

**ASEAN FOOD SECURITY  
INFORMATION SYSTEM**



# **ASEAN AGRICULTURAL COMMODITY OUTLOOK**

NO.26 JUNE 2021



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**ASEAN FOOD SECURITY  
INFORMATION SYSTEM (AFSIS)**

**Report on**

**ASEAN Agricultural Commodity Outlook**

**No. 26 June 2021**

*Released by  
AFSIS Secretariat  
Office of Agricultural Economics (OAE)  
Ministry of Agriculture and Cooperatives  
Bangkok, Thailand  
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The ACO report activity represents the hard work and well collaboration between the ASEAN member countries. The ACO report No.26 and the previous ACO reports would be beneficial and useful for all ASEAN members, policy makers, and other relevant agencies who need agricultural information for planning and creating the policies to ensure the food security in their countries and the ASEAN region.

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*Thank you*

*Waraporn Saelee*

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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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## Rice Outlook for 2022

### **Highlights**

Rice supply in ASEAN is forecasted to increase about 3.68 percent from 150.43 million tons of milled rice in 2021 to 155.96 million tons in 2022 (Table 1). The increase in supply is mostly due to the increase in production and stock carried over from the previous year.

The rice production in 2022 is forecasted to be 124.57 million tons, increasing from 122.70 million tons in 2021, or 1.53 percent increase.

The beginning stock is forecasted to increase 15.59 percent or 3.63 million tons from 23.28 million tons in 2021 to 26.91 million tons in 2022. The import is expected to increase 0.45 percent or 0.02 million tons from 4.46 million tons in 2021 to 4.48 million tons in 2022.

Considering only available data, rice export is expected to increase 0.94 percent from 14.97 million tons in 2021 to 15.11 million tons in 2022.

The ratio of production to domestic utilization (self-sufficiency ratio) for the region is expected to be 113.77 percent in 2022. The beginning stock to domestic utilization ratio (food security ratio) is estimated to be 24.58 percent in 2022 (Table 1).

**Table 1 Summary of the ASEAN rice situation, 2021-2022 (milled rice)**

Unit: Million tons

Items	2021	2022	Change	
			Quantity	%
Supply (Million tons)	150.43	155.96	5.53	3.68
Beginning stock	23.28	26.91	3.63	15.59
Production	122.70	124.57	1.88	1.53
Import	4.46	4.48	0.02	0.45
Demand (Million tons)	150.43	155.96	5.53	3.68
Domestic utilization	108.55	109.50	0.95	0.88
Export	14.97	15.11	0.14	0.94
Ending stock	26.91	31.36	4.45	16.54
Ratio of production to domestic utilization (%)	113.03	113.77	0.74	-
Ratio of beginning stock to domestic utilization (%)	21.44	24.58	3.14	-

## ASEAN Rice Situation in 2021

### ► *Production*

*ASEAN paddy production in 2021 (crop year 2020/21) was estimated at 191.28 million tons, increasing 3.79 million tons or 2.02 percent from 187.49 million tons in 2020 (crop year 2019/20). The increase was due to the increasing in planted area and harvested area. The increase in production was found in Thailand, Vietnam, Indonesia, the Philippines, Lao PDR, Cambodia, and Brunei (Table 2-5, Figure 1-4).*

For **Brunei**, the increase in production is attributed to the increase in planted area and harvested area. The increase in planted area came from government policy, which is the expansion of new rice farming areas in Kandol. The remaining in yield was because farmers used more fertilizer, improved varieties, and took better care of the rice crop.

For **Cambodia**, the increase in production was due to the increase in planted area, harvested area, and yield. The increase in planted area came from farmers' response to price increases. The increase in harvested area and yield was because farmers used more fertilizer and took better care of the rice crop together with favorable weather.

For **Indonesia**, the increase in production is attributed to the increase in planted area. The increase in planted area came from favorable weather and government policy.

For **Lao PDR**, the increase in production is attributed to the increase in harvested area and yield. The increase in harvested area came from government policy and favorable weather. The increase in yield came from government policy together with better taking care of the crops by farmers.

For **Malaysia**, the decrease in production was due to the decrease in yield caused by pests and diseases.

For **Myanmar**, the decrease in production is attributed to the decrease in planted area and harvested area. The planted area of wet season crop decreased due to unfavorable weather affected by heavy rainfall. While, the planted area of dry season crop decreased due to lack of water supply.

For **the Philippines**, the increase in production came from the increase in planted area, harvested area, and yield because farmers used more improved varieties and took better care of the rice crop.

For **Thailand**, the increase in production was due to the expansion of planted area and harvested area as a result of favorable weather and farmers' response to price increases.

For **Vietnam**, the increase in production was due to the rise in planted area, harvested area, and yield, which was caused by favorable weather and better care of the rice crop by farmers.

### ► *Utilization and Stock*

The domestic utilization of rice (milled rice) within ASEAN in 2021 (calendar year) was estimated to be 108.55 million tons, which increased from 107.55 million tons in 2020. The increase was about 1.00 million tons or 0.93 percent (Table 7-8).

The ratio of production to domestic utilization (self-sufficient ratio) of ASEAN in 2021 was estimated at 113.03 percent compared to 111.74 percent in 2020. This indicated that rice production in ASEAN in year 2021, aggregately, is sufficient for rice demand in ASEAN. The increase in the self-sufficient ratio of production to domestic utilization occurred in Indonesia, Lao PDR, the Philippines, and Vietnam. While the self-sufficient ratio of Brunei, Cambodia, Malaysia, Myanmar, and Thailand decreased.

However, on the country-by-country basis, some countries in the region still need to import rice for their domestic consumption. The highest ratio was found in Cambodia, Thailand, and Vietnam, respectively, while the lowest ratio was in Singapore (Table 10, Figure 12).

The beginning stock in 2021 (January 2021) of ASEAN was estimated at 23.28 million tons, increasing 1.06 million tons from 22.22 million tons in 2020 or 4.75 percent. Myanmar carried 9.16 million tons or 39.35 percent of the ASEAN stock, followed by Thailand with 4.64 million tons or 19.93 percent of the total stock in ASEAN (Table 7-8).

The ratio of the beginning stock to the domestic utilization in 2021 for the whole ASEAN was estimated at 21.44 percent, which increased about 0.78 percent from the previous year. Brunei, Cambodia, Myanmar, Myanmar, and Thailand have the-ratios above 20 percent of the optimum level (Table 11, Figure 13).

### ► *Trade*

In 2021, ASEAN as a whole exported 14.97 million tons of milled rice, which decreased of 0.67 million tons or 4.30 percent from 15.64 million tons exported in 2020. Vietnam and Thailand, the two major exporting countries, exported about 7.11 million tons and 6.00 million tons, respectively (Table 7-8, Figure 5-6).

The total import by ASEAN in 2021 is estimated to be 4.46 million tons, an increase of 0.39 million tons or about 9.54 percent from 4.07 million tons in 2020. The Philippines was the biggest importer in the region, which imported 2.00 million tons of milled rice (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 2020-2021 (January-December) are shown in Table 14-15 and Figure 14- 16.

### ► *Damaged Area*

The damaged area of paddy in ASEAN in 2021 (crop year 2020/21) was estimated to be 1.06 million hectares. Of which, 0.84 million hectares or 78.79 percent were caused by drought. The damage caused by drought occurred mostly in Thailand, which equals to 0.74 million hectares or 88.08 percent of the whole ASEAN. The damage was also caused by many factors such as flood, pests, and diseases (Table 6).



## Prospects for Rice in 2022

### ► Production

ASEAN paddy production in 2022 (crop year 2021/22) is estimated at 193.95 million tons, increasing by 2.67 million tons, which is 1.39 percent from 191.28 million tons in 2021 (crop year 2020/21) by assuring without extreme natural disasters. The production is predicted to increase in all countries, except Myanmar and Vietnam, which are caused by the increase in either planted area or yield (Table 2-5, Figure 1-4).

### ► Utilization and Stock

The domestic utilization of milled rice in ASEAN in 2022 is projected to be 109.50 million tons, increasing about 0.94 million tons or 0.87 percent compared to 108.55 million tons in 2021 (Table 8-9).

The beginning stock in 2022 is predicted to be 26.91 million tons, which increased by 3.63 million tons or 15.60 percent from 23.28 million tons in 2021. The ending stock is also expected to increase by 4.45 million tons or 16.54 percent from 26.91 million tons in 2021 to 31.36 million tons in 2022 (Table 8-9, Figure 11).

The ratio of production to domestic utilization is forecasted to be 113.77 percent in 2022, which will increase by 0.74 percent from 2021. This indicates 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 2022 is forecasted to increase from 21.44 percent in 2021 to 24.58 percent in 2022 (Table 11, Figure 13).

### ► Trade

With missing data from some countries, rice import from ASEAN is forecasted to increase from 4.46 million tons in 2021 to 4.48 million tons in 2022 (Table 8-9, Figure 8 and 10).

For the export, the whole ASEAN is forecasted to export 15.11 million tons in 2022, increasing of 0.14 million tons or about 0.94 percent compared to 14.97 million tons in 2021 (Table 8-9, Figure 5 and 7).

**Table 2 Paddy production in ASEAN countries, 2020 - 2022**

Unit: 1,000 Tons

Country	2020 (2019/20)	2021 (2020/21)	Change 2020 over 2021		2022 (2021/22)	Change 2021 over 2022	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>187,488.04</b>	<b>191,280.20</b>	<b>3,792.17</b>	<b>2.02</b>	<b>193,946.25</b>	<b>2,666.05</b>	<b>1.39</b>
Brunei	3.86	4.06	0.19	5.00	4.26	0.20	5.00
Cambodia	10,885.73	10,935.62	49.89	0.46	10,957.49	21.87	0.20
Indonesia	54,649.20	55,534.45	885.25	1.62	57,449.83	1,915.37	3.45
Lao PDR	3,506.81	3,816.79	309.98	8.84	4,076.59	259.80	6.81
Malaysia	2,321.64	2,293.80	-27.84	-1.20	2,306.88	13.08	0.57
Myanmar	26,269.65	25,991.26	-278.38	-1.06	*25,715.60	-275.66	-1.06
Philippines	18,932.13	19,546.46	614.33	3.24	*19,546.46	0.00	0.00
Singapore	N/A						
Thailand	28,617.95	29,811.21	1,193.26	4.17	*30,799.34	988.13	3.31
Vietnam	42,301.07	43,346.56	1,045.49	2.47	43,089.81	-256.74	-0.59

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 3 Paddy planted area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2020 over 2021		2022 (2021/22)	Change 2021 over 2022	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>45,592.50</b>	<b>46,229.77</b>	<b>637.26</b>	<b>1.40</b>	<b>46,427.41</b>	<b>197.65</b>	<b>0.43</b>
Brunei	1.42	1.49	0.07	5.00	1.57	0.07	5.00
Cambodia	3,328.85	3,404.13	75.28	2.26	3,421.15	17.02	0.50
Indonesia	10,744.85	10,934.71	189.86	1.77	11,213.99	279.28	2.55
Lao PDR	1,064.32	961.50	-102.82	-9.66	956.58	-4.92	-0.51
Malaysia	645.51	677.91	32.39	5.02	676.61	-1.29	-0.19
Myanmar	7,003.92	6,961.94	-41.98	-0.60	*6,922.20	-39.74	-0.57
Philippines	4,637.26	4,780.52	143.26	3.09	*4,852.23	71.71	1.50
Singapore	N/A						
Thailand	10,966.27	11,232.07	265.80	2.42	*11,154.99	-77.08	-0.69
Vietnam	7,200.11	7,275.50	75.39	1.05	7,228.10	-47.40	-0.65

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 4 Paddy harvested area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2020 over 2021		2022 (2021/22)	Change 2021 over 2022	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>44,066.40</b>	<b>45,167.20</b>	<b>1,100.80</b>	<b>2.50</b>	<b>45,401.09</b>	<b>233.89</b>	<b>0.52</b>
Brunei	1.33	1.40	0.07	5.00	1.47	0.07	5.00
Cambodia	3,263.77	3,268.97	5.19	0.16	3,285.31	16.34	0.50
Indonesia	10,657.27	10,876.65	219.37	2.06	11,213.99	337.34	3.10
Lao PDR	929.93	961.50	31.57	3.39	956.58	-4.92	-0.51
Malaysia	643.09	677.91	34.81	5.41	676.61	-1.29	-0.19
Myanmar	6,921.02	6,830.07	-90.95	-1.31	*6,740.49	-89.58	-1.31
Philippines	4,637.26	4,780.52	143.26	3.09	*4,852.23	71.71	1.50
Singapore	N/A						
Thailand	9,812.61	10,494.69	682.08	6.95	*10,446.32	-48.37	-0.46
Vietnam	7,200.11	7,275.50	75.39	1.05	7,228.10	-47.40	-0.65

Remark: \* The value is estimated by AFSIS Secretariat, \*\* Vietnam reported only planted area. N/A refers to data that is not available.

**Table 5 Paddy yield in ASEAN countries, 2020 – 2022**

Unit: Ton/Hectare

Country	2020 (2019/20)	2021 (2020/21)	Change 2020 over 2021		2022 (2021/22)	Change 2021 over 2022	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>4.25</b>	<b>4.23</b>	<b>-0.02</b>	<b>-0.47</b>	<b>4.27</b>	<b>0.04</b>	<b>0.95</b>
Brunei	2.91	2.91	0.00	0.00	2.91	0.00	0.00
Cambodia	3.34	3.35	0.01	0.30	3.34	-0.01	-0.30
Indonesia	5.13	5.11	-0.02	-0.39	5.12	0.01	0.20
Lao PDR	3.77	3.97	0.20	5.31	4.26	0.29	7.30
Malaysia	3.61	3.38	-0.23	-6.37	3.41	0.03	0.89
Myanmar	3.80	3.81	0.01	0.26	*3.82	0.01	0.26
Philippines	4.08	4.09	0.01	0.25	*4.03	-0.06	-1.47
Singapore	N/A						
Thailand	2.92	2.84	-0.08	-2.74	*2.95	0.11	3.87
Vietnam	5.88	5.96	0.08	1.36	5.96	0.00	0.00

Remark: Yield related to harvested area except Vietnam which related to planted area, \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 6 Paddy damaged area in ASEAN by cause of damage, 2021**

Unit: Hectares

Country	Cause of Damage (Hectares)						Total
	Flood	Drought	Pests	Diseases	Other	Unspecified	
<b>ASEAN</b>	<b>214,535</b>	<b>837,173</b>	<b>2,124</b>	<b>1,298</b>	<b>2,051</b>	<b>5,385</b>	<b>1,062,565</b>
Brunei	19	16	26	32	-	5	97
Cambodia	121,934	7,034	815	-	-	5,380	135,163
Indonesia	53,716	1,811	1,266	1,266		-	58,059
Lao PDR	N/A						
Malaysia	N/A						
Myanmar	38,866	90,932	17	-	2,051	-	131,866
Philippines							N/A
Singapore	N/A						
Thailand	-	737,380	-	-	-	-	737,380
Vietnam	N/A						

Remark: N/A refers to data that is not available.

**Table 7 Rice balance sheet of ASEAN countries, 2020 (milled rice)**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>22,222,403</b>	<b>120,174,912</b>	<b>4,067,769</b>	<b>146,465,084</b>	<b>107,548,121</b>	<b>15,639,381</b>	<b>23,277,582</b>	<b>146,465,084</b>
Brunei	15,486	2,511	34,082	52,079	30,517	-	21,563	52,079
Cambodia	519,149	6,998,796	-	7,517,945	3,222,129	690,829	3,604,987	7,517,945
Indonesia	2,012,085	34,286,909	17,018	36,316,013	35,334,107	258	981,647	36,316,012
Lao PDR	279,600	2,104,087	25,960	2,409,647	2,193,344	21,770	194,533	2,409,647
Malaysia	-	1,485,847	1,212,410	2,698,257	2,640,007	58,251	-	2,698,257
Myanmar	9,201,629	16,581,400	-	25,783,029	14,829,880	1,794,102	9,159,047	25,783,029
Philippines	*2,675,000	*12,618,000	*2,099,000	*17,392,000	*15,060,000	-	*2,332,000	*17,392,000
Singapore	-	-	396,357	396,357	295,960	100,397	-	396,357
Thailand	*4,540,000	18,601,666	45,244	23,186,910	12,822,250	5,724,660	*4,640,000	23,186,910
Vietnam	2,979,454	27,495,695	237,697	30,712,846	21,119,927	7,249,114	2,343,805	30,712,846

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 8 Rice balance sheet of ASEAN countries, 2021 (milled rice)**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>23,277,582</b>	<b>122,695,085</b>	<b>4,455,986</b>	<b>150,428,653</b>	<b>108,551,794</b>	<b>14,967,556</b>	<b>26,909,303</b>	<b>150,428,654</b>
Brunei	21,563	2,637	31,575	55,775	32,777	-	22,998	55,775
Cambodia	3,604,987	7,012,794	-	10,617,781	3,985,561	806,466	5,825,754	10,617,781
Indonesia	981,647	34,842,316	19,641	35,843,604	34,443,617	246	1,399,742	35,843,605
Lao PDR	194,533	2,290,074	26,574	2,511,181	2,283,640	17,117	210,424	2,511,181
Malaysia	-	1,468,033	*1,230,596	2,698,629	*2,650,000	*48,629	-	2,698,629
Myanmar	9,159,047	*16,405,684	-	25,564,731	*14,817,485	*894,737	*9,852,509	25,564,731
Philippines	*2,332,000	*13,121,000	*2,000,000	*17,453,000	*15,080,000	-	*2,373,000	*17,453,000
Singapore	-	-	356,735	356,735	266,374	90,361	-	356,735
Thailand	*4,640,000	19,377,284	*35,221	24,052,505	13,612,505	*6,000,000	*4,440,000	24,052,505
Vietnam	2,343,805	28,175,264	755,644	31,274,712	21,379,836	7,110,000	2,784,876	31,274,712

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 9 Rice balance sheet of ASEAN countries, 2022 (milled rice)**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>26,909,303</b>	<b>124,573,413</b>	<b>4,480,868</b>	<b>155,963,584</b>	<b>109,496,270</b>	<b>15,108,059</b>	<b>31,359,254</b>	<b>155,963,583</b>
Brunei	22,998	2,769	32,523	58,289	33,813	-	24,477	58,289
Cambodia	5,825,754	7,026,819	-	12,852,573	4,210,657	830,294	*7,811,622	12,852,573
Indonesia	1,399,742	36,044,021	*18,330	37,462,092	34,944,947	252	2,516,893	37,462,092
Lao PDR	210,424	2,445,953	25,538	2,681,915	2,258,017	24,175	399,723	2,681,915
Malaysia	-	1,476,401	*1,237,611	2,714,011	*2,650,000	*64,011	-	2,714,011
Myanmar	9,852,509	16,231,688	-	26,084,196	14,810,679	943,948	10,329,569	26,084,196
Philippines	*2,373,000	*13,317,815	*2,000,000	*17,690,815	*15,100,027	-	*2,590,788	*17,690,815
Singapore	-	-	376,546	376,546	281,167	95,379	-	376,546
Thailand	*4,440,000	20,019,569	*33,921	24,493,490	*13,696,600	*6,150,000	*4,646,890	24,493,490
Vietnam	2,784,876	28,008,379	756,399	31,549,655	21,510,363	7,000,000	3,039,291	31,549,655

Remark: \* The value is estimated by AFSIS Secretariat.



