

# ASEAN Agricultural Commodity outlook

No. 17 December 2016

ASEAN Food Security Information System (AFSIS)



Released by AFSIS Secretariat

Office of Agricultural Economics (OAE)

Ministry of Agriculture and Cooperatives

Bangkok, Thailand

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**ASEAN FOOD SECURITY  
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.

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 8.53 percent or about 16.34 million tons from 191.55 million tons in 2016 to 207.89 million tons in 2017 (Table 1)
- Rice production is forecasted to increase about 4 percent, from 130.98 million tons in 2016 to 136.12 million tons in 2017 and import is expected to increase about 2.18 percent or 0.06 million tons from 2.99 million tons in 2016 to 3.05 million tons in 2017.
- Rice export is expected to slightly decrease about 4 percent or 19.27 million tons in 2016 to 18.57 million tons in 2017.
- The ratio of production to domestic utilization ratio (self-sufficiency ratio) for the region is expected to increase 3 percent from 126.47 percent in 2016 to 129.47 percent in 2017. The beginning stock to domestic utilization ratio (food security ratio) is estimated to increase about 10 percent from 55.60 percent in 2016 to 65.36 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)	191.55	207.89	16.34	8.53
Beginning stock	57.58	68.72	11.14	19.35
Production	130.98	136.12	5.14	3.92
Import	2.99	3.05	0.06	2.18
Demand (Million tons)	191.55	207.89	16.34	8.53
Domestic utilization	103.56	105.13	1.57	1.52
Export	19.27	18.57	-0.70	-3.61
Ending stock	68.72	84.18	15.47	22.51
Ratio of production to domestic utilization (%)	126.47	129.47	3.00	-
Ratio of beginning stock to domestic utilization (%)	55.60	65.36	9.76	-

## ASEAN Rice Situation in 2016

### Production

ASEAN paddy production in 2016 (crop year 2015/16) was estimated at 213.18 million tons, the slight decrease of 2,319 tons which is 1.08 percent from 215.50 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 and favorable weather.

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 continues to increase rice planted area.

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

For **Malaysia**, the increase in production derived from the increase in planted area and yield as a result of unfavorable weather during the growing season.

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 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 103.56 million tons, slightly increase from 102.08 million tons in 2015. The increase was about 1.48 million tons or 1.46 percent (Table 7-8).

The ratio of production to domestic utilization (self-sufficient ratio) of ASEAN in 2016 was estimated at 126.47 percent compared to 128.83 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 Cambodia, Indonesia, 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 57.58 million tons up about 11.44 million tons from 46.13 million tons in 2015 or about 24.82 percent. Thailand carried 25.79 million tons or about 45 percent of the ASEAN stock and followed by Indonesia about 19.85 million tons or about 34 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 55.60 percent, up about 10 percent from the previous year. However, only Malaysia, Singapore, and Vietnam have the ratio below 20 percent optimum level while the Cambodia is at the optimum level (Table 11, Figure 13).

## Trade

In 2016, ASEAN as a whole exported 19.27 million tons of milled rice, a decrease of about 1.49 million tons or about 7 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 2.99 million tons, increase 0.04 million tons or about 1.47 percent from 2.95 million tons in 2015. Indonesia was the biggest importer in the region, which imported about 1.28 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 – Nov) are shown in Table 14-15.

For Myanmar, the average price of 5% milled rice was 364 US\$/ton in 2016. For Thailand, the average price was 397 US\$/ton while Vietnam, the average price was 451 US\$/ton.

For CIF prices, the average price of the grade between 10% to 25% broken milled rice in the Philippines was 359 in 2016. The average CIF prices in Indonesia and Singapore in 2016 was 430 US\$/ton and 635 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 0.52 million hectares or about 74 percent caused by the drought. The damage has occurred the most in Thailand, which equals to 0.44 million hectares or about 84 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 2017 (crop year 2016/17) was estimated at 222.18 million tons, the slightly increase of about 9,000 tons which is 4.22 percent from 2016. The increase was due to the rise in planted area and yield. The increase in production was found in most of the countries except Vietnam, which 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 105.13 million tons, increase about 1.6 million tons or about 1.52 percent compared to 2016 (Table 8-9).

The beginning stock in 2017 is predicted to be 68.72 million tons, up about 11.14 million tons or 19.35 percent from 2016. The ending stock in 2017 is forecasted to be 84.18 million tons, an increase of 15.5 million tons or 22.51 percent from 68.72 million tons in 2016 (Table 8-9, Figure 11).

The ratio of production to domestic utilization is forecasted to be about 129 percent in 2017, an increase of 3 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 55.60 percent in 2016 to 65.36 percent in 2017 (Table 11, Figure 13).

### **Trade**

Rice export from ASEAN is forecasted to decrease from 19.27 million tons in 2016 to 18.57 million tons in 2017 (Table 8-9, Figure 5 and 7). The decrease in export is forecasted in Cambodia, Myanmar, and Thailand.

For the import, the whole ASEAN is forecasted to import 3.05 million tons in 2017, an increase of 0.06 million tons or about 2.17 percent compared to 2.99 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	(%)
<b>ASEAN</b>	<b>215,502.82</b>	<b>213,183.70</b>	<b>-2,319.12</b>	<b>-1.08</b>	<b>222,183.83</b>	<b>9,000.13</b>	<b>4.22</b>
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	9,814.20	478.91	5.13
Indonesia	75,397.84	79,171.92	3,774.08	5.01	80,656.27	1,484.36	1.87
Lao PDR	4,102.00	4,121.30	19.30	0.47	4,339.47	218.17	5.29
Malaysia	2,738.48	3,492.08	753.60	27.52	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	17,473.17	-1,438.31	-7.61	17,627.36	154.20	0.88
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	(%)
<b>ASEAN</b>	<b>50,066.85</b>	<b>49,626.72</b>	<b>-440.12</b>	<b>-0.88</b>	<b>50,738.87</b>	<b>1,112.14</b>	<b>2.24</b>
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	3,097.65	46.24	1.52
Indonesia	14,513.79	15,077.67	563.88	3.89	15,087.19	9.52	0.06
Lao PDR	984.93	975.22	-9.72	-0.99	1,017.49	42.28	4.33
Malaysia	682.12	715.30	33.18	4.86	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	4,592.29	31.06	0.68
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	(%)
<b>ASEAN</b>	<b>49,147.16</b>	<b>48,925.29</b>	<b>-221.87</b>	<b>-0.45</b>	<b>50,410.07</b>	<b>1,484.78</b>	<b>3.03</b>
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	3,079.45	53.82	1.78
Indonesia	14,116.64	15,044.96	928.32	6.58	15,087.19	42.23	0.28
Lao PDR	965.15	972.38	7.23	0.75	1,017.49	45.11	4.64
Malaysia	678.40	711.44	33.04	4.87	726.20	14.76	2.08
Myanmar	7,152.52	7,101.11	-51.41	-0.72	7,518.20	417.09	5.87
Philippines	4,704.49	4,522.79	-181.70	-3.86	4,555.92	33.13	0.73
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	(%)
<b>ASEAN</b>	<b>4.38</b>	<b>4.36</b>	<b>-0.02</b>	<b>-0.46</b>	<b>4.41</b>	<b>0.05</b>	<b>1.15</b>
Brunei	2.34	1.75	-0.59	-25.21	1.75	0.00	0.00
Cambodia	3.08	3.09	0.01	0.32	3.19	0.10	3.24
Indonesia	5.34	5.26	-0.08	-1.50	5.35	0.09	1.71
Lao PDR	4.25	4.24	-0.01	-0.24	4.26	0.02	0.47
Malaysia	4.04	4.91	0.87	21.53	5.08	0.17	3.46
Myanmar	3.94	3.90	-0.04	-1.02	4.08	0.18	4.62
Philippines	4.02	3.86	-0.16	-3.98	3.87	0.01	0.26
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	
<b>ASEAN</b>	<b>126,306</b>	<b>518,691</b>	<b>38,633</b>	<b>15,703</b>	<b>2,100</b>	<b>0</b>	<b>701,434</b>
Brunei	16	75	22	26	-	-	139
Cambodia	-	25,782	-	-	-	-	25,782
Indonesia	4,909	27,290	516	-	-	-	32,714
Lao PDR	91	10	2,093	-	637	-	2,831
Malaysia	45	259	1,705	1,070	782	-	3,861
Myanmar	110,083	-	16	-	681	-	110,780
Philippines	11,163	27,077	200	-	-	-	38,440
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
<b>ASEAN</b>	<b>46,127,634</b>	<b>131,508,694</b>	<b>2,945,181</b>	<b>180,581,508</b>	<b>102,076,669</b>	<b>20,928,107</b>	<b>57,576,732</b>	<b>180,581,508</b>
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	10,830,562	42,352,129	861,601	54,044,293	34,189,876	519	19,853,898	54,044,293
Lao PDR	349,146	2,461,200	16,151	2,826,497	2,272,211	23,738	530,548	2,826,497
Malaysia	613,774	1,725,240	-	2,339,014	2,247,550	-	91,464	2,339,014
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	1,478,726	16,010,720	12,811,700	220	3,198,800	16,010,720
Singapore	-	-	421,276	421,276	284,233	137,043	-	421,276
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
<b>ASEAN</b>	<b>57,576,732</b>	<b>130,979,906</b>	<b>2,988,486</b>	<b>191,545,123</b>	<b>103,562,405</b>	<b>19,265,983</b>	<b>68,716,736</b>	<b>191,545,123</b>
Brunei	15,589	1,583	32,334	49,506	33,977	-	15,529	49,506
Cambodia	478,152	5,464,546	-	5,942,698	2,378,816	3,198,211	365,671	5,942,698
Indonesia	19,853,898	44,494,638	1,283,179	65,631,715	34,651,353	999	30,979,363	65,631,715
Lao PDR	530,548	2,472,780	11,137	3,014,465	2,338,595	15,717	660,153	3,014,465
Malaysia	91,464	2,200,007	-	2,291,471	2,267,553	-	23,918	2,291,471
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 <sup>1/</sup>	-	-	318,410	318,410	266,032	52,378	-	318,410
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: <sup>1/</sup>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
<b>ASEAN</b>	<b>68,716,736</b>	<b>136,115,131</b>	<b>3,053,483</b>	<b>207,885,350</b>	<b>105,133,509</b>	<b>18,570,264</b>	<b>84,181,577</b>	<b>207,885,350</b>
Brunei	15,529	1,631	33,304	50,464	34,997	-	15,468	50,464
Cambodia	365,671	5,223,688	-	5,589,359	2,257,638	3,000,122	331,599	5,589,359
Indonesia	30,979,363	45,331,072	1,283,179	77,593,613	34,651,353	999	42,941,261	77,593,613
Lao PDR	660,153	2,603,683	11,000	3,274,836	2,573,321	20,552	680,963	3,274,836
Malaysia	23,918	2,326,318	-	2,350,236	2,289,548	-	60,688	2,350,236
Myanmar	8,252,506	19,338,080	-	27,590,586	14,554,551	-	13,036,035	27,590,586
Philippines	2,959,237	11,951,352	1,200,000	16,110,589	13,457,692	-	2,652,897	16,110,589
Singapore <sup>1/</sup>	-	-	400,000	400,000	264,409	135,591	-	400,000
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: <sup>1/</sup>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 (%)
<b>ASEAN</b>	<b>131,508,694</b>	<b>102,076,669</b>	<b>128.83</b>	<b>130,979,906</b>	<b>103,562,405</b>	<b>126.47</b>	<b>136,115,131</b>	<b>105,133,509</b>	<b>129.47</b>
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	5,464,546	2,378,816	229.72	5,223,688	2,257,638	231.38
Indonesia	42,352,129	34,189,876	123.87	44,494,638	34,651,353	128.41	45,331,072	34,651,353	130.82
Lao PDR	2,461,200	2,272,211	108.32	2,472,780	2,338,595	105.74	2,603,683	2,573,321	101.18
Malaysia	1,725,240	2,247,550	76.76	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	12,811,700	92.65	11,854,757	13,298,115	89.15	11,951,352	13,457,692	88.81
Singapore	0	284,233	-	0	266,032	-	0	264,409	-
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 (%)
<b>ASEAN</b>	<b>46,127,634</b>	<b>102,076,669</b>	<b>45.19</b>	<b>57,576,732</b>	<b>103,562,405</b>	<b>55.60</b>	<b>68,716,736</b>	<b>105,133,509</b>	<b>65.36</b>
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	2,378,816	20.10	365,671	2,257,638	16.20
Indonesia	10,830,562	34,189,876	31.68	19,853,898	34,651,353	57.30	30,979,363	34,651,353	89.40
Lao PDR	349,146	2,272,211	15.37	530,548	2,338,595	22.69	660,153	2,573,321	25.65
Malaysia	613,774	2,247,550	27.31	91,464	2,267,553	4.03	23,918	2,289,548	1.04
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	12,811,700	20.78	3,198,800	13,298,115	24.05	2,959,237	13,457,692	21.99
Singapore	0	284,233	0.00	0	266,032	0.00	0	264,409	0.00
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									38,887					
Indonesia									21	25,552			77	91,657
Lao PDR														
Malaysia						16,822,876								277
Myanmar					14,325	5,701,350								
Philippines					0	551								
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							38,887	0	503,257		542,144	0
Indonesia	100.2	174912	525	190,511	0	37	723	482,669	274	376,969	997	859,638
Lao PDR					5,406	3,863,669	5,406	3,863,669	10,311	6,453,932	15,717	10,317,601
Malaysia		291057		17,354		751,347	0	17,882,911		262,061	0	18,144,972
Myanmar	20,982	5,954,900					35,307	11,656,250	249,109	15,071,122	284,416	26,727,372
Philippines					0	4,700	0	5,251	233	263,312	233	268,563
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								721	293,540	13,775	5,482,450	1	7,165	
Lao PDR														
Malaysia				15,463,176										
Myanmar														
Philippines					0	465		56	25,317					
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			516,770	223,010,435	535,577	212,602,762	1,066,844	441,396,352	130,482	53,722,221	1,197,327	495,118,573
Lao PDR			5,936	3,550,624	5,201	2,006,172	11,137	5,556,796	0	0	11,137	5,556,796
Malaysia				144,125,184		71,835,704	0	231,424,064		55,884,613	0	287,308,677
Myanmar							0	0			0	0
Philippines	3,997	1,485,051	147,861	60,665,010	262,000	100,874,040	413,914	163,049,883	7,333	36,250,757	421,248	199,300,640
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	896	585	1,069	702	423	1,193	1,028	627		775
Myanmar	Milled Rice 25%	2015	353	332	384	368	367	367	377	374	371	374	370	366	367
		2016	351	368	371	367									364
Thailand	Milled Rice 5%	2015	420	420	408	398	381	377	395	372	354	373	368	361	386
		2016	369	383	385	395	435	441	442	422	384	369	365	373	397
	Hommati Rice	2015	953	947	926	927	887	867	900	859	824	828	793	742	871
		2016	741	741	733	724	747	771	756	724	709	681	614	639	715
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							451

**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	408	442	469	390	428	470	455	438		430
Philippines	Rice upon prior certification of NEDA that shortage exist	2015	396	419	417	397	410	502	677	588		382		413	425
		2016	376	373	406	501					385	401	401		398
	Other rice, more than 10% but not 25% broken	2015		381	360	374		840			324	307		408	356
		2016		298	403	402									359
	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	381											365	
Singapore	Not specified	2015	561	610	676	679	623	626	609	637	660	740	773	764	663
		2016	663	624	627	633	634	667	654	653	572	621	634	643	635



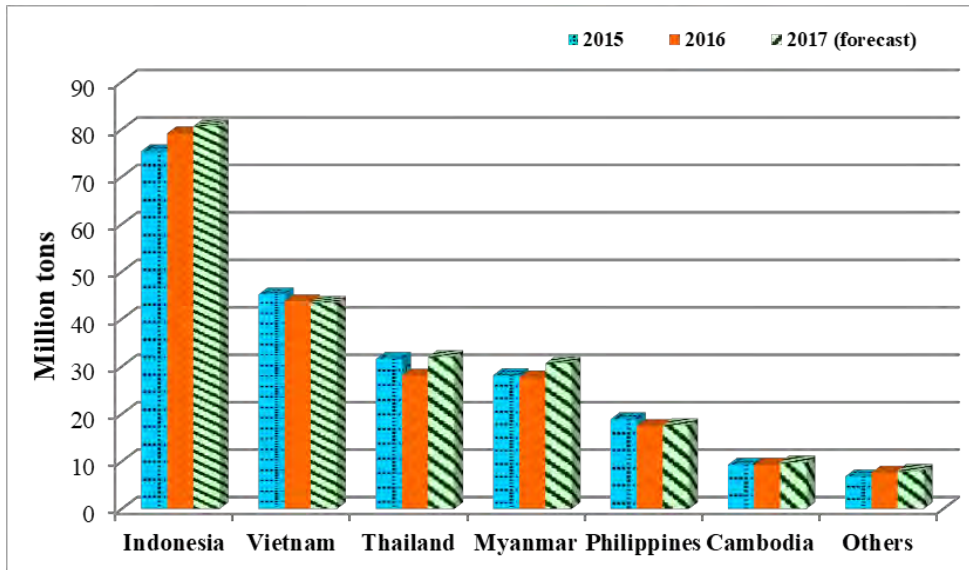


Figure 1 Paddy production of selected countries in ASEAN, 2015-2017

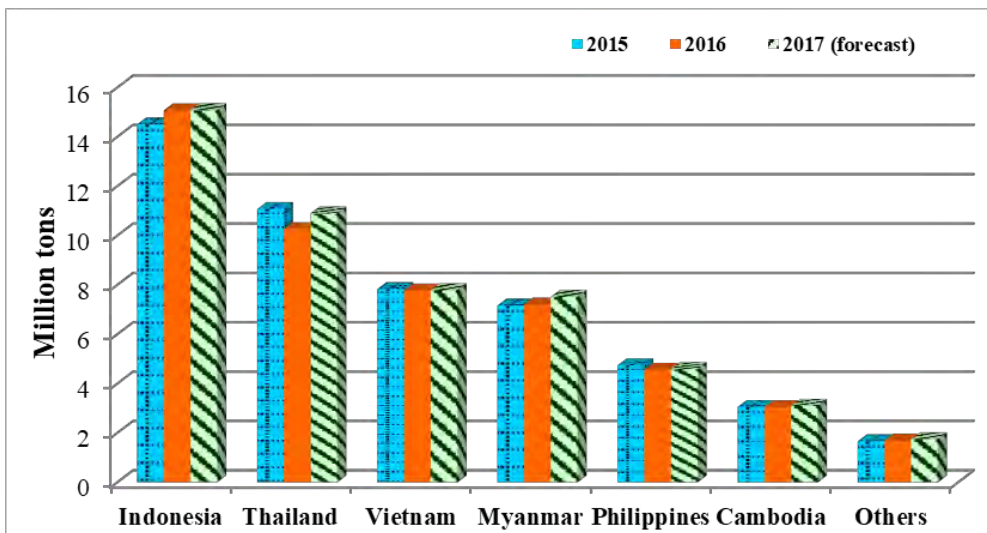


Figure 2 Paddy planted area of selected countries in ASEAN, 2015-2017

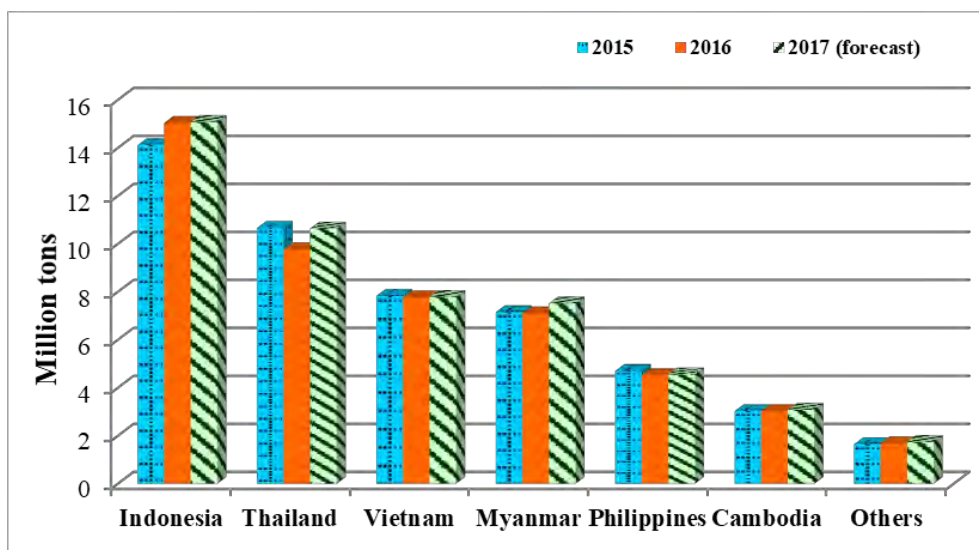
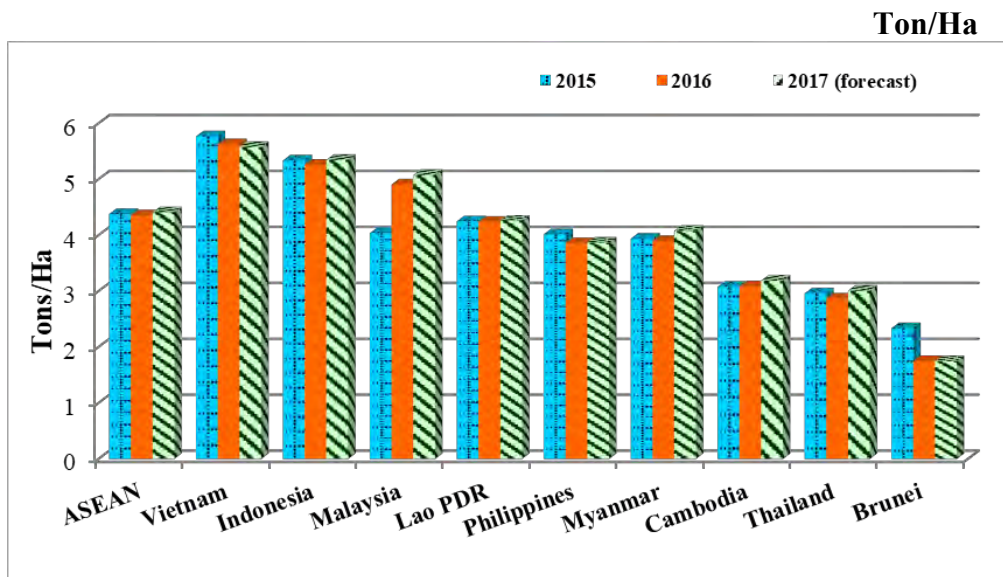
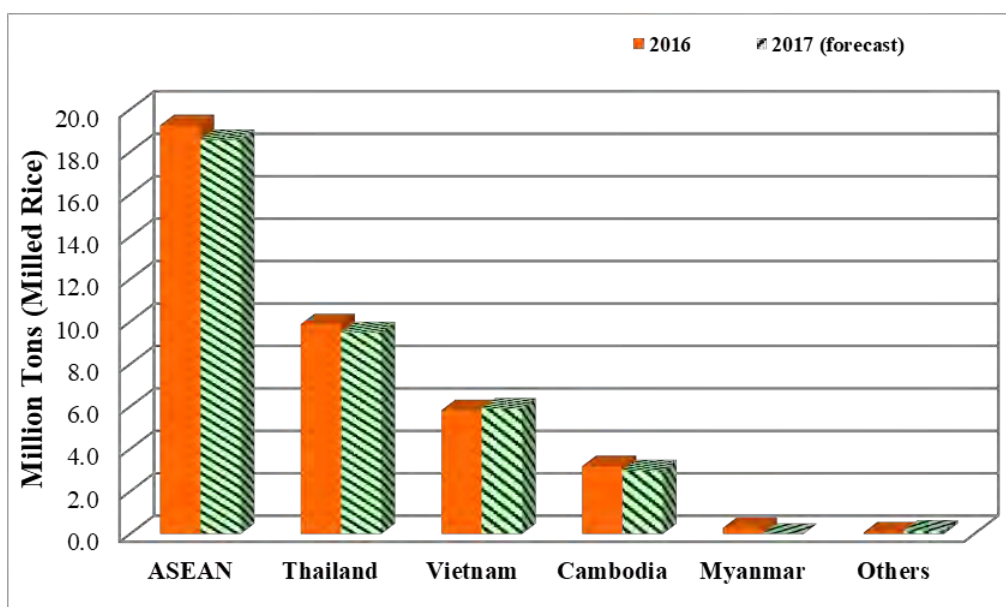


