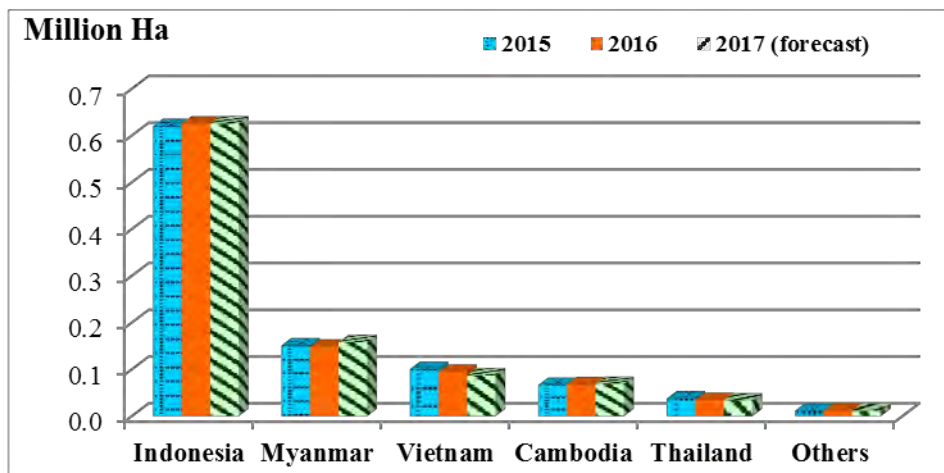


Figure 48 Soybean planted area of selected countries in ASEAN, 2015 – 2017

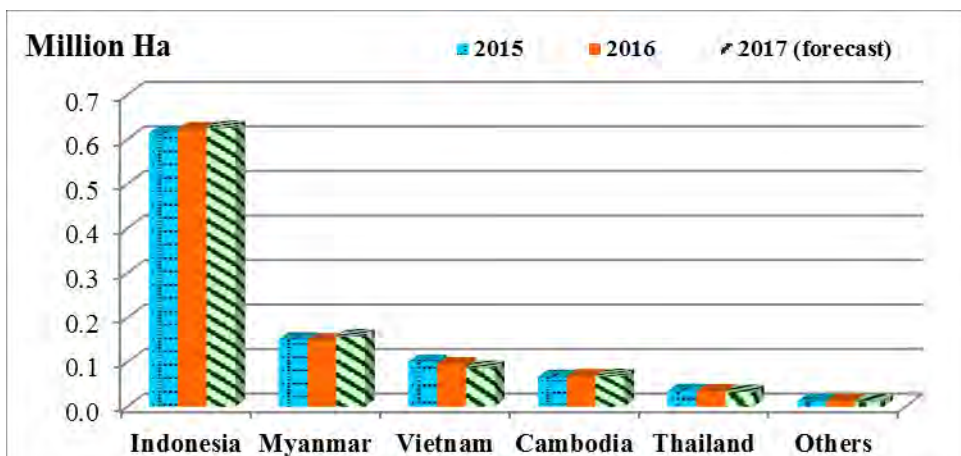


Figure 49 Soybean harvested area of selected countries in ASEAN, 2015 – 2017

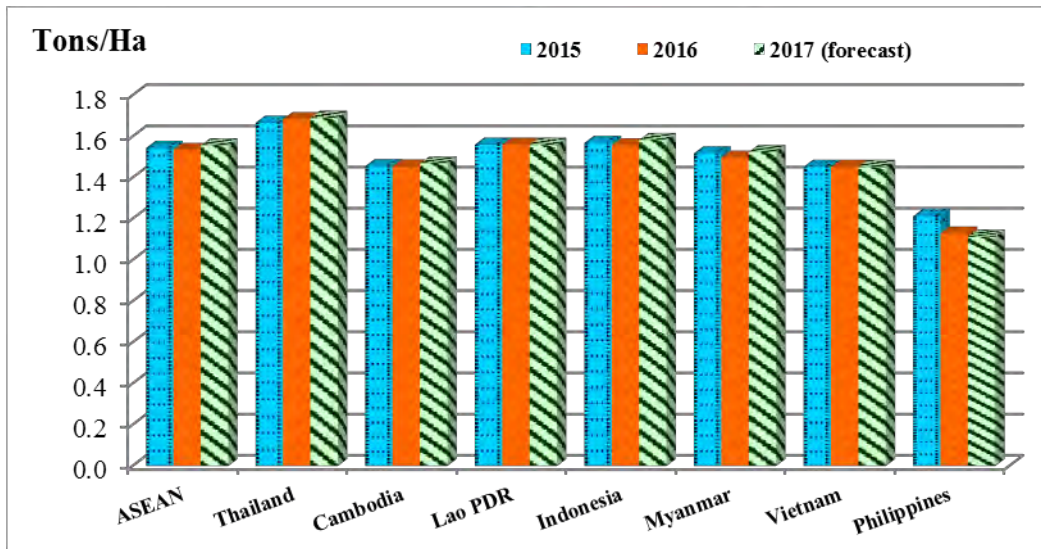


Figure 50 Soybean yield of countries in ASEAN, 2015 – 2017

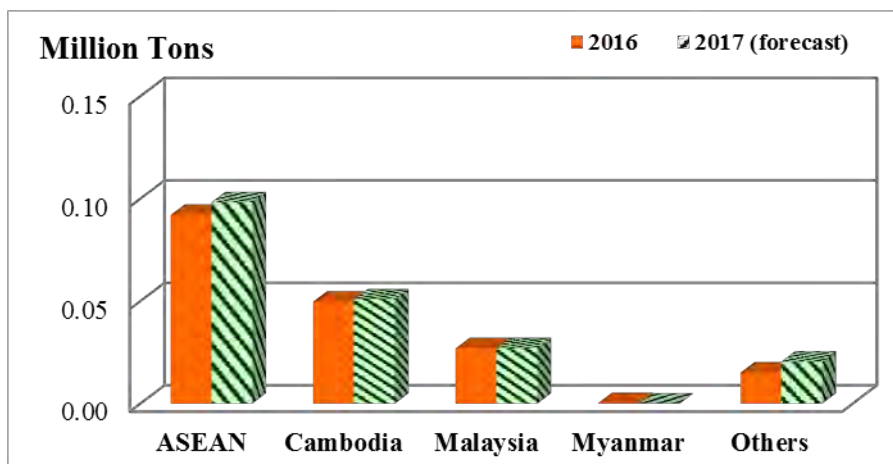


Figure 51 Amount of Soybean export (million tons) of selected countries in ASEAN in 2016 -2017

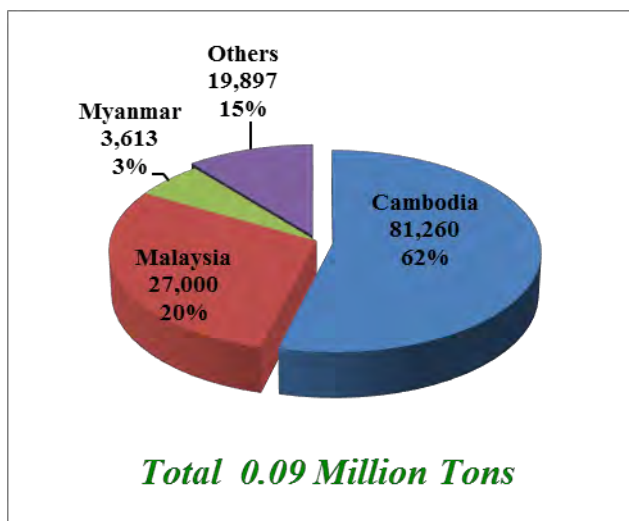


Figure 52 Share of Soybean export (ton) among ASEAN countries, 2016

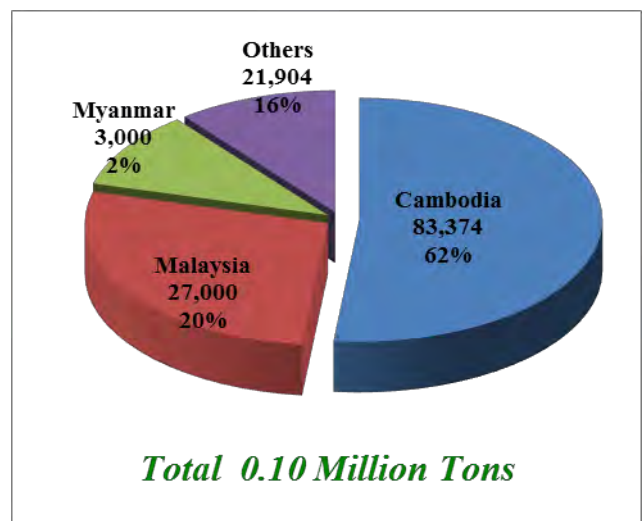


Figure 53 Share of Soybean export (ton) among ASEAN countries, 2017

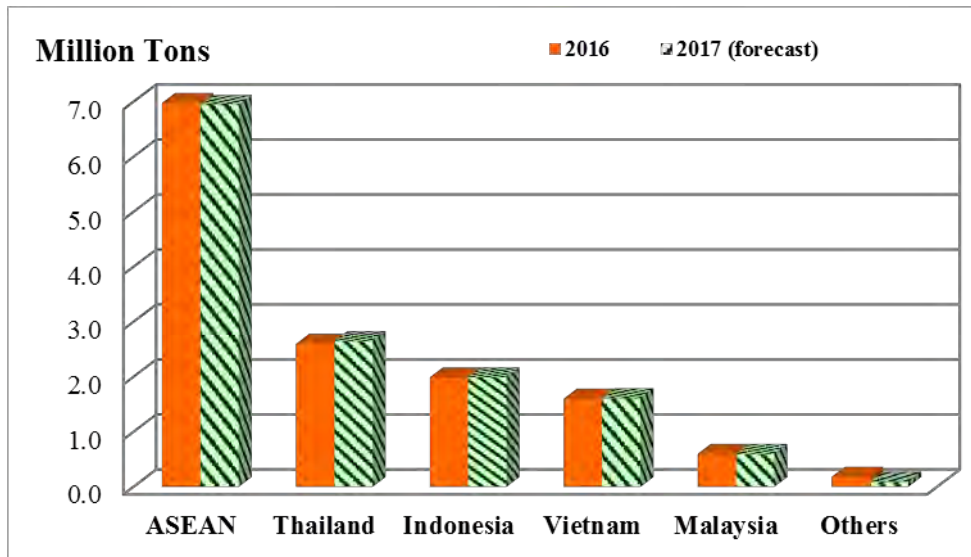


Figure 54 Amount of soybean import (million tons) by selected countries in ASEAN in 2016 – 2017