**Table 10 Ratio of rice production to domestic utilization in ASEAN countries (Self-sufficiency ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>120,174,912</b>	<b>107,548,121</b>	<b>111.74</b>	<b>122,695,085</b>	<b>108,551,794</b>	<b>113.03</b>	<b>124,573,413</b>	<b>109,496,270</b>	<b>113.77</b>
Brunei	2,511	30,517	8.23	2,637	32,777	8.04	2,769	33,813	8.19
Cambodia	6,998,796	3,222,129	217.21	7,012,794	3,985,561	175.96	7,026,819	4,210,657	166.88
Indonesia	34,286,909	35,334,107	97.04	34,842,316	34,443,617	101.16	36,044,021	34,944,947	103.15
Lao PDR	2,104,087	2,193,344	95.93	2,290,074	2,283,640	100.28	2,445,953	2,258,017	108.32
Malaysia	1,485,847	2,640,007	56.28	1,468,033	2,650,000	55.40	1,476,401	2,650,000	55.71
Myanmar	16,581,400	14,829,880	111.81	16,405,684	14,817,485	110.72	16,231,688	14,810,679	109.59
Philippines	12,618,000	15,060,000	83.78	13,121,000	15,080,000	87.01	13,317,815	15,100,027	88.20
Singapore	-	295,960	-	-	266,374	-	-	281,167	-
Thailand	18,601,666	12,822,250	145.07	19,377,284	13,612,505	142.35	20,019,569	13,696,600	146.16
Vietnam	27,495,695	21,119,927	130.19	28,175,264	21,379,836	131.78	28,008,379	21,510,363	130.21

[8] **Table 11 Ratio of rice beginning stock to domestic utilization in ASEAN countries, 2020– 2022**

Unit: Tons

Country	2020			2021			2022		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>22,222,403</b>	<b>107,548,121</b>	<b>20.66</b>	<b>23,277,582</b>	<b>108,551,794</b>	<b>21.44</b>	<b>26,909,303</b>	<b>109,496,270</b>	<b>24.58</b>
Brunei	15,486	30,517	50.74	21,563	32,777	65.79	22,998	33,813	68.02
Cambodia	519,149	3,222,129	16.11	3,604,987	3,985,561	90.45	5,825,754	4,210,657	138.36
Indonesia	2,012,085	35,334,107	5.69	981,647	34,443,617	2.85	1,399,742	34,944,947	4.01
Lao PDR	279,600	2,193,344	12.75	194,533	2,283,640	8.52	210,424	2,258,017	9.32
Malaysia	-	2,640,007	-	-	2,650,000	-	-	2,650,000	0.00
Myanmar	9,201,629	14,829,880	62.05	9,159,047	14,817,485	61.81	9,852,509	14,810,679	66.52
Philippines	2,675,000	15,060,000	17.76	2,332,000	15,080,000	15.46	2,373,000	15,100,027	15.72
Singapore	-	295,960	-	-	266,374	0.00	-	281,167	0.00
Thailand	4,540,000	12,822,250	35.41	4,640,000	13,612,505	34.09	4,440,000	13,696,600	32.42
Vietnam	2,979,454	21,119,927	14.11	2,343,805	21,379,836	10.96	2,784,876	21,510,363	12.95

**Table 12 Quantity and Value of Rice Export by Countries of Destination in 2021**

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	N/A													
Cambodia	N/A													
Indonesia														
Lao PDR														
Malaysia	64	106,702			57,498	95,752,114								
Myanmar									21,970	186,591.21			92,419	3,410,723
Philippines														
Singapore	N/A													
Thailand	3,234	2,413,969	1,613	745,279	24,865	14,267,798	10,036	3,271,438	23,645	11,938,956	60	26,324	22,965	11,408,873
Vietnam					8,320	4,260			113,252	60,330			715,717	381,439

[6]

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	N/A											
Cambodia	N/A											
Indonesia								30	82,905	30	82,905	
Lao PDR			1,892	994,559	6,949	3,552,032	8,841	4,546,591	8,276	4,901,163	17,117	9,447,755
Malaysia	207.0	344,719					57,769	96,203,535	481	801,153	58,251	97,004,688
Myanmar	2,927	3,474.35	1,904	1,540.34	16,905	100,415.70	136,125	3,702,745	758,612	230,712,238	894,737	234,414,982
Philippines									121	154,822	121	154,822
Singapore	N/A											
Thailand	29,242	26,267,714			3,703	2,329,263	119,363	72,669,615	1,339,620	826,814,566	1,458,983	899,484,181
Vietnam	37,686	21,877					874,975	467,906	1,098,073	604,210	1,973,048	1,072,116

**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 2021**

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	N/A													
Cambodia	N/A													
Indonesia														
Lao PDR														
Malaysia			67,420	137,409,145	63	129,361					81,725	166,563,560		
Myanmar	N/A													
Philippines			2,508	882,594	16	119,976					32,217	12,069,168		
Singapore			5,587	4,374,993	49	74,692			187	124,138	4,722	2,122,695		
Thailand											432,000	88,822	0.002	31
Vietnam			-	144,600,000			-	2,103,335				2,757,500	-	3,769

[10]

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	N/A											
Cambodia	N/A											
Indonesia					1,300	719,859	1,300	719,859	1,647.71	1,663,228	2,948	2,383,087
Lao PDR			6,529	2,304,469	7,008	2,394,261	13,537	4,698,730	13,037	5,589,095	26,574	10,287,825
Malaysia	107.4	218,943	80,426	163,915,260	510,186	1,039,807,011	739,928	1,508,043,280	472,482	962,961,532	1,212,410	2,471,004,812
Myanmar	N/A											
Philippines	955.6	273579	30,130	12,770,716	717,698	291,914,832	783,524	318,030,865	10,246	17,342,724	793,770	335,373,589
Singapore			90,494	86,002,254	113,565	68,859,347	214,604	161,558,118	142,132	84,927,738	356,735	246,485,856
Thailand	0.007	42			612	355,010	1,044	443,905	10,696	3,789,525	11,740	4,233,430
Vietnam	-	3,224,558	-	1,835,427			-	154,524,589		97,356,589	-	251,881,178

**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**

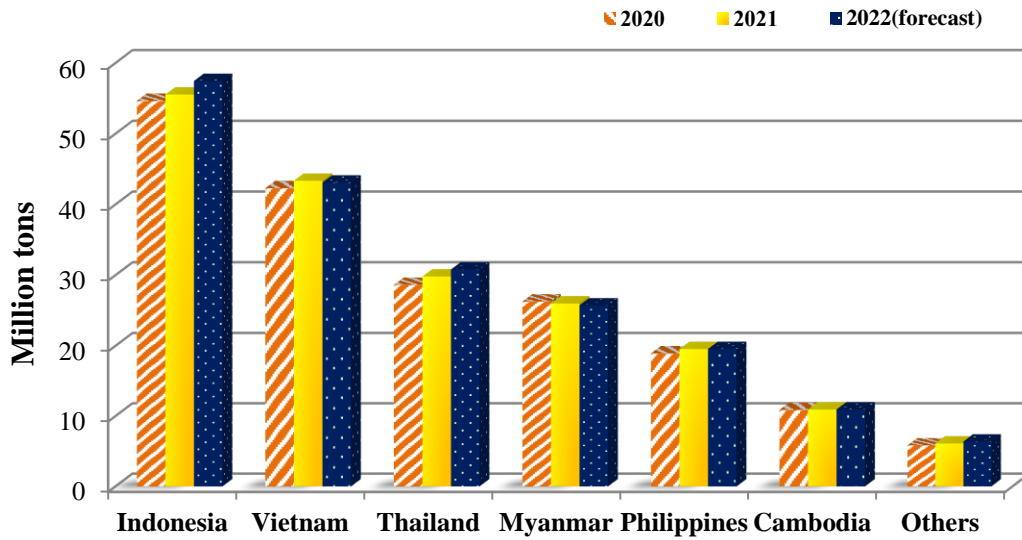
Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
<b>Cambodia</b>	Not specified	2020	1,400	1,400	1,375	1,347	1,400	1,400	1,400	1,400	1,400	1,400	1,390	1,380	1,391
		2021	N/A												
<b>Indonesia</b>	Not specified	2020	N/A	1,990	1,181	2,122	1,923	2,039	2,274	N/A	N/A	2,222	2,724	1,433	1,990
		2021	N/A	2,787	N/A	2,750	-	-	-	-	-	-	-	-	--
<b>Lao PDR</b>	Hom mali Rice-A	2020	563	590	593	539	534	508	527	550	651	596	578	547	565
		2021	580	551	558	570	580	-	-	-	-	-	-	-	-
<b>Malaysia</b>	Not specified	2020	1,051	896	1,000	5,538	403	388	401	405	392	389	396	372	969
		2021	N/A												
<b>Myanmar</b>	Milled Rice 25%	2020	300	313	322	342	367	397	387	379	403	403	395	408	368
		2021	399	416	423	-	-	-	-	-	-	-	-	-	-
<b>Thailand</b>	Milled Rice 5%	2020	451	457	517	564	509	521	474	512	504	471	499	523	500
		2021	545	557	525	495	492	-	-	-	-	-	-	-	-
	Hom mali Rice	2020	1,088	1,056	1,039	1,126	1,097	1,084	1,008	990	923	914	887	897	1,009
		2021	900	891	845	810	783	-	-	-	-	-	-	-	-
<b>Vietnam</b>	Milled Rice 5%	2020	486	447	459	499	516	505	484	998	508	529	538	534	542
		2021	N/A												

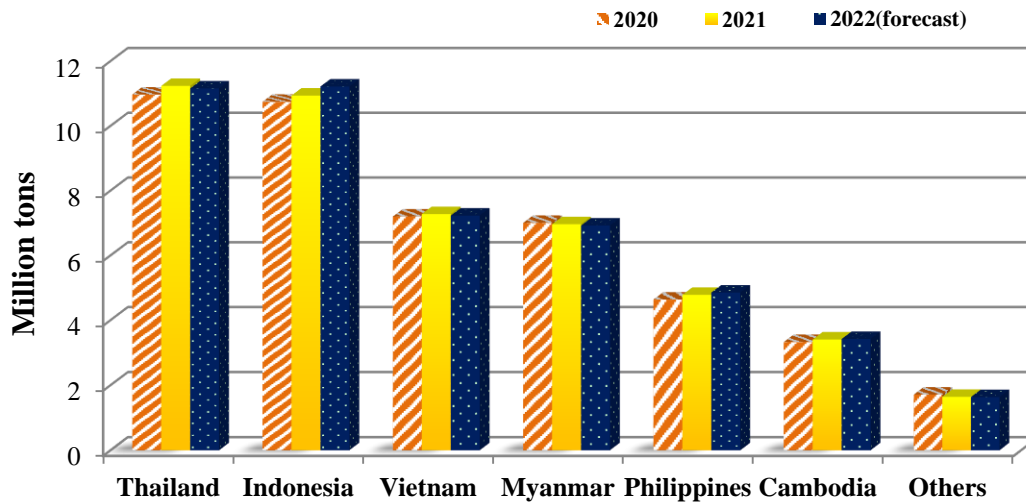
**Table 15 CIF Price of rice in selected ASEAN countries**

Unit: US\$/Ton

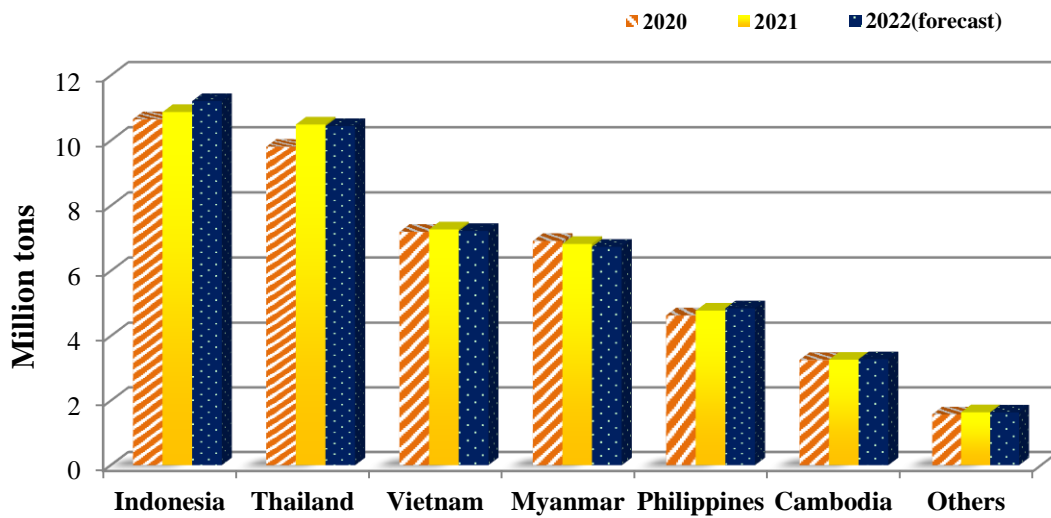
Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
<b>Indonesia</b>	Not specified	2020	512	N/A	N/A	N/A	533	537	458	652	507	592	356	636	531
		2021	896	1,200	684	800	-	-	-	-	-	-	-	-	-
<b>Malaysia</b>	Not specified	2020	494	471	448	464	531	508	491	468	468	505	458	487	483
		2021	N/A												
<b>Lao PDR</b>	Hom mali Rice	2020	646	682	675	677	560	520	634	723	740	734	640	510	645
		2021	537	623	540	545	484	-	-	-	-	-	-	-	-
<b>Singapore</b>	Not specified	2020	724	731	811	863	858	867	757	738	704	662	653	666	753
		2021	689	679	725	681	679	-	-	-	-	-	-	-	-