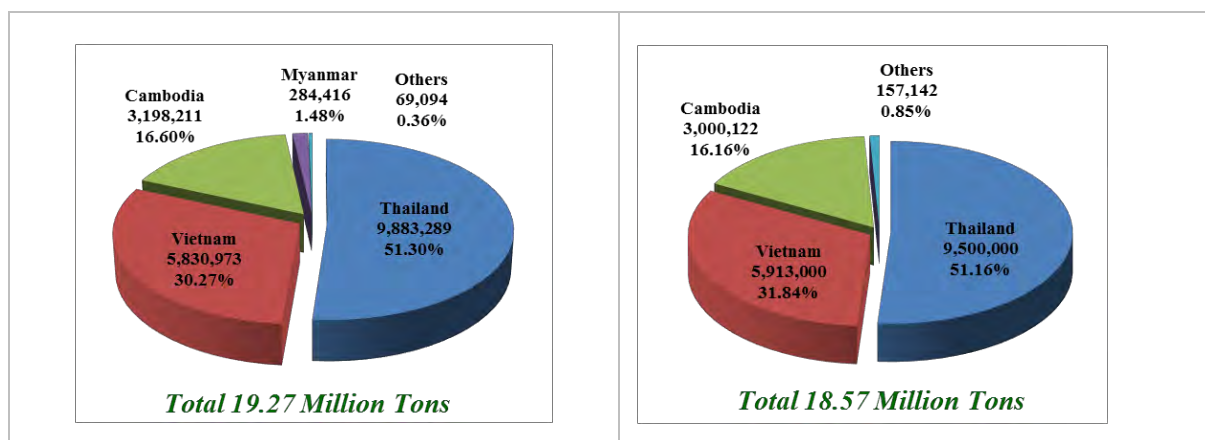
Figure 3 Paddy harvested area of selected countries in ASEAN, 2015-2017



**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**

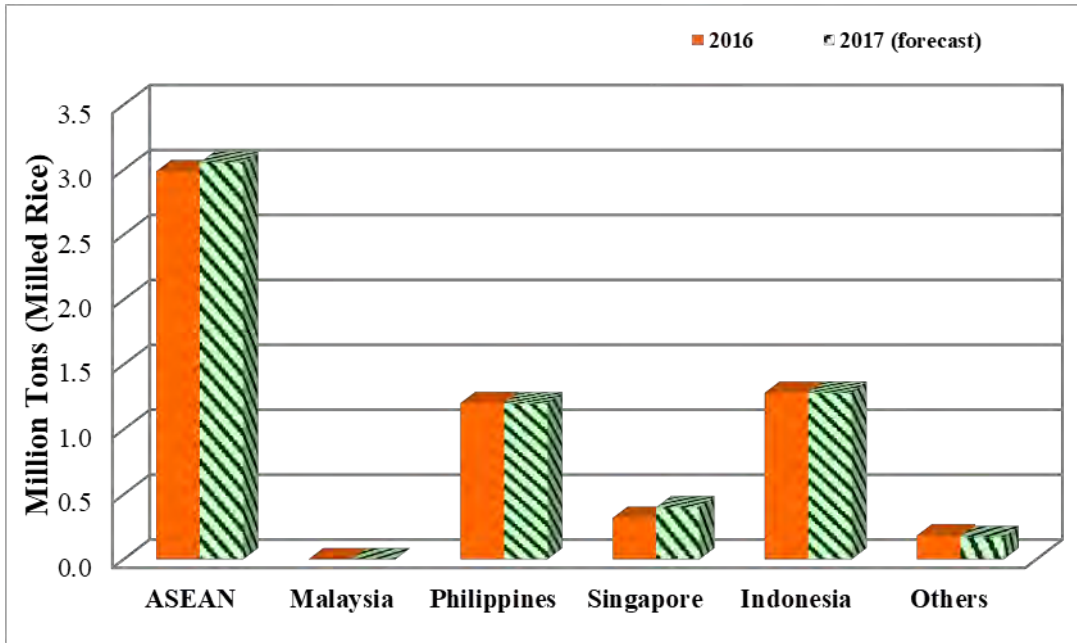


Figure 8 Amount of rice import (million tons) by selected countries in ASEAN in 2016-2017

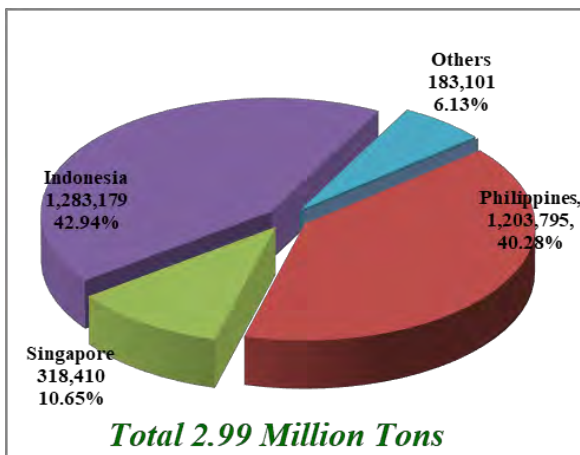


Figure 9 Share of rice import (tons) among ASEAN countries, 2016

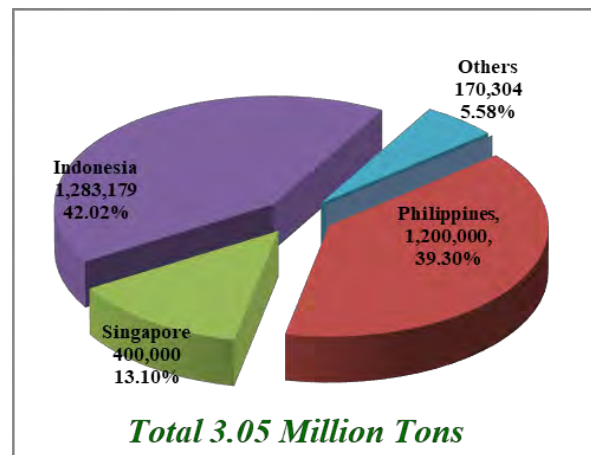


Figure 10 Share of rice import (tons) among ASEAN countries, 2017

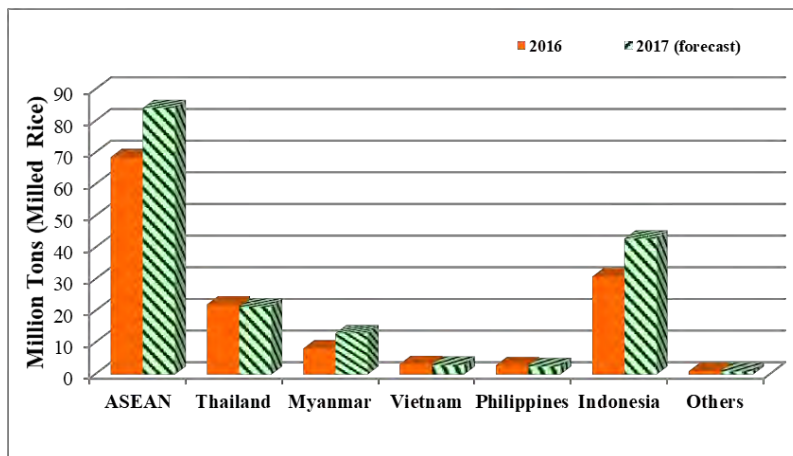


Figure 11 Amount of ending stock of rice in ASEAN countries, 2016-2017

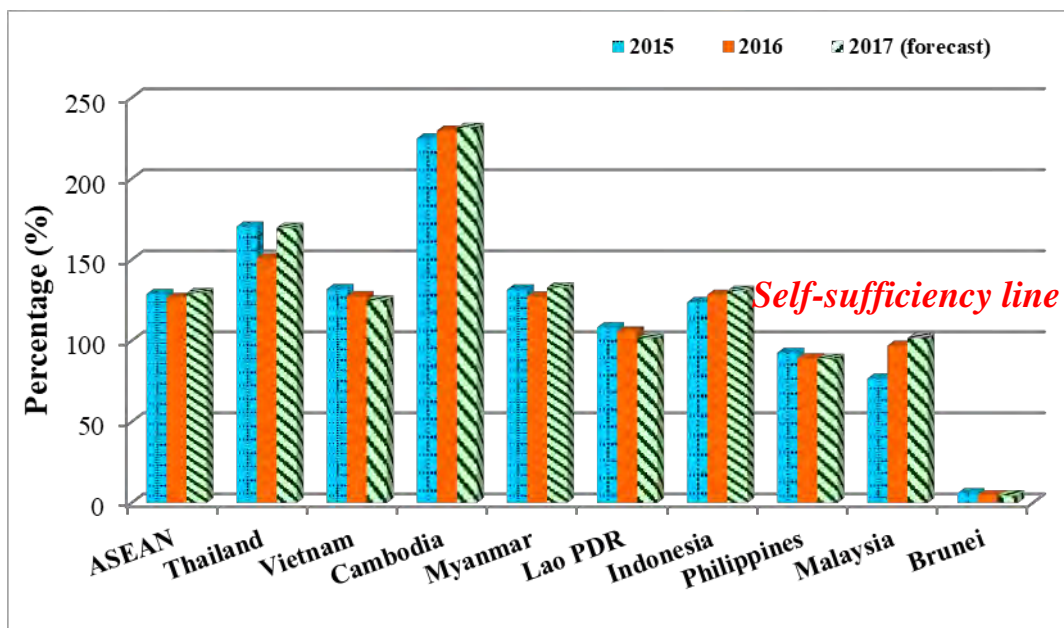


Figure 12 Ratio of rice production to domestic utilization in ASEAN countries, 2015-2017

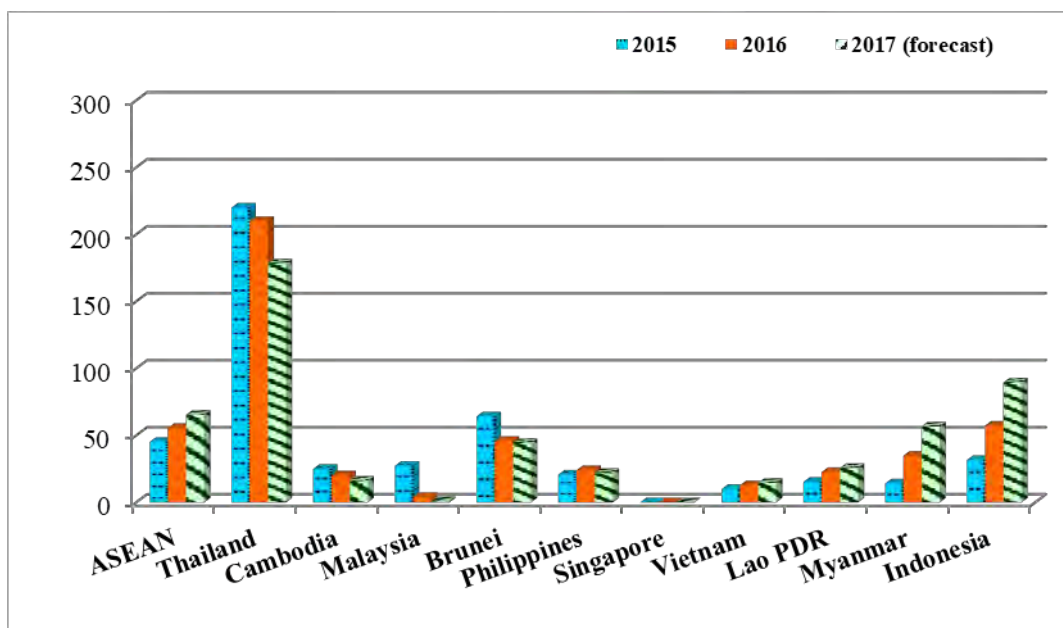


Figure 13 Ratio of rice beginning stock to domestic utilization in ASEAN countries, 2015-2017

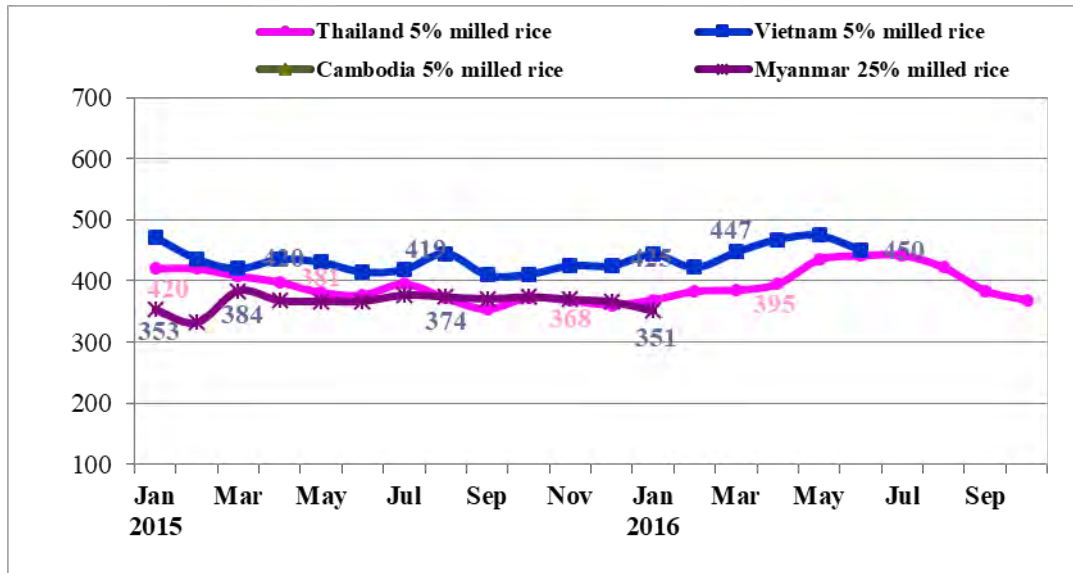


Figure 14 FOB price (US\$/Ton) of milled rice of selected countries in ASEAN in 2015-2016

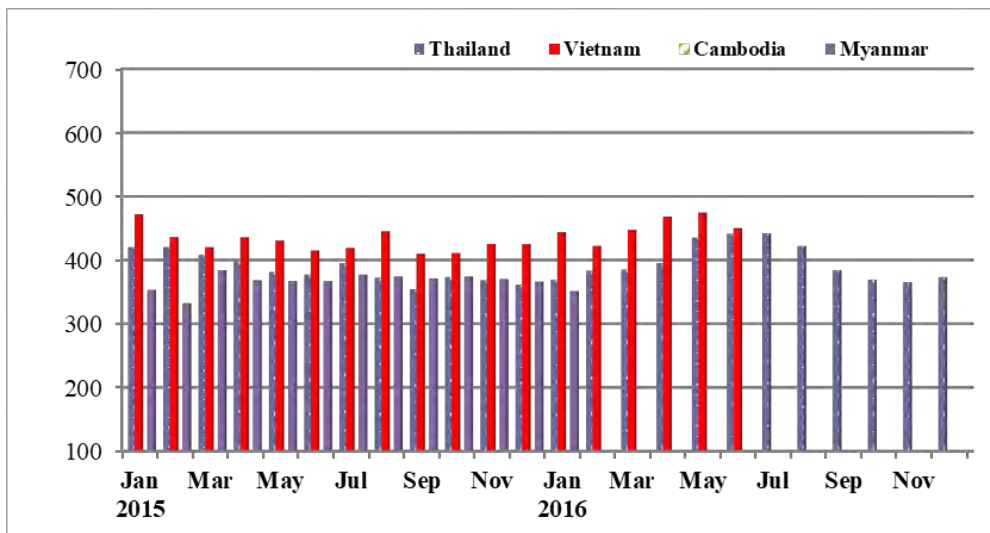


Figure 15 FOB price (US\$/Ton) of milled rice of selected countries in ASEAN in 2015-2016

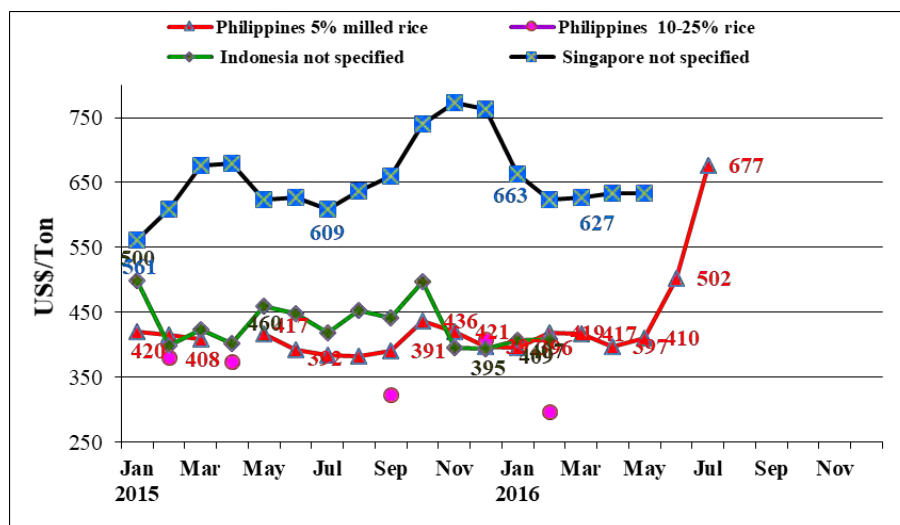


Figure 16 CIF price (US\$/Ton) of milled rice of selected countries in ASEAN in 2015-2016

### Highlights of Maize Outlook for 2017

- In 2017 (crop year 2016/17) maize supply in ASEAN is forecasted to be 87.10 million tons, an increase of 8.70 million tons or 11.09 percent from 78.40 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 45.75 million tons in 2017, an increase of about 2.25 million tons or around 5.17 percent, compared to 43.50 million tons in 2016 (Table 16).
- The beginning stock is forecasted to increase from 14.91 million tons in 2016 to 22.26 million tons in 2017 while the ending stock is forecasted to increase from 22.26 million tons in 2016 to 38.05 million tons in 2017.
- Maize export from ASEAN is predicted to be 1.25 million tons in 2017 compared to 1.50 million tons in 2016. For the import, it is forecasted to be 19.09 million tons in 2017, a slight decrease of 0.90 percent from 19.99 million tons in 2016.
- The production to domestic utilization ratio (self-sufficiency ratio) is forecasted to be about 95.72 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 19.29 percent from 27.29 percent in 2016 to 46.58 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)	78.40	87.10	8.70	11.09
Beginning stock	14.91	22.26	7.35	49.32
Production	43.50	45.75	2.25	5.17
Import	19.99	19.09	-0.90	-4.52
Demand (Million tons)	78.40	87.10	8.70	11.10
Domestic utilization	54.64	47.80	-6.84	-12.53
Export	1.50	1.25	-0.25	-16.47
Ending stock	22.26	38.05	15.79	70.93
Ratio of production to domestic utilization (%)	79.62	95.72	16.10	-
Ratio of beginning stock to domestic utilization (%)	27.29	46.58	19.29	-

## ASEAN Maize Situation in 2016

### Production

Maize production in ASEAN in 2016 (crop year 2015/16) was estimated at 43.23 million tons, an increase of 2.25 million tons or about 6.24 percent from 40.69 million tons in 2015. The increase has occurred in Indonesia and Myanmar. The most increase in term of quantity was found in Indonesia approximately 3.6 million tons (18.23 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 unfavorable weather, yield was mainly affected by drought.

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.

For **Lao PDR**, the decrease in production attributed to the decrease in planted area due to the price decrease.

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 54.64 million tons, an increase of about 2.16 million tons or 4.12 percent compared to 52.47 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 14.91 million tons, an increase of 4.94 million tons from 9.97 million tons in year 2015. The ratio of maize production to domestic utilization for the whole ASEAN in 2016 was estimated at 79.62 percent compared to 77.25 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, Indonesia, Lao PDR, and Myanmar have the ratio well above 100 percent. For 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 27.29 percent, indicated that the region is secured enough in terms of feed requirement (Table 26, Figure 29). Cambodia and Indonesia 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 1.50 million tons compared to 19.99 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 38.71 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 – November) was 345 US\$/ton, higher than other countries but down 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 267, 252, and 195 respectively.

## Damaged Area

The damaged area of maize in 2016 was reported to be 110,872 hectares of which 95,570 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 46.23 million tons, an increase of 3 million tons or about 6.96 percent from 43.23 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 1.65 million tons (7.13 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 production due to farmers used more improved variety and more fertilizer continue with favorable weather.

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



For **Cambodia** and **Lao PDR**, the maize production is projected to increase which come from the increase in both area and yield 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 47.80 million tons in 2017, a decrease of 6.84 million tons from 54.64 million tons in 2016 (Table 23-24). The estimate of the beginning stock for the year 2017 is about 22.26 million tons, an increase of 7.35 million tons from 14.91 million tons in 2016.