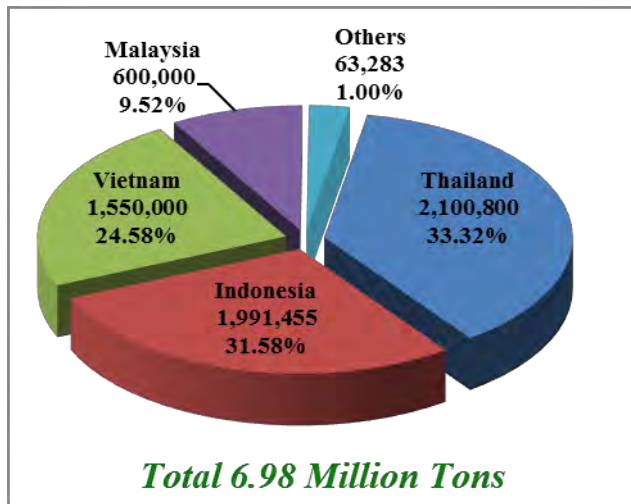


Figure 55 Share of Soybean import (ton) among ASEAN countries, 2016

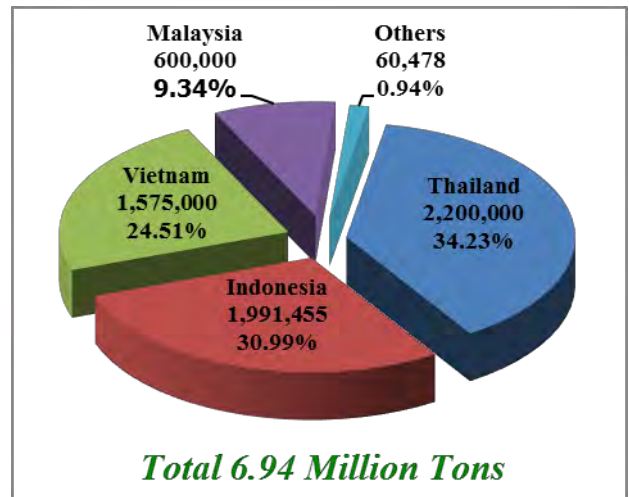


Figure 56 Share of Soybean import (ton) among ASEAN countries, 2017

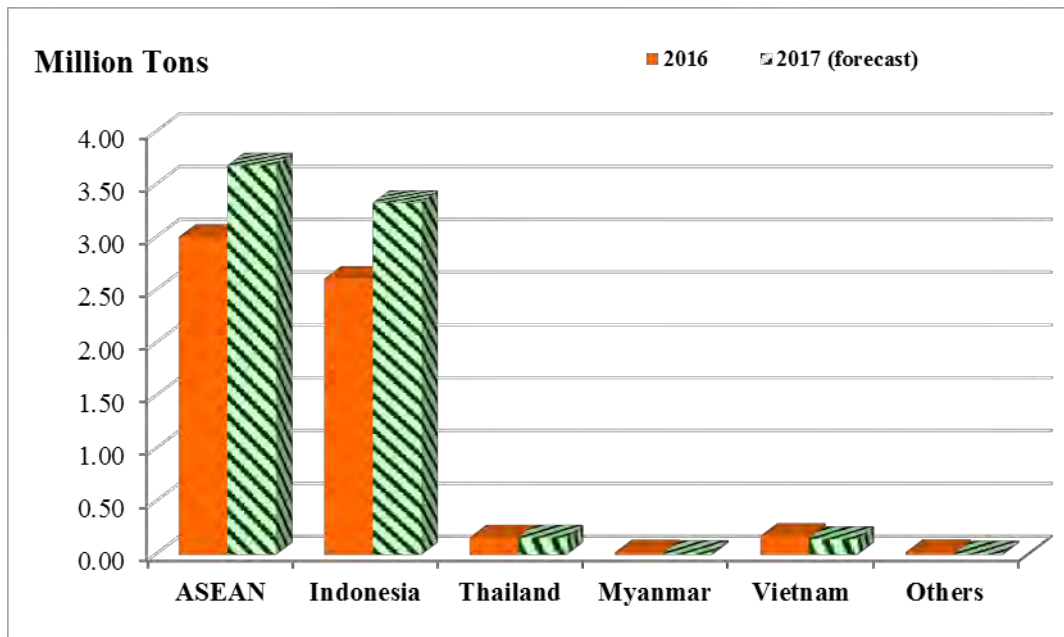


Figure 57 Amount of ending stock of soybean in ASEAN countries in 2016 – 2017

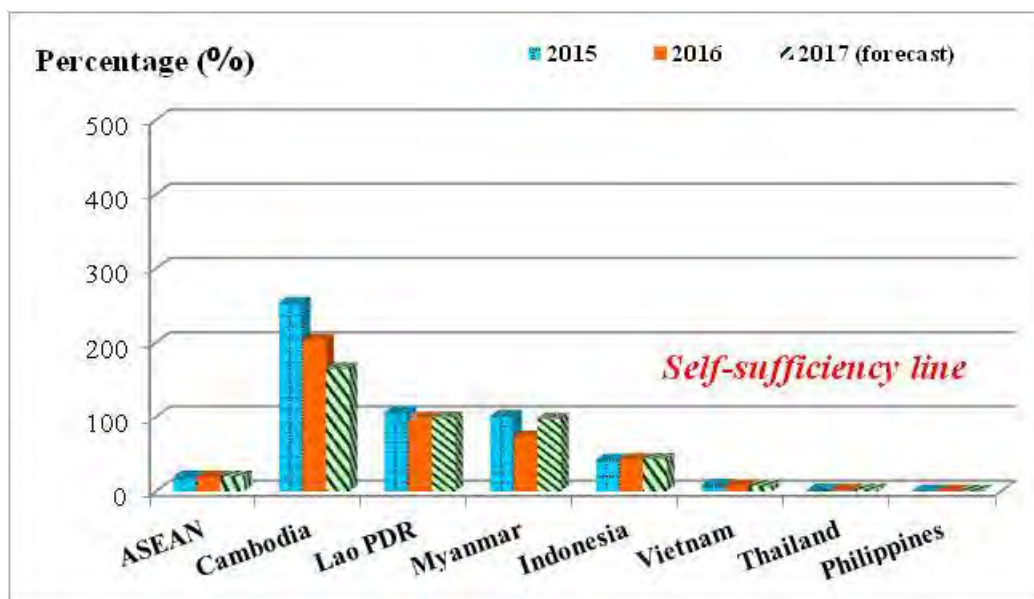


Figure 58 Ratio of soybean production to domestic utilization in ASEAN countries, 2015 – 2017

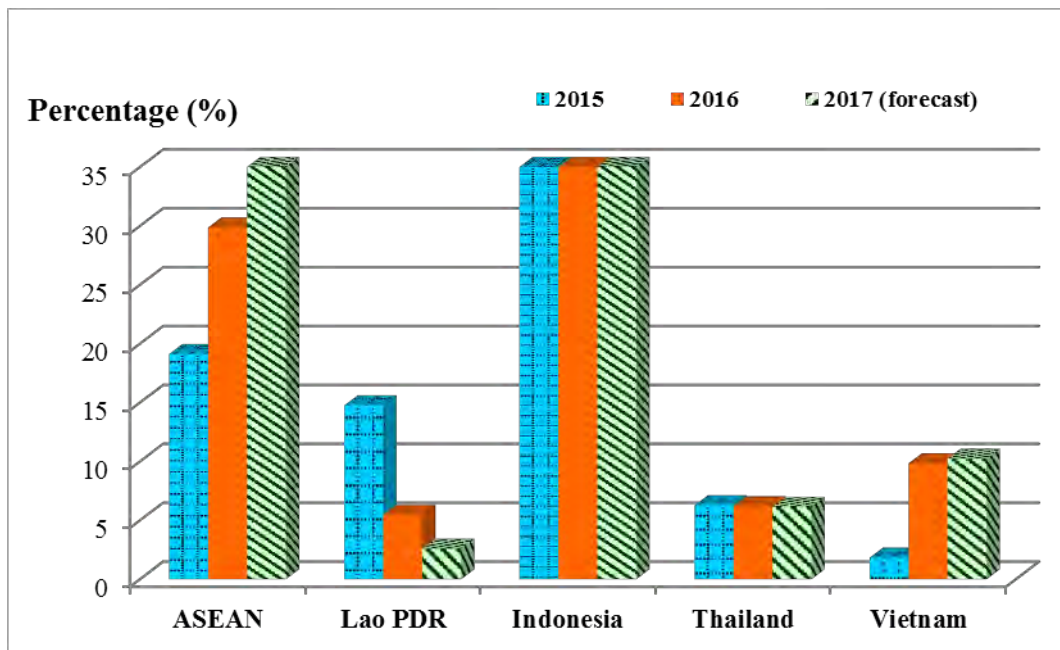


Figure 59 Ratio of soybean beginning stock to domestic utilization in ASEAN countries, 2015 – 2017

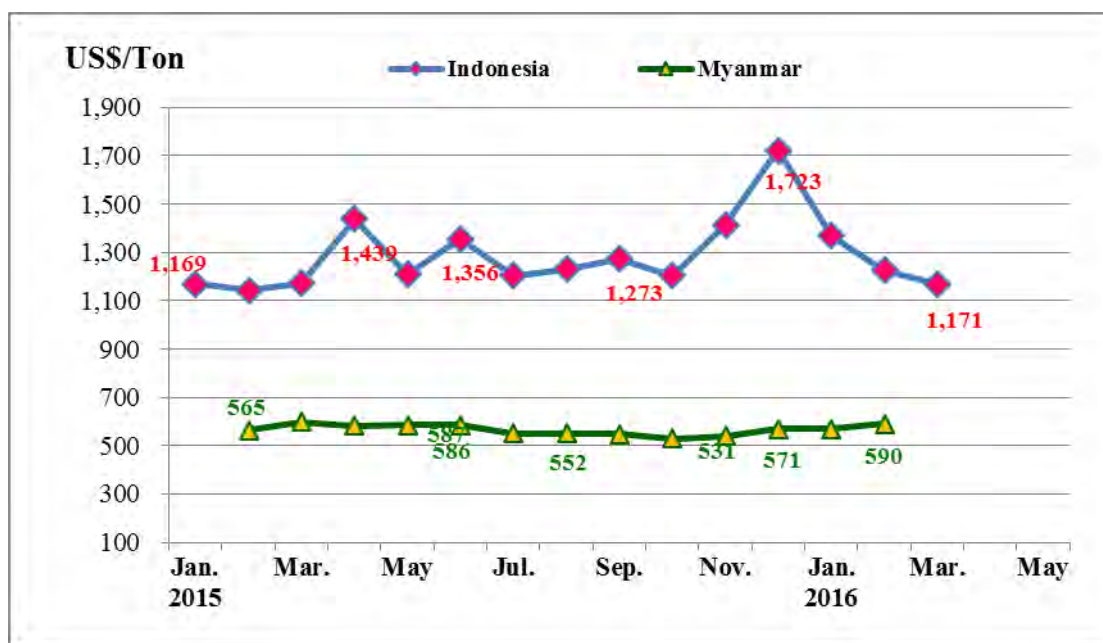


Figure 60 FOB price (US\$/Ton) of soybean of selected countries in ASEAN in 2015 – 2016