**Figure 1 Paddy production of selected countries in ASEAN, 2020 – 2022**



**Figure 2 Paddy planted area of selected countries in ASEAN, 2020 – 2022**



**Figure 3 Paddy harvested area of selected countries in ASEAN, 2020 – 2022**

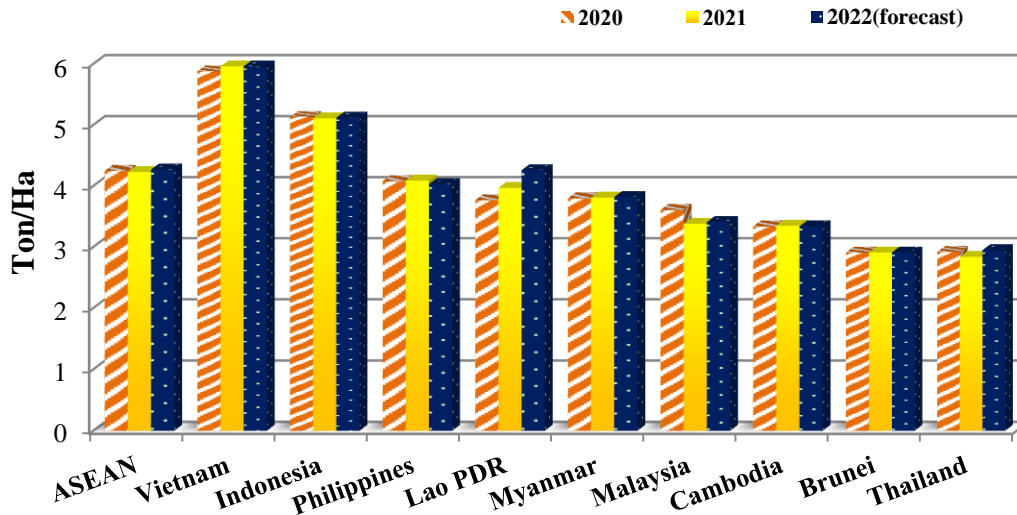


Figure 4 Paddy yield of countries in ASEAN, 2020 – 2022

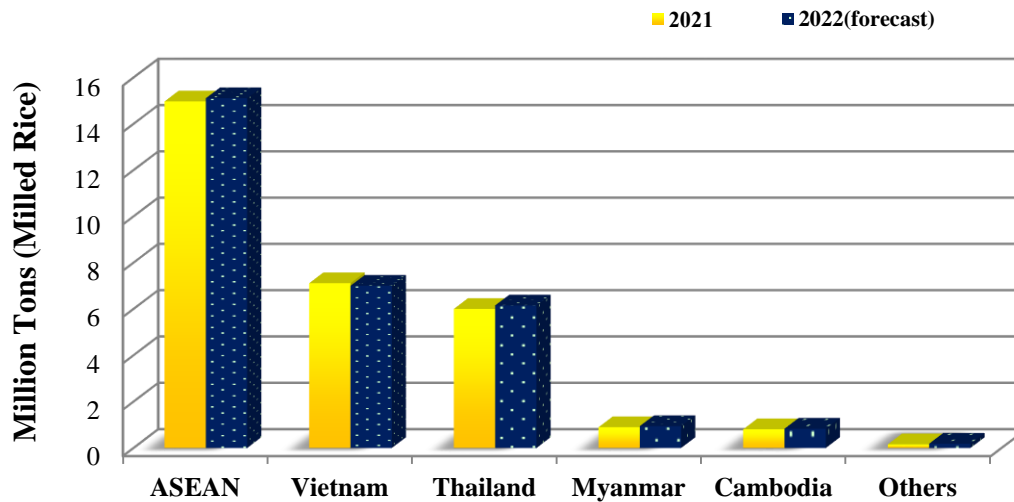
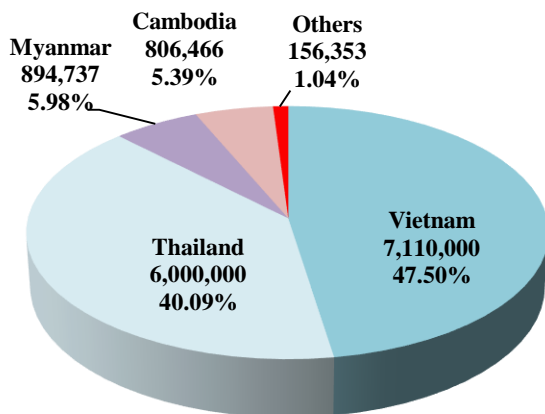
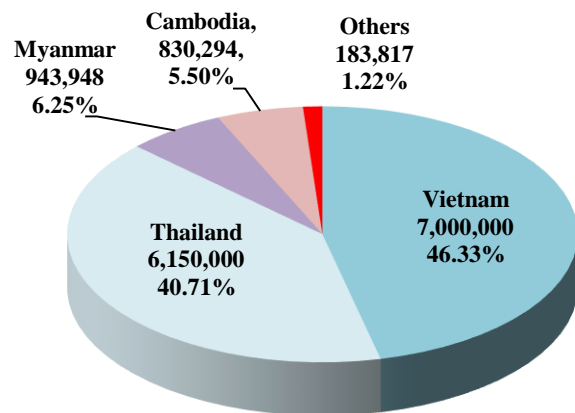


Figure 5 Amount of rice export (million tons) of selected countries in ASEAN in 2021 – 2022



*Total 14.97 million tons*

Figure 6 Share of rice export (tons) among ASEAN countries, 2021



*Total 15.11 million tons*

Figure 7 Share of rice export (tons) among ASEAN countries, 2022

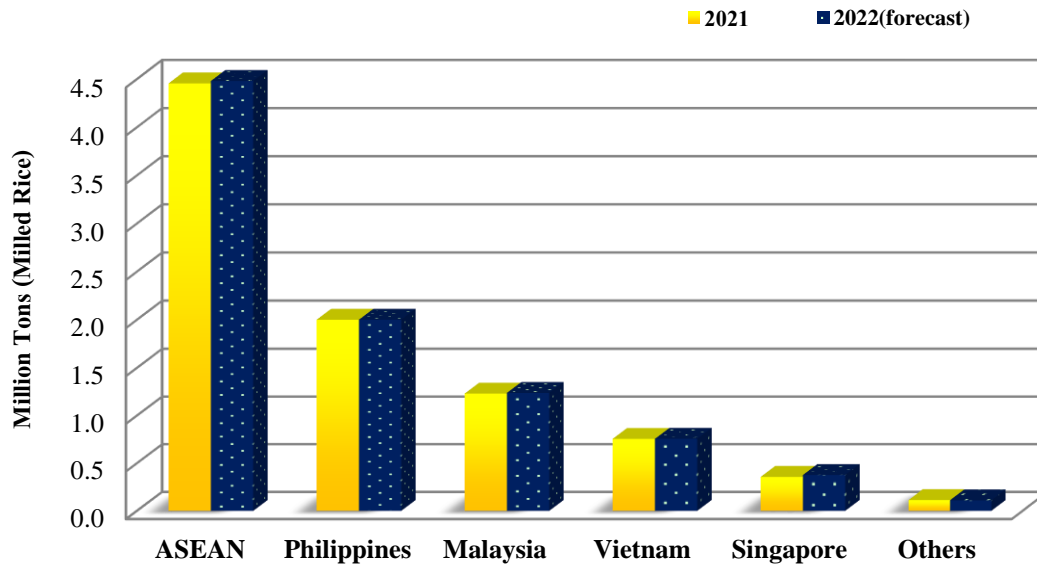
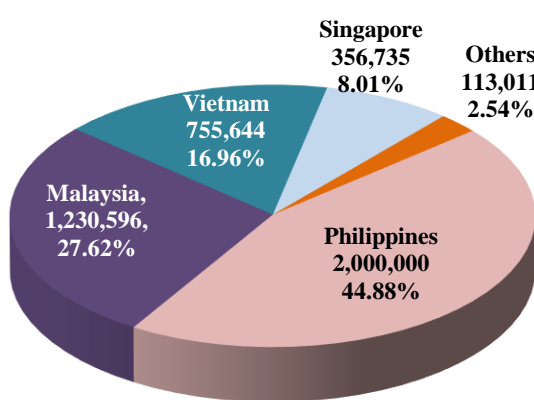
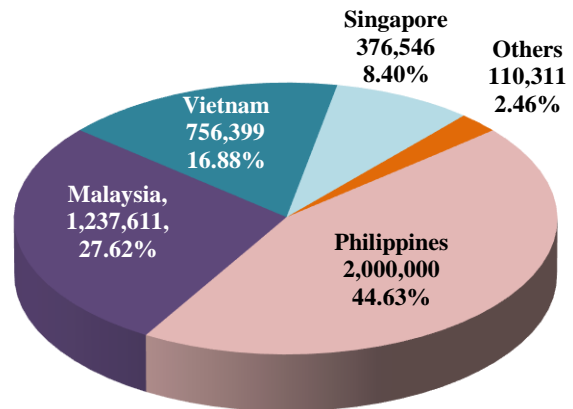


Figure 8 Amount of rice import (million tons) by selected countries in ASEAN in 2021 – 2022



Total 4.46 million tons

Figure 9 Share of rice import (tons) among ASEAN countries, 2021



Total 4.48 million tons

Figure 10 Share of rice import (tons) among ASEAN countries, 2022

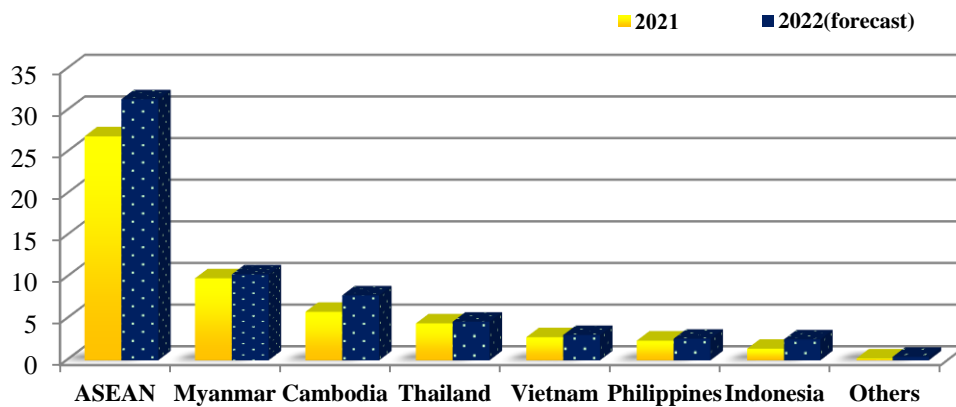


Figure 11 Amount of ending stock of rice in ASEAN countries, 2021 – 2022



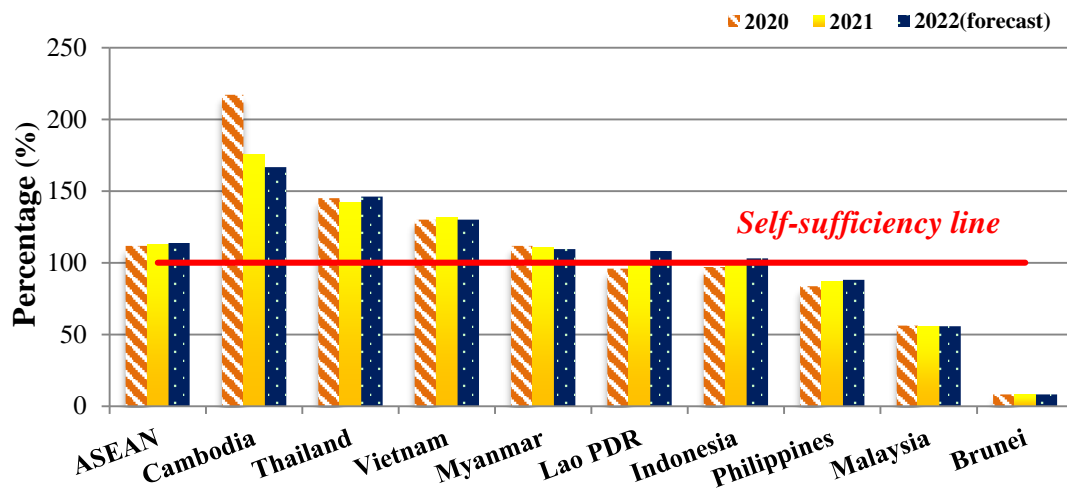


Figure 12 Ratio of rice production to domestic utilization in ASEAN countries, 2020 – 2022

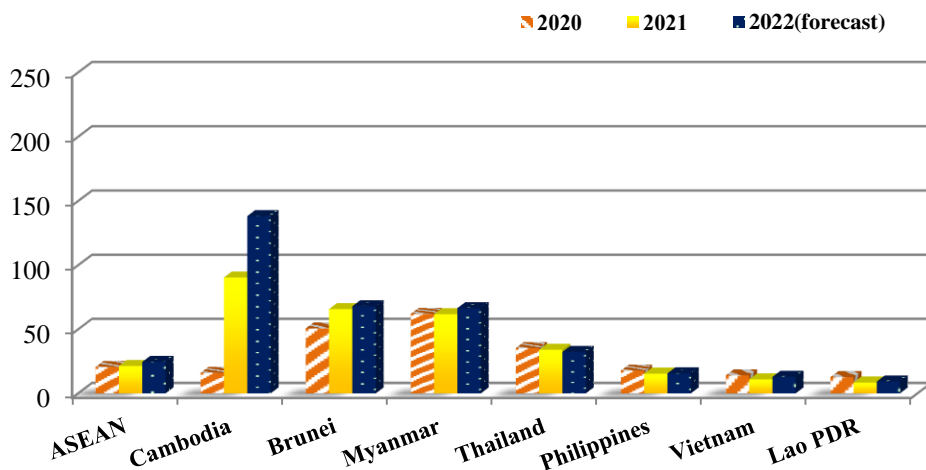


Figure 13 Ratio of rice beginning stock to domestic utilization in ASEAN countries, 2020 – 2022

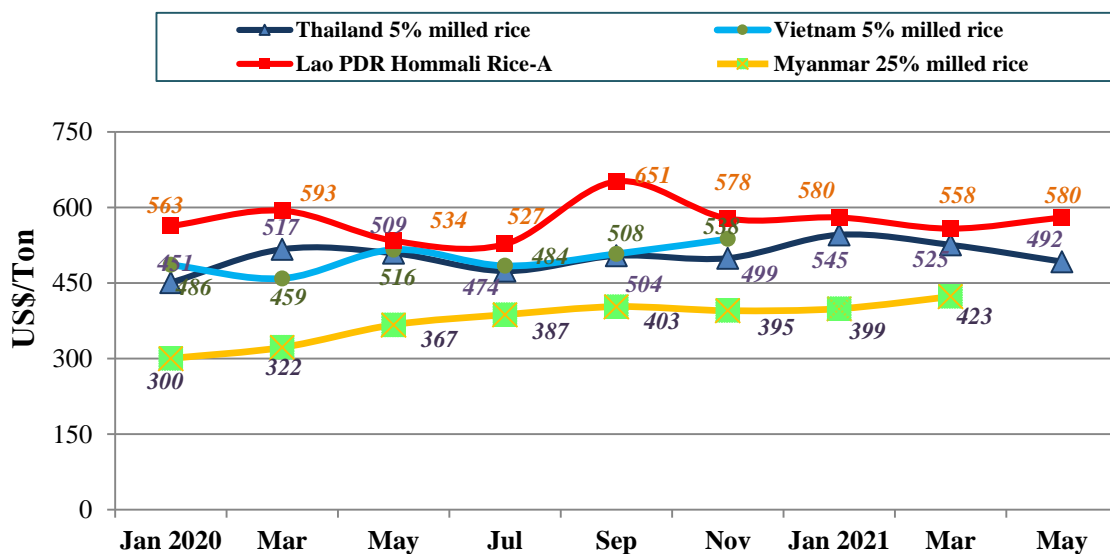


Figure 14 FOB price (US\$/Ton) of milled rice of selected countries in ASEAN in 2020 – 2022

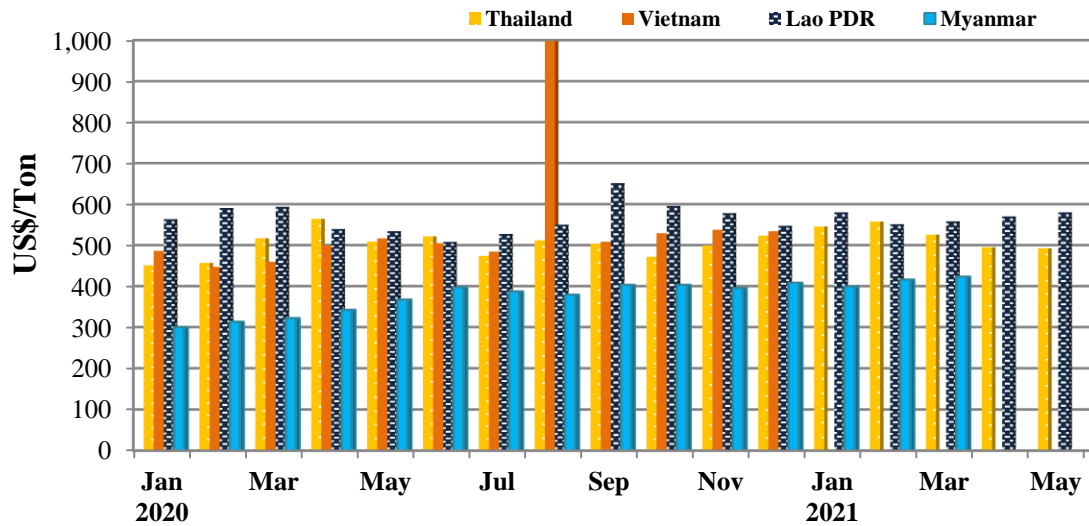


Figure 15 FOB price (US\$/Ton) of milled rice of selected countries in ASEAN in 2020 – 2021

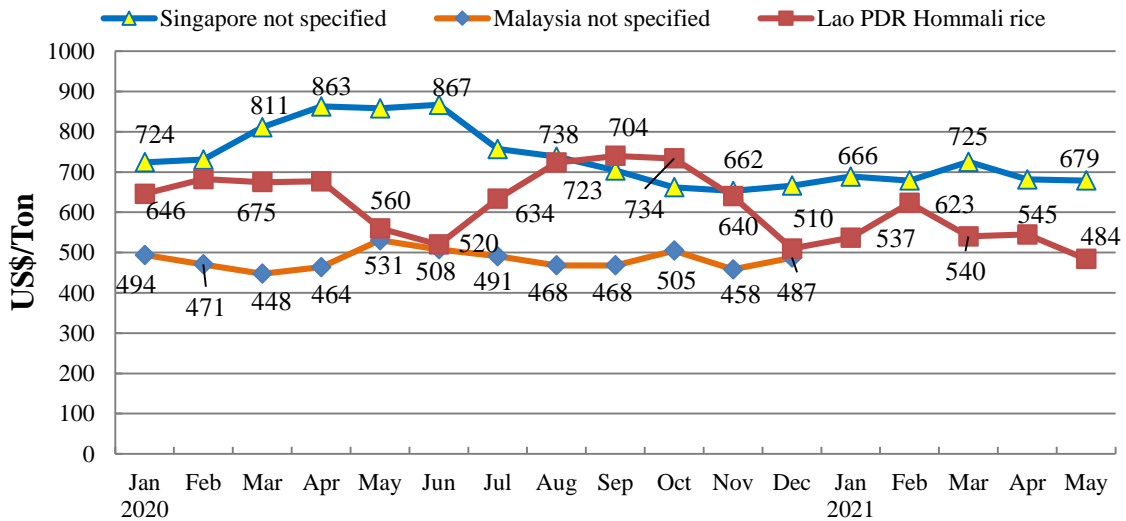


Figure 16 CIF price (US\$/Ton) of milled rice of selected countries in ASEAN in 2020 – 2021

## Maize Outlook for 2022



An increase in the production and import is the main reason for increasing in the ASEAN maize supply. The increasing supply is expected to be 0.86 percent or 0.59 million tons from 68.76 million tons in 2021 to 69.35 million tons in 2022 (Table 16).