In 2017 the ratio of production to domestic utilization is expected to be 95.72 percent, an increase of about 16 percent from 79.62 percent in year 2016 (Table 25, Figure 28). The ratio of beginning stock to domestic utilization ratio is expected to be 46.58 percent, which increases from 27.29 percent in 2016 (Table 26, Figure 29).

### Trade

The maize export from ASEAN is projected to be 1.25 million tons in 2017, a decrease of 0.25 million tons compared to 1.50 million tons in 2016. For the import by the ASEAN, it is forecasted to be 19.09 million tons in 2017, a slight decrease from 19.99 million tons in 2016 about 0.90 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	(%)
<b>ASEAN</b>	<b>40,689.26</b>	<b>43,227.70</b>	<b>2,538.45</b>	<b>6.24</b>	<b>46,234.29</b>	<b>3,006.59</b>	<b>6.96</b>
Brunei	-	-	-	-	-	-	-
Cambodia	549.61	399.65	-149.96	-27.28	552.78	153.13	38.32
Indonesia	19,612.44	23,187.62	3,575.18	18.23	24,839.83	1,652.22	7.13
Lao PDR	1,234.07	1,111.78	-122.29	-9.91	1,229.15	117.38	10.56
Malaysia	-	-	-	-	-	-	-
Myanmar	1,720.57	1,748.86	28.29	1.64	1,721.71	-27.16	-1.55
Philippines	7,671.63	6,965.93	-705.71	-9.20	8,064.88	1,098.95	15.78
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	(%)
<b>ASEAN</b>	<b>9,551.37</b>	<b>9,943.97</b>	<b>392.60</b>	<b>4.11</b>	<b>10,252.23</b>	<b>308.26</b>	<b>3.10</b>
Brunei							
Cambodia	143.52	112.57	-30.94	-21.56	141.37	28.79	25.58
Indonesia	3,810.38	4,394.57	584.19	15.33	4,467.93	73.36	1.67
Lao PDR	223.21	200.40	-22.81	-10.22	201.50	1.10	0.55
Malaysia							
Myanmar	459.05	471.93	12.88	2.81	467.05	-4.88	-1.03
Philippines	2,589.43	2,485.33	-104.10	-4.02	2,699.46	214.13	8.62
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	(%)
<b>ASEAN</b>	<b>9,458.67</b>	<b>9,833.10</b>	<b>374.43</b>	<b>3.96</b>	<b>10,197.47</b>	<b>364.37</b>	<b>3.71</b>
Brunei							
Cambodia	136.00	104.16	-31.84	-23.41	140.34	36.18	34.74
Indonesia	3,787.37	4,387.58	600.22	15.85	4,467.93	80.35	1.83
Lao PDR	223.21	200.40	-22.81	-10.22	201.50	1.10	0.55
Malaysia							
Myanmar	458.29	469.75	11.46	2.50	467.05	-2.70	-0.57
Philippines	2,561.42	2,417.50	-143.92	-5.62	2,676.56	259.06	10.72
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	(%)
<b>ASEAN</b>	<b>4.30</b>	<b>4.40</b>	<b>0.10</b>	<b>2.33</b>	<b>4.53</b>	<b>0.13</b>	<b>2.95</b>
Brunei							
Cambodia	4.04	3.84	-0.20	-4.95	3.94	0.10	2.60
Indonesia	5.18	5.28	0.10	1.93	5.56	0.28	5.30
Lao PDR	5.53	5.55	0.02	0.36	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	3.01	0.13	4.51
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	
<b>ASEAN</b>	<b>9,966</b>	<b>95,570</b>	<b>2,924</b>	<b>2,412</b>	-	-	<b>110,872</b>
Brunei							
Cambodia	5,951	2,466	-	-	-	-	8,417
Indonesia	1,836	4,909	124	121	-	-	6,990
Lao PDR	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-
Myanmar	2,179	-	-	-	-	-	2,179
Philippines	-	67,833	-	-	-	-	67,833
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
<b>ASEAN</b>	<b>9,971,875</b>	<b>40,536,381</b>	<b>19,014,924</b>	<b>69,523,180</b>	<b>52,472,893</b>	<b>2,140,994</b>	<b>14,909,293</b>	<b>69,523,180</b>
Brunei	-	-	872	872	872	-	-	872
Cambodia		549,607		549,607	240,814	56,422	252,371	549,607
Indonesia	7,558,022	19,612,435	3,267,694	30,438,151	18,052,621	234,559	12,150,972	30,438,151
Lao PDR	75,610	1,234,065	2,105	1,311,780	899,383	296,058	116,339	1,311,780
Malaysia <sup>1/</sup>	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	183,960	7,518,756	712,424	8,415,140	8,028,432	492	386,216	8,415,140
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: <sup>1/</sup> 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
<b>ASEAN</b>	<b>14,909,293</b>	<b>43,501,675</b>	<b>19,989,645</b>	<b>78,400,613</b>	<b>54,636,426</b>	<b>1,502,438</b>	<b>22,261,749</b>	<b>78,400,613</b>
Brunei	-	-	898	898	898	-	-	898
Cambodia	252,371	552,775		805,146	442,220	128,355	234,571	805,146
Indonesia	12,150,972	23,187,616	2,820,499	38,159,087	19,379,382	216,927	18,562,777	38,159,087
Lao PDR	116,339	1,111,775	1,113	1,229,227	900,699	270,036	58,492	1,229,227
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	386,216	7,086,773	172,818	7,645,807	7,579,598	217	65,992	7,645,807
Singapore <sup>1/</sup>	-	-	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: <sup>1/</sup> 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
<b>ASEAN</b>	<b>22,261,749</b>	<b>45,751,764</b>	<b>19,085,700</b>	<b>87,099,213</b>	<b>47,796,367</b>	<b>1,252,872</b>	<b>38,049,973</b>	<b>87,099,213</b>
Brunei	-	-	925	925	925	-	-	925
Cambodia	234,571	506,641		741,212	490,267	136,673	114,272	741,212
Indonesia	18,562,777	24,839,834	2,820,499	46,223,110	19,380,850	216,927	26,625,333	46,223,110
Lao PDR	58,492	1,229,150	1,289	1,288,931	928,779	298,939	61,213	1,288,931
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	65,992	7,628,483	58,210	7,752,685			7,752,685	7,752,685
Singapore <sup>1/</sup>	-	-	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: <sup>1/</sup> 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 (%)
<b>ASEAN</b>	<b>40,536,381</b>	<b>52,472,893</b>	<b>77.25</b>	<b>43,501,675</b>	<b>54,636,426</b>	<b>79.62</b>	<b>45,751,764</b>	<b>47,796,367</b>	<b>95.72</b>
Brunei	-	872	0.00	-	898	0.00	-	925	0.00
Cambodia	549,607	240,814	228.23	552,775	442,220	125.00	506,641	490,267	103.34
Indonesia	19,612,435	18,052,621	108.64	23,187,616	19,379,382	119.65	24,839,834	19,380,850	128.17
Lao PDR	1,234,065	899,383	137.21	1,111,775	900,699	123.43	1,229,150	928,779	132.34
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	8,028,432	93.65	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 (%)
<b>ASEAN</b>	<b>9,971,875</b>	<b>52,472,893</b>	<b>19.00</b>	<b>14,909,293</b>	<b>54,636,426</b>	<b>27.29</b>	<b>22,261,749</b>	<b>47,796,367</b>	<b>46.58</b>
Brunei	-	872	-	-	898	-	-	925	-
Cambodia	-	240,814	-	252,371	442,220	57.07	234,571	490,267	47.85
Indonesia	7,558,022	18,052,621	41.87	12,150,972	19,379,382	62.70	18,562,777	19,380,850	95.78
Lao PDR	75,610	899,383	8.41	116,339	900,699	12.92	58,492	928,779	6.30
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	183,960	8,028,432	2.29	386,216	7,579,598	5.10	65,992	-	
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									709	232,197			18,628	6,476,739
Lao PDR														
Malaysia		1,446,940				3,908,987								
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	402	272,388	1,530	836,209	605	1,155,637	21,874	8,973,170	19,464	4,002,908	41,338	12,976,078
Lao PDR			23,089	714,490			23,089	714,490	246,947	35,262,661	270,036	35,977,151
Malaysia		1,866,336				261,820	0	7,484,083		430,220	0	7,914,303
Myanmar	299	74,520	5,410		1		5,710	74,721	270,776	67	276,486	74,789
Philippines					317	962,386	317	962,386	5	38,353	322	1,000,739
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					25	4,475			1,120	1,739,597			1	15,108
Lao PDR														
Malaysia						109,711								15,372
Myanmar														
Philippines					6,501	2,291,665					913	527,925		
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	1,025	663,121	7,038	2,621,688			9,209	5,043,989	1,064,004	243,076,277	1,073,213	248,120,266
Lao PDR			1,113	119,877			1,113	119,877			1,113	119,877
Malaysia		205		1,376,010			0	1,501,298		524,068,981	0	525,570,279
Myanmar			300,000	660,000			300,000	660,000	1,286,600	886,918	1,586,600	1,546,918
Philippines			418,819	112,225,074	25,649	7,382,647	451,881	122,427,311	188,548	50,254,134	640,430	172,681,445
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**

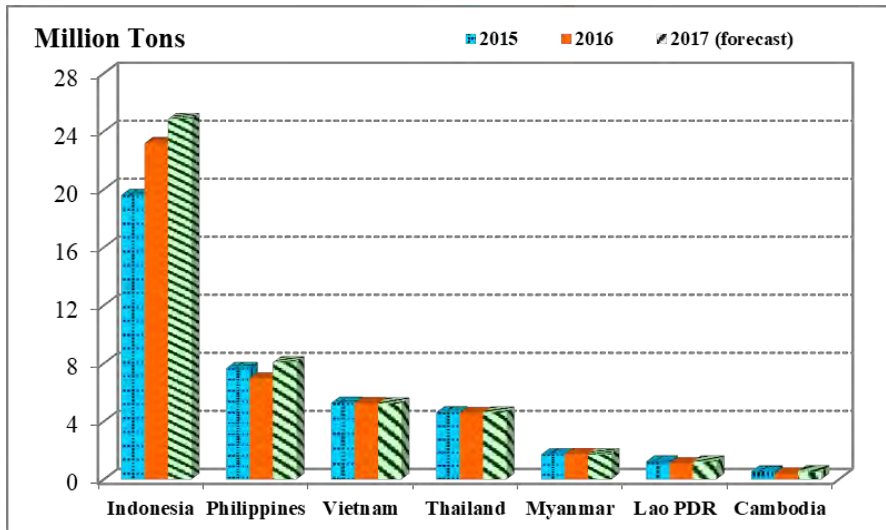
Unit: US\$/Ton

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	311	278	215	301	371	319	500	424		345
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

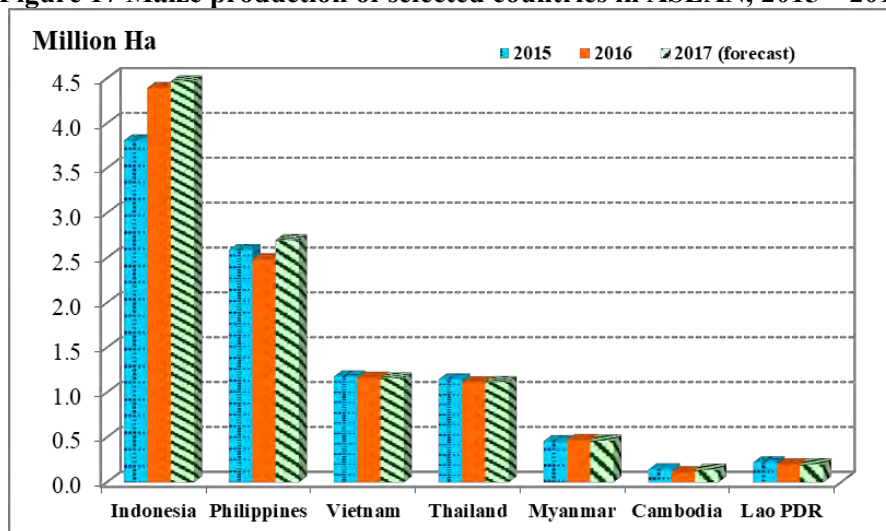
**Table 30 CIF Price of maize (feed grain) in selected ASEAN countries**

Unit: US\$/Ton

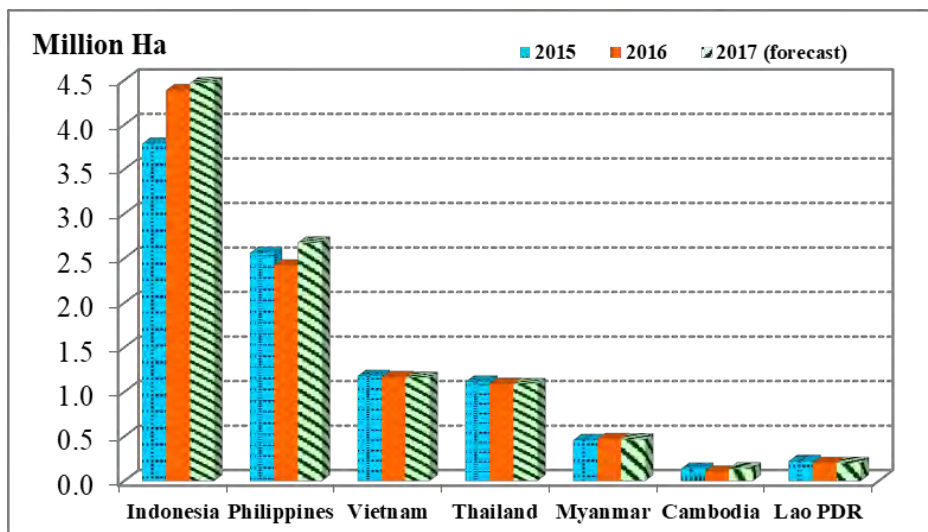
Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average	
Indonesia	2015	232	245	232	248	226	239	219	213	218	215	224	218	227	
	2016	215	223	221	225	253	312	270	236	270	292	367		267	
Philippines	In-quota	2015	285		387	273	64	273	261	275	279	273	280	229	215
		2016	208	221	286	240	304	273	278	289	287	288	256		260
	Out-quota	2015	516	432	289	320	304	381	539	410			321		437
		2016	199				220	217	311	401			244		233
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**

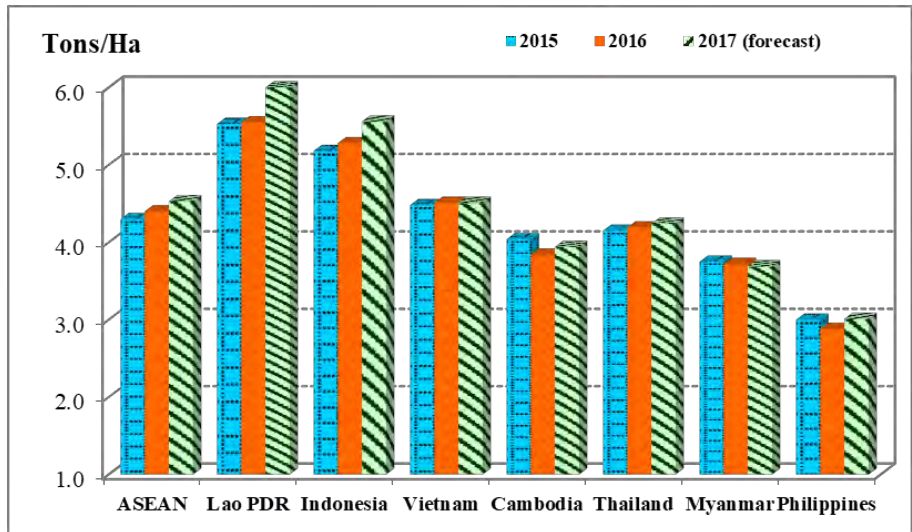


Figure 20 Maize yield of countries in ASEAN, 2015 – 2017

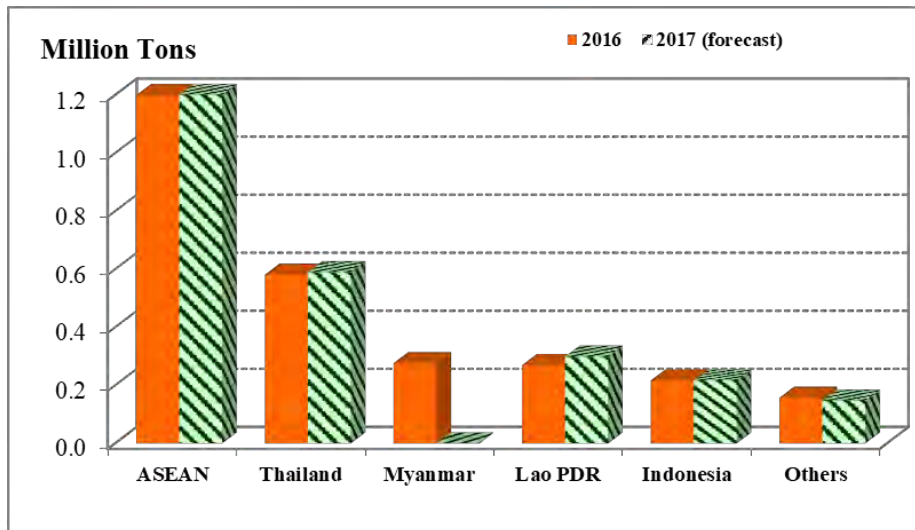


Figure 21 Amount of maize export (million tons) of selected countries in ASEAN in 2016 – 2017

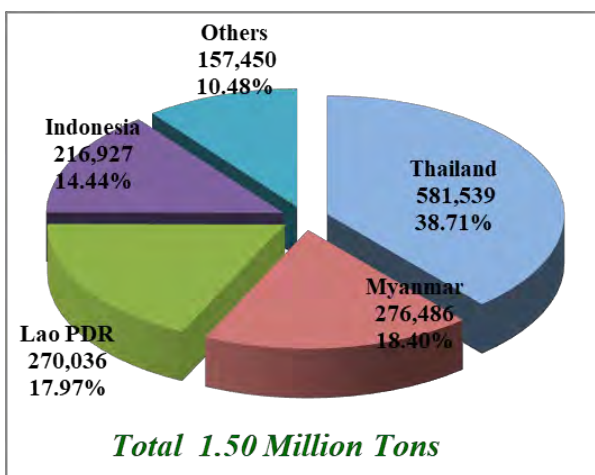


Figure 22 Share of maize export (tons) among ASEAN countries, 2016

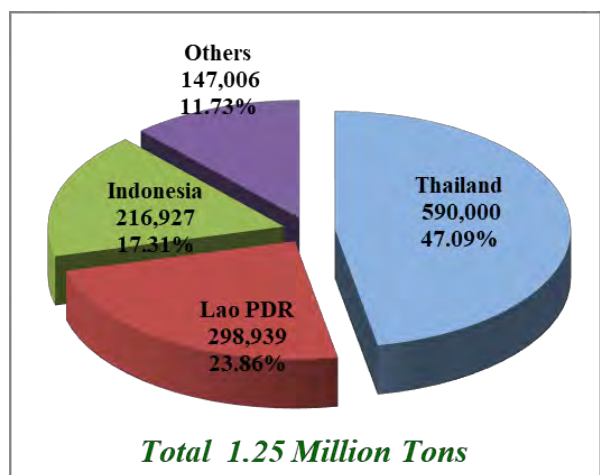


Figure 23 Share of maize export (tons) among ASEAN countries, 2017

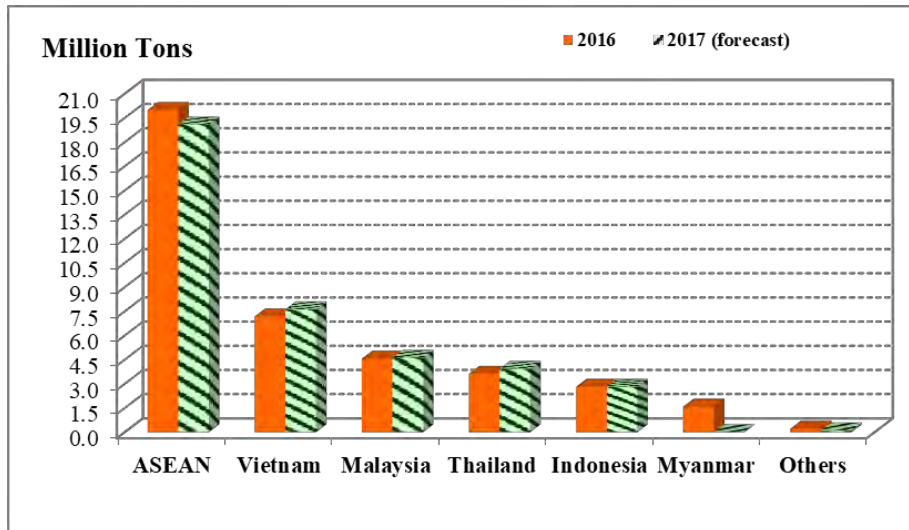


Figure 24 Amount of maize import (million tons) by selected countries in ASEAN in 2016 – 2017