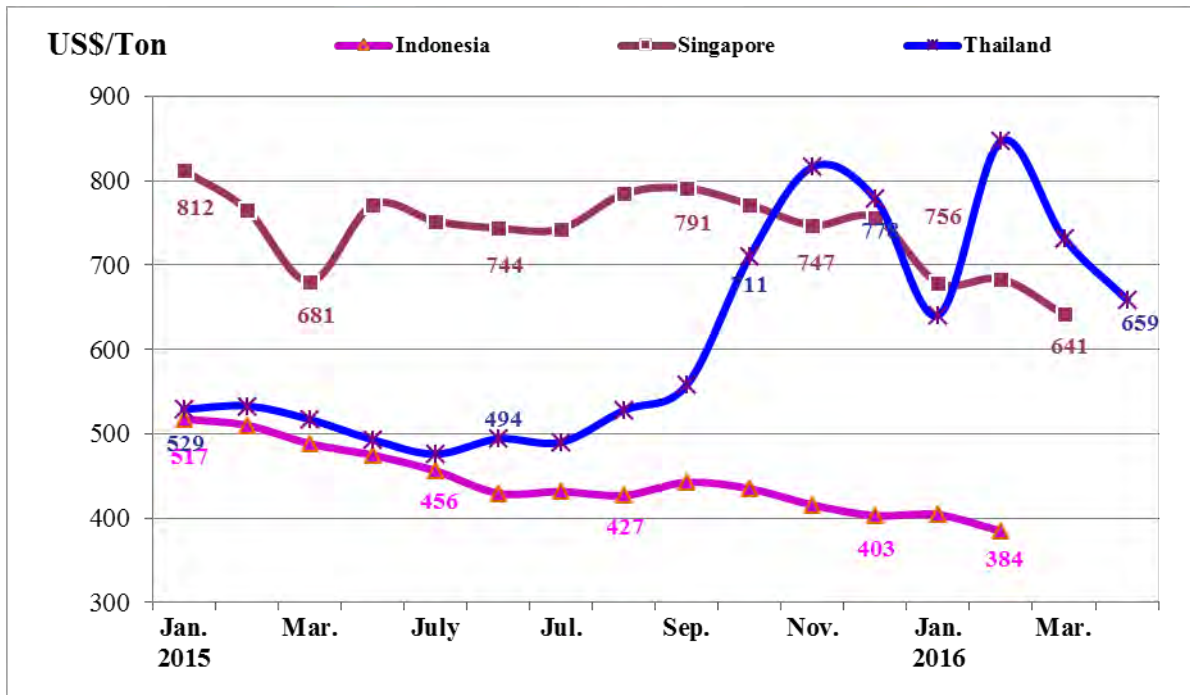


Figure 61 CIF price (US\$/Ton) of soybean of selected countries in ASEAN in 2015 – 2016

Highlights of Cassava Outlook for 2017

- The supply of cassava in ASEAN is forecasted to be 100.92 million tons in 2017, an increase of 3.93 million tons or about 4 percent from 96.99 million tons in 2016. (Table 61). The increase is due to the increase in production and the expected increase in the import.
- The beginning stock of cassava in 2017 is projected to be at 4.22 million tons, increase from 1.84 million tons in 2016 due to the increase in stock in Indonesia and Thailand while the ending stock in 2017 is expected to be 6.74 million tons, up from 4.22 million tons in 2016.
- The export of cassava is expected to increase about 1 million tons or an increase of about 1 percent from 42.90 million tons in 2016 to 43.53 million tons in 2017 while the import of cassava is forecasted to increase about 1 percent from 9.23 million tons in 2016 to 9.33 million tons in 2017.
- The ratio of production to domestic utilization in 2017 is forecasted to be about 173 percent, compared to about 172 percent in 2016. The ratio of beginning stock to domestic utilization in 2017 is forecasted to be about 8 percent, a increase of about 5 percent from about 4 percent in 2016.

Table 61 Summary of the ASEAN cassava situation, 2016-2017

Unit: Million tons

Items	2016	2017	Change	
			Quantity	%
Supply (Million tons)	96.99	100.92	3.93	4.05
Beginning stock	1.84	4.22	2.38	129.13
Production	85.92	87.37	1.45	1.69
Import	9.23	9.33	0.10	1.08
Demand (Million tons)	96.99	100.92	3.93	4.05
Domestic utilization	49.88	50.65	0.77	1.54
Export	42.90	43.53	0.63	1.48
Ending stock	4.22	6.74	2.53	59.89
Ratio of production to domestic utilization (%)	172.27	172.52	0.25	-
Ratio of beginning stock to domestic utilization (%)	3.69	8.32	4.63	-

ASEAN Cassava Situation in 2016

Production

The estimated cassava production (root fresh) in ASEAN in 2016 (crop year 2015/16) was 85.92 million tons which has increased from 81.88 million tons in 2015 about 5 percent. The increase has occurred in every producing country except 3 countries namely, Lao PDR, Myanmar, and Thailand. (Table 62-65, Figure 62-65).

The estimated cassava production in 2016 in **Indonesia** has increase due to favorable weather and special assistant from the government while the yield is increase due to favorable weather, the special assistance by government, farmers use more improve variety and use more fertilizer together with taking care their crop better.

In **Thailand**, the decrease in production was due to drought made cassava root weight less than normal and some area effect by not efficiency drainage in the field damage the product.

In **Vietnam**, the increase in production came from the expansion in planted area and yield due to farmers responded to price increase.

For **Cambodia**, the increase in production came from the expansion of planted area and the increase in yield.

In the **Philippines**, the increase in production came from the increase in planted area and yield due to farmer use more improved variety.

For **Lao PDR**, the decrease in production came from the decrease in planted area and yield.

For **Myanmar**, the planted area has declined due to Unfavorable weather and yield decrease due to farmer use less fertilizer.

In **Malaysia**, the increase in production came from the increase in both area and yield.

Utilization and Stock

Cassava root in ASEAN, in general, can be used for human food, animal feed and making ethanol. The domestic utilization of cassava for all purposes in ASEAN in 2016 was estimated at 49.88 million tons, a decrease of about 0.09 million tons or 0.18 percent from 49.97 million tons in 2015 (Table 67-68).

The beginning stock in 2016 was estimated at 1.84 million tons, a decrease of 6.91 million tons compared to 8.75 million tons in 2015. The ending stock of cassava in 2016 was estimated to be 4.22 million tons, an increase of 2.38 million tons compared to 1.84 million tons in 2015, which came from the increase in ending stock in most of country except Lao PDR and Vietnam.

The ratio of the production to the domestic utilization in 2016 was estimated to be about 172 percent, compared to about 164 percent in 2014, indicated that, aggregately, the cassava production in the ASEAN is sufficient for the demand within ASEAN (Table 70, Figure 73).

The ratio of the beginning stock to the domestic utilization for the ASEAN in 2016 is estimated to decrease to about 4 percent compared to about 18 percent in 2015 (Table 71, Figure 74).

Trade

The cassava exported from ASEAN in 2016 is expected to be 42.90 million tons, slightly decrease of 0.49 million tons from 43.39 million tons in 2015. The cassava imported by the ASEAN in 2016 was estimated to be 9.23 million tons, 4.67 million tons increase from 4.56 million tons in 2015. (Table 67-68, Figure 66, 67, 69, and 70).

The quantity and value of cassava exported by countries of destination and the quantity and value of imported by counties of origin are given in Table 72 and 73.

Prices

The FOB prices of cassava in the form of flour, shredded and pellets in Indonesia, Myanmar, Thailand and Vietnam between years 2015 - 2016 and the CIF prices in Indonesia, and Singapore are shown in Table 74 – 75.

Damaged Area

The cassava damaged area in 2016 in the ASEAN was reported to be 92,362 hectares of which 87,069 hectares or about 94 percent cause by drought and has occurred in Thailand.

Prospects for Cassava in 2017

Production

The cassava production in ASEAN in 2017 is forecasted to be 87.37 million tons which is 1.45 million tons or about 2 percent increase from 85.92 million tons in 2016. The increase in production is expected in every country. The most increase is expected in **Thailand**, which is forecasted to be 31.19 million tons or an increase of about 2 percent from previous year. The increase came from the increase in yield due to favorable weather is expected combined with farmer taking care their crop better. (Table 62-65, Figure 62-65).

Utilization and Stock

The domestic utilization of cassava is predicted to increase to 50.64 million tons in 2017 compared to 49.88 million tons in 2016, an increase of 0.77 million tons. The beginning stock in 2017 is forecasted to be 4.22 million tons, an increase of about 2.38 million tons, compared to 1.84 million tons in 2016. The ending stock in 2017 is predicted to be 6.74 million tons, an increase of about 2.52 million tons from 4.22 million tons in 2016.

The ratio of production to domestic utilization for 2017 is forecasted to be about 173 percent, compared to about 172 percent in 2015, indicates that the self-sufficiency in cassava in the ASEAN is increasing (Table 70). The ratio of beginning stock to the domestic utilization in 2017 is predicted to be about 8 percent, compared to about 4 percent in 2016, indicates that the cassava supply situation in the ASEAN is increasing (Table 71).