Maize production is forecasted to increase around 0.51 million tons or 1.21 percent from 42.08 million tons in 2021 to 42.59 million tons in 2022. The beginning stock is expected to decrease around 6.64 percent or 0.46 million tons from 6.93 million tons in 2021 to 6.47 million tons in 2022.

Maize's demand in 2022 is expected to increase around 0.86 percent. Domestic utilization is predicted to increase by 0.70 million tons from 60.25 million tons in 2021 to 60.95 million tons in 2022. The export of maize is also expected to increase around 3.43 percent from 2.04 million tons in 2021 to 2.11 million tons in 2022.

The ending stock of maize is expected to decrease around 2.78 percent from 6.47 million tons in 2021 to 6.29 million tons in 2022.

The ratio of production to domestic utilization (self-sufficiency ratio) for the region is expected to increase by 0.03 percent from 69.85 percent in 2021 to 69.88 percent in 2022.

The beginning stock to domestic utilization ratio (food security ratio) in 2022 is forecasted to decrease around 0.88 percent from 11.50 percent in 2021 to 10.62 percent in 2022. This indicates that the food (feed) security situation in the ASEAN region is decreasing.

**Table 16 Summary of the ASEAN maize situation, 2021 – 2022**

Unit: Million tons

Items	2021	2022	Change	
			Quantity	%
Supply (Million tons)	68.76	69.35	0.59	0.86
Beginning stock	6.93	6.47	-0.46	-6.64
Production	42.08	42.59	0.51	1.21
Import	19.75	20.28	0.53	2.68
Demand (Million tons)	68.76	69.35	0.59	0.86
Domestic utilization	60.25	60.95	0.70	1.16
Export	2.04	2.11	0.07	3.43
Ending stock	6.47	6.29	-0.18	-2.78
Ratio of production to domestic utilization (%)	69.85	69.88	0.03	-
Ratio of beginning stock to domestic utilization (%)	11.50	10.62	-0.88	-

## ASEAN Maize Situation in 2021

### ► **Production**

*ASEAN maize production in 2021 (crop year 2020/21) was estimated at 45.48 million tons, which increased by 0.55 million tons or about 1.22 percent from 44.94 million tons in 2020 (crop year 2019/20). An increase in maize production in 2021 was found in Brunei, Indonesia, Lao PDR, Myanmar, the Philippines, Thailand and Vietnam due to the increase in either harvested area or yield. While, the production of Cambodia decreased due to the declining of planted area and harvested area (Table 17-20, Figure 17-20).*

For **Brunei**, the increase in production is attributed to the increase in yield because farmers used more fertilizer and took better care of their crops.

For **Cambodia**, the decrease in production is attributed to the decrease in planted and harvested areas, which was caused by unfavorable weather affected by flood and drought.

For **Indonesia**, the increase in production is attributed to the increase in planted and harvested areas, which came from farmers' response to price increases, favorable weather, and government policies together with special assistants.

For **Lao PDR**, the increase in production is attributed to the increase in planted area and yield. Farmers responded to price increases and favorable weather (sufficient sunlight for plants). Moreover, farmers took better care of their crops, which resulted in a higher yield.

For **Myanmar**, the increase in production is attributed to the increase in planted area and yield, which was caused by farmers' response to price increases and government policies.

For **the Philippines**, the increase in production is attributed to the increase in planted and harvested areas.

For **Thailand**, the increase in production is attributed to the increase in the harvested area caused by the increase in the price of maize, the decrease in the price of completing crops, and better taking care of the maize crops by farmers.

For **Vietnam**, the increase in production is attributed to the increase in planted area and yield. This is because farmers responded to price increases and took better care of their crops.

### ► **Utilization and Stock**

Maize utilization in ASEAN in 2021 was estimated at 60.25 million tons, which increased 5.62 million tons or 10.28 percent compared to 54.63 million tons in 2020 (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 Brunei, Indonesia, Lao PDR, Malaysia, the Philippines, Thailand, and Vietnam.

The beginning stock of maize in ASEAN in 2021 was estimated at 6.93 million tons, which increased by 2.85 million tons from 4.07 million tons in 2020 (Table 22-23). The ratio of maize production to domestic utilization for the whole ASEAN in 2021 was estimated at 69.85 percent compared to 76.46 percent in year 2020. This indicated that the ASEAN itself produced inadequate maize for the regional consumption (Table 25, Figure 28). On the country basis, Cambodia, Lao PDR, and Myanmar have the ratio above 100 percent. While Brunei, Indonesia, the Philippines, Thailand and Vietnam have the ratio less than 100 percent.

The ratio of beginning stock to domestic utilization for the ASEAN in 2021 was estimated to be 11.50 percent. This indicated that the region is not secure 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 2021 is forecasted to be 2.04 million tons compared to 19.75 million tons of maize imported (Table 23, Figure 21-22, 24-25). In 2021, Myanmar, the biggest exporter in ASEAN, is expected to export 1.25 million tons or around 61.60 percent of the total maize exported from the ASEAN (Table 23, Figure 21-22).

The major importing countries in the region are Vietnam, Thailand, Malaysia, Indonesia, and the Philippines (Table 23, Figure 24-25). 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 of 2020 and 2021 are shown in Table 29-30 and Figure 30-31. The annual average of Indonesia FOB prices in 2021 (January-April) was 575 US\$/ton, which increase from 425 US\$/ton as the yearly average in 2020. For Cambodia, Lao PDR, Malaysia, Myanmar, and Thailand, average FOB prices of 2020 were 274, 243, 286, 171, and 290 US\$/ton, respectively. The average CIF prices in 2021 in Indonesia (January-April), Singapore (January-June) were 229 and 355 respectively.

### ► *Damaged Area*

The damaged area of maize in 2021 is estimated to be 53,353 hectares, of which 34,010 hectares were caused by drought. The most affected areas were caused by drought, which occurred in Thailand and Myanmar, respectively (Table 21).

## Prospects for Maize in 2022

### ► *Production*

Maize production in ASEAN in 2022 (crop year 2021/22) was estimated at 46.00 million tons. The increase has occurred in Brunei, Indonesia, Lao PDR, the Philippines, Thailand, and Vietnam. The most increase in terms of quantity was found in Indonesia at approximately 0.29 million tons (Table 17).

For **Brunei**, a slight increase in production is attributed to the increase in yield because farmers used more fertilizer and took better care of their crops.

For **Cambodia**, the decrease in production is attributed to the decrease in planted area and yield.

For **Indonesia**, the biggest maize producer in ASEAN, the increase in production is attributed to the increase in planted area and yield, which comes from farmers' response to price increases, favorable weather, and government policies together with special assistants.

For **Lao PDR**, the increase in production is attributed to the increase in planted area, which caused by good care of the crop by farmers and government policies.

For **Myanmar**, the maize production is projected to remain the same due to the unchanged in harvested area and yield.

**The Philippines**, the maize production is forecasted to increase due to the increasing in planted area.

For **Thailand**, the increase in production is attributed to the increase in

planted area and yield caused by the decrease in the price of completing crops, and better taking care of the maize crops by farmers.

For **Vietnam**, the increase in production is attributed to the increase in planted area, which caused by farmers' response to maize price increases (Table 17-20, Figure 17-20).

### ► *Utilization and Stock*

The domestic utilization of maize in ASEAN is forecasted to be 60.95 million tons in 2022, an increase of 0.71 million tons from 60.25 million tons in 2021 (Table 23-24). The estimate of the beginning stock for 2022 is around 6.47 million tons, a decrease of 0.45 million tons from 6.93 million tons in 2021.

In 2022, the ratio of production to domestic utilization is expected to be 69.88 percent, increasing 0.03 percent from 69.85 percent in 2021 (Table 25, Figure 28). The ratio of beginning stock to domestic utilization ratio in 2022 is expected to be 10.62 percent, which decreases 0.88 percent from 2021 (Table 26, Figure 29).

### ► *Trade*

The maize export from ASEAN is projected to be 2.11 million tons in 2022, an increase of 0.07 million tons compared to 2.04 million tons in 2021. For the import by ASEAN, it is forecasted to be 20.28 million tons in 2022, increasing from 19.75 million tons in 2021 (Table 23-24, Figure 21, 23, 24, and 26).

**Table 17 Maize production in ASEAN countries, 2020 – 2022**

Unit: 1,000 Tons

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>44,935.55</b>	<b>45,482.62</b>	<b>547.07</b>	<b>1.22</b>	<b>46,004.88</b>	<b>522.26</b>	<b>1.15</b>
Brunei	0.29	0.66	0.37	123.91	0.69	0.03	5.00
Cambodia	985.11	821.80	-163.32	-16.58	*757.41	-64.39	-7.84
Indonesia	23,950.96	24,044.98	94.02	0.39	24,339.53	294.55	1.22
Lao PDR	547.89	627.67	79.78	14.56	680.94	53.27	8.49
Malaysia	N/A						
Myanmar	1,986.13	2,075.73	89.60	4.51	*2,075.73	0.00	0.00
Philippines	8,030.04	8,265.22	235.19	2.93	*8,389.20	123.98	1.50
Singapore	N/A						
Thailand	4,702.99	4,787.56	84.58	1.80	4,849.78	62.22	1.30
Vietnam	4,732.15	4,859.00	126.85	2.68	4,911.60	52.60	1.08

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 18 Maize planted area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>9,844.72</b>	<b>9,946.21</b>	<b>101.49</b>	<b>1.03</b>	<b>10,079.61</b>	<b>133.40</b>	<b>1.34</b>
Brunei	N/A						
Cambodia	225.98	178.06	-47.92	-21.21	163.76	-14.30	-8.03
Indonesia	4,335.51	4,372.52	37.01	0.85	*4,411.20	38.68	0.88
Lao PDR	110.17	123.25	13.08	11.88	138.59	15.34	12.44
Malaysia	N/A						
Myanmar	519.65	556.55	36.90	7.10	*596.10	39.56	7.11
Philippines	*2,508.11	*2,588.02	79.90	3.19	*2,626.84	38.82	1.50
Singapore	N/A						
Thailand	1,158.47	1,122.81	-35.66	-3.08	1,127.12	4.31	0.38
Vietnam	986.83	1,005.00	18.17	1.84	1,016.00	11.00	1.09

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 19 Maize harvested area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>9,736.32</b>	<b>9,891.95</b>	<b>155.63</b>	<b>1.60</b>	<b>9,988.34</b>	<b>96.39</b>	<b>0.97</b>
Brunei	N/A						
Cambodia	211.41	170.13	-41.28	-19.52	*157.56	-12.57	-7.39
Indonesia	4,327.28	4,369.24	41.96	0.97	4,411.20	41.96	0.96
Lao PDR	110.17	123.25	13.08	11.88	135.07	11.82	9.59
Malaysia	N/A						
Myanmar	515.73	538.29	22.56	4.38	*538.29	0.00	0.00
Philippines	2,508.11	2,588.02	79.90	3.19	*2,626.84	38.82	1.50
Singapore	N/A						
Thailand	1,076.81	1,098.03	21.22	1.97	1,103.39	5.36	0.49
Vietnam	986.83	1,005.00	18.17	1.84	1,016.00	11.00	1.09

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.



**Table 20 Maize yield in ASEAN countries, 2020 – 2022**

Unit: Tons/Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>4.62</b>	<b>4.60</b>	<b>-0.02</b>	<b>-0.43</b>	<b>4.61</b>	<b>0.01</b>	<b>0.22</b>
Brunei	N/A						
Cambodia	4.66	4.83	0.17	3.65	*4.81	-0.02	-0.41
Indonesia	5.53	5.50	-0.03	-0.54	5.52	0.02	0.36
Lao PDR	4.97	5.09	0.12	2.41	5.04	-0.05	-0.98
Malaysia	N/A						
Myanmar	3.85	3.86	0.01	0.26	*3.86	0.00	0.00
Philippines	3.20	3.19	-0.01	-0.31	*3.19	0.00	0.00
Singapore	N/A						
Thailand	4.37	4.36	-0.01	-0.23	4.40	0.04	0.92
Vietnam	4.80	4.83	0.03	0.63	4.83	0.00	0.00

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.**Table 21 Maize damaged area in ASEAN by cause of damage, 2021**

Unit: Hectares

Country	Cause of Damage (Hectares)						
	Flood	Drought	Pests	Diseases	Unspecified	Others	Total
<b>ASEAN</b>	<b>9,771</b>	<b>34,010</b>	<b>1,564</b>	<b>51</b>	<b>-</b>	<b>7,958</b>	<b>53,353</b>
Brunei	N/A						
Cambodia	-	-	-	-	-	7,935	7,935
Indonesia	2,213	66	51	51	-	-	2,380
Lao PDR	N/A						
Malaysia	N/A						
Myanmar	7,558	10,678	-	-	-	23	18,259
Philippines	N/A						
Singapore	N/A						
Thailand	-	23,266	1,513	-	-	-	24,779
Vietnam	N/A						

**Remark:** N/A refers to data that is not available.

**Table 22 Maize balance sheet of ASEAN countries, 2020**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>4,073,039</b>	<b>41,768,839</b>	<b>19,172,078</b>	<b>65,013,955</b>	<b>54,629,450</b>	<b>3,457,786</b>	<b>6,926,719</b>	<b>65,013,956</b>
Brunei	-	295	220	515	515	-	-	515
Cambodia	*314,551	985,113	-	*1,299,664	*803,844	*202,798	*293,022	1,299,664
Indonesia	1,157,845	20,837,334	865,653	22,860,832	17,596,560	64,272	5,200,000	22,860,832
Lao PDR	96,571	547,885	1,108	645,565	517,005	71,875	56,684	645,565
Malaysia	-	-	2,003,520	2,003,520	1,998,646	4,874	-	2,003,520
Myanmar	1,420,212	1,986,126	6,135	3,412,473	933,895	2,458,898	19,680	3,412,473
Philippines	812,000	8,118,000	600,000	9,530,000	8,468,000	-	1,062,000	9,530,000
Singapore	-	-	21,039	21,039	19,999	1,040	-	21,039
Thailand	*240,000	4,702,985	*3,602,346	8,545,331	8,344,700	631	*200,000	8,545,331
Vietnam	31,860	4,591,100	12,072,057	16,695,017	15,946,286	653,398	95,333	16,695,017

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 23 Maize balance sheet of ASEAN countries, 2021**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>6,926,719</b>	<b>42,084,550</b>	<b>19,745,755</b>	<b>68,757,024</b>	<b>60,246,754</b>	<b>2,036,174</b>	<b>6,474,096</b>	<b>68,757,024</b>
Brunei	-	660	231	891	891	-	-	891
Cambodia	*293,022	821,798	-	*1,114,820	*670,580	*203,312	*240,928	1,114,820
Indonesia	5,200,000	20,919,135	902,564	27,021,699	22,506,958	64,741	4,450,000	27,021,699
Lao PDR	56,684	627,669	1,404	685,757	525,927	67,164	92,667	685,757
Malaysia	-	-	*2,033,572	2,033,572	*2,028,625	*4,947	-	2,033,572
Myanmar	19,680	2,075,727	3,452	2,098,859	*820,097	1,254,229	*24,533	2,098,859
Philippines	1,062,000	8,280,000	500,000	9,842,000	8,796,000	-	1,046,000	9,842,000
Singapore	-	-	13,473	13,473	12,807	666	-	13,473
Thailand	*200,000	4,787,561	*3,613,707	8,601,268	8,380,160	1,108	*220,000	8,601,268
Vietnam	95,333	4,572,000	12,677,351	17,344,684	16,504,708	440,007	399,969	17,344,684

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 24 Maize balance sheet of ASEAN countries, 2022**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>6,474,096</b>	<b>42,594,878</b>	<b>20,281,691</b>	<b>69,350,666</b>	<b>60,951,991</b>	<b>2,112,524</b>	<b>6,286,151</b>	<b>69,350,665</b>
Brunei	-	693	242	935	935	-	-	935
Cambodia	*240,928	*757,407	-	*998,334	*650,463	*203,827	*144,044	998,334
Indonesia	4,450,000	21,175,393	941,049	26,566,441	21,923,045	65,213	4,578,183	26,566,441
Lao PDR	92,667	680,940	1,300	774,906	501,196	143,515	130,196	774,906
Malaysia	-	-	*2,064,076	2,064,076	*2,059,055	*5,021	-	2,064,076
Myanmar	*24,533	*2,169,464	*3,383	2,197,380	*833,434	*1,343,787	*20,160	2,197,380
Philippines	1,046,000	8,389,202	400,000	9,835,202	8,960,785	-	874,417	9,835,202
Singapore	-	-	17,256	17,256	16,403	853	-	17,256
Thailand	*220,000	4,849,780	*3,541,390	8,611,170	*8,400,000	*1,170	*210,000	8,611,170
Vietnam	399,969	4,572,000	13,312,995	18,284,965	17,606,675	349,138	329,152	18,284,965

Remark: \* The value is estimated by AFSIS Secretariat, N/A refers to data that is not available.