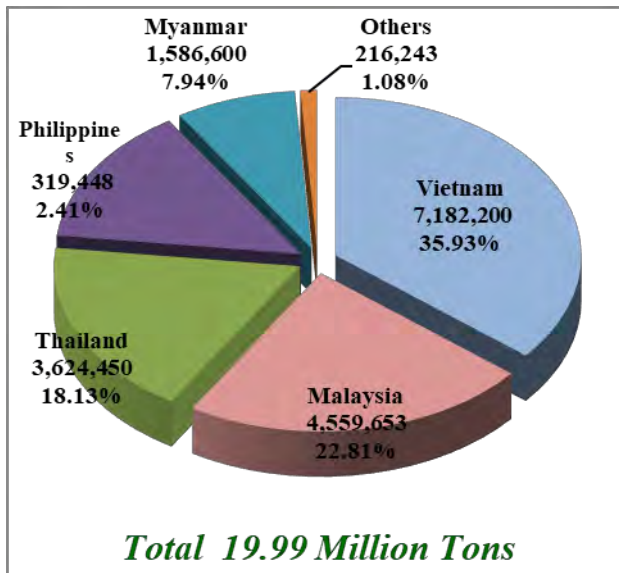


Figure 25 Share of maize import (tons) among ASEAN countries, 2016

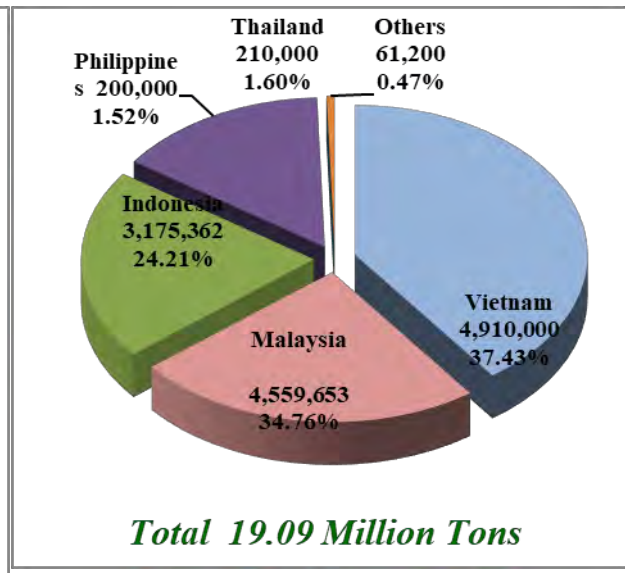


Figure 26 Share of maize import (tons) among ASEAN countries, 2017

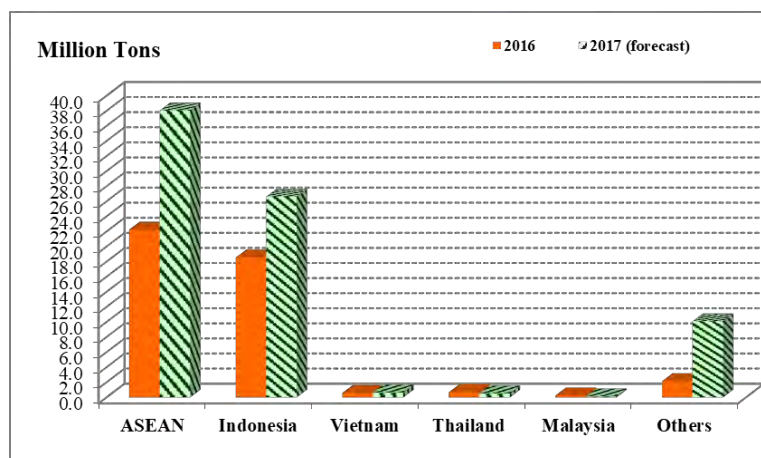


Figure 27 Amount of ending stock of Maize in ASEAN countries in 2016 – 2017

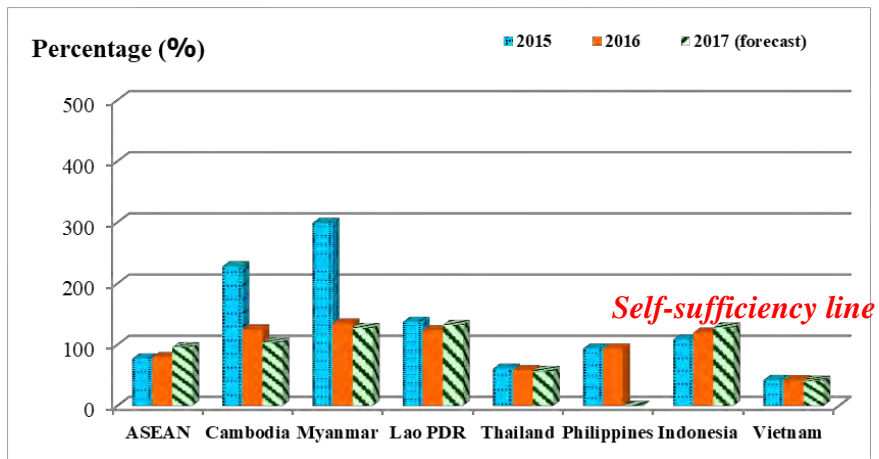


Figure 28 Ratio of maize production to domestic utilization in ASEAN countries, 2015 – 2017

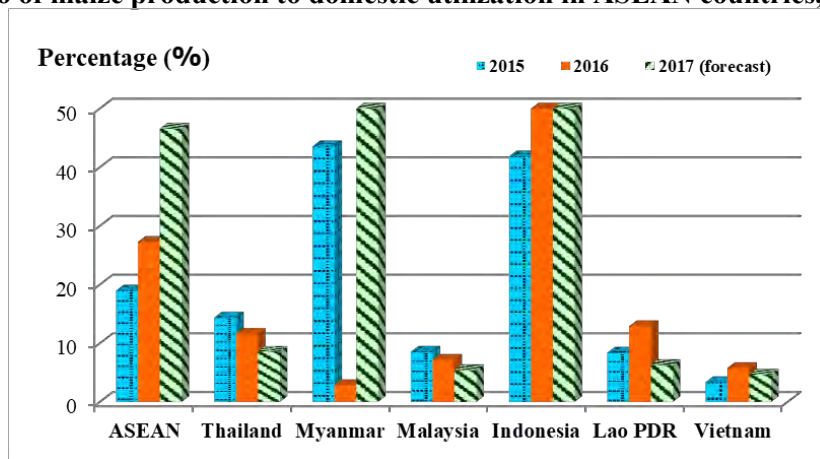


Figure 29 Ratio of maize beginning stock to domestic utilization in ASEAN countries, 2015 – 2017

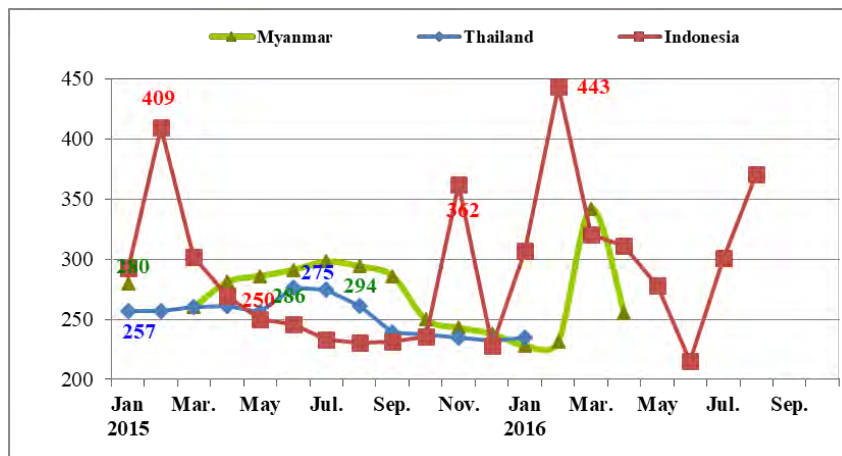


Figure 30 FOB price (US\$/Ton) of maize of selected countries in ASEAN in 2015 – 2016

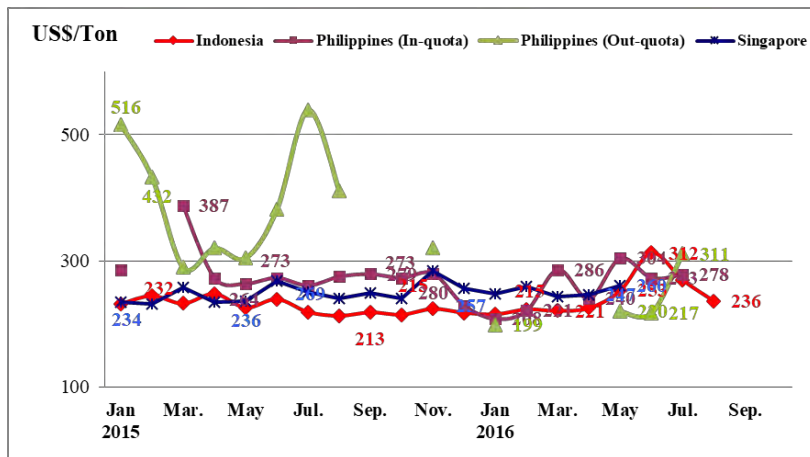


Figure 31 CIF price (US\$/Ton) of maize of selected countries in ASEAN in 2015 – 2016

### Highlight of Sugar Outlook for 2017

- ASEAN sugar supply is forecasted to decrease about 2 percent or 0.7 million tons from 37.68 million tons in 2016 to 37.02 million tons in 2017 mainly due to the decrease in beginning stock and import.
- The beginning stock of sugar in 2017 is estimated at 13.24 million tons, down from 14.56 million tons in 2016.
- The sugar export from ASEAN in 2017 is expected to increase from 8.21 million tons in 2016 to 8.63 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 112 percent which is increased from about 106 percent in 2016.
- The beginning stock to domestic utilization ratio in 2017 is forecasted to be about 82 percent, which is decrease from 89.73 percent in 2016.

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

Unit: Million Tons

Items	2016	2017	Change	
			Quantity	%
Supply (Million tons)	37.68	37.02	-0.66	-1.76
Beginning stock	14.56	13.24	-1.33	-9.11
Production	17.27	17.99	0.72	4.16
Import	5.85	5.79	-0.06	-0.94
Demand (Million tons)	37.68	37.02	-0.66	-1.76
Domestic utilization	16.23	16.07	-0.16	-1.00
Export	8.21	8.63	0.42	5.09
Ending stock	13.24	12.32	-0.92	-6.94
Ratio of production to domestic utilization (%)	106.41	111.96	5.55	-
Ratio of beginning stock to domestic utilization (%)	89.73	82.38	-7.35	-

## ASEAN Sugar Situation in 2016

### Production

The sugarcane production in ASEAN in 2016 (2015/16 crop year) was estimated at 163.98 million tons, down 15.25 million tons from 179.23 million tons in 2015 or about 9 percent (Table 32, Figure 32). The decrease in production was due to the decrease in yield in many countries except Cambodia, Myanmar and Vietnam (Table 33). The yield of sugarcane in ASEAN in 2016 was estimated at 59.09 tons per hectare, significantly decrease from 64.79 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 area.

**The production in Vietnam** was estimated to decrease due to the decrease in planted area in responded to the price decrease and unfavorable weather while yield has increase due to farmer use more improved variety.

**The production in Indonesia** was estimated to decrease due to the decrease in planted area by compete with other food crops commodity and yield decrease by less intensive assistant.

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 increase in area by favorable weather while yield is decrease due to farmer use less 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 16.23 million tons in 2016 (Table 38). The beginning stock of sugar in ASEAN in 2016 was estimated at 14.56 million tons, up from 13.30 million tons in 2015, which is about 1.26 million tons or about 9 percent. The ending stock of sugar in ASEAN in 2016 was estimated to be about 13.24 million tons, a decrease of about 9 percent from 2015.

The ratio of sugar production to domestic utilization in 2016 was estimated to be about 106 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 90 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 8.21 million tons compared to 8.48 million tons in 2015, a slight decrease of about 0.26 million tons or about 3 percent (Table 37 and 38, Figure 37 and 38). Thailand is the major sugar exporting country in the region constituted about 89 percent of the total ASEAN export or about 7.28 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 is 334 and 439 respectively, the prices of raw sugar and white sugar of 2016 is higher than 2015. Similarly for CIF prices for Singapore, the CIF price in 2016 was also higher 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 57,010 hectares (Table 36).

## **Prospects for Sugar in 2017**

### **Production**

Sugarcane production in ASEAN is forecasted to increase from 163.98 million tons in 2016 to 175.24 million tons in 2017. The countries which forecasted to increase in its production are Cambodia, Indonesia, Myanmar, and Thailand. 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 decrease from 16.23 million tons of sugar in 2016 to 16.07 million tons in 2017, which is about 0.16 million tons decrease (Table 39). The beginning stock in ASEAN is estimated at 13.24 million tons of sugar, a decrease

of 1.33 million tons or compared to 14.56 million tons in the previous year. The ending stock of sugar in ASEAN in 2017 is forecasted to be 12.32 million tons which is about 0.92 million tons down from the previous year.

The ratio of production to domestic utilization in 2017 is forecasted to be about 112 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 82 percent which is decrease from 2016 (Table 41, Figure44). This indicates that the domestic availability of sugar in the region is expected to less while compare to the previous year.

## **Trade**

The export is predicted to increase from 8.21 million tons in 2016 to 8.63 million tons in 2017 (Table 38 and 39, Figure 37 and 38). For the import, it is forecasted to slight 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	(%)
<b>ASEAN</b>	<b>179,226.42</b>	<b>163,980.07</b>	<b>-15,246.35</b>	<b>-8.51</b>	<b>175,237.78</b>	<b>11,257.70</b>	<b>6.87</b>
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	2,018.66	2,019.00	0.35	0.02	1,944.00	-75.00	-3.71
Malaysia	-	-	-	-	-	-	-
Myanmar	11,128.42	10,142.38	-986.03	-8.86	10,827.71	685.33	6.76
Philippines	22,654.01	23,005.11	351.11	1.55	21,747.65	-1,257.47	-5.47
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	(%)
<b>ASEAN</b>	<b>2,833.68</b>	<b>2,833.94</b>	<b>0.26</b>	<b>0.01</b>	<b>2,855.89</b>	<b>21.95</b>	<b>0.77</b>
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	36.13	36.18	0.05	0.14	32.00	-4.18	-11.55
Malaysia	-	-	-	-	-	-	-
Myanmar	180.86	161.91	-18.95	-10.48	172.99	11.08	6.84
Philippines	401.73	413.15	11.43	2.84	403.83	-9.33	-2.26
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	(%)
<b>ASEAN</b>	<b>2,766.32</b>	<b>2,775.28</b>	<b>8.97</b>	<b>0.32</b>	<b>2,796.28</b>	<b>21.00</b>	<b>0.76</b>
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	36.13	36.18	0.05	0.14	32.00	-4.18	-11.55
Malaysia	-	-	-	-	-	-	-
Myanmar	178.32	161.84	-16.48	-9.24	172.99	11.15	6.89
Philippines	401.73	413.15	11.43	2.84	403.83	-9.33	-2.26
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	(%)		Quantities	(%)
<b>ASEAN</b>	<b>64.79</b>	<b>59.09</b>	<b>-5.70</b>	<b>-8.80</b>	<b>62.67</b>	<b>3.58</b>	<b>6.06</b>
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	55.87	55.80	-0.07	-0.13	60.75	4.95	8.87
Malaysia	-	-	-	-	-	-	-
Myanmar	62.41	62.67	0.26	0.42	62.59	-0.08	-0.13
Philippines	56.39	55.68	-0.71	-1.26	53.85	-1.83	-3.29
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)						Total
	Flood	Drought	Pests	Diseases	Others	Unspecified	
<b>ASEAN</b>	<b>277</b>	<b>55,515</b>	<b>850</b>	<b>700</b>	<b>14</b>	<b>1,300</b>	<b>58,656</b>
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
<b>ASEAN</b>	<b>13,298,887</b>	<b>19,206,205</b>	<b>6,091,151</b>	<b>38,596,243</b>	<b>15,555,222</b>	<b>8,477,990</b>	<b>14,563,031</b>	<b>38,596,243</b>
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	403,731	7,259	422,445	351,651	23,124	47,670	422,445
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
<b>ASEAN</b>	<b>14,563,031</b>	<b>17,270,088</b>	<b>5,846,823</b>	<b>37,679,943</b>	<b>16,230,137</b>	<b>8,213,863</b>	<b>13,235,942</b>	<b>37,679,943</b>
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	47,670	403,800	-	451,470	359,872	32,270	59,328	451,470
Malaysia <sup>1/</sup>	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	2,205,668	-	2,705,872	2,200,000	135,508	370,364	2,705,872
Singapore <sup>1/</sup>	-		293,599	293,599	254,291	39,308	-	293,599
Thailand	10,343,026	9,780,923	500	20,124,449	2,500,000	7,280,923	10,343,526	20,124,449
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
<b>ASEAN</b>	<b>13,235,942</b>	<b>17,988,606</b>	<b>5,792,382</b>	<b>37,016,930</b>	<b>16,067,389</b>	<b>8,632,180</b>	<b>12,317,360</b>	<b>37,016,930</b>
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	59,328	388,800	-	448,128	371,672	35,846	40,611	448,128
Malaysia <sup>1/</sup>	78,001		2,000,000	2,078,001	1,700,000	300,000	78,001	2,078,001
Myanmar <sup>1/</sup>	66,657	866,217	-	932,874	799,129		133,745	932,874
Philippines	370,364	2,085,105	-	2,455,469	2,200,000	100,000	155,469	2,455,469
Singapore <sup>1/</sup>	-		300,000	300,000	255,000	45,000	-	300,000
Thailand	10,343,526	10,400,000	500	20,744,026	2,500,000	7,900,000	10,344,026	20,744,026
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 (%)
<b>ASEAN</b>	<b>19,206,205</b>	<b>15,555,222</b>	<b>123.47</b>	<b>17,270,088</b>	<b>16,230,137</b>	<b>106.41</b>	<b>17,988,606</b>	<b>16,067,389</b>	<b>111.96</b>
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	403,731	351,651	114.81	403,800	359,872	112.21	388,800	371,672	104.61
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	2,205,668	2,200,000	100.26	2,085,105	2,200,000	94.78
Singapore	-	272,734	-	-	254,291	-	-	255,000	-
Thailand	11,339,086	2,484,890	456.32	9,780,923	2,500,000	391.24	10,400,000	2,500,000	416.00
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 (%)
<b>ASEAN</b>	<b>13,298,887</b>	<b>15,555,222</b>	<b>85.49</b>	<b>14,563,031</b>	<b>16,230,137</b>	<b>89.73</b>	<b>13,235,942</b>	<b>16,067,389</b>	<b>82.38</b>
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	47,670	359,872	13.25	59,328	371,672	15.96
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	370,364	2,200,000	16.83
Singapore	-	272,734	-	-	254,291	-	-	255,000	-
Thailand	9,079,659	2,484,890	365.39	10,343,026	2,500,000	413.72	10,343,526	2,500,000	413.74
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	17	17,422							507	246,439			188,658	24,547,289
Lao PDR														
Malaysia		901				13,488,309						1,720,316		2,401,055
Myanmar														
Philippines														
Singapore	1,289	1,039,512	48	91,867	13,161	7,200,967			3,844	2,120,717	1,827	1,080,498	1,955	1,218,299
Thailand	3,755	2,169,818	673,577	291,895,011	2,104,092	689,557,609	129,731	58,110,328	146,025	59,729,590	674,695	293,472,517	279,736	111,983,229
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	327	166,269	18,013	2,044,483	57,113	6,831,200	264,635	33,853,102	120,895	17,582,825	385,529	51,435,927
Lao PDR							0	0	161,348	7,216,292	161,348	7,216,292
Malaysia		24,193,291				1,662,452	0	43,466,324		44,574,985	0	88,041,309
Myanmar			3,000	0			3,000	0.08	132,547	6.06	135,547	6.14
Philippines							0	0	135,911	71,577,558	135,911	71,577,558
Singapore			550	280,548	44	193,628	22,719	13,226,036	16,589	15,179,272	39,308	28,405,307
Thailand	102,959	46,951,685			299,775	120,623,108	4,414,346	1,674,492,895	1,565,082	612,493,677	5,979,428	2,286,986,572
Vietnam							0	0			0	0



**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									4,450	1,869,341				
Lao PDR														
Malaysia						44,904								3,875
Myanmar														
Philippines														
Singapore					146	180,213			62,436	30,008,450	4	1,988	2.33	10,903
Thailand					0	672			2	3,627	0	14		
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	543	1,930,734	2,176,166	867,666,424			2,181,159	871,466,499	2,160,825	982,061,271	4,341,984	1,853,527,770
Lao PDR							0	0			0	0
Malaysia		199,127		31,922,286			0	32,170,192		573,510,047	0	605,680,239
Myanmar							0	0			0	0
Philippines							0	0			0	0
Singapore			100,513	51,005,576	165	88,542	163,266	81,295,672	130,334	64,239,118	293,599	145,534,791
Thailand	0.42	1,804			0.001	7	3	6,123	2,190	1,331,532	2,192	1,337,655
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**

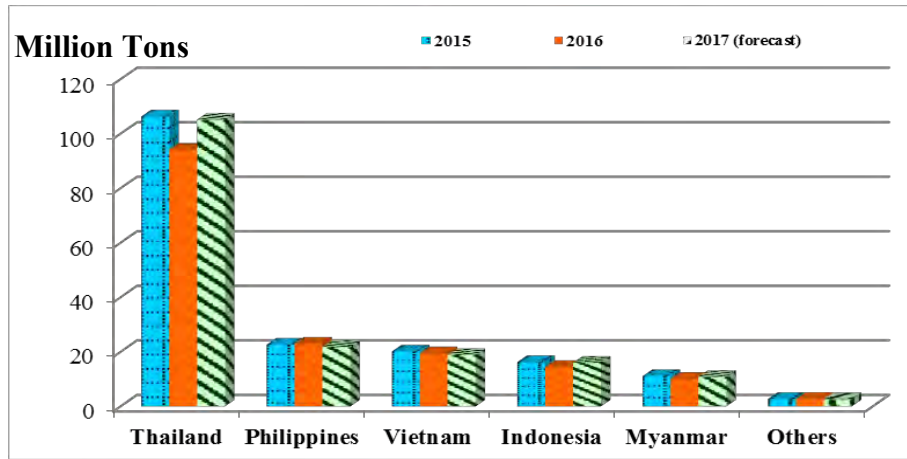
Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
<b>Indonesia</b>	White Sugar	2015	143	264	1,403	163	1,844	151	122	117	117	120	120	129	391
		2016	138	352	140	160	141	137	124	134	127	133	145		157
<b>Malaysia</b>	Not specified	2015	400	410	413	400	387	391	393	381	378	381	404	395	394
<b>Myanmar</b>	Not specified	2015			450	600	597	31	27					26	289
		2016	51	48	50	50									50
<b>Philippines</b>	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
<b>Thailand</b>	Raw Sugar	2015	381	379	380	351	312	320	338	293	302	308	293	286	324
		2016	305	313	317	326	318	330	352	375	327	373	388	403	334
	White Sugar	2015	432	409	401	403	361	365	353	356	350	358	360	380	372
		2016	389	409	412	416	416	437	447	458	478	474	483	475	439

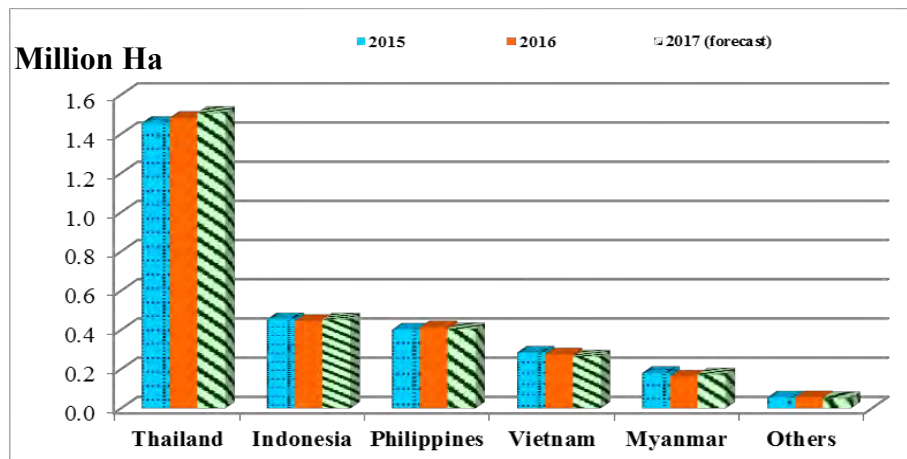
**Table 45 CIF Price of sugar in selected ASEAN countries**