Trade

The cassava export from the ASEAN is expected to increase to 43.53 million tons in 2017, an increase of 0.64 million tons compared to 42.90 million tons in 2016. For the import, it is expected to slightly increase from 9.23 million tons in 2016 to 9.33 million tons in 2017 (Table 68-69, Figure 66, 68, 69 and 71)

Table 62 Cassava production in ASEAN countries, 2015-2017

Unit: 1,000 Tons

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	81,884.10	85,921.52	4,037.42	4.93	87,373.29	1,451.77	1.69
Brunei	0.17	0.17	0.01	3.00	0.18	0.01	3.00
Cambodia	11,943.20	13,222.25	1,279.04	10.71	13,386.69	164.44	1.24
Indonesia	21,790.96	26,749.01	4,958.06	22.75	26,918.63	169.61	0.63
Lao PDR	2,158.71	1,527.20	-631.51	-29.25	1,557.75	30.55	2.00
Malaysia	67.71	74.48	6.77	10.00	81.93	7.45	10.00
Myanmar	484.91	460.48	-24.43	-5.04	764.40	303.92	66.00
Philippines	2,628.01	2,751.85	123.84	4.71	2,822.97	71.12	2.58
Singapore							
Thailand	32,357.74	30,557.86	-1,799.88	-5.56	31,187.28	629.42	2.06
Vietnam	10,452.70	10,578.22	125.52	1.20	10,653.47	75.25	0.71

Table 63 Cassava planted area in ASEAN countries, 2015-2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
ASEAN	3,849.86	4,023.32	173.45	4.51	3,996.67	-26.65	-0.66
Brunei	-	-	-	-	-	-	-
Cambodia	521.46	531.89	10.43	2.00	542.42	10.54	1.98
Indonesia	949.25	1,108.56	159.31	16.78	1,102.20	-6.36	-0.57
Lao PDR	74.15	46.00	-28.15	-37.97	46.50	0.50	1.09
Malaysia	4.03	4.19	0.16	4.02	4.36	0.17	3.98
Myanmar	37.20	36.24	-0.96	-2.58	48.34	12.11	33.42
Philippines	219.52	223.20	3.69	1.68	224.47	1.26	0.57
Singapore	-	-	-	-	-	-	-
Thailand	1,491.15	1,514.24	23.08	1.55	1,466.38	-47.86	-3.16
Vietnam	553.10	559.00	5.90	1.07	562.00	3.00	0.54

Table 64 Cassava harvested area in ASEAN countries, 2015-2017

Unit: 1,000 Hectares

Country	2015 (2014/15)	2016 (2015/16)	change		2017 (2016/17)	change	
			Quantities	(%)		Quantities	(%)
ASEAN	3,785.74	3,930.95	145.21	3.84	3,906.95	-24.00	-0.61
Brunei	-	-	-		-	-	
Cambodia	515.29	527.32	12.03	2.33	537.87	10.55	2.00
Indonesia	949.25	1,108.56	159.31	16.78	1,102.20	-6.36	-0.57
Lao PDR	74.15	46.00	-28.15	-37.97	46.50	0.50	1.09
Malaysia	3.42	3.47	0.05	1.40	3.51	0.05	1.38
Myanmar	37.20	36.24	-0.96	-2.58	48.34	12.11	33.42
Philippines	219.52	223.20	3.69	1.68	224.47	1.26	0.57
Singapore	-	-	-		-	-	
Thailand	1,433.82	1,427.17	-6.65	-0.46	1,382.06	-45.11	-3.16
Vietnam	553.10	559.00	5.90	1.07	562.00	3.00	0.54

Note: Vietnam reported only planted area.

Table 65 Cassava yield in ASEAN countries, 2015-2017

Unit: Ton/Hectare

Country	2015 (2014/15)	2016 (2015/16)	change		2017 (2016/17)	change	
			Quantities	(%)		Quantities	(%)
ASEAN	21.63	21.86	0.23	1.06	22.36	0.50	2.29
Brunei	-	-	-		-	-	
Cambodia	23.18	25.07	1.89	8.15	24.89	-0.18	-0.72
Indonesia	22.96	24.13	1.17	5.10	24.42	0.29	1.20
Lao PDR	29.11	33.20	4.09	14.05	33.50	0.30	0.90
Malaysia	19.81	21.49	1.68	8.48	23.32	1.83	8.52
Myanmar	13.04	12.71	-0.33	-2.53	15.81	3.10	24.39
Philippines	11.97	12.33	0.36	3.01	12.58	0.25	2.03
Singapore	-	-	-		-	-	
Thailand	22.57	21.41	-1.16	-5.14	22.57	1.16	5.42
Vietnam	18.90	18.92	0.02	0.11	18.96	0.04	0.21

Note: Yield related to harvested area excepts Vietnam which related to planted

Table 66 Cassava damaged area in ASEAN by cause of damage, 2016

Country	Cause of Damage (Hectares)						Total
	Flood	Drought	Pests	Disease	Others	Unspecitfy	
ASEAN			4,567	-	-	726	92,362
Brunei	-	-	-	-	-	-	-
Cambodi		-	4,567	-	-	-	4,567
Indonesia		-	-	-	-	-	-
Lao PDR	-	-	-	-	-	-	-
Malaysia	-		-	-	-	726	726
Myanmar	-	-	-	-	-	-	-
Philippin	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-
Thailand	-		-	-	-	-	87,069
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 67 Cassava balance sheet of ASEAN countries, 2015 (Cassava roots fresh)

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	8,751,126	81,884,104	4,562,213	95,197,443	49,965,287	43,392,081	1,840,076	95,197,443
Brunei	0	169	0.60	169	163	0	6	169
Cambodia	-	11,943,204	0	11,943,204	2,388,641	9,554,563	0	11,943,204
Indonesia	2,261,602	21,790,956	227,969	24,280,527	24,210,997	2,549	66,982	24,280,527
Lao PDR	495,827	2,158,705	1,013	2,655,545	1,995,973	220,572	439,000	2,655,545
Malaysia	0	67,713	0	67,713	34,322	33,391	0	67,713
Myanmar	8,367	484,908	58.00	493,333	478,139	4,377	10,817	493,333
Philippines	-	2,628,008	82,911	2,710,919	2,710,790	129	0	2,710,919
Singapore	-	-	1,262	1,262	1,262	0	0	1,262
Thailand	5,310,000	32,357,741	4,249,000	41,916,741	9,280,000	32,000,000	636,741	41,916,741
Vietnam	675,330	10,452,700	-	11,128,030	8,865,000	1,576,500	686,530	11,128,030

Table 68 Cassava balance sheet of ASEAN countries, 2016 (Cassava roots fresh)

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	1,840,076	85,921,523	9,230,378	96,991,977	49,876,840	42,898,944	4,216,192	96,991,977
Brunei	6	174	0.72	181	168	-	13	181
Cambodia	-	13,222,246	-	13,222,246	2,583,759	10,638,487	0	13,222,246
Indonesia	66,982	26,749,012	227,969	27,043,962	24,410,997	2,549	2,630,417	27,043,962
Lao PDR	439,000	1,527,200	1,175	1,967,375	1,326,211	365,610	275,554	1,967,375
Malaysia	-	74,484	-	74,484	37,688	36,796	0	74,484
Myanmar	10,817	460,483	38	471,338	456,821	53	14,464	471,338
Philippines ^{1/}	-	2,751,850		2,751,850	2,751,000	850	0	2,751,850
Singapore ^{1/}	-		1,196	1,196	1,196		0	1,196
Thailand	636,741	30,557,857	9,000,000	40,194,598	9,400,000	30,000,000	794,598	40,194,598
Vietnam	686,530	10,578,217	-	11,264,747	8,909,000	1,854,600	501,147	11,264,747

Note: ^{1/} The value is estimated by AFSIS

Table 69 Cassava balance sheet of ASEAN countries, 2017 (Cassava roots fresh)

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
ASEAN	4,216,192	87,373,290	9,330,369	100,919,852	50,644,939	43,533,998	6,740,915	100,919,852
Brunei	13	179	1	193	173	-	19	193
Cambodia	-	13,386,690	-	13,386,690	2,535,434	10,851,256	0	13,386,690
Indonesia	2,630,417	26,918,627	227,969	29,777,012	24,410,997	2,549	5,363,467	29,777,012
Lao PDR	275,554	1,557,750	1,200	1,834,504	1,326,211	238,293	270,000	1,834,504
Malaysia	-	81,933	-	81,933	41,000	40,933	0	81,933
Myanmar 1/	14,464	764,400	-	778,864	754,924		23,940	778,864
Philippines ^{1/}	-	2,822,967		2,822,967	2,822,000	967	0	2,822,967
Singapore ^{1/}	-		1,200	1,200	1,200		0	1,200
Thailand	794,598	31,187,276	9,100,000	41,081,874	9,920,000	30,500,000	661,874	41,081,874
Vietnam	501,147	10,653,468	-	11,154,615	8,833,000	1,900,000	421,615	11,154,615

Note: ^{1/} The value is estimated by AFSIS, n.a. = not available

Table 70 Ratio of cassava production to domestic utilization in ASEAN countries (Self-sufficiency ratio), 2015-2017

Unit: Tons

Country	2015			2016			2017		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
ASEAN	81,884,104	49,965,287	163.88	85,921,523	49,876,840	172.27	87,373,290	50,644,939	172.52
Brunei	169	163	103.49	174	168	103.32	179	173	103.32
Cambodia	11,943,204	2,388,641	500.00	13,222,246	2,583,759	511.74	13,386,690	2,535,434	527.98
Indonesia	21,790,956	24,210,997	90.00	26,749,012	24,410,997	109.58	26,918,627	24,410,997	110.27
Lao PDR	2,158,705	1,995,973	108.15	1,527,200	1,326,211	115.16	1,557,750	1,326,211	117.46
Malaysia	67,713	34,322	197.29	74,484	37,688	197.63	81,933	41,000	199.84
Myanmar	484,908	478,139	101.42	460,483	456,821	100.80	764,400	754,924	101.26
Philippines	2,628,008	2,710,790	96.95	2,751,850	2,751,000	100.03	2,822,967	2,822,000	100.03
Singapore	-	1,262	0.00	-	1,196	0.00	-	1,200	0.00
Thailand	32,357,741	9,280,000	348.68	30,557,857	9,400,000	325.08	31,187,276	9,920,000	314.39
Vietnam	10,452,700	8,865,000	117.91	10,578,217	8,909,000	118.74	10,653,468	8,833,000	120.61

Table 71 Ratio of cassava beginning stock to domestic utilization in ASEAN countries (Food security ratio), 2015-2017

Unit: Tons

Country	2015			2016			2017		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
ASEAN	8,751,126	49,965,287	17.51	1,840,076	49,876,840	3.69	4,216,180	50,644,939	8.32
Brunei	-		0.00	6	168	3.74		173	-
Cambodia	-		0.00	-	2,583,759	0.00	-	2,535,434	-
Indonesia	2,261,602		9.34	66,982	24,410,997	0.27	2,630,417	24,410,997	10.78
Lao PDR	495,827		24.84	439,000	1,326,211	33.10	275,554	1,326,211	20.78
Malaysia	-		0.00	-	37,688	0.00	-	41,000	-
Myanmar	8,367		1.75	10,817	456,821	2.37	14,464	754,924	1.92
Philippines	-		0.00	-	2,751,000	0.00	-	2,822,000	-
Singapore	-		0.00	-	1,196	0.00	-	1,200	-
Thailand	5,310,000		57.22	636,741	9,400,000	6.77	794,598	9,920,000	8.01
Vietnam	675,330		7.62	686,530	8,909,000	7.71	501,147	8,833,000	5.67