**Table 25 Ratio of maize production to domestic utilization in ASEAN countries (Self-sufficiency ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>41,768,839</b>	<b>54,629,450</b>	<b>76.46</b>	<b>42,084,550</b>	<b>60,246,754</b>	<b>69.85</b>	<b>42,594,878</b>	<b>60,951,991</b>	<b>69.88</b>
Brunei	295	515	57.28	660	891	74.07	693	935	74.12
Cambodia	985,113	*803,844	122.55	821,798	*670,580	122.55	*757,407	*650,463	116.44
Indonesia	20,837,334	17,596,560	118.42	20,919,135	22,506,958	92.95	21,175,393	21,923,045	96.59
Lao PDR	547,885	517,005	105.97	627,669	525,927	119.35	680,940	501,196	135.86
Malaysia	-	1,998,646	-	-	*2,028,625	-	-	*2,059,055	-
Myanmar	1,986,126	933,895	212.67	2,075,727	*820,097	253.11	*2,169,464	*833,434	260.30
Philippines	8,118,000	8,468,000	95.87	8,280,000	8,796,000	94.13	8,389,202	8,960,785	93.62
Singapore	-	19,999	-	-	12,807	-	-	16,403	-
Thailand	4,702,985	8,344,700	56.36	4,787,561	8,380,160	57.13	4,849,780	*8,400,000	57.74
Vietnam	4,591,100	15,946,286	28.79	4,572,000	16,504,708	27.70	4,572,000	17,606,675	25.97

Remark: \* The value is estimated by AFSIS Secretariat, N/A refers to data that is not available.

[24]

**Table 26 Ratio of maize beginning stock to domestic utilization in ASEAN countries (Food security ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>4,073,039</b>	<b>54,629,450</b>	<b>7.46</b>	<b>6,926,719</b>	<b>60,246,754</b>	<b>11.50</b>	<b>6,474,096</b>	<b>60,951,991</b>	<b>10.62</b>
Brunei	-	515	-	-	891	-	-	935	-
Cambodia	*314,551	*803,844	39.13	*293,022	*670,580	43.70	*240,928	*650,463	37.04
Indonesia	1,157,845	17,596,560	6.58	5,200,000	22,506,958	23.10	4,450,000	21,923,045	20.30
Lao PDR	96,571	517,005	18.68	56,684	525,927	10.78	92,667	501,196	18.49
Malaysia	-	1,998,646	-	-	*2,028,625	-	-	*2,059,055	-
Myanmar	1,420,212	933,895	152.07	19,680	*820,097	2.40	*24,533	*833,434	2.94
Philippines	812,000	8,468,000	9.59	1,062,000	8,796,000	12.07	1,046,000	8,960,785	11.67
Singapore	-	19,999	-	-	12,807	-	-	16,403	-
Thailand	*240,000	8,344,700	2.88	*200,000	8,380,160	2.39	*220,000	*8,400,000	2.62
Vietnam	31,860	15,946,286	0.20	95,333	16,504,708	0.58	399,969	17,606,675	2.27

Remark: \* The value is estimated by AFSIS Secretariat, N/A refers to data that is not available.

**Table 27 Quantity and Value of Maize Export by Countries of Destination in 2021**

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	N/A													
Cambodia	N/A													
Indonesia									49	39,104				
Lao PDR														
Malaysia	419	107,909			559	143,916								
Myanmar									2,118	1,054.76			19,978	97,573
Philippines														
Singapore	N/A													
Thailand					30	980								
Vietnam			-	16,176,157			-	1,193,725	-	662			-	37,174,173

[25]

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	N/A											
Cambodia	N/A											
Indonesia	206	141,793					254	180,897	233	96,530	487	277,427
Lao PDR			21,921	4,710,305	9,255	1,933,310	31,176	6,643,615	35,988	7,881,411	67,164	14,525,026
Malaysia	398	102,521	2,417	621,966	21	5,304	3,815	981,616	1,059	272,549	4,874	1,254,165
Myanmar	267	16,554	1,565,035	452,426,578	194,813	8,995,685	1,782,211	461,520,907	112,019	1,871,343	1,894,230	463,392,250
Philippines			1.10	13,643	119	364,077	120	377,720	1	4,760	121	382,480
Singapore	N/A											
Thailand					960	21,002	990	21,982	118	42,970	1,108	64,953
Vietnam	-	14,560	-	97,356			-	54,656,634		2,569,805	-	57,226,439

**Remark:** The data in this table is obtained from national focal points of member states and may not complete, N/A refers to data that is not available.

**Table 28 Quantity and Value of Maize Import by Countries of Origin in 2021**

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	N/A													
Cambodia	N/A													
Indonesia														
Lao PDR														
Malaysia					34	6,885								
Myanmar					0.09	0.00004								
Philippines											6,643	1,791,866		
Singapore					609	435,307			12,249	3,123,385			0.72	215
Thailand			5,665	1,300,469			9,532	1,337,507			981,532	192,041,809		
Vietnam														

[26]

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	N/A											
Cambodia	N/A											
Indonesia							0	0	268,211	66,469,726	268,211	66,469,726
Lao PDR			1,188	479,649	70	30,000	1,258	509,649	146	58,426	1,404	568,075
Malaysia			7,202	1,477,730			7,236	1,484,615	1,996,284	409,592,237	2,003,520	411,076,851
Myanmar			1,254	5971,548			1,254	5,972	2,198	14,516	3,452	20,487
Philippines			34	821,244	15,959	5,938,863	22,635	8,551,973	3,566	2,323,893	26,200	10,875,866
Singapore			27	48,461	0.03	26	12,885	3,607,394	588	827,798	13,473	4,435,191
Thailand							996,729	194,679,784			996,729	194,679,784
Vietnam			888	3,345,560			888	3,345,560	3,409,098	858,217,128	3,409,986	861,562,688

**Remark:** The data in this table is obtained from national focal points of member states and may not complete, N/A refers to data that is not available.

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

Unit: US\$/Ton

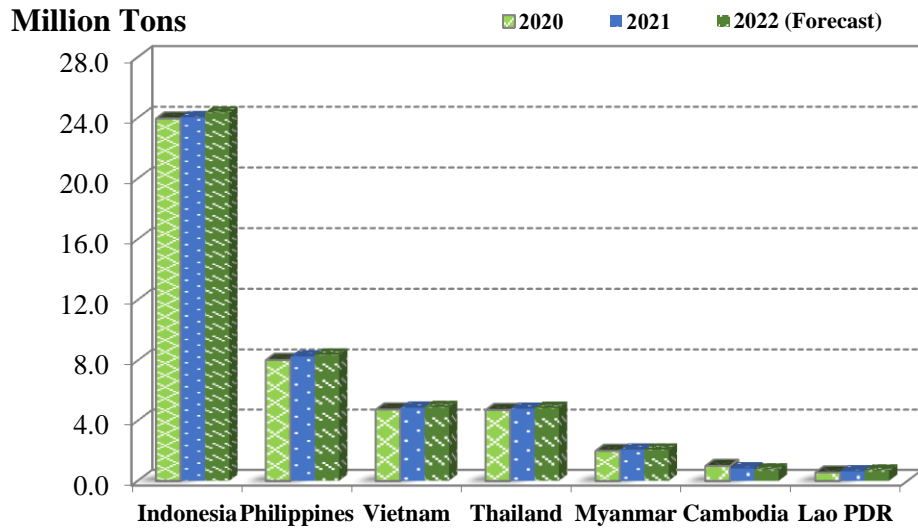
Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Cambodia	2020	270	248	256	267	293	290	276	279	288	274	275	278	274
	2021	N/A												
Indonesia	2020	565	555	605	527	241	240	243	245	243	530	634	471	425
	2021	525	502	627	648	-	-	-	-	-	-	-	-	575
Lao PDR	2020	280	241	226	218	234	245	266	275	244	217	219	252	243
	2021	257	237	216	210	220	-	-	-	-	-	-	-	228
Malaysia	2020	277	281	441	407	250	252	289	253	248	236	237	259	286
	2021	N/A												
Myanmar	2020	193	164	161	157	159	174	156	143	203	152	175	212	171
	2021	203	171	213	-	-	-	-	-	-	-	-	-	196
Thailand	2020	275	268	271	275	298	291	299	305	298	302	304	290	290
	2021	319	307	301	311		-	-	-	-	-	-	-	310

Remark: \* The value is estimated by AFSIS Secretariat, N/A refers to data that is not available.

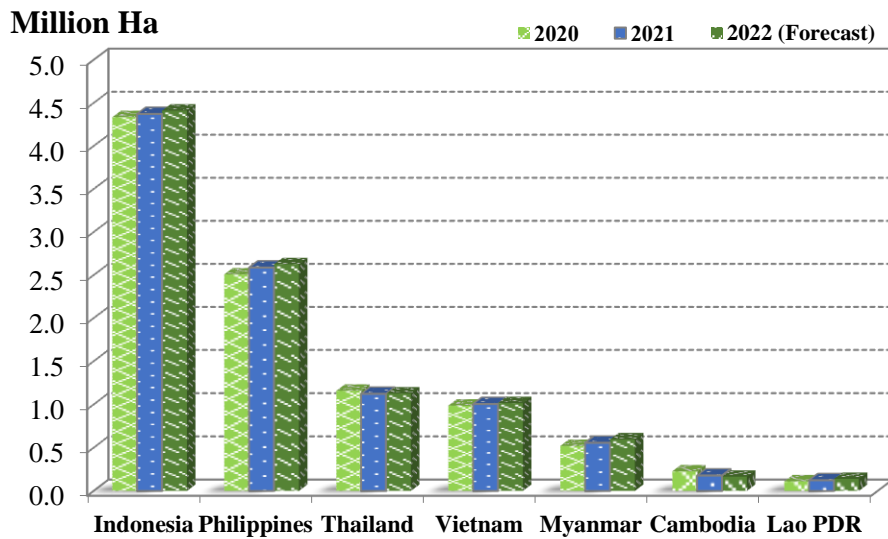
**Table 30 CIF Price of maize (Feed grain) in selected ASEAN countries**

Unit: US\$/Ton

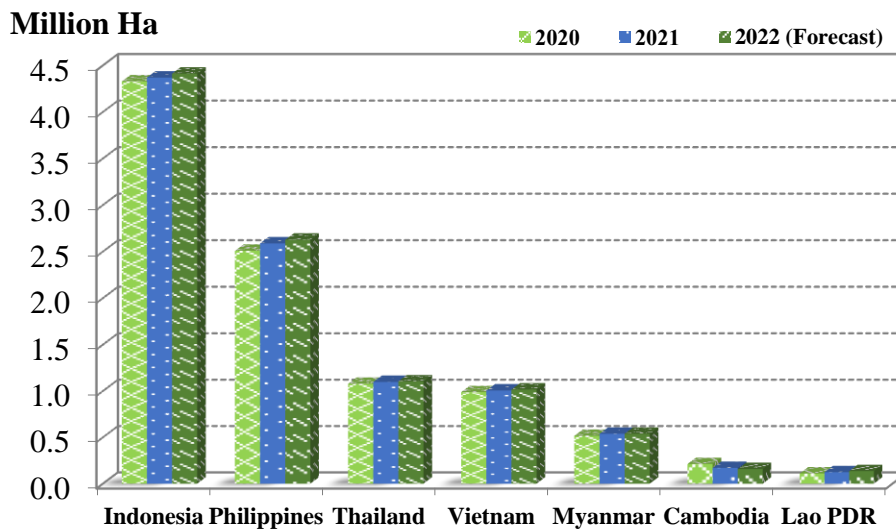
Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	2020	197	203	209	217	215	204	194	198	181	179	179	187	197
	2021	189	200	254	274	-	-	-	-	-	-	-	-	229
Malaysia	2020	210	210	213	216	229	210	206	188	193	190	207	226	208
	2021	N/A												
Singapore	2020	257	276	304	319	295	261	274	285	251	281	310	273	282
	2021	291	288	411	369	416	355	-	-	-	-	-	-	355
Vietnam	2020	196	207	218	217	212	211	203	190	186	186	188	196	201
	2021	N/A												



**Figure 17 Maize production of selected countries in ASEAN, 2020 – 2022**

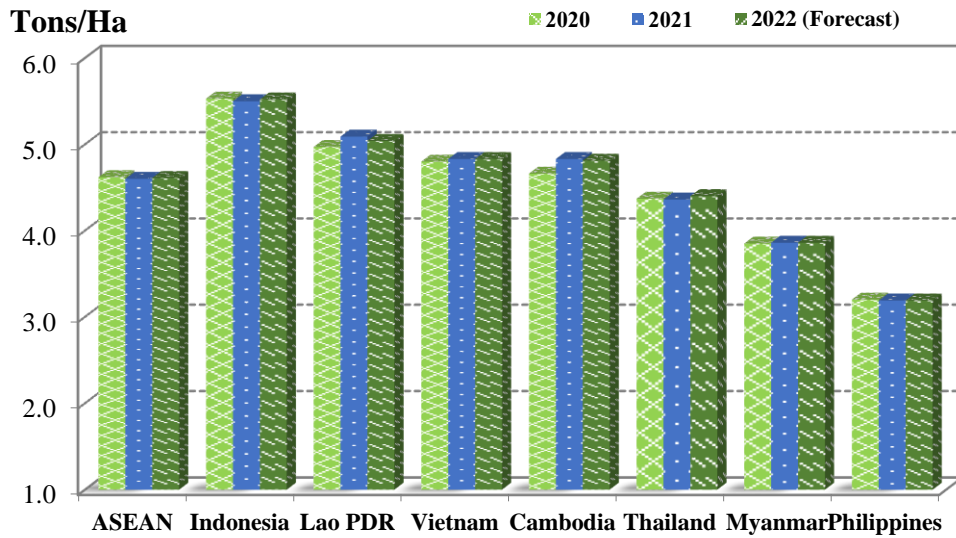


**Figure 18 Maize planted area of selected countries in ASEAN, 2020 – 2022**

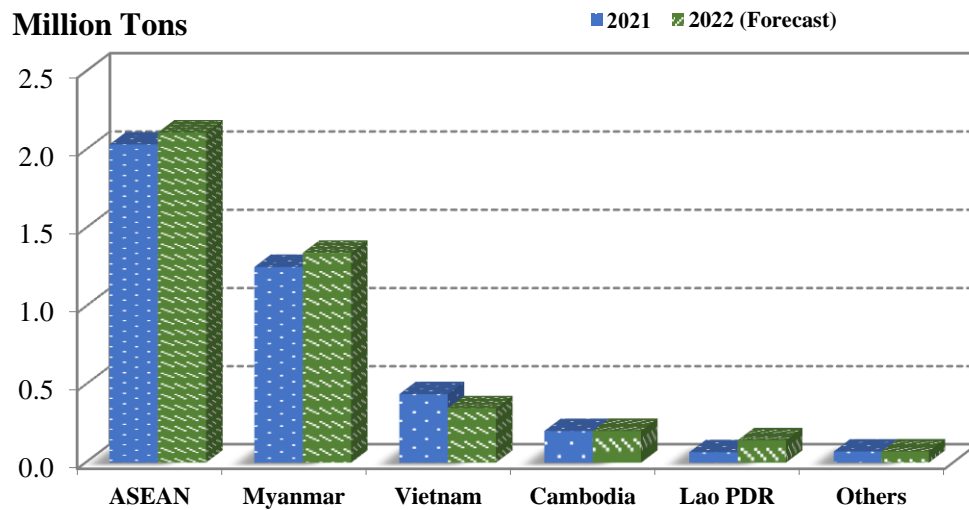


**Figure 19 Maize harvested area of selected countries in ASEAN, 2020 – 2022**

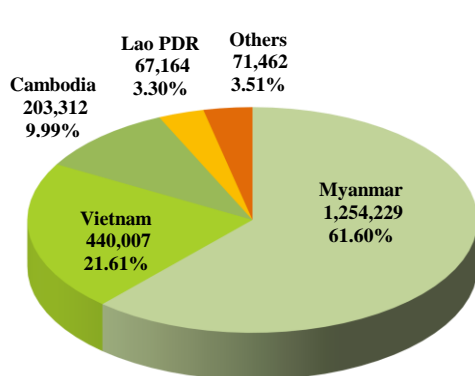




**Figure 20** Maize yield of countries in ASEAN, 2020 – 2022

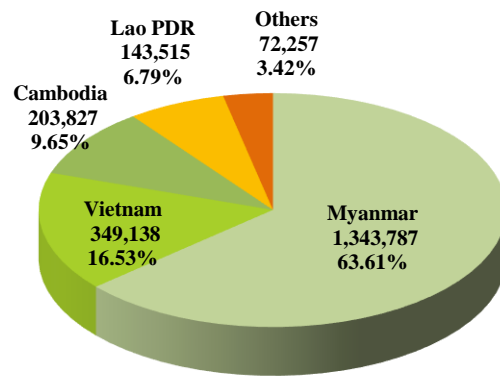


**Figure 21** Amount of maize export (million tons) of selected countries in ASEAN in 2021 – 2022



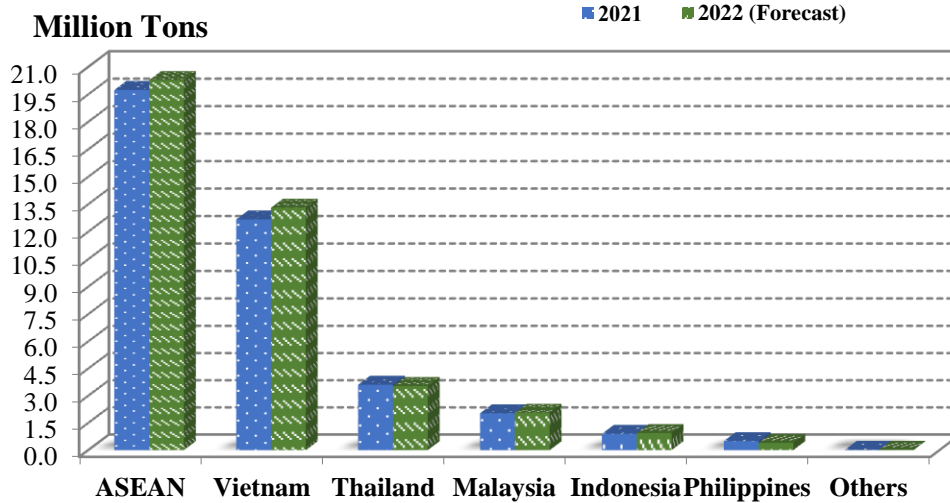
*Total 2.04 million tons*

**Figure 22** Share of maize export (tons) among ASEAN countries, 2021

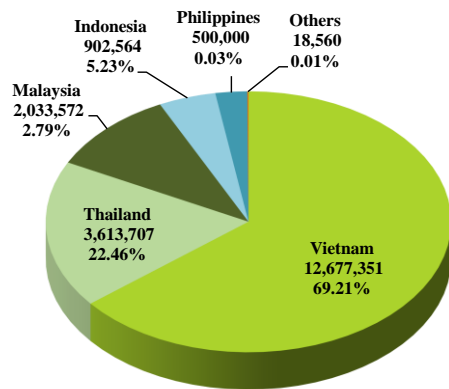


*Total 2.11 million tons*

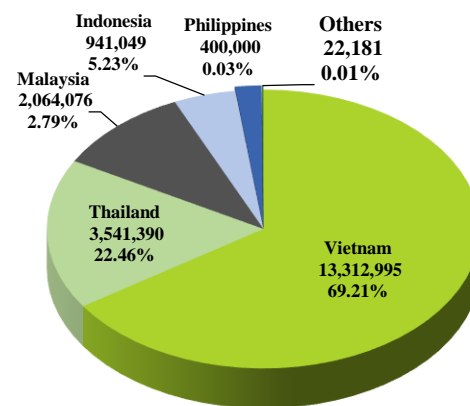
**Figure 23** Share of maize export (tons) among ASEAN countries, 2022