Unit: US\$/Ton

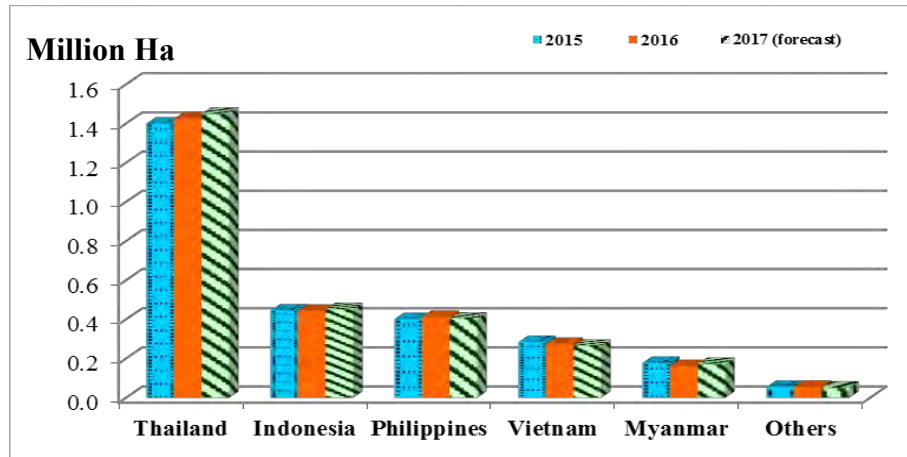
Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
<b>Indonesia</b>	White Sugar	2015	419	408	387	389	386	382	391	342	356	345	310	325	370
		2016	349	347	370	382	354	402	443	456	484	529	511		421
<b>Malaysia</b>	Not specified	2015	317	311	335	324	331	316	333	334	291	312	359	366	327
<b>Singapore</b>	Not specified	2015	477	486	471	482	448	426	418	413	439	440	461	415	448
		2016	405	471	427	452	461	482	486	507	538	574	591	616	501



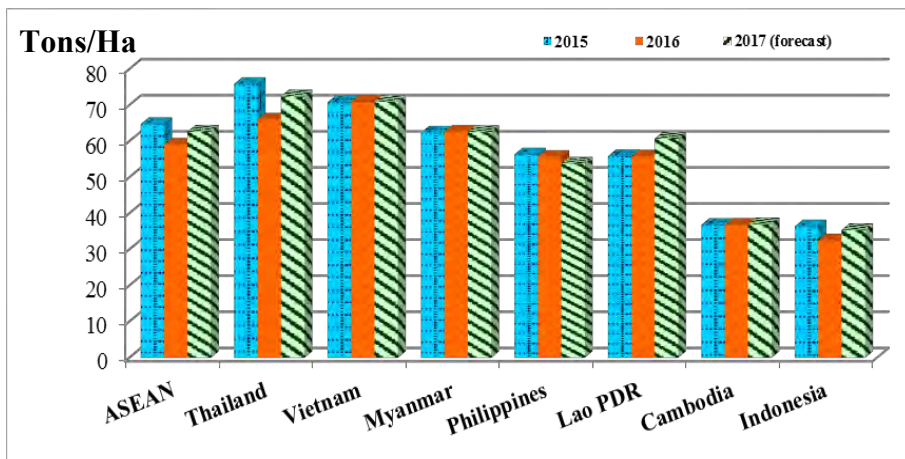
**Figure 32 Sugarcane production of selected countries in ASEAN, 2015-2017**



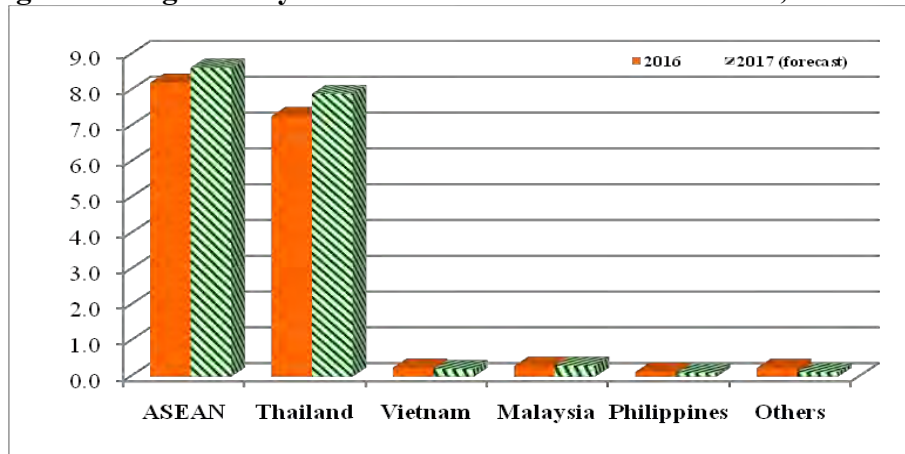
**Figure 33 Sugarcane planted area of selected countries in ASEAN, 2015-2017**



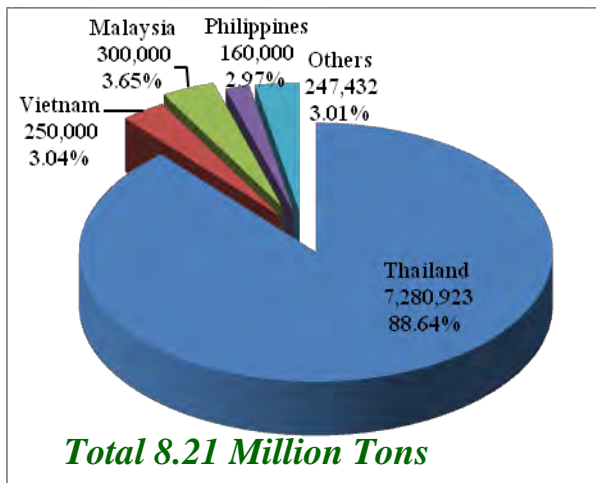
**Figure 34 Sugarcane harvested area of selected countries in ASEAN, 2015-2017**



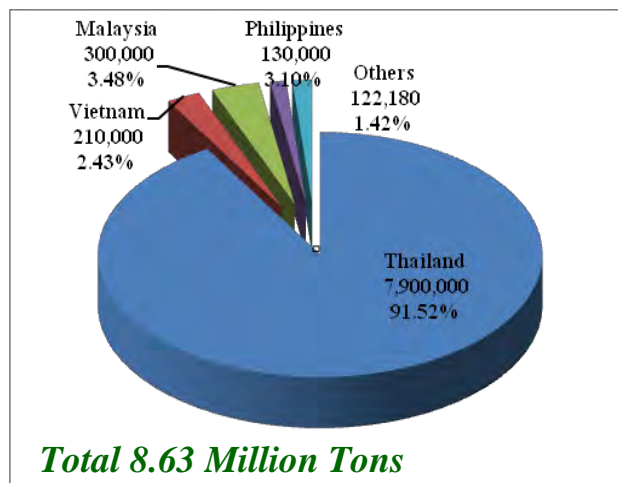
**Figure 35 Sugarcane yield of selected countries in ASEAN, 2015-2017**



**Figure 36 Amount of Sugar export (million tons) of selected countries in ASEAN in 2016-2017**



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



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

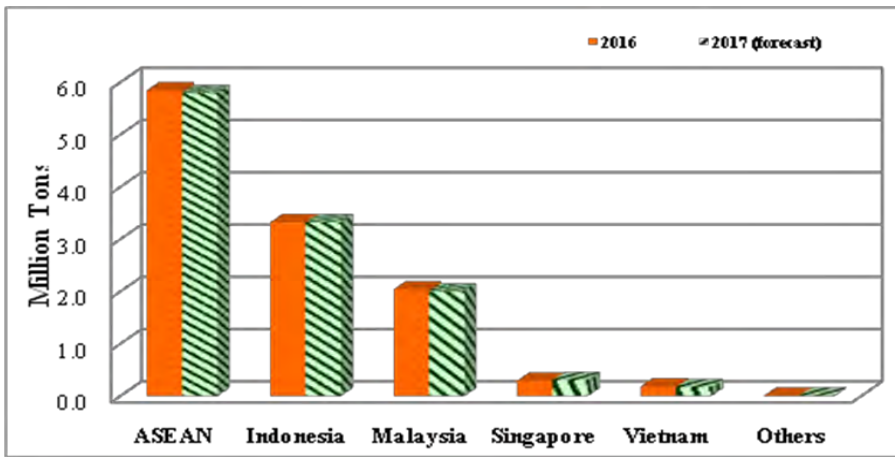


Figure 39 Amount of sugar import (million tons) by selected countries in ASEAN in 2016-2017

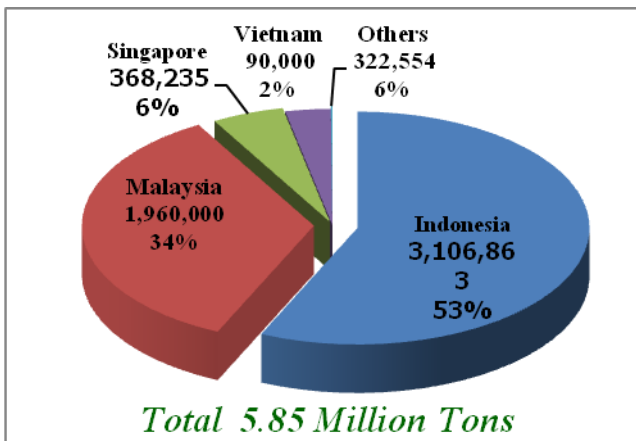


Figure 40 Share of sugar import (ton) among ASEAN countries, 2016

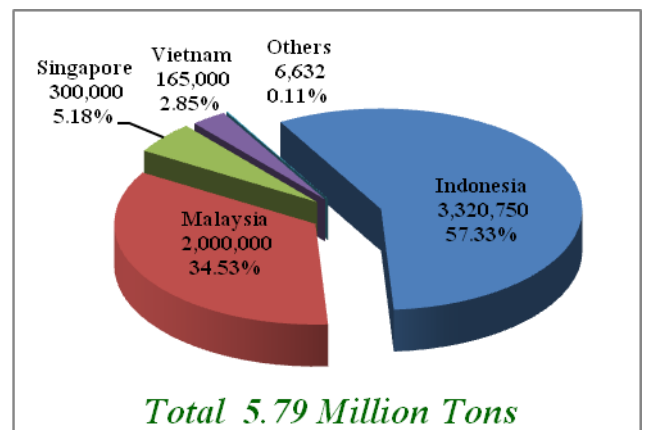


Figure 41 Share of sugar import (ton) among ASEAN countries, 2017

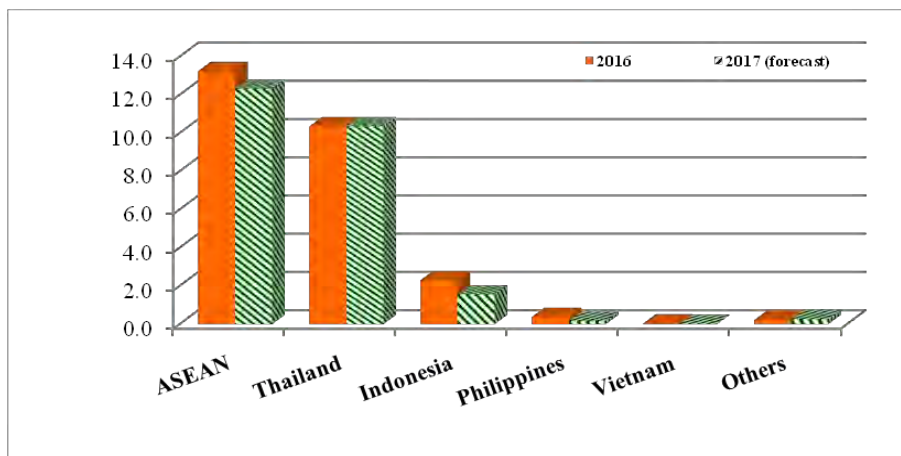


Figure 42 Amount of ending stock of Sugar in ASEAN countries

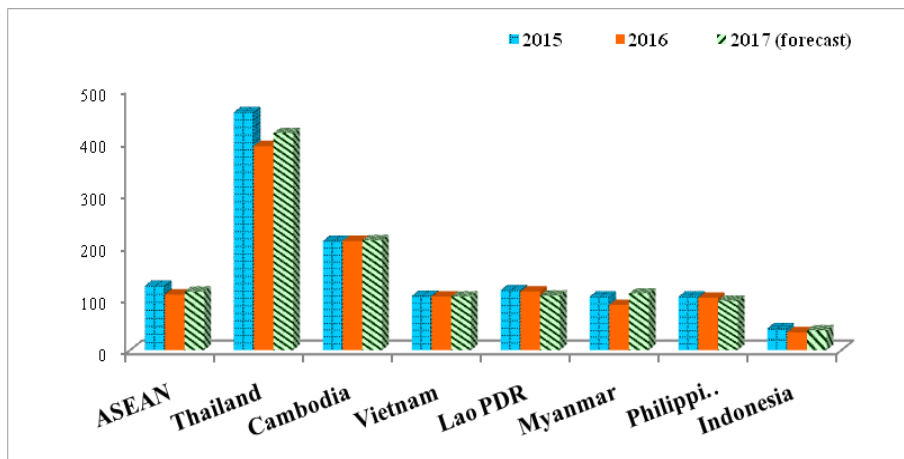


Figure 43 Ratio of sugar production to domestic utilization in ASEAN countries, 2015-2017

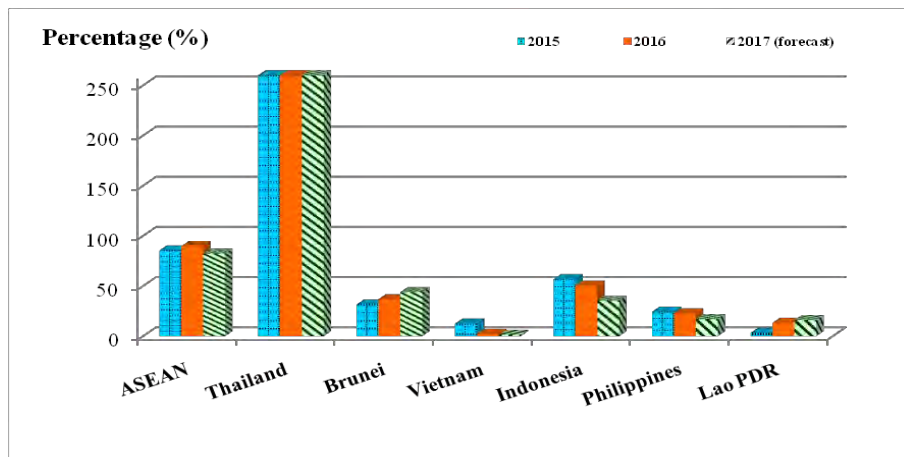


Figure 44 Ratio of sugar beginning stock to domestic utilization in ASEAN countries, 2015-2017

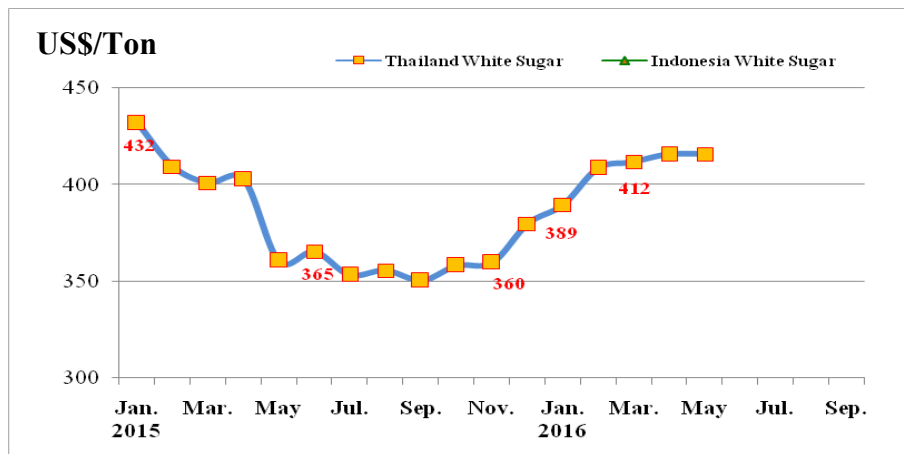


Figure 45 FOB price (US\$) of white sugar of selected countries in ASEAN in 2015-2016

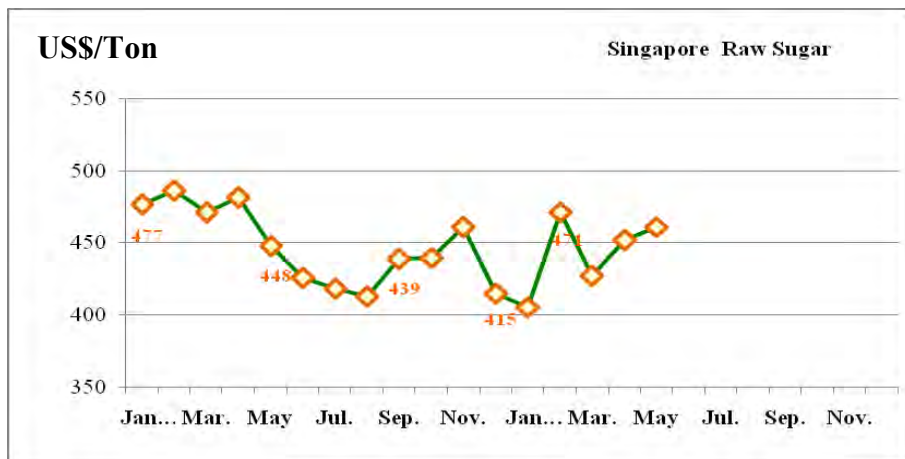


Figure 46 CIF price (US\$) of raw sugar of selected countries in ASEAN in 2015-2016

## Highlights of Soybean Outlook for 2017

- The supply of ASEAN soybean is forecasted to increase from 10.40 million tons in 2016 to 10.78 million tons or approximately 3.65 percent in 2017 (Table 46). The increase in supply mainly comes from the increase in the beginning stock, which increases approximately 19.21 percent.
- The soybean production is predicted to be 1.49 million tons, slightly increase from the previous year 4.93 percent.
- The beginning stock of soybean in ASEAN in 2017 is forecasted to increase to 2.11 million tons, up 0.34 million tons from 1.77 million tons in 2016. The ending stock is expected to be 2.45 million tons in 2017, an increase of 0.34 million ton or approximately 16.11 percent from 2.11 million tons in 2016.
- In terms of soybean demand in ASEAN in 2017, the domestic utilization is estimated at 8.23 million tons, compared to 8.19 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 7.21 million tons in 2016 to 7.18 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 18.07 percent, slightly increased from the previous year.
- The beginning stock to domestic utilization ratio (food security ratio) is predicted to be 25.69 percent in 2017, which increased approximately 4.14 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	
			Quantit y	%
Supply (Million tons)	10.40	10.78	0.38	3.65
Beginning stock	1.77	2.11	0.34	19.21
Production	1.42	1.49	0.07	4.93
Import	7.21	7.18	-0.03	-0.42
Demand (Million tons)	10.40	10.78	0.38	3.65
Domestic utilization	8.19	8.23	0.04	0.49
Export	0.09	0.10	0.01	11.11
Ending stock	2.11	2.45	0.34	16.11
Ratio of production to domestic utilization (%)	17.37	18.07	0.70	-
Ratio of beginning stock to domestic utilization (%)	21.55	25.69	4.14	-



## ASEAN Soybean Situation 2016

### Production

The estimate of soybean production in ASEAN in 2016 (crop year 2015/16) was 1.42 million tons, a decrease of 0.09 million tons or 5.96 percent from 1.51 million tons in 2015. The decrease in production was due to the decline in area and yield. 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.

For **Indonesia**, the estimated soybean production in 2016 has decreased to 0.89 million tons, decrease approximately 7.85% percent from 0.96 million tons in 2015. The decrease in production was due to the decrease in planted area, harvested area, and yield. The area reduction attributed to farmer responded to price decrease and the competition of the other food crops commodity. 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, harvested area and yield.

For **Lao PDR**, the slight decrease in production was due to the decrease in area attributed to the unfavorable weather and yield decrease by farmers use less fertilizer.

**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 8.19 million tons, an increase of 0.23 million tons or about 3 percent from 7.97 million tons in 2015. In 2016, the beginning stock was estimated at 1.77 million tons, an increase of about 0.70 million tons or about 65 percent from 1.07 million tons in 2015. Indonesia, Thailand and Vietnam 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 17.37 percent, a slight 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 22 percent (Table 56, Figure 59).

### Trade

In 2016, ASEAN altogether exported soybean 0.09 million tons, which increased 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 56 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 Cambodia, Indonesia and Malaysia 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 1,337 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 409 US\$/ton, in Singapore was 621 US\$/ton, in Thailand was 749 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 1.49 million tons, which is increase from 2016 approximately 5 percent (Table 47, Figure 47). The increase in production is expected in most of the country except Lao PDR, the Philippines, Thailand, and Vietnam. Indonesia, the biggest soybean producing country in ASEAN, is forecasted to increase in its production from 0.89 million tons in 2016 to 0.94 million tons in 2017, about 6 percent increase. The increase is derived from the increase in yield by favorable weather, farmers use more improved variety and taking care their crop better. (Table 49-50, Figure 47-50).

### **Utilization and Stock**

The domestic utilization of soybeans in ASEAN is forecasted to increase about 0.49 percent from 8.19 million tons in 2016 to 8.23 million tons in 2017 (Table 54).

The beginning stock in ASEAN in 2017 is forecasted to increase 0.34 million ton or about 19.21 percent from 1.77 million ton in 2016 to 2.11 million ton in 2017. The ending stock is forecasted to increase about 16 percent from 2.11 million tons in 2016 to 2.45 million tons in 2017 (Table 53, Figure 57).