Table 72 Quantity and Value of Cassava Export by Countries of Destination in 2016

Quantity: Tons Values: US\$

Exporting Country	Country of Destination													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei														
Cambodia														
Indonesia	14	49,896							0	172			147	58,800
Lao PDR														
Malaysia														1,374
Myanmar														
Philippines														
Singapore	0	1,512												
Thailand	625	69,353	448	132,290	1,103,528	100,531,643	3,378	303,471	287,689	27,955,427	2,708	425,700	92,411	9,739,597
Vietnam									19,000	3,450			19,500	3,610

Exporting Country	Country of Destination						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei							0	0			0	0
Cambodia							0	0			0	0
Indonesia	3	7,403	145	44,794			310	161,065	2,238	1,388,643	2,549	1,549,708
Lao PDR			181,805	133,800	183,805	179,000	365,610	312,800	0	0	365,610	312,800
Malaysia		65,401					0	66,776			0	66,776
Myanmar							0	0	53	0	53	0
Philippines							0	0	127	120,727	127	120,727
Singapore							0	1,512	0	814	0	2,326
Thailand	69,334	6,461,852			41,296	5,048,493	1,601,416	150,667,827	7,623,693	691,729,547	9,225,110	842,397,374
Vietnam							38,500	7,060	1,861,500	362,600	1,900,000	369,660

Remark: The data in this table is obtained from national focal points of member.

Table 73 Quantity and Value of Cassava Import by Countries of Origin in 2016

Quantity: Tons Values: US\$

Importing Country	Country of Origin													
	Brunei		Cambodia		Indonesia		Lao PDR		Malaysia		Myanmar		Philippines	
	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values	Quantity	Values
Brunei									0.60	250				
Cambodia														
Indonesia														
Lao PDR														
Malaysia														
Myanmar														
Philippines					60	26,404								
Singapore					1.06	214			485	112,523				
Thailand			3,291,497	182,638,296	461	39,204	416,708	33,033,652	71	29,628				
Vietnam														

Importing Country	Country of Origin						Total within ASEAN		Total outside ASEAN		Total	
	Singapore		Thailand		Vietnam		Quantity	Values	Quantity	Values	Quantity	Values
	Quantity	Values	Quantity	Values	Quantity	Values						
Brunei							0.60	250			0.60	250
Cambodia							0	0			0	0
Indonesia			195,434	72,783,117	31,480	11,227,096	226,914	84,010,213	1,055	398,168	227,969	84,408,381
Lao PDR			1,040	23,292,978			1,040	23,292,978	135	19,500	1,175	23,312,478
Malaysia				13,373			0	13,373		222,372	0	235,746
Myanmar			19	17,167.00			19	17,167	19	5,180	38	22,347
Philippines			9,008	3,662,794	10,806	4,581,327	19,874	8,270,525	38	63,785	19,912	8,334,310
Singapore			0.16	145	0	260	486	113,141	0	814	486	113,955
Thailand	-	20			628	48,725	3,709,365	215,789,524	22,251	5,988,530	3,731,615	221,778,054
Vietnam							0	0			0	0

Remark: The data in this table is obtained from national focal points of member

Table 74 FOB Price of Cassava in selected ASEAN countries

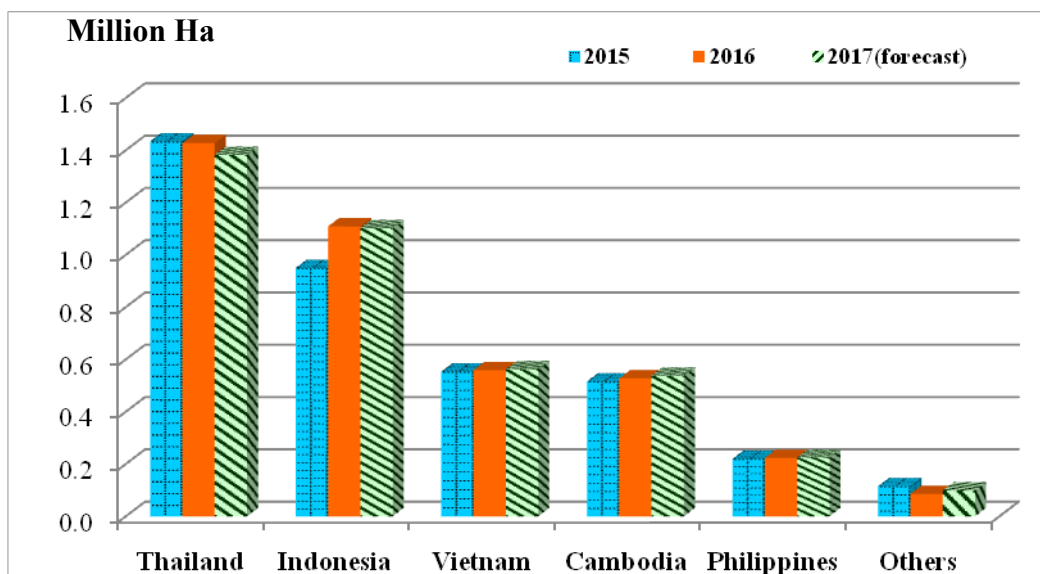
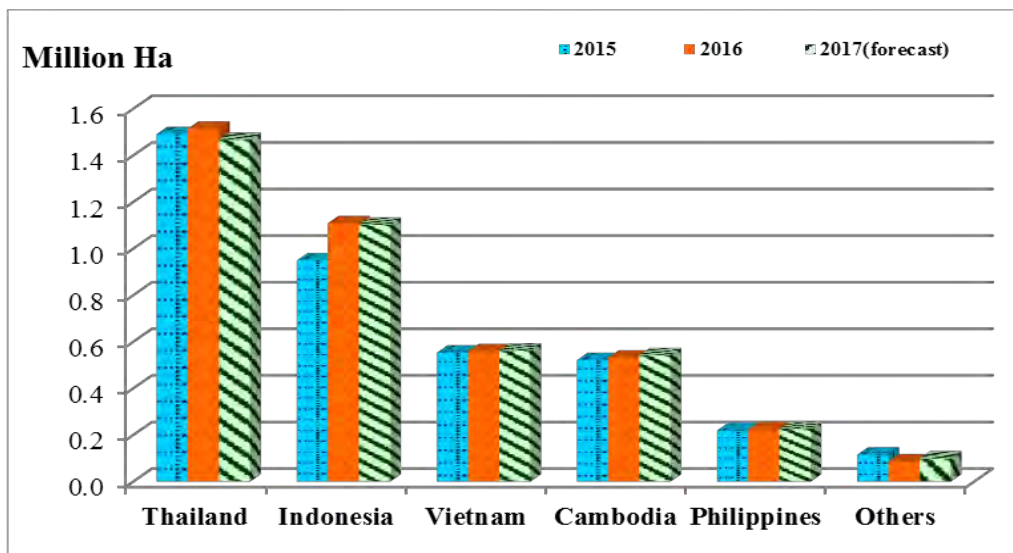
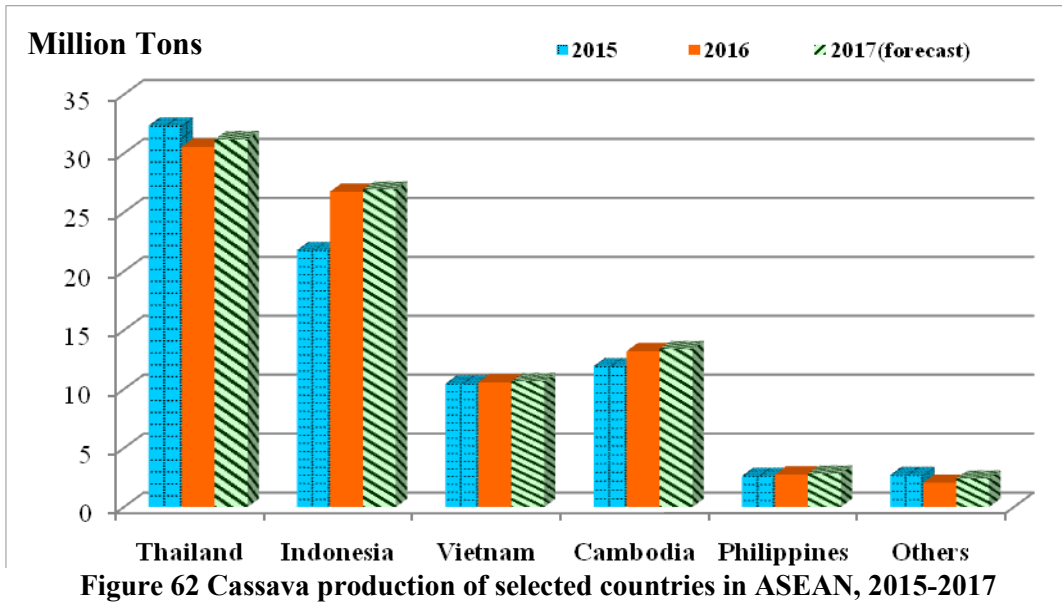
Unit: US\$/Ton

Country	Product	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	Flour	2015	313	663	639	606	705	780	658	560	579	557	591	700	613
		2016	575	617	640										
Myanmar		2015		350	313			300	350	297	198		291	278	297
		2016		228											
Thailand	Starch	2015	419	424	409	423	409	432	428	427	430	424	395	384	417
		2016	370	367	366	363	371								
	Pellets	2015	212	262	261	292	190	206	235	237	284	241	260	186	239
		2016	220			239	178								
	Shredded	2015	224	217	212	213	209	227	192	216	218	223	215	193	213
		2016	180	172	170	171	173								
Vietnam	Not specified	2015	233	221	220	220	231	230	230	238	230	134	123	157	214
		2016	155	169	165	175	190	171							

Table 75 CIF Price of Cassava in selected ASEAN countries

Unit: US\$/Ton

Country	Product	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	Flour	2015	432	427	427	428	431	429	455	448	445	438	424	406	432
		2016	388	372	363										
Singapore	Not specified	2015	323	264	262	250	248	248	245	238	257	252	252	261	258
		2016	241	244	232	230	227								