**Figure 24 Amount of maize import (million tons) by selected countries in ASEAN in 2021– 2022**



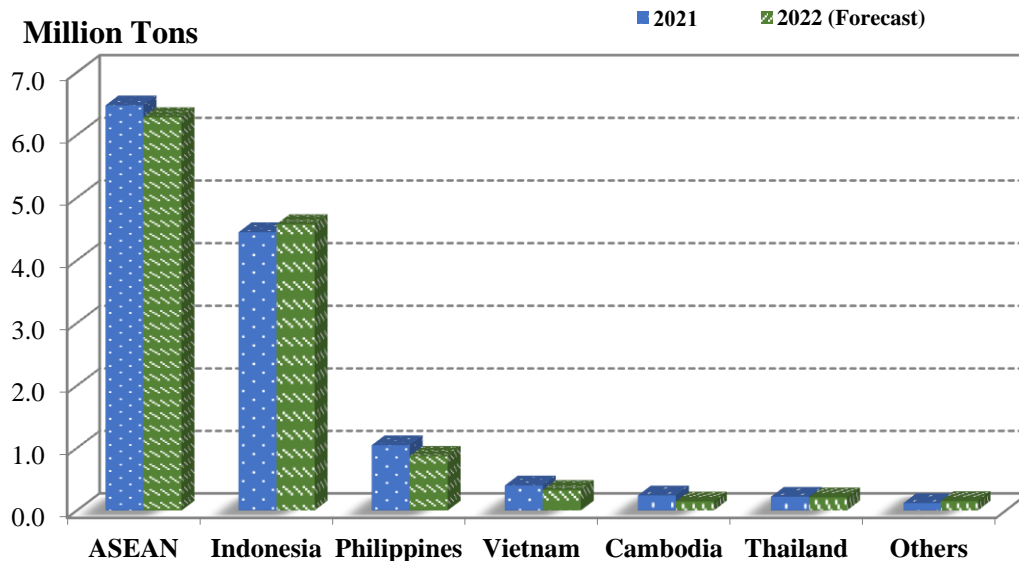
*Total 19.75 million tons*



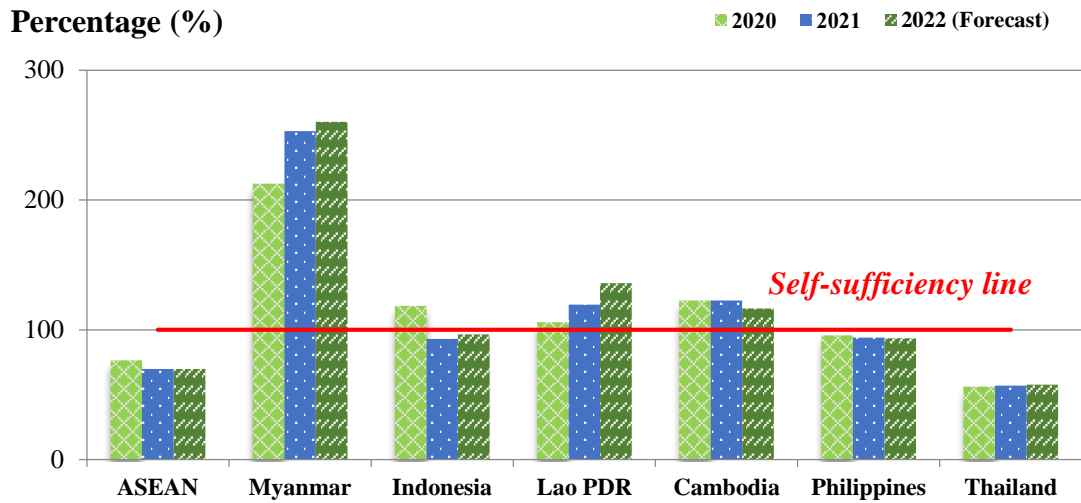
*Total 20.28 million tons*

**Figure 25 Share of maize import (tons) among ASEAN countries, 2021**

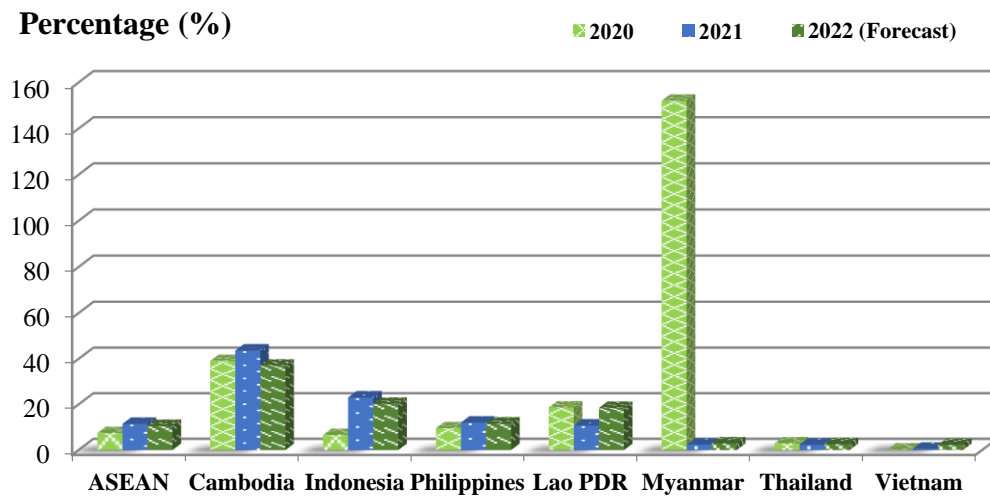
**Figure 26 Share of maize import (tons) among ASEAN countries, 2022**



**Figure 27 Amount of ending stock of maize in ASEAN countries in 2021 – 2022**



**Figure 28** Ratio of maize production to domestic utilization in ASEAN countries, 2020 – 2022



**Figure 29** Ratio of maize beginning stock to domestic utilization in ASEAN countries, 2020 – 2022

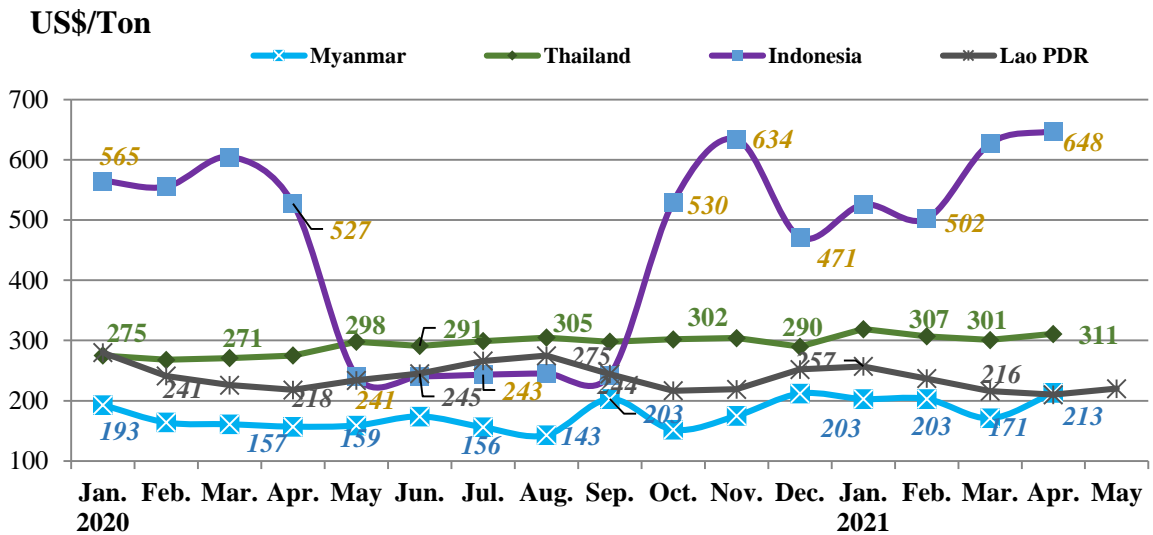


Figure 30 FOB price (US\$/Ton) of maize of selected countries in ASEAN in 2020 – 2021

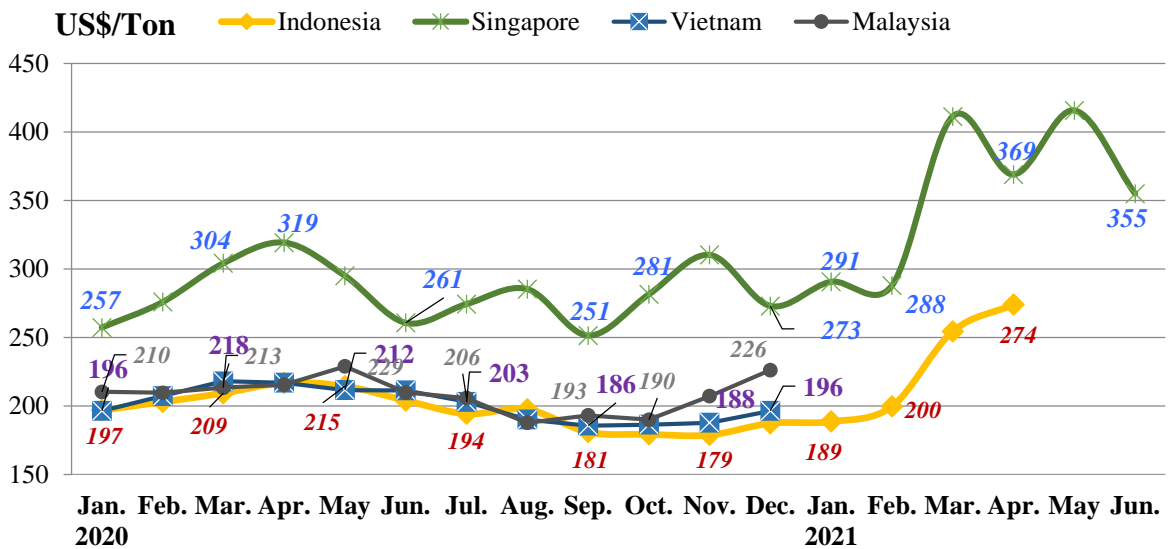


Figure 31 CIF price (US\$/Ton) of maize of selected countries in ASEAN in 2020– 2021

## Sugar Outlook for 2022



ASEAN sugar supply is forecasted to increase by approximately 0.07 percent or 0.02 million tons from 30.75 million tons in 2021 to 30.77 million tons in 2022, especially with the increase in beginning stock (Table 31).

The beginning stock of sugar in 2022 is estimated at 8.42 million tons, which increases from 7.91 million tons in 2021.

The sugar production in 2022 is estimated at 14.39 million tons, which increases from 14.29 million tons in 2021.

The sugar's import of 2022 is forecasted to be 7.95 million tons, which decreases around 7.02 percent from 8.55 million tons in 2021.

The export of sugar from ASEAN in 2022 is expected to decrease from 6.17 million tons in 2021 to 6.08 million tons in 2022.

The production to domestic utilization ratio for sugar in 2022 is forecasted to be about 87.61 percent, which decreases from 88.46 percent in 2021.

The beginning stock to domestic utilization ratio in 2022 is forecasted to be about 51.26 percent, which increases from 48.92 percent in 2021.

**Table 31 Summary of the ASEAN sugar situation, 2021 – 2022**

Unit: Million Tons

Items	2021	2022	Change	
			Quantity	%
Supply (Million tons)	30.75	30.77	0.02	0.07
Beginning stock	7.91	8.42	0.51	6.45
Production	14.29	14.39	0.10	0.70
Import	8.55	7.95	-0.60	-7.02
Demand (Million tons)	30.75	30.77	0.02	0.07
Domestic utilization	16.16	16.43	0.27	1.67
Export	6.17	6.08	-0.09	-1.46
Ending stock	8.42	8.26	-0.16	-1.90
Ratio of production to domestic utilization (%)	88.46	87.61	-0.85	-
Ratio of beginning stock to domestic utilization (%)	48.92	51.26	2.34	-

## ASEAN Sugar Situation in 2021

### ► *Production*

*Sugarcane production in ASEAN in 2021 (2020/21 crop year) was estimated at 144.93 million tons, down 10.32 million tons from 155.25 million tons in 2020 or about 6.65 percent (Table 32, Figure 32). The decrease in production was due to the decrease in the production of Thailand, Vietnam, the Philippines, Myanmar, and Lao PDR. The harvested area of sugarcane in ASEAN in 2021 was estimated at 2.54 million hectares, significantly decreasing from 3.05 million hectares in 2020 (Table 34).*

**Thailand**, the largest sugar-producing country in the region, the production was estimated to decrease mainly due to the declining in planted area resulted from farmers' response to price decreases (Table 32-35, Figure 32-35).

**Vietnam** was estimated to decrease its production due to the decrease in the planted area and yield. The decreasing in planted area was due to farmers' response to price decreases and unfavorable weather. The decreasing in yield was because farmers used less fertilizer and the weather was unfavorable as a result of the drought.

In **the Philippines**, the production was estimated to decrease due to the decrease in planted area and yield as a result of unfavorable weather affected by strong winds caused by typhoons toppled.

**Myanmar** was estimated to decrease its production due to the decrease in planted area, which resulted from unfavorable weather affected by heavy rainfall in the Sagaing area.

For **Lao PDR**, the production was estimated to decrease due to the decrease in planted area. The decline in the planted area came from the increase in prices of competing crops and government policy.

The production in **Indonesia** was estimated to increase due to the increase in planted area and yield resulted from favorable weather together with better taking care of the crops by farmers.

Production in **Cambodia** was estimated to increase due to the increase in the planted area caused by favorable weather.

**Brunei**, the smallest sugar-producing country in the region, the production was estimated to increase because farmers increased more planted areas, used more fertilizer on their crops, and took good care of their crops from planting until harvesting.

### ► *Utilization and Stock*

Regarding domestic utilization of sugar in the ASEAN, it has significantly increased to 16.16 million tons in 2021 from 15.14 million tons in 2020 (Table 37-38). The beginning stock of sugar in ASEAN in 2021 was estimated at 7.91 million tons, which significantly increased about 12.21 percent from 2020. The ending stock of sugar in ASEAN in 2021 was estimated to be about 8.42 million tons, an increase of about 6.54 percent from 2020.

The ratio of sugar production to domestic utilization in 2021 was estimated to be about 88.46 percent. This indicated that the ASEAN itself produced inadequate sugar for the regional consumption (Table 40, Figure 43).

The ratio of beginning stock to domestic utilization was estimated to be about 48.92 percent in 2021, compared to 46.52 percent in 2020. This indicated that the sugar availability in the region was slightly up from the previous year (Table 41, Figure 44).

### ► *Trade*

The sugar's export from ASEAN in 2021 was 6.17 million tons, which decreased about 0.57 million tons or 8.50 percent from 2020 (Table 37-38, Figure 36-37). Thailand is the major sugar exporting country in the region, which constituted about 77.50 percent of the total ASEAN export or about 4.78 million tons.

For the import, ASEAN in 2021 as a whole imported sugar around 8.55 million tons, increasing about 14.84 percent from the previous year (Table 37-38, Figure 39-40).

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 Tables 42 and 43, respectively.

### ► *Prices*

The FOB and CIF prices of sugar in exporting and importing countries in ASEAN during 2020-2021 are shown in Tables 44-45. The annual average of Thailand FOB prices of raw sugar and white sugar in 2021 (January-April) were 291 US\$/ton and 435 US\$/ton, respectively. The prices of raw sugar of 2021 were higher than those of 2020, likewise, the prices of white sugar of 2021 were higher than those of 2020. The average CIF price (January- May) in Singapore in 2021 was 488 US\$/ton, which was higher than in 2020.