The ratio of production to domestic utilization (self-sufficiency ratio) is forecasted to be about 18.07 percent, which is slightly increased 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 26 percent, which increase about 4 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 7.18 million tons, compared to 7.21 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		2017 (2016/17)	change	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>1,513.16</b>	<b>1,422.94</b>	<b>-90.22</b>	<b>-5.96</b>	<b>1,486.99</b>	<b>64.05</b>	<b>4.50</b>
Brunei	-	-	-	-	-	-	-
Cambodia	96.94	98.88	1.94	2.00	100.86	1.98	2.00
Indonesia	963.18	887.54	-75.64	-7.85	943.86	56.32	6.35
Lao PDR	18.68	18.34	-0.34	-1.79	18.10	-0.24	-1.33
Malaysia	-	-	-	-	-	-	-
Myanmar	228.93	222.28	-6.65	-2.90	241.12	18.84	8.48
Philippines	0.67	0.62	-0.05	-7.60	0.47	-0.15	-24.62
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		2017 (2016/17)	change	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>989.62</b>	<b>950.90</b>	<b>-38.73</b>	<b>-3.91</b>	<b>948.95</b>	<b>-1.94</b>	<b>-0.20</b>
Brunei	-	-	-	-	-	-	-
Cambodia	66.82	68.16	1.34	2.00	68.84	0.68	1.00
Indonesia	620.49	592.33	-28.16	-4.54	589.15	-3.18	-0.54
Lao PDR	11.88	11.75	-0.13	-1.09	11.60	-0.15	-1.28
Malaysia	-	-	-	-	-	-	-
Myanmar	151.19	148.60	-2.59	-1.71	158.18	9.58	6.45
Philippines	0.56	0.52	-0.04	-6.44	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		2017 (2016/17)	change	
			Quantities	(%)		Quantities	(%)
ASEAN	979.75	947.15	-32.60	-3.33	948.33	1.18	0.12
Brunei	-	-	-	-	-	-	-
Cambodia	66.61	68.00	1.39	2.09	68.68	0.68	1.00
Indonesia	614.10	589.42	-24.68	-4.02	589.15	-0.27	-0.05
Lao PDR	11.88	11.75	-0.13	-1.09	11.60	-0.15	-1.28
Malaysia	-	-	-	-	-	-	-
Myanmar	150.80	148.44	-2.36	-1.57	158.18	9.74	6.56
Philippines	0.56	0.52	-0.04	-6.44	0.48	-0.04	-8.01
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		2017 (2016/16)	change	
			Quantities	(%)		Quantities	(%)
ASEAN	1.54	1.50	-0.04	-2.73	1.57	0.07	4.37
Brunei	-	-	-	-	-	-	-
Cambodia	1.46	1.45	0.00	-0.09	1.47	0.01	0.99
Indonesia	1.57	1.51	-0.06	-4.00	1.60	0.10	6.39
Lao PDR	1.57	1.56	-0.01	-0.71	1.56	0.00	-0.05
Malaysia	-	-	-	-	-	-	-
Myanmar	1.52	1.50	-0.02	-1.36	1.52	0.03	1.80
Philippines	1.21	1.20	-0.02	-1.24	0.98	-0.22	-18.06
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
<b>ASEAN</b>	<b>1,069,105</b>	<b>1,513,163</b>	<b>7,232,056</b>	<b>9,814,323</b>	<b>7,965,137</b>	<b>83,673</b>	<b>1,765,512</b>	<b>9,814,323</b>
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	855,352	963,183	2,259,225	4,077,760	2,686,322	1,682	1,389,756	4,077,760
Lao PDR	2,441	18,675	0	21,116	17,598	2,532	986	21,116
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	84,139	84,813	84,566	118	129	84,813
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
<b>ASEAN</b>	<b>1,765,512</b>	<b>1,422,939</b>	<b>7,208,084</b>	<b>10,396,536</b>	<b>8,192,958</b>	<b>89,443</b>	<b>2,114,136</b>	<b>10,396,536</b>
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	1,389,756	887,539	2,221,652	4,498,947	2,780,764	1,425	1,716,758	4,498,947
Lao PDR	986	18,340	693	20,019	18,666	395	958	20,019
Malaysia <sup>1/</sup>	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 <sup>1/</sup>	129	623	70,000	70,751	70,500	0	251	70,751
Singapore <sup>1/</sup>	0	0	21,468	21,468	21,218	250	0	21,468
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: <sup>1/</sup>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
<b>ASEAN</b>	<b>2,114,136</b>	<b>1,486,991</b>	<b>7,176,424</b>	<b>10,777,551</b>	<b>8,229,054</b>	<b>96,826</b>	<b>2,451,671</b>	<b>10,777,551</b>
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	1,716,758	943,863	2,221,652	4,882,273	2,783,613	1,425	2,097,235	4,882,273
Lao PDR	958	18,096	0	19,054	18,749	113	192	19,054
Malaysia <sup>1/</sup>	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 <sup>1/</sup>	251	469	70,000	70,721	70,500	0	221	70,721
Singapore <sup>1/</sup>	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: <sup>1/</sup>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 (%)
<b>ASEAN</b>	<b>1,513,163</b>	<b>7,965,137</b>	<b>19.00</b>	<b>1,422,939</b>	<b>8,192,958</b>	<b>17.37</b>	<b>1,486,991</b>	<b>8,229,054</b>	<b>18.07</b>
Brunei	-	728	-	-	750	-	-	772	-
Cambodia	96,942	38,206	253.74	98,880	48,493	203.91	100,857	60,945	165.49
Indonesia	963,183	2,686,322	35.86	887,539	2,780,764	31.92	943,863	2,783,613	33.91
Lao PDR	18,675	17,598	106.12	18,340	18,666	98.25	18,096	18,749	96.52
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	84,566	0.80	623	70,500	0.88	469	70,500	0.67
Singapore	-	21,928	-	-	21,218	-	-	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 (%)
<b>ASEAN</b>	<b>1,069,105</b>	<b>7,965,137</b>	<b>13.42</b>	<b>1,765,512</b>	<b>8,192,958</b>	<b>21.55</b>	<b>2,114,136</b>	<b>8,229,054</b>	<b>25.69</b>
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	855,352	2,686,322	31.84	1,389,756	2,780,764	49.98	1,716,758	2,783,613	61.67
Lao PDR	2,441	17,598	13.87	986	18,666	5.28	958	18,749	5.11
Malaysia	-	573,000	-	-	573,000	-	-	573,000	-
Myanmar	15,530	226,032	-	15,050	300,992	-	24,629	245,475	10.03
Philippines	-	84,566	-	129	70,500	-	251	70,500	-
Singapore	-	21,928	-	-	21,218	-	-	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									2	6,760				
Lao PDR														
Malaysia		27,421				4,225,109								
Myanmar														
Philippines														
Singapore	1	707			108	49,467			106	236,734			1	1,413
Thailand			101	82,134			3,872	2,069,096	13	18,273	0.88	4,155	29	21,575
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	9	17,870					12	24,630	1,216	237,653	1,228	262,283
Lao PDR							0	0	0	0	0	0
Malaysia		1,815,293					0	6,067,823		7,249,795	0	13,317,618
Myanmar	132	77,240					132	77,240	101	0	233	77,240
Philippines							0	0			0	0
Singapore					1	707	216	289,028	34	37,454	250	326,482
Thailand	21	86,438			605	417,850	4,641	2,699,522	836	513,244	5,477	3,212,766
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									4,803	2,542,833				
Lao PDR														
Malaysia						49,575								
Myanmar									2,157	1,163,010				
Philippines														
Singapore					1	23,208			2941.8268	1,425,888	0	292		
Thailand			4,980	2,116,523	0	3			0.18	1,026				
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	0	1					4,803	2,542,834	2,066,140	874,973,579	2,070,943	877,516,413
Lao PDR					693	58,143	693	58,143			693	58,143
Malaysia		357,170					0	406,745		263,924,539	0	264,331,284
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	108	0	108	122,702	58,452,288	122,702	58,452,396
Singapore			1	640			2,943	1,450,028	18,525	11,759,648	21,468	13,209,676
Thailand	0.01	46					4,980.18	2,117,599	2,952,749	1,218,796,001	2,957,729	1,220,913,599
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**

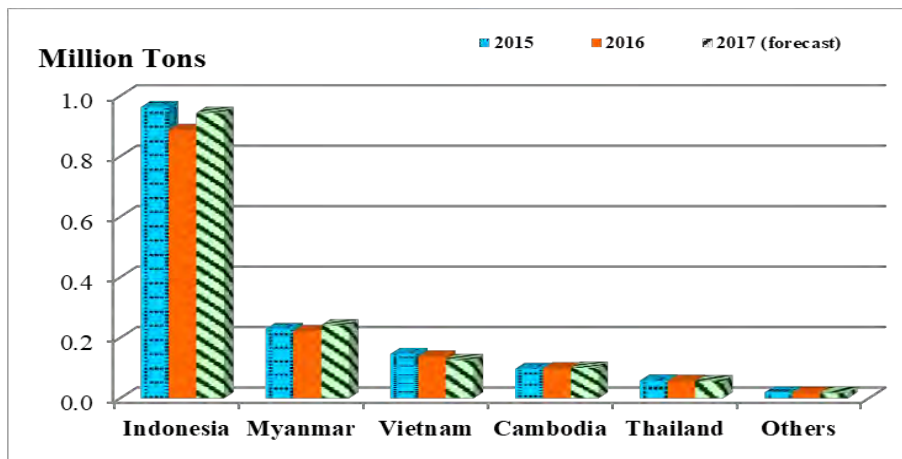
Unit: US\$/Ton

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	1,378	1,249	1,444	1,240	1,389	1,406	1,470	1,366		1,337
Myanmar	2015		565	600	584	587	586	552	552	549	531	540	571	565
	2016	571	590	559	643									591

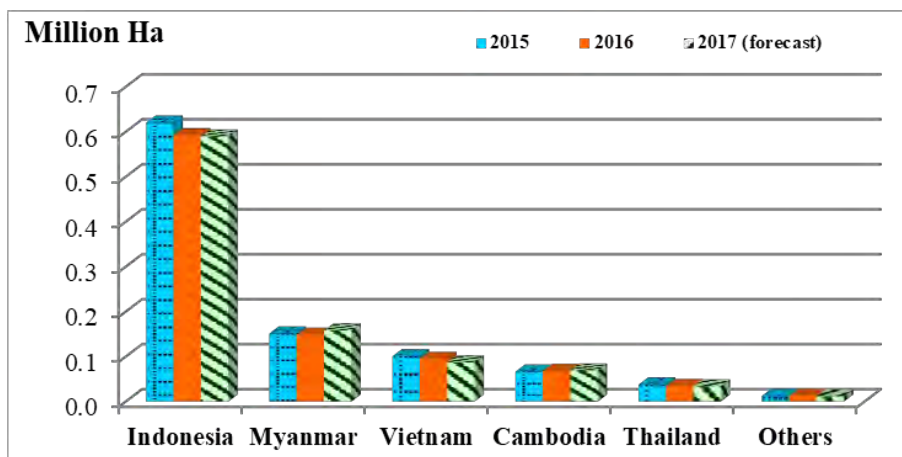
**Table 60 CIF Price of soybean in selected ASEAN countries**

Unit: US\$/Ton

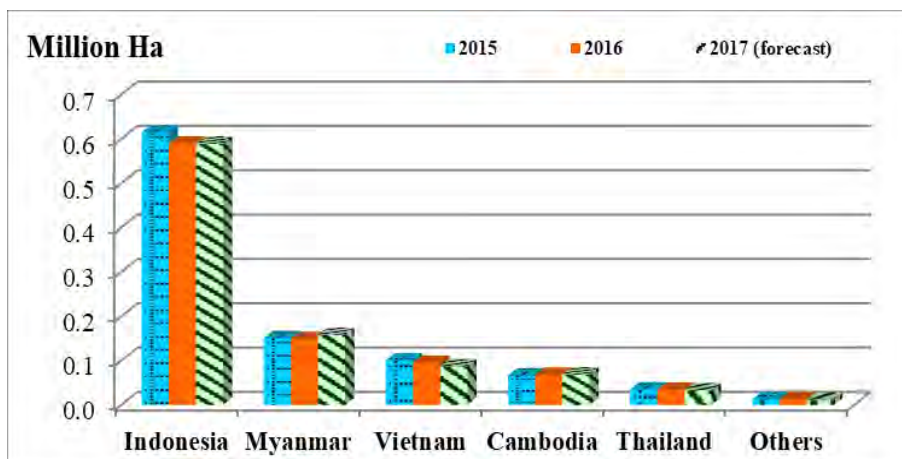
Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	2015	517	510	488	475	456	429	431	427	442	435	416	403	452
	2016	404	384	378	372	377	397	427	468	444	426	422		409
Singapore	2015	812	766	681	772	752	744	743	785	791	772	747	756	760
	2016	679	684	641	639	629	593	593	580	577	610	587	645	621
Thailand	2015	529	533	517	493	476	494	490	528	558	711	817	778	577
	2016	641	847	732	659	712	823	738	794	872	880	607	678	749
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**

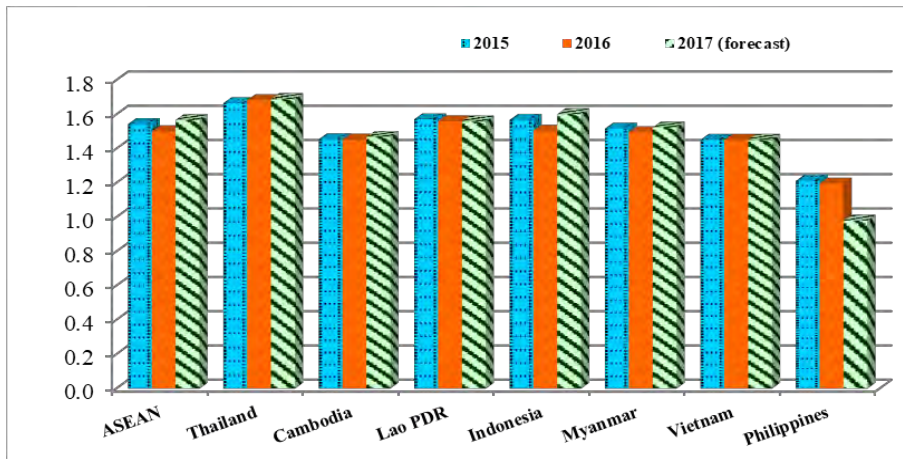


Figure 50 Soybean yield of countries in ASEAN, 2015 – 2017

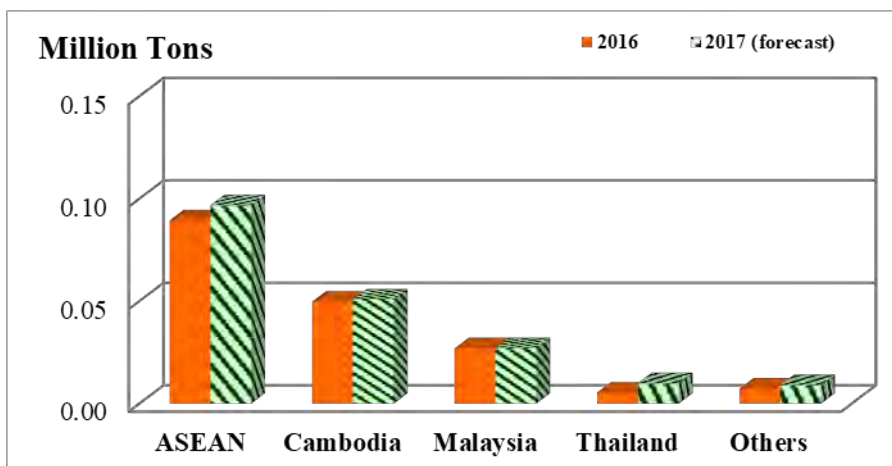


Figure 51 Amount of Soybean export (million tons) of selected countries in ASEAN in 2016 -2017

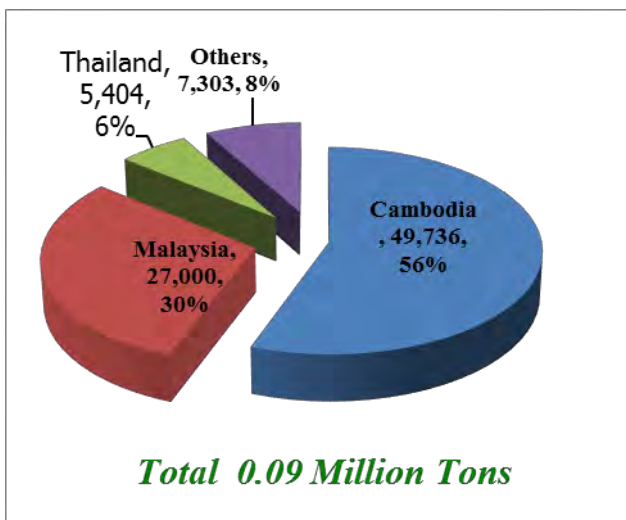


Figure 52 Share of Soybean export (ton) among ASEAN countries, 2016

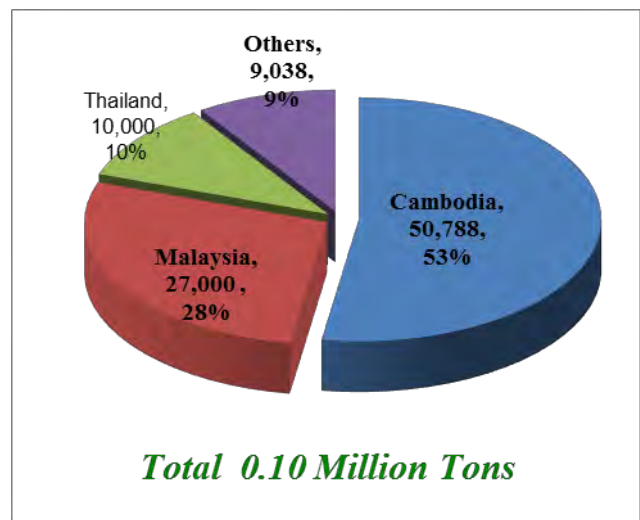


Figure 53 Share of Soybean export (ton) among ASEAN countries, 2017

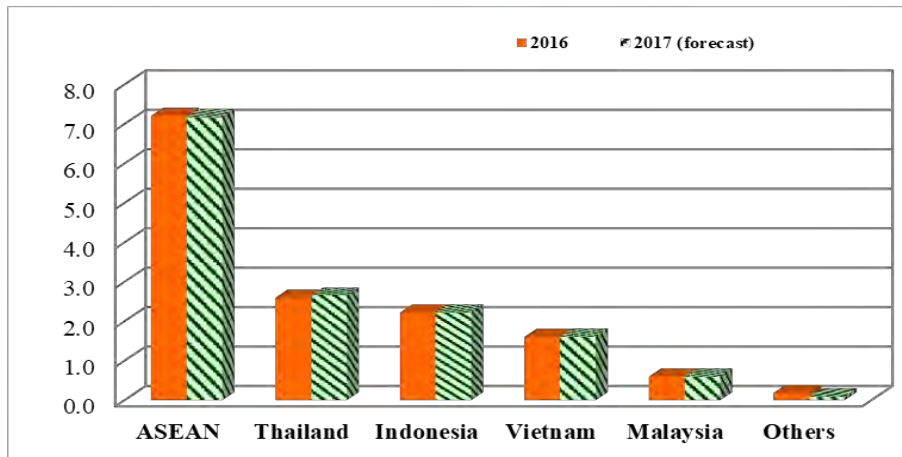


Figure 54 Amount of soybean import (million tons) by selected countries in ASEAN in 2016 – 2017

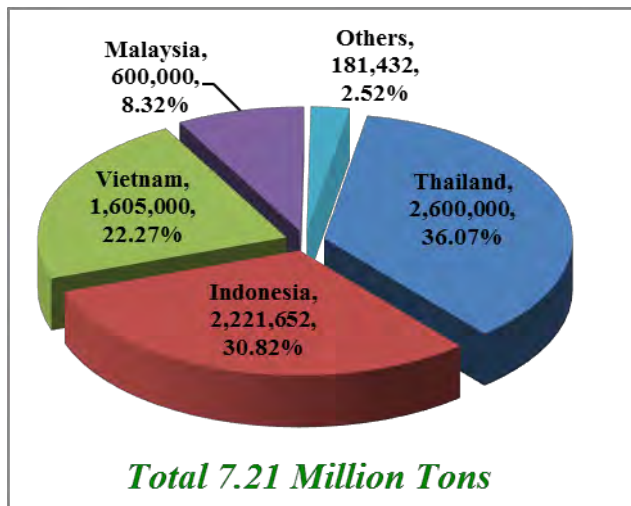


Figure 55 Share of Soybean import (ton) among ASEAN countries, 2016

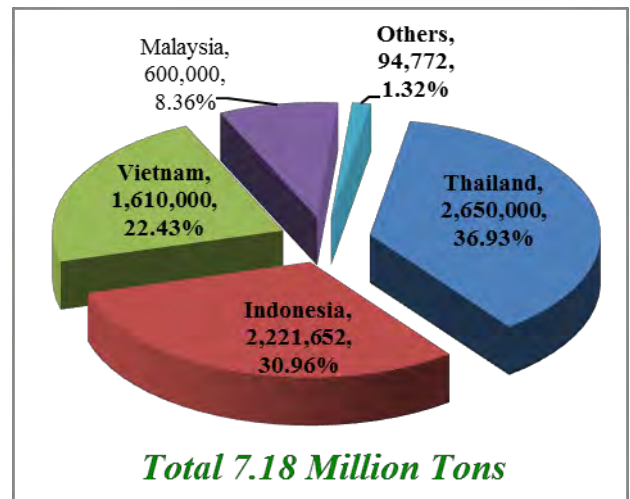


Figure 56 Share of Soybean import (ton) among ASEAN countries, 2017

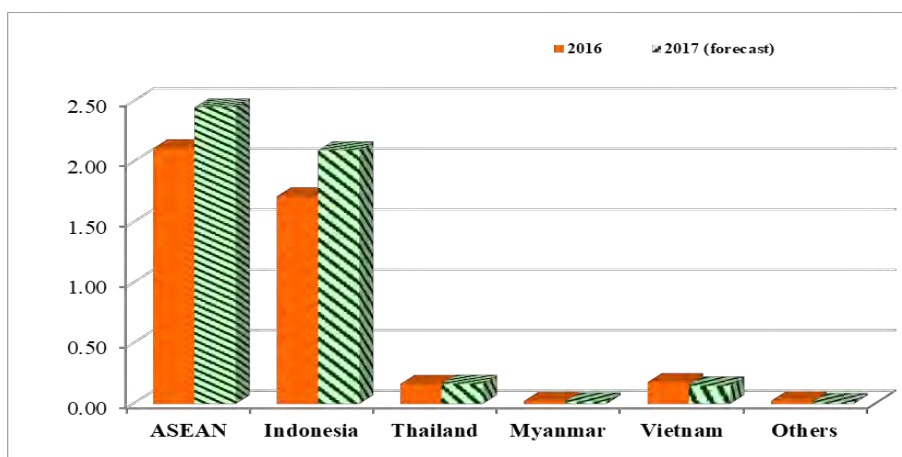


Figure 57 Amount of ending stock of soybean in ASEAN countries in 2016 – 2017

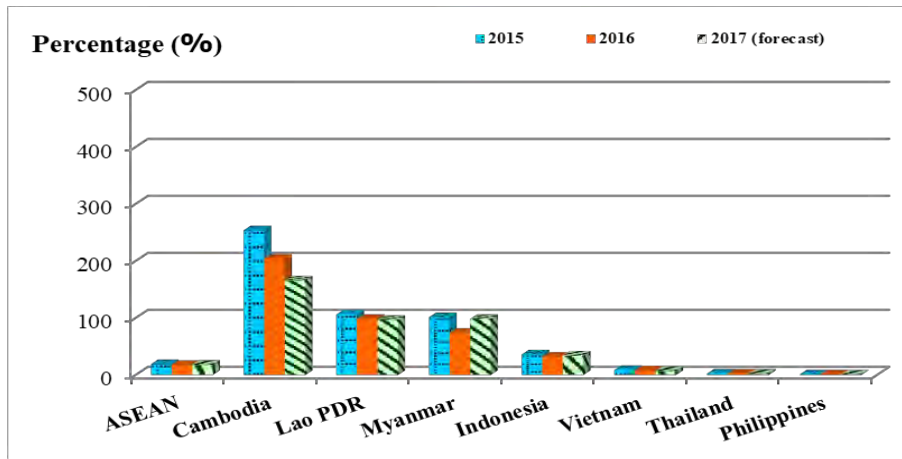


Figure 58 Ratio of soybean production to domestic utilization in ASEAN countries, 2015 – 2017