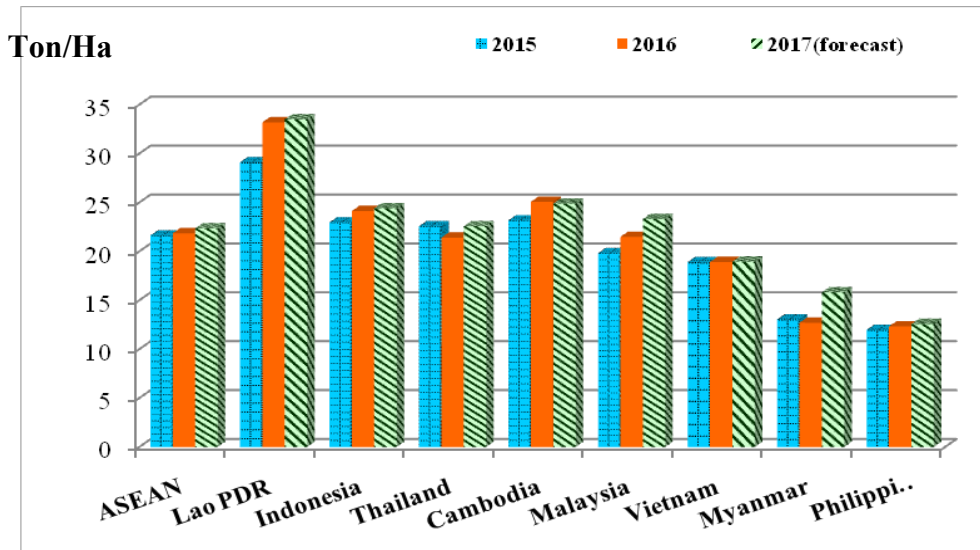


Figure 65 Cassava yield of countries in ASEAN, 2015-2017

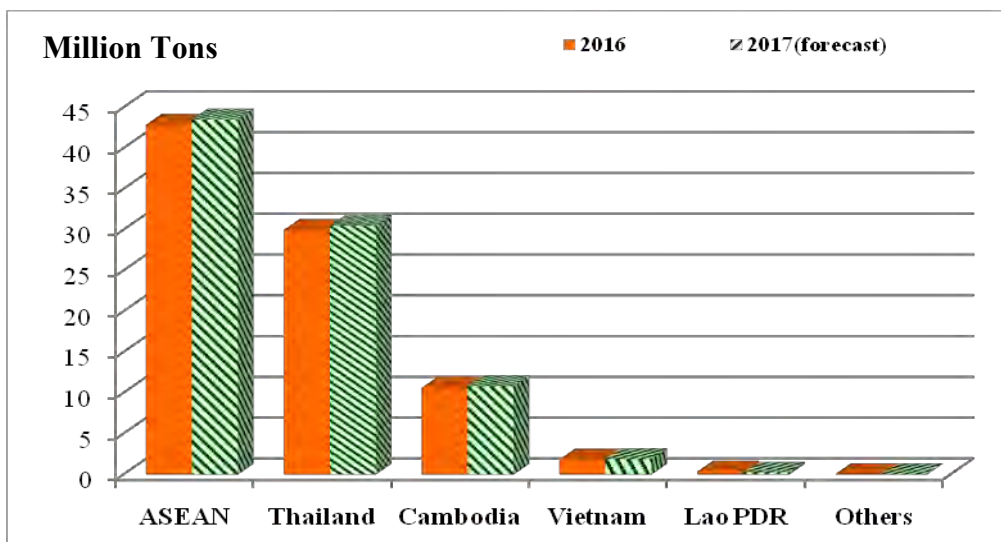


Figure 66 Amount of cassava export (million tons) of selected countries in ASEAN in 2016-2017

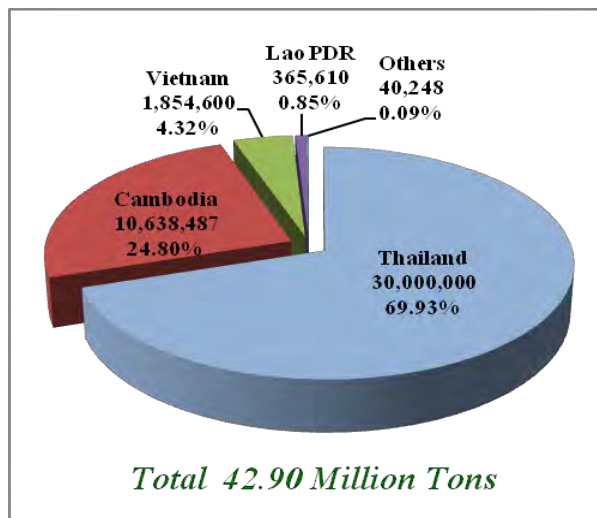


Figure 67 Share of cassava export (tons) among ASEAN countries, 2016

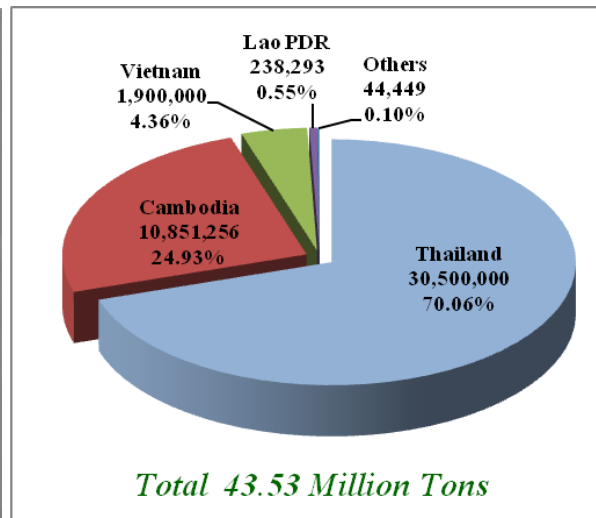


Figure 68 Share of cassava export (tons) among ASEAN countries, 2017

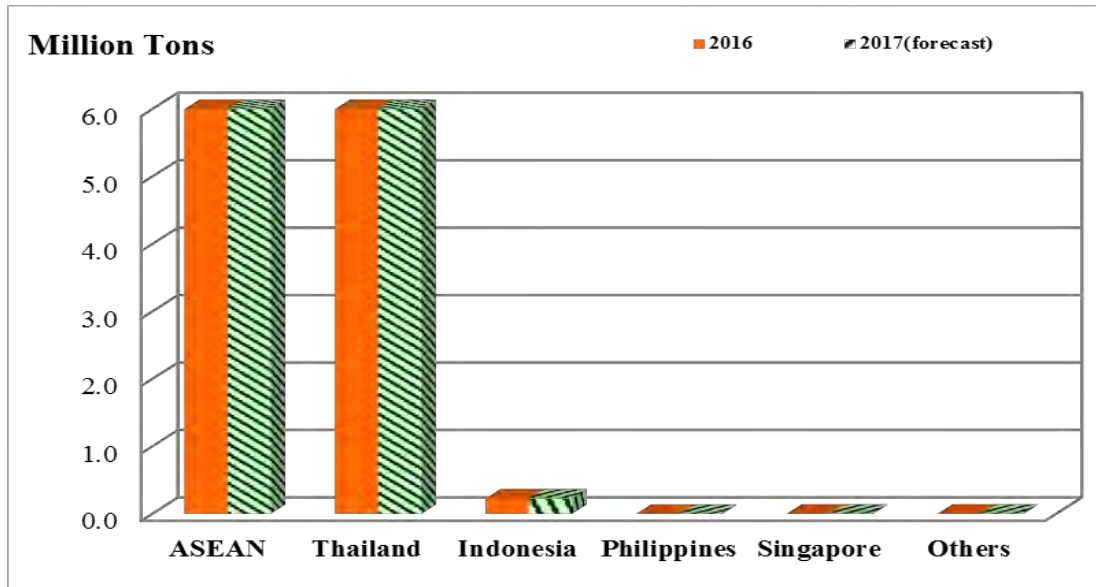


Figure 69 Amount of cassava import (million tons) by selected countries in ASEAN in 2016-2017