### ► *Damaged Area*

The sugarcane damaged area in ASEAN in 2021 was reported to be 153 hectares. The most affected area caused by flood (125 hectares) occurred in Myanmar (Table 36).



## Prospects for Sugar in 2022

### ► **Production**

*Sugarcane production in ASEAN is forecasted to increase from 144.93 million tons in 2021 to 145.79 million tons in 2022 (Table 32-35, Figure 32-35). Thailand, the largest sugar-producing country in the region, is forecasted to increase its production from 67.37 million tons in 2021 to 69.12 million tons in 2022. The increase in Thai production is mainly caused by increasing in planted area and yield due to farmers' response to price increases.*

The second increase in terms of quantity is found in **Indonesia**, which is expected to increase its production from 33.48 million tons in 2021 to 34.32 million tons in 2022. The increase in Indonesia's production is due to the increase in planted area and yield.

Besides, **Lao PDR** is also forecasted to increase its production from 11.57 million tons in 2021 to 12.35 million tons in 2022, the increase comes from government policies and farmers using more improved varieties.

For **Cambodia**, the production is expected to increase from 0.68 million tons in 2021 to 0.69 million tons in 2022, the increase comes from the expansion of the planted area.

For **Brunei**, the smallest sugar-producing country in the region, is expected to increase in production from 107 tons in 2021 to 112 tons in 2022.

For **Vietnam**, the production is forecasted to decrease from 8.07 million tons in 2021 to 6.46 million tons in 2022. The main reason is due to the decrease in planted area.

**The Philippines**, the decrease in production is estimated to decrease from 22.62 million tons in 2021 to 22.50 million tons in 2022. The cause is due to the decrease in planted area and yield.

For **Myanmar**, the production is forecasted to decrease from 11.55 million tons in 2021 to 11.48 million tons in 2022 due to the decrease in planted area and yield.

### ► **Utilization and Stock**

The domestic utilization of sugar in ASEAN is forecasted to increase from 16.16 million tons of sugar in 2021 to 16.43 million tons in 2022, which increases about 0.27 million tons (Table 38-39). The beginning stock in ASEAN is estimated at 8.42 million tons of sugar in 2022, an increase of 0.52 million tons from 7.91 million tons in the previous year. The ending stock of sugar in ASEAN in 2022 is forecasted to be 8.26 million tons which decreases about 0.17 million tons from the previous year.

The ratio of production to domestic utilization in 2022 is forecasted to be 87.61 percent, which is slightly lower than the previous year (Table 40, Figure 43).

The ratio of the beginning stock to domestic utilization in 2022 is forecasted to be about 51.26 percent, which moderately increases from 2021 (Table 41, Figure 44). This indicates that the domestic availability of sugar in the region is expected to increase moderately compared to the previous year.

### ► **Trade**

The export is predicted to decrease from 6.17 million tons in 2021 to 6.08 million tons in 2022 (Table 38-39, Figure 36-38). The import is forecasted to be 7.95 million tons in 2022, which decreases from 8.55 million tons in the previous year (Tables 38-39, Figure 39-41).

**Table 32 Sugarcane production in ASEAN countries, 2020 – 2022**

Unit: 1,000 Tons

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>155,252.78</b>	<b>144,927.98</b>	<b>-10,324.80</b>	<b>-6.65</b>	<b>145,789.74</b>	<b>861.77</b>	<b>0.59</b>
Brunei	*0.10	*0.11	0.01	5.00	*0.11	0.01	5.00
Cambodia	680.66	682.70	2.04	0.30	685.44	2.73	0.40
Indonesia	31,734.18	33,479.56	1,745.38	5.50	34,316.55	836.99	2.50
Lao PDR	1,191.24	1,157.40	-33.84	-2.84	1,235.41	78.01	6.74
Malaysia	N/A						
Myanmar	11,846.18	11,551.11	-295.06	-2.49	*11,476.03	-75.08	-0.65
Philippines	23,297.81	*22,615.72	-682.09	-2.93	*22,498.11	-117.60	-0.52
Singapore	N/A						
Thailand	74,968.07	67,367.20	-7,600.87	-10.14	69,118.75	1,751.55	2.60
Vietnam	11,534.54	8,074.18	-3,460.36	-30.00	6,459.34	-1,614.84	-20.00

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 33 Sugarcane planted area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>3,053.09</b>	<b>2,538.20</b>	<b>-514.89</b>	<b>-16.86</b>	<b>2,549.03</b>	<b>10.83</b>	<b>0.43</b>
Brunei	N/A						
Cambodia	16.41	16.49	0.08	0.47	16.58	0.10	0.60
Indonesia	416.98	437.83	20.85	5.00	446.59	8.76	2.00
Lao PDR	31.51	23.09	-8.41	-26.70	21.86	-1.23	-5.33
Malaysia	N/A						
Myanmar	182.44	177.44	-5.01	-2.74	*176.12	-1.31	-0.74
Philippines	*385.70	*374.51	-11.19	-2.90	*372.64	-1.87	-0.50
Singapore	N/A						
Thailand	*1,834.40	*1,369.60	-464.80	-25.34	*1,403.84	34.24	2.50
Vietnam	185.66	139.25	-46.42	-25.00	111.40	-27.85	-20.00

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 34 Sugarcane harvested area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>3,052.79</b>	<b>2,538.05</b>	<b>-514.74</b>	<b>-16.86</b>	<b>2,548.93</b>	<b>10.88</b>	<b>0.43</b>
Brunei	N/A						
Cambodia	16.39	16.46	0.07	0.43	16.53	0.08	0.47
Indonesia	416.98	437.83	20.85	5.00	446.59	8.76	2.00
Lao PDR	31.51	23.09	-8.41	-26.70	21.86	-1.23	-5.33
Malaysia	N/A						
Myanmar	182.16	177.31	-4.85	-2.66	*176.07	-1.24	-0.70
Philippines	385.70	*374.51	-11.19	-2.90	*372.64	-1.87	-0.50
Singapore	N/A						
Thailand	1,834.40	1,369.60	-464.80	-25.34	1,403.84	34.24	2.50
Vietnam	185.66	139.25	-46.42	-25.00	111.40	-27.85	-20.00

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 35 Sugarcane yield in ASEAN countries, 2020 – 2022**

Unit: Ton/Hectare

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>50.86</b>	<b>57.10</b>	<b>6.24</b>	<b>12.27</b>	<b>57.20</b>	<b>0.10</b>	<b>0.18</b>
Brunei	N/A						
Cambodia	41.54	41.48	-0.06	-0.14	41.46	-0.02	-0.05
Indonesia	76.10	76.47	0.37	0.49	76.84	0.37	0.48
Lao PDR	37.81	50.12	12.31	32.56	56.51	6.39	12.75
Malaysia	N/A						
Myanmar	65.03	65.15	0.12	0.18	*65.18	0.03	0.05
Philippines	60.40	60.39	-0.01	-0.02	60.38	-0.01	-0.02
Singapore	N/A						
Thailand	40.87	49.19	8.32	20.36	49.24	0.05	0.10
Vietnam	62.13	57.98	-4.15	-6.68	57.98	0.00	0.00

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.**Table 36 Sugarcane damaged area in ASEAN by cause of damage, 2021**

Unit: Hectares

Country	Cause of Damage (Hectares)						Total
	Flood	Drought	Pests	Diseases	Others	Unspecified	
<b>ASEAN</b>	<b>125</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>153</b>
Brunei	N/A						
Cambodia	-	-	-	-	-	28	28
Indonesia	N/A						
Lao PDR.	N/A						
Malaysia	N/A						
Myanmar	125	-	-	-	-	-	125
Philippines	N/A						
Singapore	N/A						
Thailand	N/A						
Vietnam	N/A						

**Remark:** N/A refers to data that is not available.

**Table 37 Sugar balance sheet of ASEAN countries, 2020**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>7,045,091</b>	<b>15,299,603</b>	<b>7,444,438</b>	<b>29,789,132</b>	<b>15,143,408</b>	<b>6,740,673</b>	<b>7,905,051</b>	<b>29,789,132</b>
Brunei	3,531	*11	5,397	8,939	*5,593	-	3,346	8,939
Cambodia	-	68,066	-	68,066	20,410	47,656	-	68,066
Indonesia	494,439	2,437,820	5,539,679	8,471,938	7,621,686	45,566	804,685	8,471,937
Lao PDR	1,261,987	238,248	22	1,500,257	-	71,740	1,428,517	1,500,257
Malaysia	-	-	259,523	259,523	236,911	22,612	-	259,523
Myanmar	2,013,272	947,694	-	2,960,966	787,341	627,035	1,546,590	2,960,966
Philippines	619,570	2,164,310	104,082	2,887,961	2,235,952	109,408	542,601	2,887,961
Singapore	-	-	253,381	253,381	201,714	51,666	-	253,381
Thailand	*2,525,250	8,290,000	82,356	10,897,606	2,310,000	5,493,497	*3,094,109	10,897,606
Vietnam	127,043	1,153,454	1,200,000	2,480,496	1,723,800	271,493	485,203	2,480,496

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

[39]

**Table 38 Sugar balance sheet of ASEAN countries, 2021**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>7,905,051</b>	<b>14,294,168</b>	<b>8,549,027</b>	<b>30,748,246</b>	<b>16,158,296</b>	<b>6,167,950</b>	<b>8,422,000</b>	<b>30,748,246</b>
Brunei	3,346	*11	5,612	8,969	*5,458	-	3,511	8,969
Cambodia	-	68,270	-	68,270	21,399	46,872	-	68,270
Indonesia	804,685	2,571,900	6,093,833	9,470,418	8,399,369	91,048	980,000	9,470,418
Lao PDR	1,428,517	231,480	18	1,660,015	-	65,515	1,594,500	1,660,015
Malaysia	-	-	*255,630	255,630	*233,357	*22,272	-	255,630
Myanmar	1,546,590	924,089	-	2,470,679	728,333	749,616	992,730	2,470,679
Philippines	542,601	2,101,000	107,460	2,751,061	2,214,860	136,201	400,00--0	2,751,061
Singapore	-	-	325,765	325,765	259,339	66,426	-	325,765
Thailand	*3,094,109	7,590,000	*80,709	10,764,818	2,400,000	*4,780,000	*3,584,818	10,764,818
Vietnam	485,203	807,418	1,680,000	2,972,621	1,896,180	210,000	866,441	2,972,621

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 39 Sugar balance sheet of ASEAN countries, 2022**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>8,422,000</b>	<b>14,393,267</b>	<b>7,952,149</b>	<b>30,767,415</b>	<b>16,429,430</b>	<b>6,082,052</b>	<b>8,255,932</b>	<b>30,767,415</b>
Brunei	3,511	*12	6,091	9,615	*5,459	-	4,156	9,615
Cambodia	-	68,544	-	68,544	21,352	47,191	-	68,544
Indonesia	980,000	2,636,198	5,789,141	9,405,339	8,448,631	100,153	856,555	9,405,339
Lao PDR	1,594,500	247,082	26	1,841,608	-	78,618	1,762,990	1,841,608
Malaysia	-	-	*251,795	251,795	*229,857	*21,938	-	251,795
Myanmar	992,730	*918,082	-	1,910,812	*713,766	*757,112	*439,934	1,910,812
Philippines	400,000	*2,090,075	*108,427	2,598,502	*2,194,040	*149,821	*254,640	2,598,502
Singapore	-	-	289,573	289,573	230,527	59,046	-	289,573
Thailand	*3,584,818	*7,787,340	*79,095	11,451,253	*2,500,000	*4,637,172	*4,314,080	11,451,253
Vietnam	866,441	645,934	1,428,000	2,940,375	2,085,798	231,000	623,577	2,940,375

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 40 Ratio of sugar production to domestic utilization in ASEAN countries, 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>15,299,603</b>	<b>15,143,408</b>	<b>101.03</b>	<b>14,294,168</b>	<b>16,158,296</b>	<b>88.46</b>	<b>14,393,267</b>	<b>16,429,430</b>	<b>87.61</b>
Brunei	11	5,593	0.20	11	5,458	0.20	12	5,459	0.22
Cambodia	68,066	20,410	333.49	68,270	21,399	319.04	68,544	21,352	321.01
Indonesia	2,437,820	7,621,686	31.99	2,571,900	8,399,369	30.62	2,636,198	8,448,631	31.20
Lao PDR	238,248	-	-	231,480	-	-	247,082	-	-
Malaysia	-	236,911	-	-	233,357	-	-	229,857	-
Myanmar	947,694	787,341	120.37	924,089	728,333	126.88	918,082	713,766	128.63
Philippines	2,164,310	2,235,952	96.80	2,101,000	2,214,860	94.86	2,090,075	2,194,040	95.26
Singapore	-	201,714	-	-	259,339	-	-	230,527	-
Thailand	8,290,000	2,310,000	358.87	7,590,000	2,400,000	316.25	7,787,340	2,500,000	311.49
Vietnam	1,153,454	1,723,800	66.91	807,418	1,896,180	42.58	645,934	2,085,798	30.97

**Remark:** \* The value is estimated by AFSIS Secretariat.

**Table 41 Ratio of sugar beginning stock to domestic utilization in ASEAN countries, 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>7,045,091</b>	<b>15,143,408</b>	<b>46.52</b>	<b>7,905,051</b>	<b>16,158,296</b>	<b>48.92</b>	<b>8,422,000</b>	<b>16,429,430</b>	<b>51.26</b>
Brunei	3,531	5,593	63.13	3,346	5,458	61.31	3,511	5,459	64.33
Cambodia	-	20,410	-	-	21,399	-	-	21,352	-
Indonesia	494,439	7,621,686	6.49	804,685	8,399,369	9.58	980,000	8,448,631	11.60
Lao PDR	1,261,987	-	-	1,428,517	-	-	1,594,500	-	-
Malaysia	-	236,911	-	-	233,357	-	-	229,857	-
Myanmar	2,013,272	787,341	255.71	1,546,590	728,333	212.35	992,730	713,766	139.08
Philippines	619,570	2,235,952	27.71	542,601	2,214,860	24.50	400,000	2,194,040	18.23
Singapore	-	201,714	-	-	259,339	-	-	230,527	-
Thailand	2,525,250	2,310,000	109.32	3,094,109	2,400,000	128.92	3,584,818	2,500,000	143.39
Vietnam	127,043	1,723,800	7.37	485,203	1,896,180	25.59	866,441	2,085,798	41.54

**Remark:** \* The value is estimated by AFSIS Secretariat.

**Table 42 Quantity and Value of Sugar Export by Countries of Destination in 2021**

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	N/A													
Cambodia	N/A													
Indonesia	9	10,671							74	43,775				
Lao PDR														
Malaysia	39	2,138,789	59	1,580,119	4,848	27,392,924					37	4,971,392	672	13,769,000
Myanmar														
Philippines														
Singapore					920	792,348			22,067	11,376,527	11	7,781	8	29,628
Thailand	1,868	868,323	197,940	87,612,555	292,411	97,662,756	48,231	24,076,740	65,626	27,003,681	26,882	14,194,646	35,583	11,866,250
Vietnam			-	969,380	-	685,902	-	1,087,158	-	2,251,001			-	3,768,271

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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	N/A											
Cambodia	N/A											
Indonesia	338	217,333			51,951	25,115,550	52,371	25,387,329	1,121	2,514,421	53,492	27,901,750
Lao PDR			36,727	33,937,702	9,160	8,526,170	45,887	42,463,873	19,628	18,585,240	65,515	61,049,112
Malaysia	3,271	32,703,336	293	6,246,973	246	55677861.75	9,465	144,480,394	13,146	145,285,634	22,612	289,766,029
Myanmar							-	-	749,616	20,581,457	749,616	20,581,457
Philippines							-	-	136,201	-	136,201	-
Singapore			87,699	44,516,111	263	155,074	110,969	56,877,469	214,796	101,032,560	325,765	157,910,029
Thailand	32,985	14,977,378			226,966	84,846,970	928,494	363,109,299	410,643	187,978,170	1,339,136	551,087,469
Vietnam	-	324,943	-	2,534,034			-	11,620,688	-	30,190,036	-	41,810,724

**Remark:** The data in this table is obtained from national focal points of member states and may not complete. N/A refers to data that is not available.

**Table 43 Quantity and Value of Sugar Import by Countries of Origin in 2021**

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	N/A													
Indonesia														
Lao PDR														
Malaysia					525	13,192,059					3	148,661	30	3,381,192
Myanmar	N/A													
Philippines	N/A													
Singapore	N/A													
Thailand					36,980	14,996,901	5,654	997,362	1,505	2,686,066	123	150,845	484	1,914,983
Vietnam			-	31,444,103	-	32,743,623	-	7,319,317	-	28,235,250	-	22,103,958	-	3,999,641

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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			5,612	-			5,612	-			5,612	-
Cambodia	N/A											
Indonesia	0.003	3.0	280,611	119,361,533	21	24,278	280,632	119,385,814	2,305,584	953,973,197	2,586,216	1,073,359,011
Lao PDR			18	8,580			18	8,580			18	8,580
Malaysia	72	2,215,869	19,361	72,369,872	305	10,053,060	20,295	101,360,713	239,227	832,529,024	259,523	933,889,736
Myanmar	N/A											
Philippines	N/A											
Singapore	N/A											
Thailand	193.53	616,872			773.842	3,708,590	45,713	25,071,619	268,061	100,513,952	313,773	125,585,571
Vietnam	-	6,134,704	-	104,235,957			-	236,216,552	-	89,276,152	-	325,492,704

**Remark:** The data in this table is obtained from national focal points of member states and may not complete. N/A refers to data that is not available.