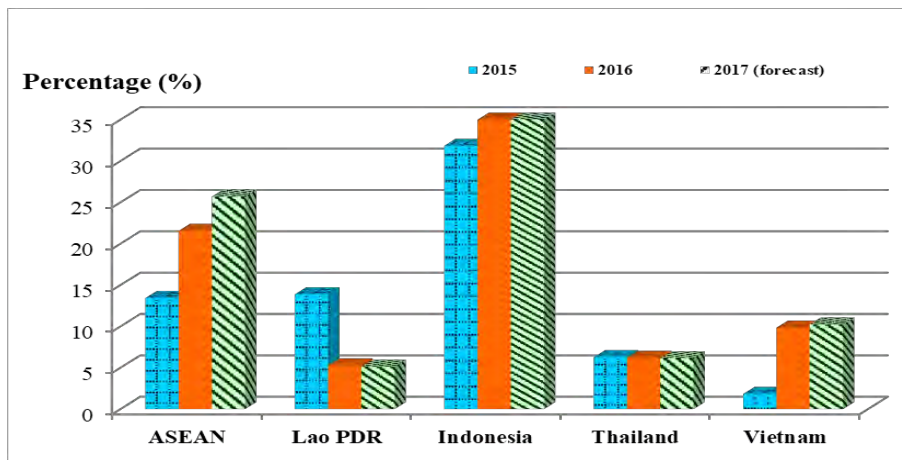


Figure 59 Ratio of soybean beginning stock to domestic utilization in ASEAN countries, 2015 – 2017

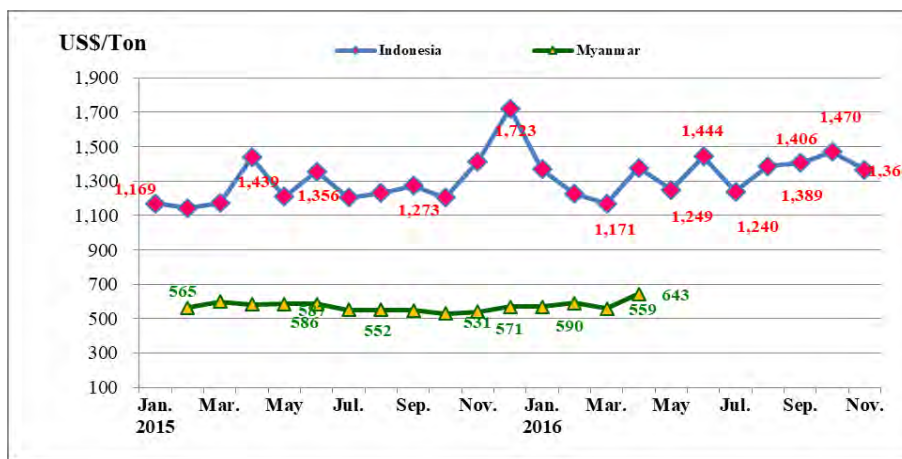


Figure 60 FOB price (US\$/Ton) of soybean of selected countries in ASEAN in 2015 – 2016

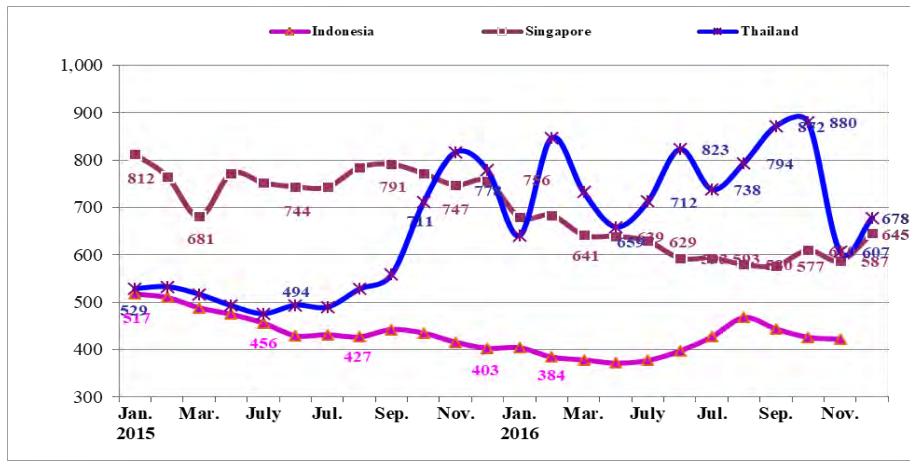


Figure 61 CIF price (US\$/Ton) of soybean of selected countries in ASEAN in 2015 – 2016

## Highlights of Cassava Outlook for 2017

- The supply of cassava in ASEAN is forecasted to be 99.05 million tons in 2017, an increase of 3.99 million tons or about 4 percent from 95.06 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 5.27 million tons, increase from 4.61 million tons in 2016 due to the increase in stock in every country except Lao PDR and Vietnam while the ending stock in 2017 is expected to be 8.47 million tons, up from 5.27 million tons in 2016.
- The export of cassava is expected to increase 0.52 million tons or an increase of about 1 percent from 43.03 million tons in 2016 to 43.55 million tons in 2017 while the import of cassava is forecasted to be 9.74 million tons in 2017 or increase about 1 percent from 9.64 million tons in 2016.
- The ratio of production to domestic utilization in 2017 is forecasted to be about 179 percent, compared to about 173 percent in 2016. The ratio of beginning stock to domestic utilization in 2017 is forecasted to be about 11 percent, a increase of about 1 percent from about 10 percent in 2016.

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

Unit: Million tons

Items	2016	2017	Change	
			Quantity	%
Supply (Million tons)	95.06	99.05	3.99	4.20
Beginning stock	4.61	5.27	0.66	14.29
Production	80.80	84.03	3.23	4.00
Import	9.64	9.74	0.10	1.04
Demand (Million tons)	95.06	99.05	3.99	4.20
Domestic utilization	46.76	47.03	0.27	0.59
Export	43.03	43.55	0.52	1.22
Ending stock	5.27	8.47	3.19	60.58
Ratio of production to domestic utilization (%)	172.81	178.68	5.87	-
Ratio of beginning stock to domestic utilization (%)	9.87	11.21	1.34	-



## ASEAN Cassava Situation in 2016

### Production

The estimated cassava production (root fresh) in ASEAN in 2016 (crop year 2015/16) was 80.78 million tons which has decrease from 82.12 million tons in 2015 about 2 percent. The decrease has occurred in Indonesia Myanmar and Thailand. (Table 62-65, Figure 62-65).

The estimated cassava production in 2016 in **Indonesia** has decrease due to the decline in planted area from farmers respond to price decrease compete with other food crops commodities.

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 due to farmers responded to price and the yield has 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 increase in production came from the increase in both planted area and yields due to favorable weather and farmers use more fertilizers.

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 46.76 million tons, a decrease of about 0.8 million tons or about 2 percent from 47.56 million tons in 2015 (Table 67-68).

The beginning stock in 2016 was estimated at 4.61 million tons, a decrease of 3.91 million tons compared to 8.52 million tons in 2015. The ending stock of cassava in 2016 was estimated to be 5.27 million tons, an increase of 0.66 million tons compared to 4.61 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 173 percent which is about the same as 2016, 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 10 percent compared to about 18 percent in 2015 (Table 71, Figure 74).

## **Trade**

The cassava exported from ASEAN in 2016 is expected to be 43.03 million tons, slightly decrease of 0.38 million tons from 43.41 million tons in 2015. The cassava imported by the ASEAN in 2016 was estimated to be 9.64 million tons, 4.71 million tons increase from 4.93 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. Thailand FOB price of 2016 is down compare to 2015. For 2016 CIF price of Singapore is decrease from 2015.

## **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 84.03 million tons which is 3.23 million tons or about 4 percent increase from 80.80 million tons in 2016. The increase in production is expected in every country except Lao PDR. The most increase in term of quantity is expected in Indonesia, which is forecasted to be 23.58 million tons or an increase of about 14 percent from previous year. The increase came from the increase in planted area by favorable weather and special assistant. The most increase in term of percentage is expected in Myanmar. The increase in Myanmar come from the expand of planted area by farmers respond to price increase and favorable weather and yield increase from favorable weather and farmers use more fertilizer. (Table 62-65, Figure 62-65).

### **Utilization and Stock**

The domestic utilization of cassava is predicted to increase to 47.03 million tons in 2017 compared to 46.76 million tons in 2016, an increase of 0.27 million tons. The beginning stock in 2017 is forecasted to be 5.27 million tons, an increase of about 0.66 million tons, compared to 4.61 million tons in 2016. The ending stock in 2017 is predicted to be 8.47 million tons, an increase of about 3.19 million tons from 5.27 million tons in 2016.

The ratio of production to domestic utilization for 2017 is forecasted to be about 179 percent, compared to about 173 percent in 2016, 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 11 percent, compared to about 10 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 43.55 million tons in 2017, an increase of 0.52 million tons compared to 43.03 million tons in 2016. For the import, it is expected to slightly increase from 9.64 million tons in 2016 to 9.74 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	(%)
<b>ASEAN</b>	<b>82,118.34</b>	<b>80,777.28</b>	<b>-1,341.06</b>	<b>-1.63</b>	<b>84,011.40</b>	<b>3,234.12</b>	<b>4.00</b>
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	21,801.42	20,744.67	-1,056.74	-4.85	23,578.97	2,834.30	13.66
Lao PDR	2,382.48	2,410.00	27.52	1.16	1,557.75	-852.25	-35.36
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	2,729.14	101.14	3.85	2,800.73	71.59	2.62
Singapore	-	-	-	#DIV/0!	-	-	#DIV/0!
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	(%)
<b>ASEAN</b>	<b>3,851.84</b>	<b>3,813.92</b>	<b>-37.92</b>	<b>-0.98</b>	<b>3,902.68</b>	<b>88.76</b>	<b>2.33</b>
Brunei	-	-	-	#DIV/0!	-	-	#DIV/0!
Cambodia	521.46	531.89	10.43	2.00	542.42	10.54	1.98
Indonesia	949.92	867.50	-82.42	-8.68	1,002.64	135.14	15.58
Lao PDR	75.47	75.61	0.14	0.19	46.50	-29.11	-38.50
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	225.26	5.74	2.62	230.04	4.78	2.12
Singapore	-	-	-	#DIV/0!	-	-	#DIV/0!
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 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>3,787.72</b>	<b>3,721.55</b>	<b>-66.17</b>	<b>-1.75</b>	<b>3,812.96</b>	<b>91.40</b>	<b>2.46</b>
Brunei	-	-	-	#DIV/0!	-	-	#DIV/0!
Cambodia	515.29	527.32	12.03	2.33	537.87	10.55	2.00
Indonesia	949.92	867.50	-82.42	-8.68	1,002.64	135.14	15.58
Lao PDR	75.47	75.61	0.14	0.19	46.50	-29.11	-38.50
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	225.26	5.74	2.62	230.04	4.78	2.12
Singapore	-	-	-	#DIV/0!	-	-	#DIV/0!
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 2016 over 2015		2017 (2016/17)	change 2017 over 2016	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>21.68</b>	<b>21.71</b>	<b>0.03</b>	<b>0.14</b>	<b>22.03</b>	<b>0.32</b>	<b>1.47</b>
Brunei	-	-	-	#DIV/0!	-	-	#DIV/0!
Cambodia	23.18	25.07	1.89	8.15	24.89	-0.18	-0.72
Indonesia	22.95	23.91	0.96	4.18	23.52	-0.39	-1.63
Lao PDR	31.57	31.87	0.30	0.95	33.50	1.63	5.11
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	12.12	0.15	1.25	12.18	0.06	0.50
Singapore	-	-	-	#DIV/0!	-	-	#DIV/0!
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	Diseases	Others	Unspecitfy	
<b>ASEAN</b>	-	<b>87,069</b>	<b>4,567</b>	-	-	<b>726</b>	<b>92,362</b>
Brunei	-	-	-	-	-	-	-
Cambodia	-	-	4,567	-	-	-	<b>4,567</b>
Indonesia	-	-	-	-	-	-	-
Lao PDR	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	726	<b>726</b>
Myanmar	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-
Thailand	-	87,069	-	-	-	-	<b>87,069</b>
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<b>n.a.</b>

**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
<b>ASEAN</b>	<b>8,522,125</b>	<b>82,118,337</b>	<b>4,934,407</b>	<b>95,574,869</b>	<b>47,555,161</b>	<b>43,406,835</b>	<b>4,612,872</b>	<b>95,574,869</b>
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	2,032,601	21,801,415	600,163	24,434,179	21,801,398	16,776	2,616,005	24,434,179
Lao PDR	495,827	2,382,478	1,013	2,879,318	1,995,973	220,572	662,773	2,879,318
Malaysia <sup>1/</sup>	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	-	2,628,009	82,910	2,710,919	2,710,263	656	0	2,710,919
Singapore	-	-	1,262	1,262	1,261.92	0.18	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
<b>ASEAN</b>	<b>4,612,872</b>	<b>80,799,985</b>	<b>9,643,902</b>	<b>95,056,759</b>	<b>46,757,458</b>	<b>43,027,414</b>	<b>5,271,887</b>	<b>95,056,759</b>
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 <sup>1/</sup>	2,616,005	20,744,674	642,667	24,003,346	20,621,749	20,058	3,361,538	24,003,346
Lao PDR	662,773	2,410,000	-	3,072,773	1,996,077	476,569	600,127	3,072,773
Malaysia <sup>1/</sup>	-	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 <sup>1/</sup>	-	2,751,850	-	2,751,850	2,751,000	850	0	2,751,850
Singapore <sup>1/</sup>	-	-	1,196	1,196	1,195.52	0.60	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: <sup>1/</sup> 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
<b>ASEAN</b>	<b>5,271,887</b>	<b>84,033,633</b>	<b>9,743,868</b>	<b>99,049,388</b>	<b>47,031,481</b>	<b>43,551,508</b>	<b>8,466,399</b>	<b>99,049,388</b>
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 <sup>1/</sup>	3,361,538	23,578,970	642,667	27,583,175	20,627,539	20,058	6,935,578	27,583,175
Lao PDR	600,127	1,557,750	-	2,157,877	1,496,211	238,293	423,373	2,157,877
Malaysia <sup>1/</sup>	-	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 <sup>1/</sup>	-	2,822,967		2,822,967	2,822,000	967	0	2,822,967
Singapore <sup>1/</sup>	-		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: <sup>1/</sup> 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 (%)
<b>ASEAN</b>	<b>82,118,337</b>	<b>47,555,161</b>	<b>172.68</b>	<b>80,799,985</b>	<b>46,757,458</b>	<b>172.81</b>	<b>84,033,633</b>	<b>47,031,481</b>	<b>178.68</b>
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	21,801,415	21,801,398	100.00	20,744,674	20,621,749	100.60	23,578,970	20,627,539	114.31
Lao PDR	2,382,478	1,995,973	119.36	2,410,000	1,996,077	120.74	1,557,750	1,496,211	104.11
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	2,628,009	2,710,263	96.97	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 (%)
<b>ASEAN</b>	<b>8,522,125</b>	<b>47,555,161</b>	<b>17.92</b>	<b>4,612,872</b>	<b>46,757,458</b>	<b>9.87</b>	<b>5,271,875</b>	<b>47,031,481</b>	<b>11.21</b>
Brunei	-	163	0.00	6	168	3.74	-	173	-
Cambodia	-	2,388,641	0.00	-	2,583,759	0.00	-	2,535,434	-
Indonesia	2,032,601	21,801,398	9.32	2,616,005	20,621,749	12.69	3,361,538	20,627,539	16.30
Lao PDR	495,827	1,995,973	24.84	662,773	1,996,077	33.20	600,127	1,496,211	40.11
Malaysia	-	34,322	0.00	-	37,688	0.00	-	41,000	-
Myanmar	8,367	478,139	1.75	10,817	456,821	2.37	14,464	754,924	1.92
Philippines	-	2,710,263	0.00	-	2,751,000	0.00	-	2,822,000	-
Singapore	-	1,262	0.00	-	1,196	0.00	-	1,200	-
Thailand	5,310,000	9,280,000	57.22	636,741	9,400,000	6.77	794,598	9,920,000	8.01
Vietnam	675,330	8,865,000	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														1,284
Myanmar														
Philippines														
Singapore			0	1,413										
Thailand	1,723	187,052	2,303	487,041	2,811,395	251,173,368	16,576	1,357,386	1,223,703	110,729,088	27,464	2,552,042	368,337	37,162,758
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			153,650	10,544,417	309,389	45,058,358	463,039	55,602,775	13,530	3,440,268	476,569	59,043,043
Malaysia		169,530					0	170,814		2,971	0	173,785
Myanmar							0	0	53	0	53	0
Philippines							0	0	558	600,987	558	600,987
Singapore							0	1,413	0	707	1	2,120
Thailand	274,102	24,445,781			108,690	15,790,029	4,834,295	443,884,545	27,170,800	2,422,325,512	32,005,095	2,866,210,056
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						9,459								
Myanmar														
Philippines														
Singapore					16.83	3,164			1,177	264,177				
Thailand			4,549,063	259,319,569	1,434	122,807	662,926	49,833,312	156	72,942				
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							0	0			0	0
Malaysia				100,096		82,516	0	192,071		2,422,355	0	2,614,426
Myanmar			19	17,167.00			19	17,167	19	5,180	38	22,347
Philippines					9	5,400	9	5,400	38	63,785	47	69,185
Singapore			0.59	1,244	1	811	1,195	269,396	1	5,204	1,196	274,600
Thailand	0.23	1,961			2,361	179,768	5,215,940	309,530,358	63,633	20,676,796	5,279,573	330,207,154
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										
Malaysia	Not specified	2015	382	362	358	393	356	367	413	398	428	437	413	420	394
Myanmar		2015		350	313			300	350	297	198		291	278	297
		2016		228											
Philippines	Sliced or In form of Pellets	2015	569	1,033	449	826		589		930			563	563	690
		2016	421	563											
	Other than Sliced or In form of Pellets	2015	702	1,880	833	1,256	731	1,095	1,057	1,461	722	1,422	2,473	997	1,219
		2016	471	1,017	636										
	Flour	2015		1,725	1,576	934					899	549	905		1,098
		2016	1,742	4,466	921										
Thailand	Starch	2015	419	424	409	423	409	432	428	427	430	424	395	384	417
		2016	370	367	366	363	371	391	380	361	330	306	301	313	352
	Pellets	2015	212	262	261	292	190	206	235	237	284	241	260	186	239
		2016	220	0	0	239	178	270	278	237	186	199	193	193	219
	Shredded	2015	224	217	212	213	209	227	192	216	218	223	215	193	213
		2016	180	172	170	171	173	184	183	169	180	176	168	171	175
Vietnam	Not specified	2015	233	221	220	220	231	230	230	238	230	134	123	157	214
		2016	155	169	165	175	190	171							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	227	216	221	230	238	228	224	230