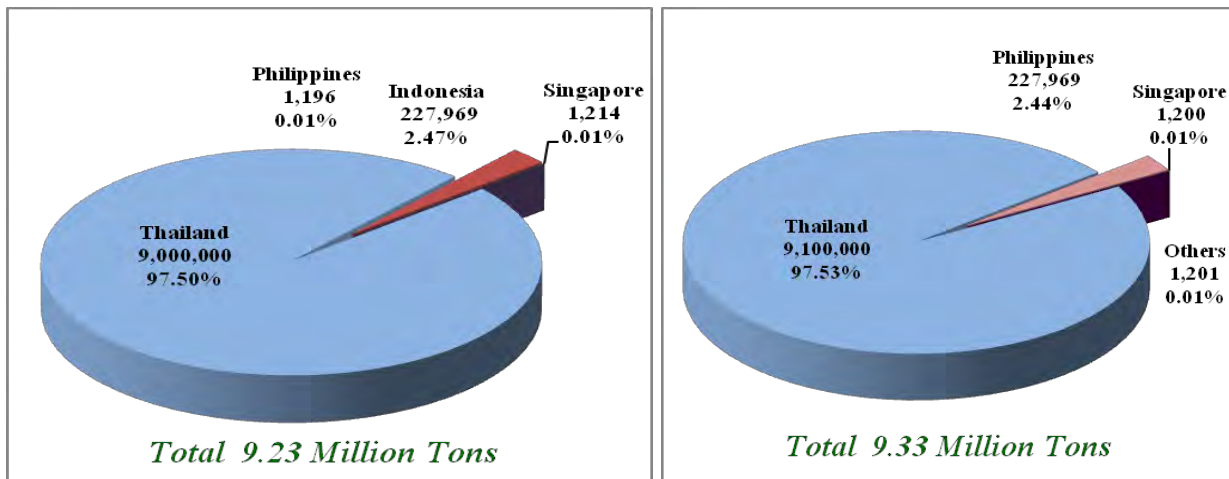


Figure 70 Share of cassava import (tons) among ASEAN countries, 2016

Figure 71 Share of cassava import (tons) among ASEAN countries, 2017

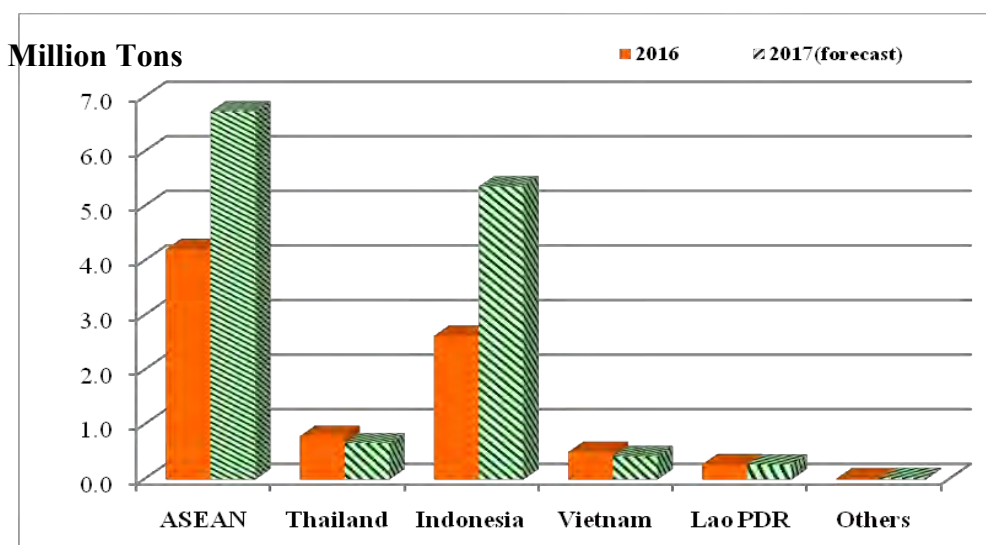


Figure 72 Amount of ending stock of cassava in ASEAN countries in 2016-2017

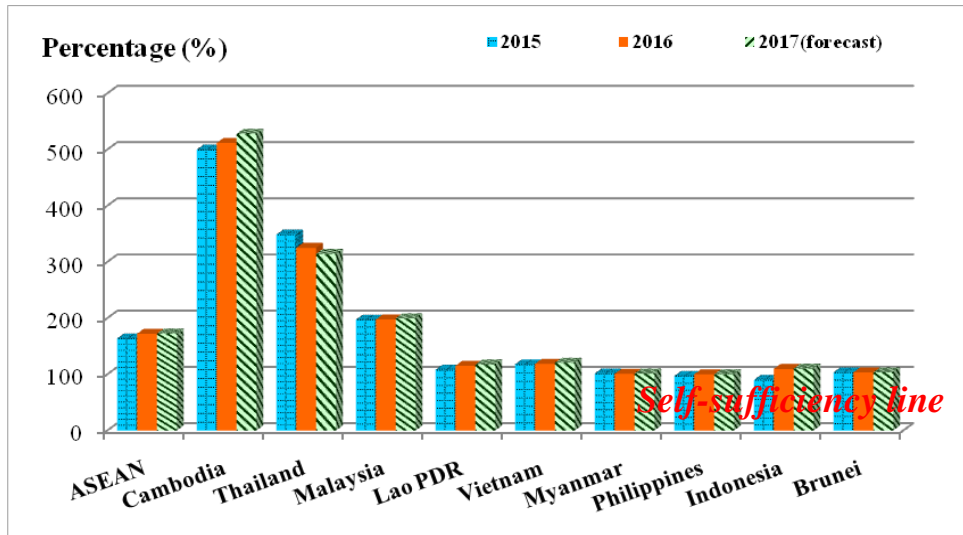


Figure 73 Ratio of cassava production to domestic utilization in ASEAN countries, 2015-2017

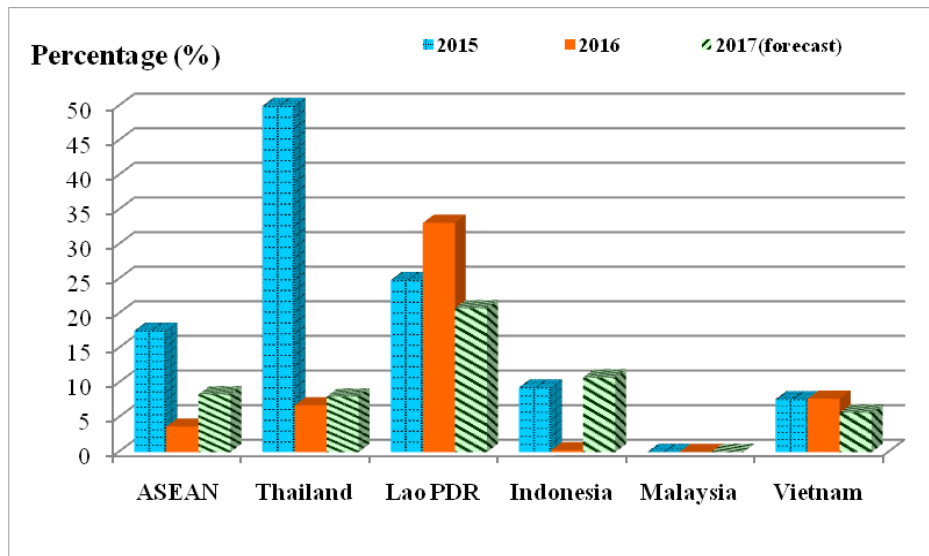


Figure 74 Ratio of cassava beginning stock to domestic utilization in ASEAN countries, 2015-2017

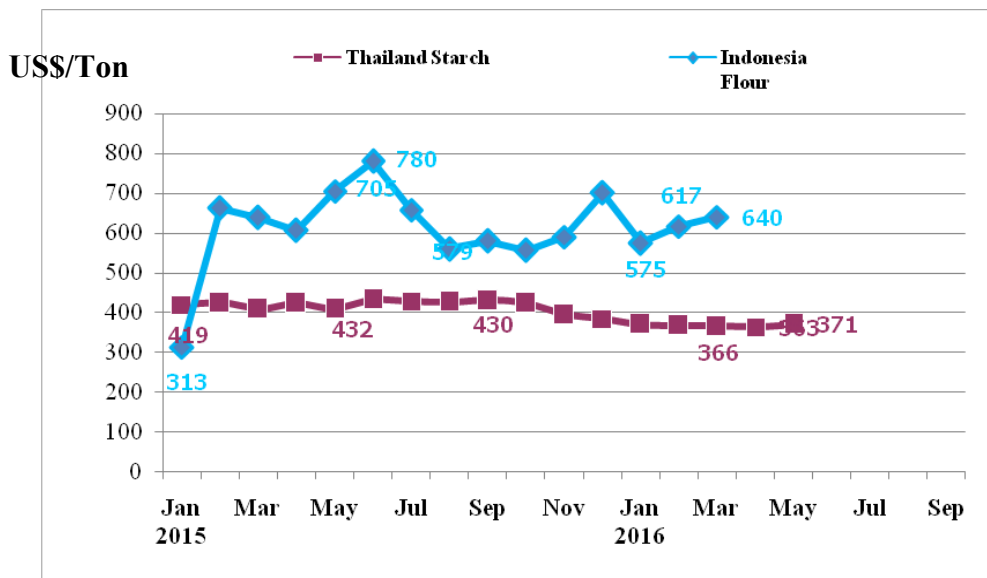


Figure 75 FOB price (US\$/Ton) of cassava flour of selected countries in ASEAN in 2015-2016

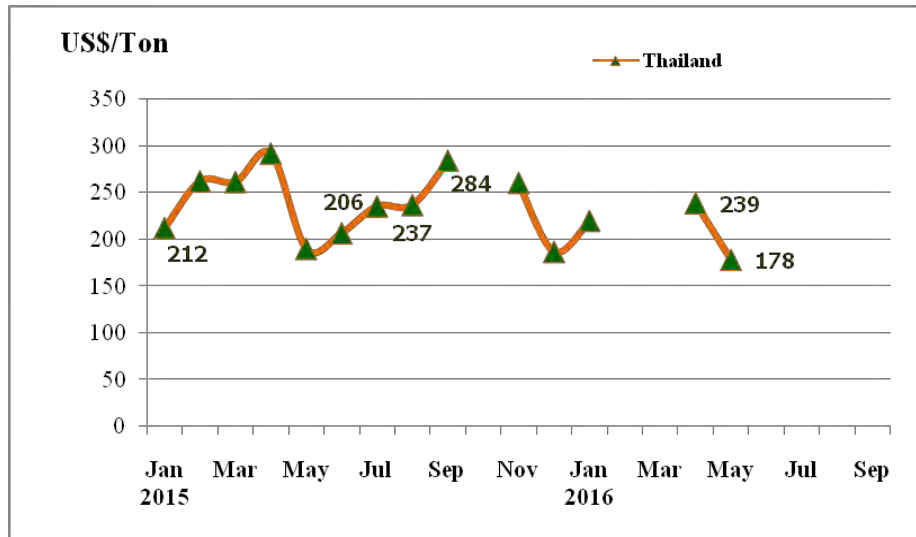


Figure 76 FOB price (US\$/Ton) of cassava pellets of selected countries in ASEAN in 2015-2016

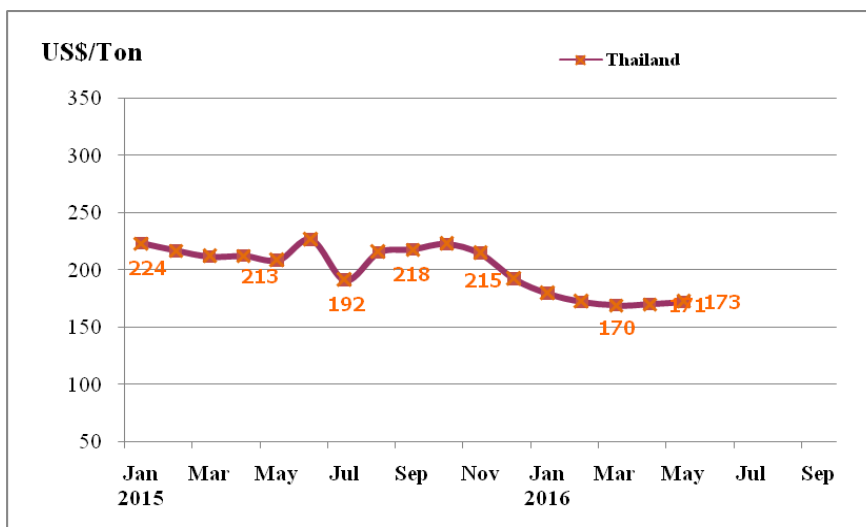


Figure 77 FOB price (US\$/Ton) of cassava shredded of selected countries in ASEAN in 2015-2016

Explanatory Notes

Production of Paddy for 2016

Brunei:

- Wet season refers to the crop harvested during January to June 2016.
- Dry season refers to the crop harvested during July to December 2016.

Cambodia:

- Wet season refers to the crop harvested during August to December 2015.
- Dry season refers to the crop harvested during January to March 2016.