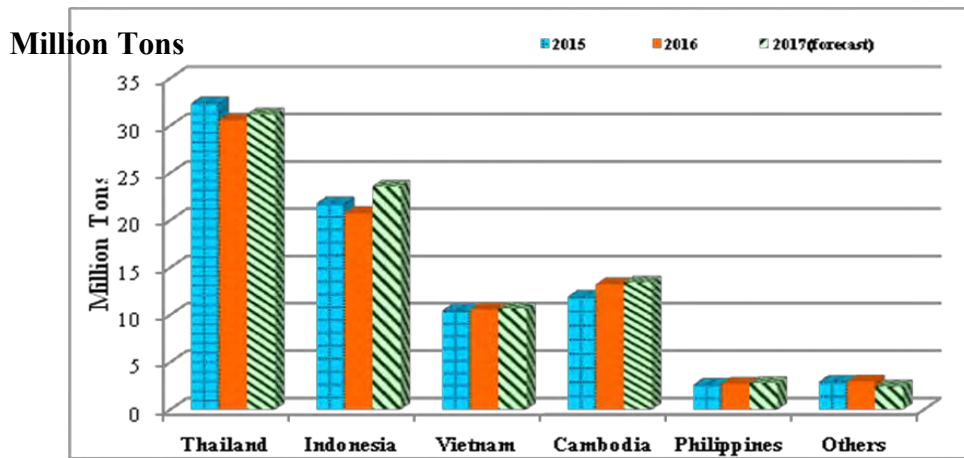


Figure 62 Cassava production of selected countries in ASEAN, 2015-2017

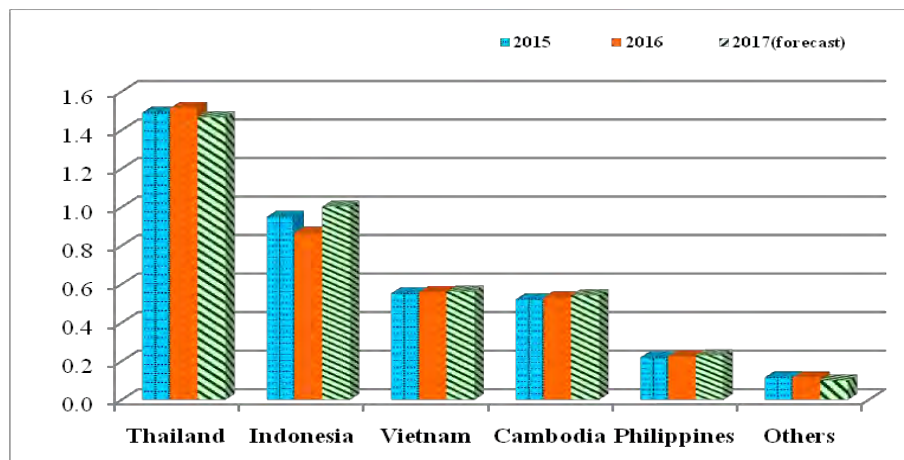


Figure 63 Cassava planted area of selected countries in ASEAN, 2015-2017

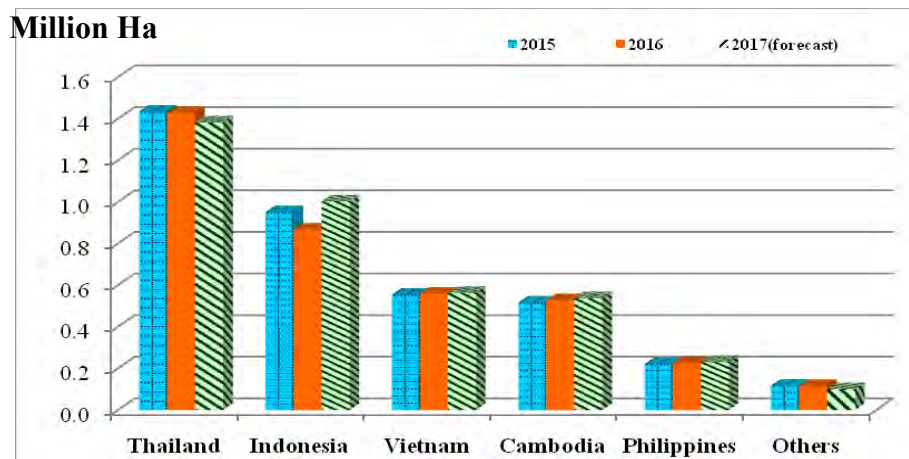


Figure 64 Cassava harvested area of selected countries in ASEAN, 2015-2017

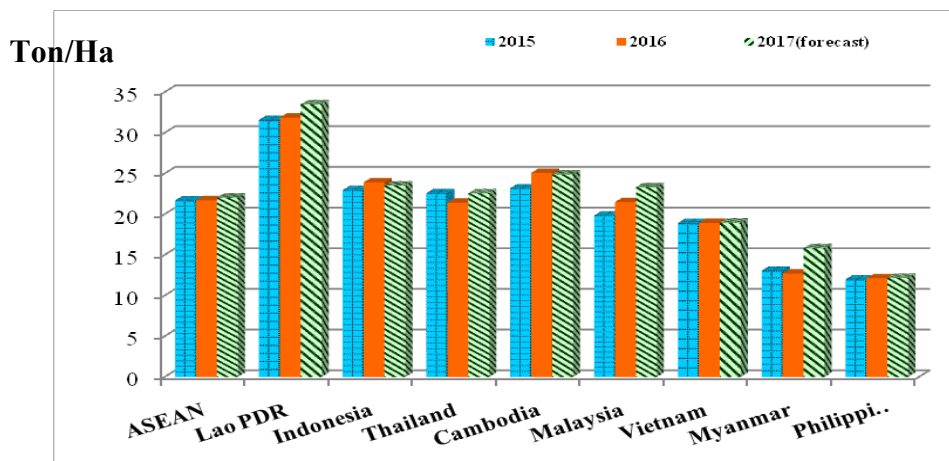


Figure 65 Cassava yield of countries in ASEAN, 2015-2017

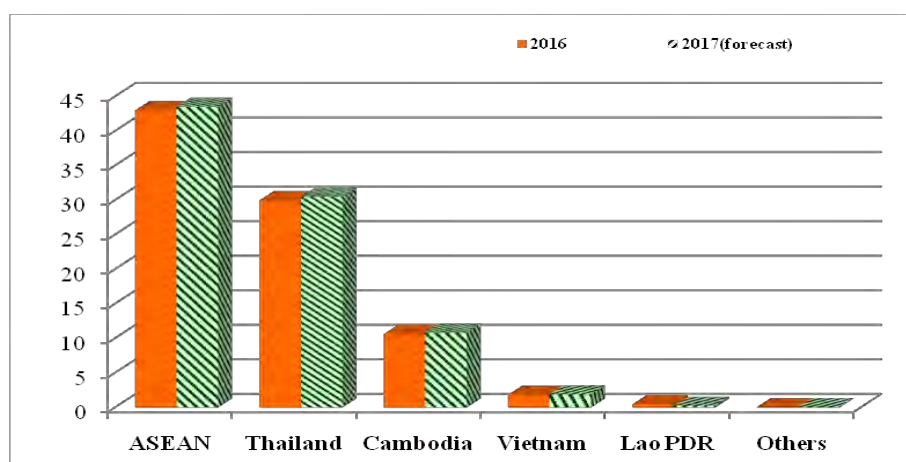


Figure 66 Amount of cassava export (million tons) of selected countries in ASEAN in 2016-2017

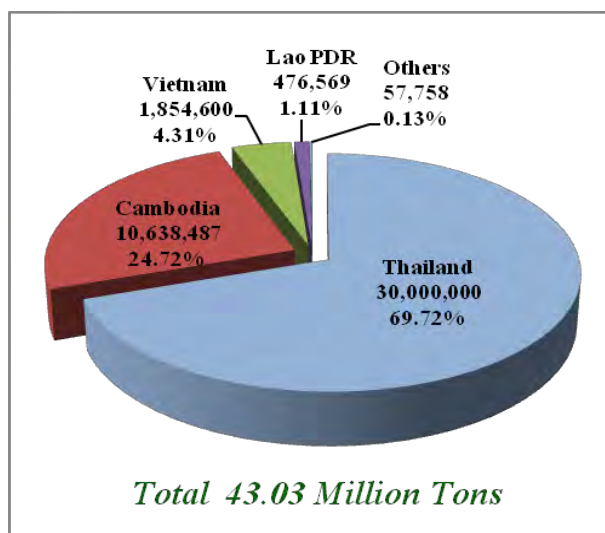


Figure 67 Share of cassava export (tons) among ASEAN countries, 2016

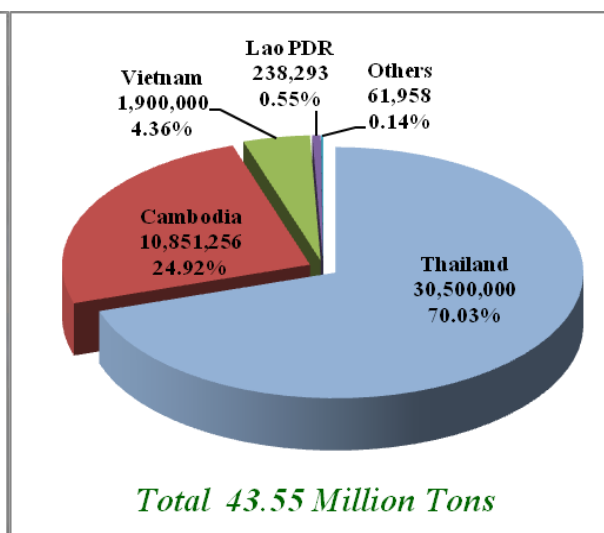


Figure 68 Share of cassava export (tons) among ASEAN countries, 2017

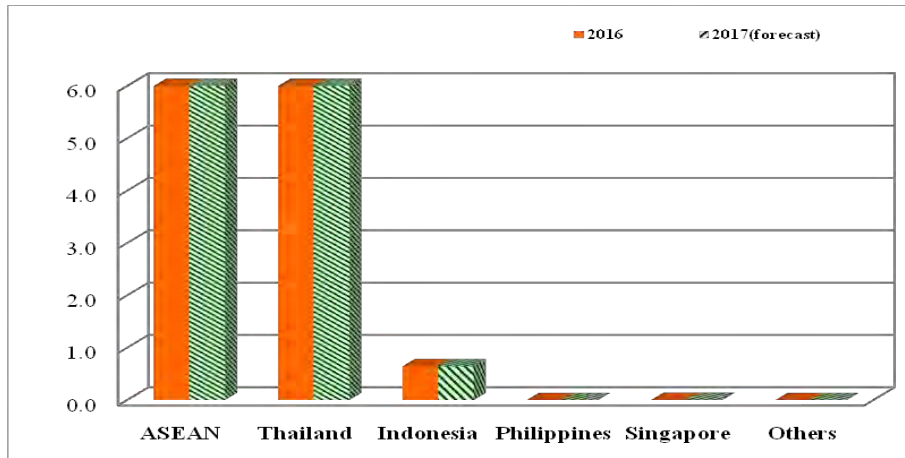


Figure 69 Amount of cassava import (million tons) by selected countries in ASEAN in 2016-2017

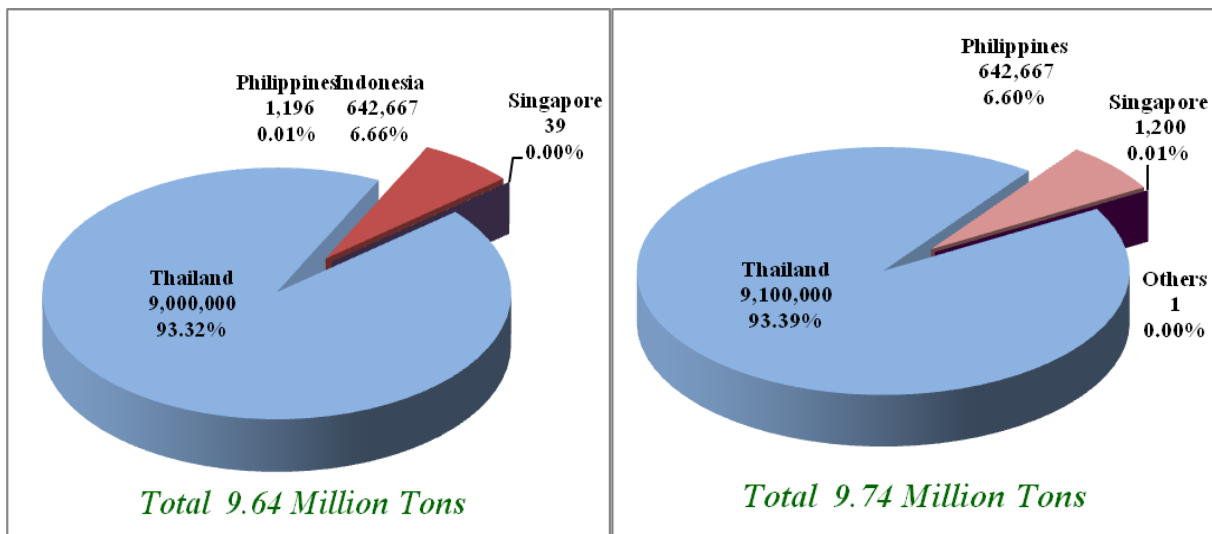


Figure 70 Share of cassava import (tons) among ASEAN countries, 2016

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

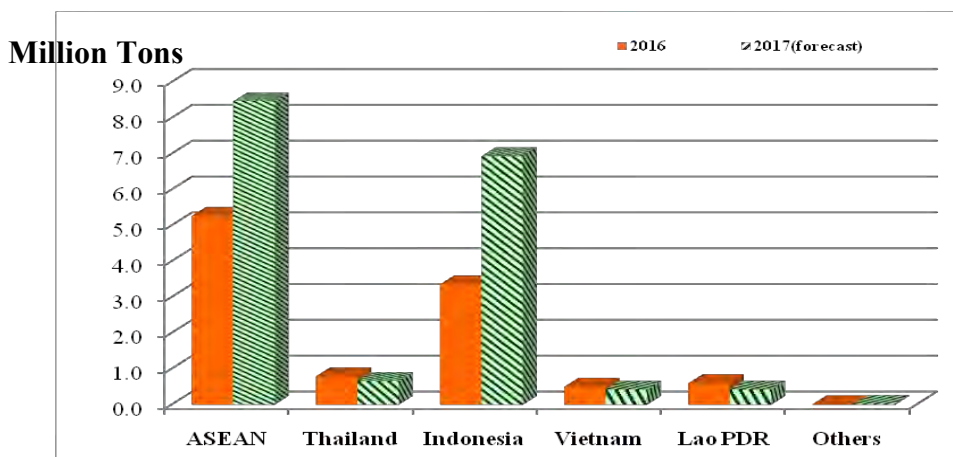


Figure 72 Amount of ending stock of cassava in ASEAN countries in 2016-2017

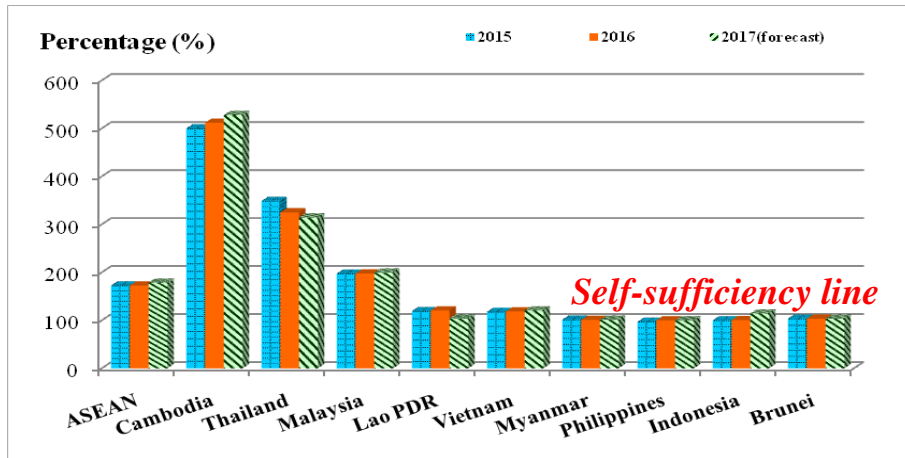


Figure 73 Ratio of cassava production to domestic utilization in ASEAN countries, 2015-2017

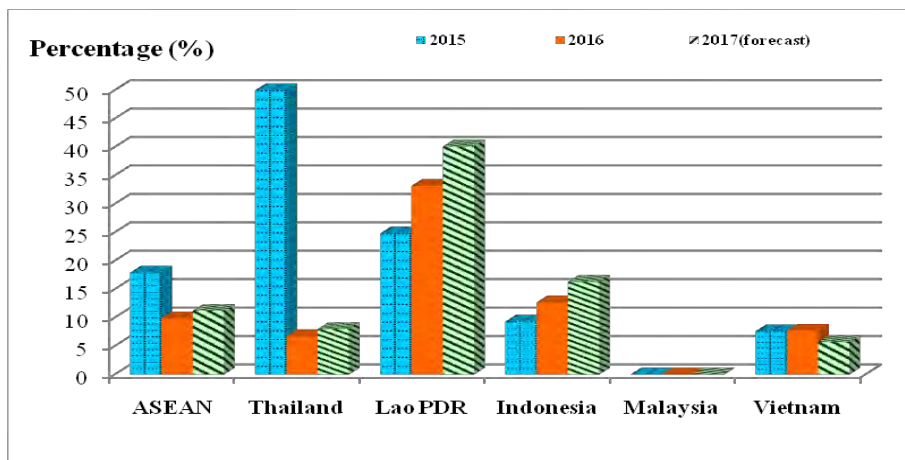


Figure 74 Ratio of cassava beginning stock to domestic utilization in ASEAN countries, 2015-2017

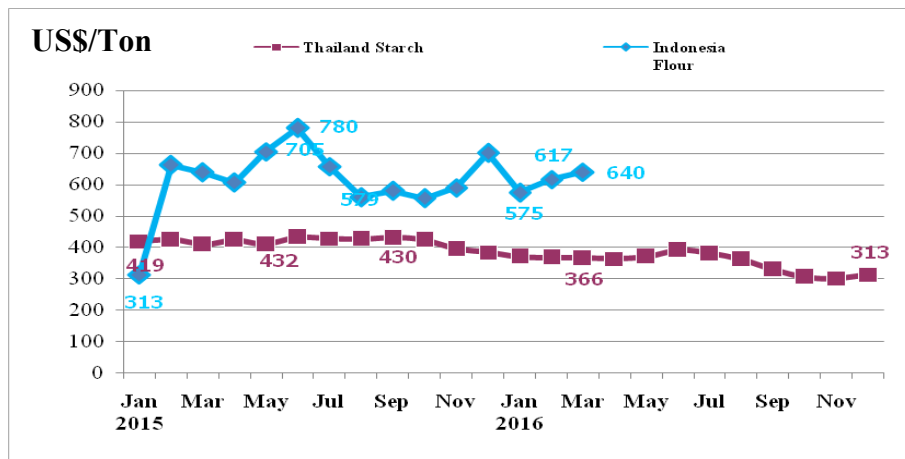


Figure 75 FOB price (US\$/Ton) of cassava flour of selected countries in ASEAN in 2015-2016

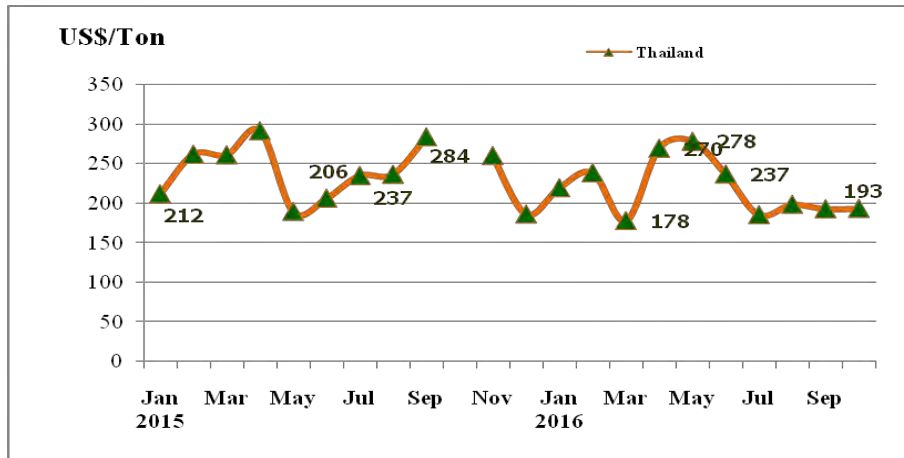


Figure 76 FOB price (US\$/Ton) of cassava pellets of selected countries in ASEAN in 2015-2016

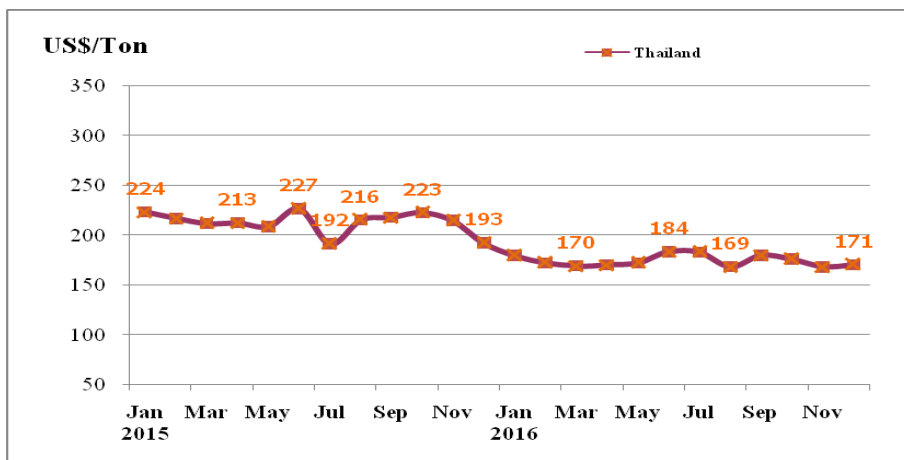


Figure 77 FOB price (US\$/Ton) of cassava shredded of selected countries in ASEAN in 2015-2016

## **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:

- 1<sup>st</sup> crop harvested during January to April 2016.
- 2<sup>nd</sup> crop harvested during May to August 2016.
- 3<sup>rd</sup> 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:

- 1<sup>st</sup> crop harvested during January to March 2016.
- 2<sup>nd</sup> crop harvested during April to September 2016.
- 3<sup>rd</sup> 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:

- 1<sup>st</sup> crop harvested during January to April 2016.
- 2<sup>nd</sup> crop harvested during May to August 2016.
- 3<sup>rd</sup> 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:

- 1<sup>st</sup> crop harvested during January to April 2016.
- 2<sup>nd</sup> crop harvested during May to August 2016.
- 3<sup>rd</sup> 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:

- 1<sup>st</sup> crop harvested during January to June 2016.
- 2<sup>nd</sup> 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

<b>Country</b>	<b>Paddy</b>	<b>Rice</b>
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

<b>Country</b>	<b>Sugarcane</b>	<b>Sugar</b>
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-17 report

Country	2015					2016												2017	
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Brunei	Wet season					←→													
	Dry season																		
Cambodia	Wet season	←→																	
	Dry season					←→													
Indonesia	Wet season					←→	←→								←→	←→			
	Dry season										←→	←→							
Lao PDR	Wet season	←→																	
	Dry season						←→	←→											
Malaysia	Wet season	←→				←→													
	Dry season																		
Myanmar	Wet season	←→																	
	Dry season					←→													
Philippines	Wet season	←→																	
	Dry season					←→													
Thailand	Wet season	←→																	
	Dry season						←→	←→											
Vietnam	Spring							←→ South	←→ North										
	Autumn												←→ North	←→ South					
	Winter														←→ North	←→ South			

## ANNEX 2

Maize crop calendar (harvested months) for crop year 2015/16 (2016) in ACO-17 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 3**

**Sugarcane crop calendar (harvested months) for crop year 2015/16 (2016) in ACO-17 report**

Country	Crop	2015				2016													
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Cambodia																			
Indonesia																			
Lao PDR																			
Myanmar																			
Philippines																			
Thailand																			
Vietnam																			

## ANNEX 4

Soybean crop calendar (harvested months) for crop year 2015/16 (2016) in ACO-17 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																	