Indonesia:

- Wet season refers to the crop harvested during January to April and September to December 2016.
- Dry season refers to the crop harvested during May to August 2016.

Lao PDR:

- Wet season refers to the crop harvested during September 2015 to January 2016.
- Dry season refers to the crop harvested during February to May 2016.

Malaysia:

- Wet season refers to the crop harvested during December 2015 to June 2016.
- Dry season refers to the crop harvested during July to November 2016.

Myanmar:

- Wet season refers to the crop harvested during September 2015 to January 2016.
- Dry season refers to the crop harvested during January to August 2016.

Philippines:

- Wet season refers to the crop harvested during August to December 2015.
- Dry season refers to the crop harvested during January to June 2016.

Thailand:

- Wet season refers to the crop harvested during August 2015 to April 2016.
- Dry season refers to the crop harvested during February to May 2016.

Vietnam:

Spring-season

- North refers to the crop harvested during June to July 2016.
- South refers to the crop harvested during March to May 2016.

Autumn-season

- North refers to the crop harvested during August to September 2016.
- South refers to the crop harvested during July to September 2016.

Winter-season

- North refers to the crop harvested during October to November 2016.
- South refers to the crop harvested during October 2016 to January 2017.

Production of Maize for 2016

Cambodia:

- Wet season refers to the crop harvested during August to October 2016.
- Dry season refers to the crop harvested during February to March 2016.

Indonesia:

- 1st crop harvested during January to April 2016.
- 2nd crop harvested during May to August 2016.
- 3rd crop harvested during September to December 2016.

Lao PDR:

- Wet season refers to the crop harvested during June to July 2016.
- Dry season refers to the crop harvested during September to December 2016.

Myanmar:

- Wet season refers to the crop harvested during August to November 2015.
- Dry season refers to the crop harvested during January to March 2016.

Philippines:

- Wet season refers to the crop harvested during July to December 2016.
- Dry season refers to the crop harvested during January to June 2016.

Thailand:

- Wet season refers to the crop harvested during June 2016 to February 2017.
- Dry season refers to the crop harvested during February to May 2016.

Vietnam:

- 1st crop harvested during January to March 2016.
- 2nd crop harvested during April to September 2016.
- 3rd crop harvested during July 2016 to January 2017.

Production of Sugarcane for 2016

Cambodia:

- The crop harvested during October to December 2016.

Indonesia:

- The crop harvested during January to December 2016.

Lao PDR:

- The crop harvested during December 2015 to June 2016.

Myanmar:

- The crop harvested during October 2015 to March 2016.

Philippines:

- The crop harvested during October 2015 to June 2016.

Thailand:

- The crop harvested during November 2015 to May 2016.

Vietnam:

- The crop harvested during November 2015 to May 2016.

Production of Soybeans for 2016

Cambodia:

- The crop harvested during November to December 2016.

Indonesia:

- 1st crop harvested during January to April 2016.
- 2nd crop harvested during May to August 2016.
- 3rd crop harvested during September to December 2016.

Lao PDR:

- Wet season refers to the crop harvested during September to October 2016.
- Dry season refers to the crop harvested during January to March 2016.

Myanmar:

- Wet season refers to the crop harvested during August to December 2015.
- Dry season refers to the crop harvested during January to March 2016.

Philippines:

- Wet season refers to the crop harvested during July to December 2016.
- Dry season refers to the crop harvested during January to June 2016.

Thailand:

- Wet season refers to the crop harvested during August to December 2016.
- Dry season refers to the crop harvested during January to May 2016.

Vietnam:

- Wet season refers to the crop harvested during February to May 2016.
- Dry season refers to the crop harvested during August to November 2016.

Production of Cassava for 2016

Cambodia:

- The crop harvested during half November to December 2016.

Indonesia:

- 1st crop harvested during January to April 2016.
- 2nd crop harvested during May to August 2016.
- 3rd crop harvested during September to December 2016.

Lao PDR:

- The crop harvested during December 2015 to February 2016.

Malaysia:

- The crop harvested during October 2015 to December 2016.

Myanmar:

- The crop harvested during November 2015 to February 2016.

Philippines:

- 1st crop harvested during January to June 2016.
- 2nd crop harvested during July to December 2016.

Thailand:

- The crop harvested during October 2015 to September 2016.

Vietnam:

- North refers to the crop harvested during February to March 2016.
- South refers to the crop harvested during September to October 2016.

Domestic Utilization, Stock, Import and Export: refer to calendar year

n.a.: The data is not available due to no collecting or reporting systems in the country yet.

nil: Small amount

Milling Rate of Rice (2016)

Unit: Tons

Country	Paddy	Rice
ASEAN	1	0.61
Brunei	1	0.65
Cambodia	1	0.54
Indonesia	1	0.56
Lao PDR	1	0.60
Malaysia	1	0.63
Myanmar	1	0.63
Philippines	1	0.68
Thailand	1	0.66
Vietnam	1	0.65

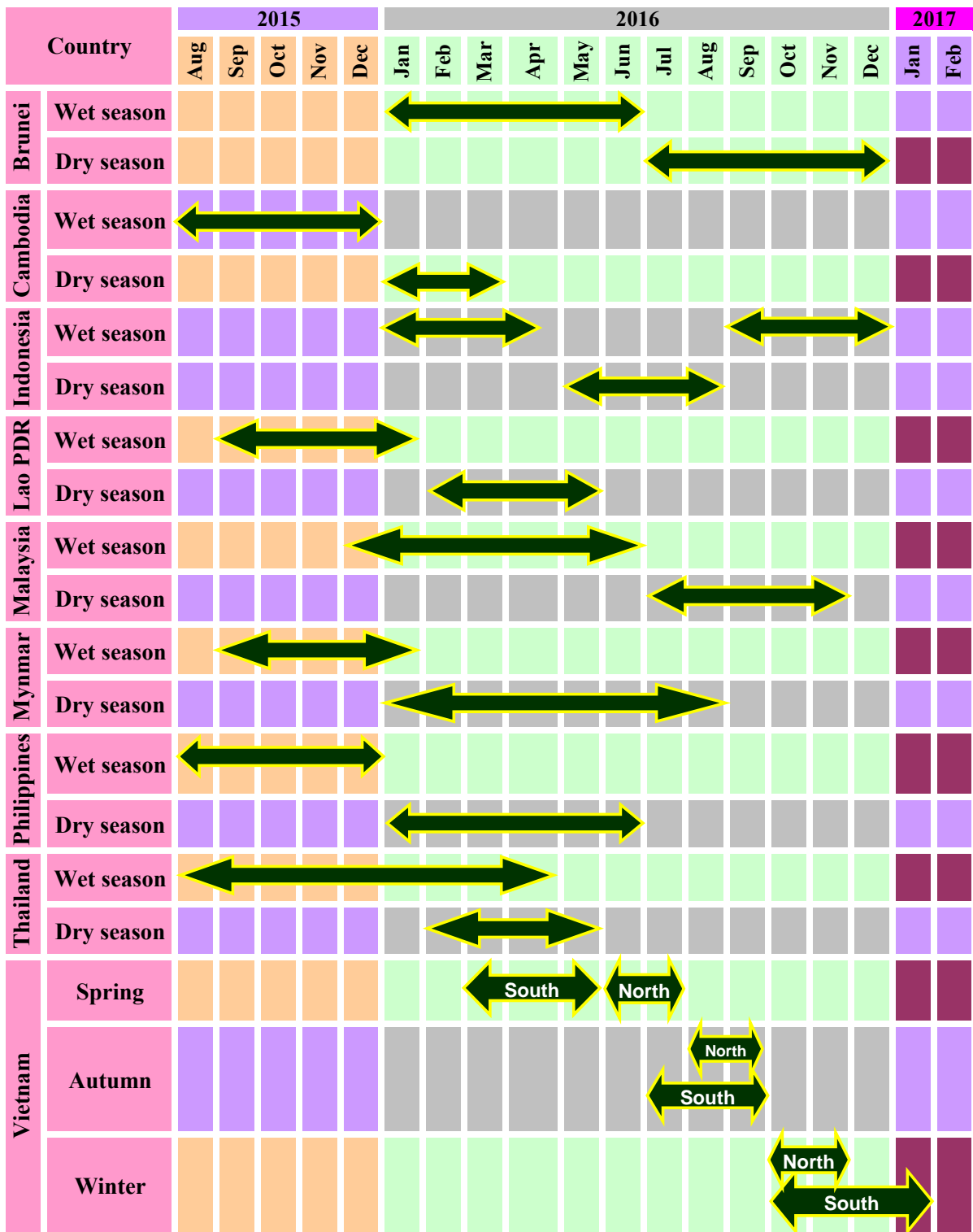
Extraction rate of Sugar (2016)

Unit: Tons

Country	Sugarcane	Sugar
ASEAN	1,000	105.24
Cambodia	1,000	100.00
Indonesia	1,000	153.85
Lao PDR	1,000	200.00
Myanmar	1,000	80.00
Philippines	1,000	95.88
Thailand	1,000	103.95
Vietnam	1,000	90.91

ANNEX 1

Rice crop calendar (harvested months) for crop year 2015/16 (2016) in ACO-16 report



ANNEX 2

Maize crop calendar (harvested months) for crop year 2015/16 (2016) in ACO-16 report

Country	Crop	2015					2016										2017					
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb		
Cambodia	Wet season	■	■	■	■	■															■	■
	Dry season	■	■	■	■	■																■
Indonesia	1st	■	■	■	■	■															■	■
	2nd	■	■	■	■	■															■	■
	3rd	■	■	■	■	■															■	■
Lao PDR	Wet season	■	■	■	■	■															■	■
	Dry season	■	■	■	■	■															■	■
Myanmar	Wet season	■	■	■	■	■															■	■
	Dry season	■	■	■	■	■															■	■
Philippines	Wet season	■	■	■	■	■															■	■
	Dry season	■	■	■	■	■															■	■
Thailand	Wet season	■	■	■	■	■															■	■
	Dry season	■	■	■	■	■															■	■
Vietnam	1st	■	■	■	■	■															■	■
	2nd	■	■	■	■	■															■	■
	3rd	■	■	■	■	■															■	■

ANNEX 4

Soybean crop calendar (harvested months) for crop year 2015/16 (2016) in ACO-16 report

Country	Crop	2015					2016											
		Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cambodia																		
Indonesia	1st																	
	2nd																	
	3rd																	
Lao PDR	Wet season																	
	Dry season																	
Myanmar	Wet season																	
	Dry season																	
Philippines	Wet season																	
	Dry season																	
Thailand	Wet season																	
	Dry season																	
Vietnam	Wet season																	
	Dry season																	