**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
Malaysia	Not specified	2020	787	767	686	571	633	594	568	563	539	544	581	648	623
		2021	N/A												
Myanmar	Not specified	2020	46	53	47	41	37	-	-	-	-	-	37	9	39
		2021	38	38	37	-	-	-	-	-	-	-	-	-	-
Thailand	Raw Sugar	2020	287	294	288	292	302	261	276	286	286	290	315	316	291
		2021	349	337	350	362	-	-	-	-	-	-	-	-	-
	White Sugar	2020	343	353	350	377	362	355	360	371	374	385	363	363	363
		2021	421	426	441	453	-	-	-	-	-	-	-	-	-

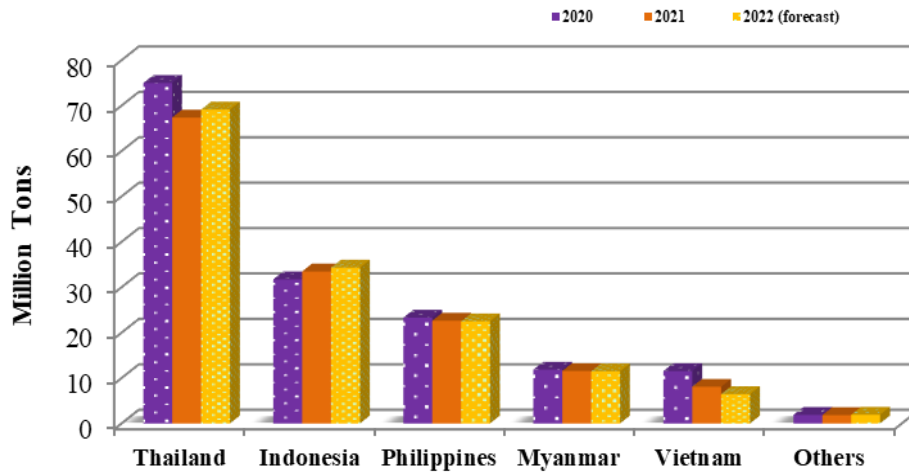
Remark: N/A refers to data that is not available.

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

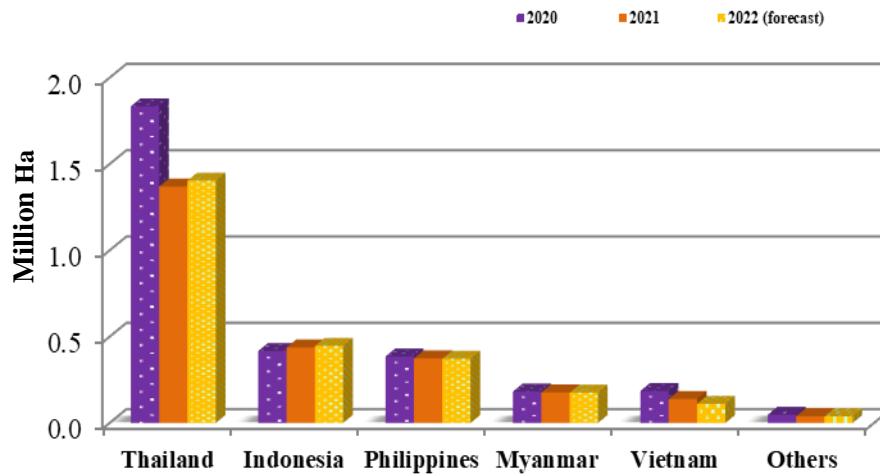
Unit: US\$/Ton

Country	Grade	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	White Sugar	2020	385	441	472	460	581	468	549	391	462	408	462	483	463
		2021	405	455	513	560	-	-	-	-	-	-	-	-	-
Laos PDR	White sugar	2020	N/A												
		2021	428	457	477	480	505	-	-	-	-	-	-	-	-
Malaysia	Not specified	2020	362	393	411	478	411	387	411	381	410	384	378	423	403
		2021	N/A												
Singapore	Not specified	2020	418	443	441	459	428	465	434	465	448	420	461	469	446
		2021	459	490	485	517	487	-	-	-	-	-	-	-	-

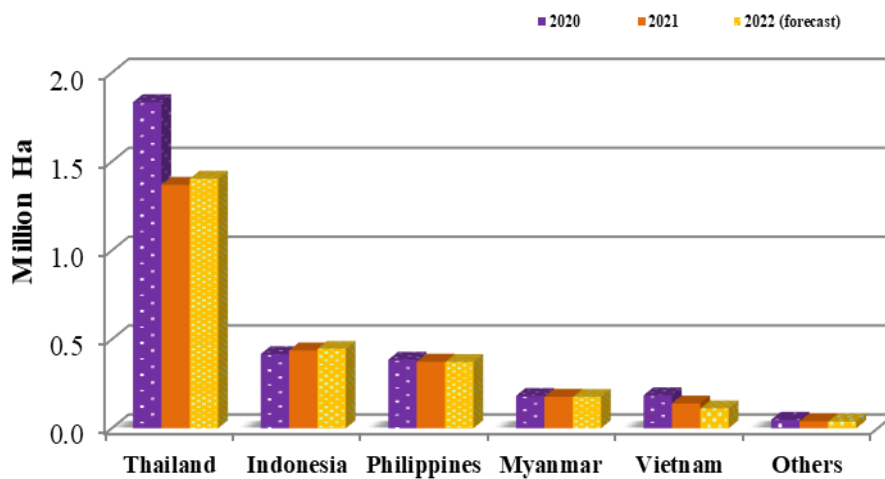
Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.



**Figure 32 Sugarcane production of selected countries in ASEAN, 2020 – 2022**



**Figure 33 Sugarcane planted area of selected countries in ASEAN, 2020 – 2022**



**Figure 34 Sugarcane harvested area of selected countries in ASEAN, 2020 – 2022**

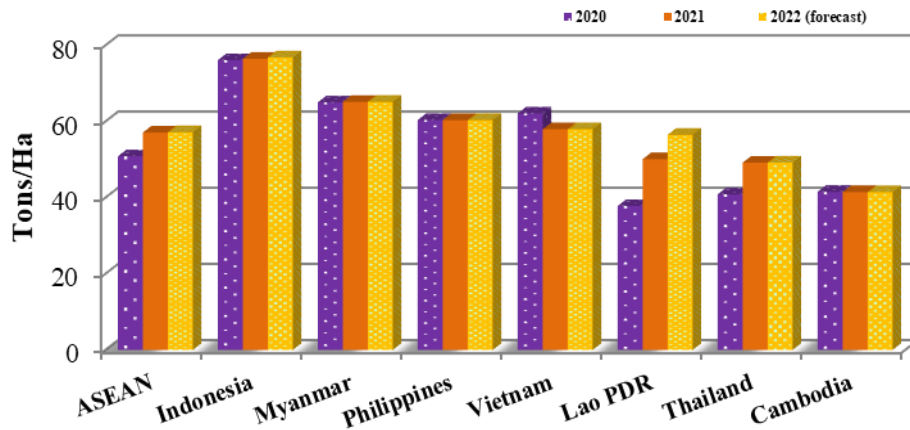


Figure 35 Sugarcane yield of selected countries in ASEAN, 2020 – 2022

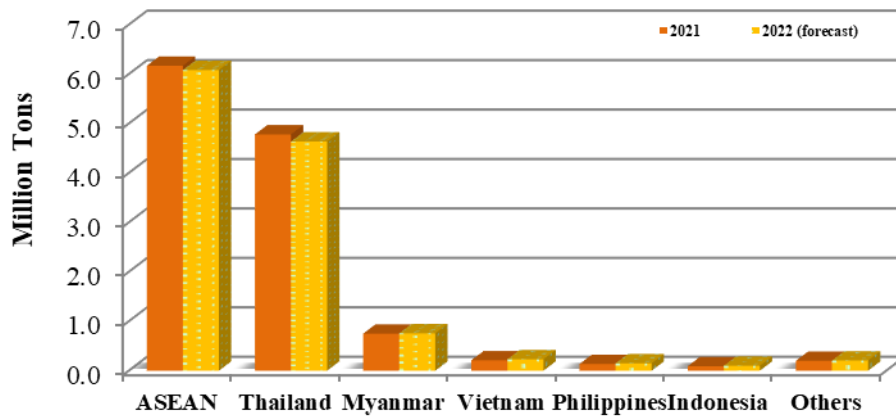
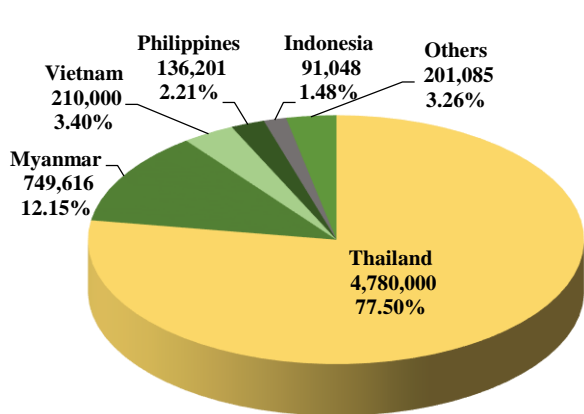
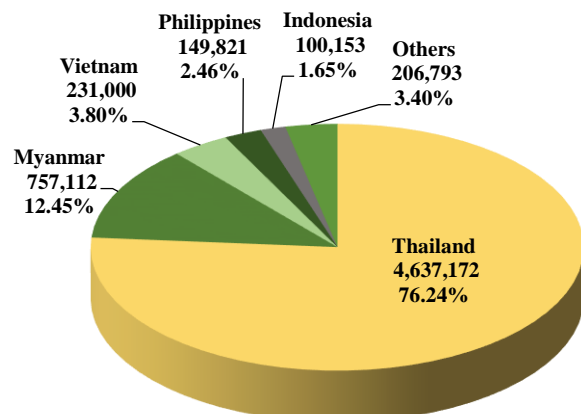


Figure 36 Amount of Sugar export (million tons) of selected countries in ASEAN in 2021 – 2022



Total 6.17 million tons

Figure 37 Share of sugar export (tons) among ASEAN countries, 2021



Total 6.08 million tons

Figure 38 Share of sugar export (tons) among ASEAN countries, 2022

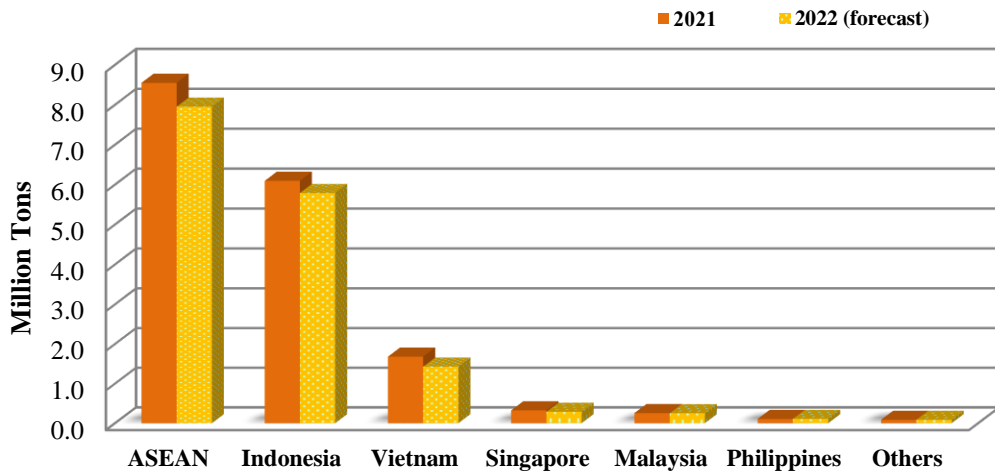
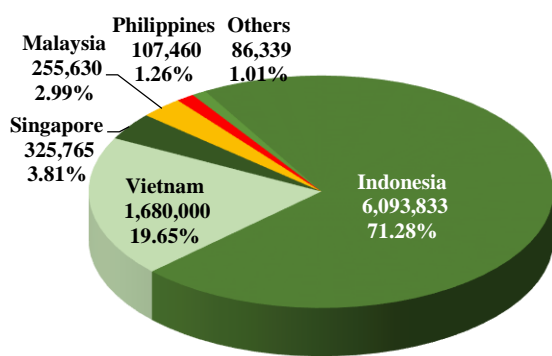
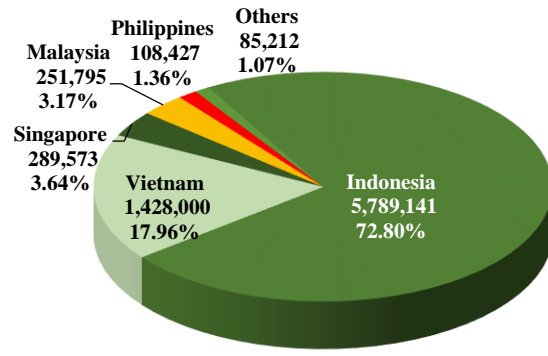


Figure 39 Amount of sugar import (million tons) by selected countries in ASEAN in 2021 – 2022



Total 8.55 million tons

Figure 40 Share of sugar import (tons) among ASEAN countries, 2021



Total 7.95 million tons

Figure 41 Share of sugar import (tons) among ASEAN countries, 2022

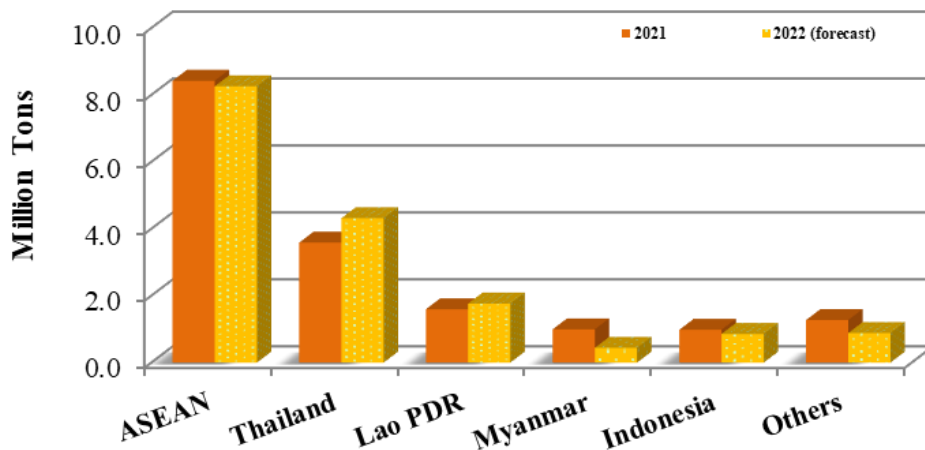


Figure 42 Amount of ending stock of Sugar in ASEAN countries in 2021– 2022

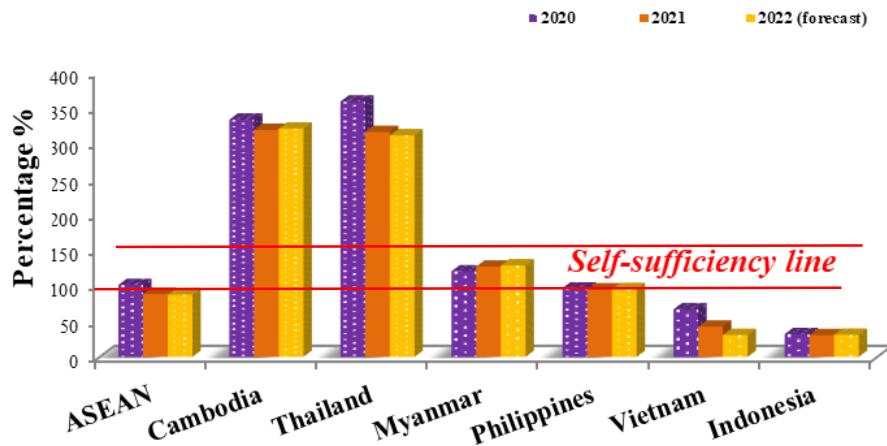


Figure 43 Ratio of sugar production to domestic utilization in ASEAN countries, 2020 – 2022

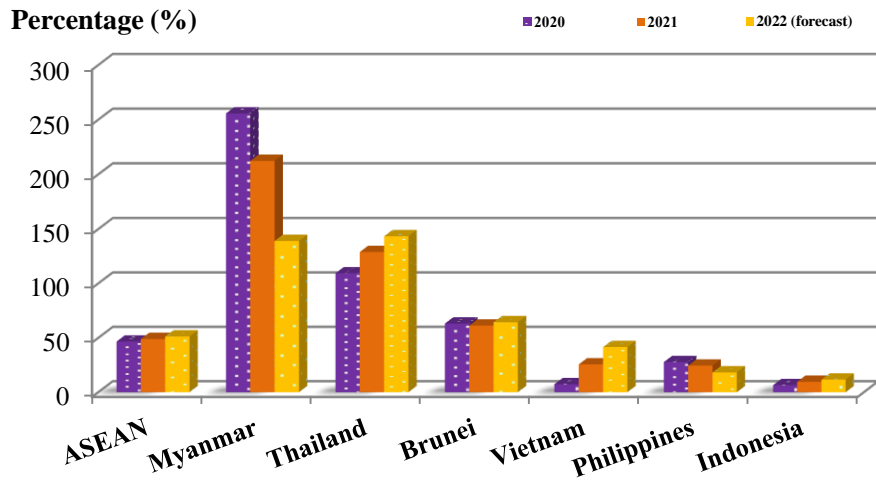


Figure 44 Ratio of sugar beginning stock to domestic utilization in ASEAN countries, 2020 – 2022

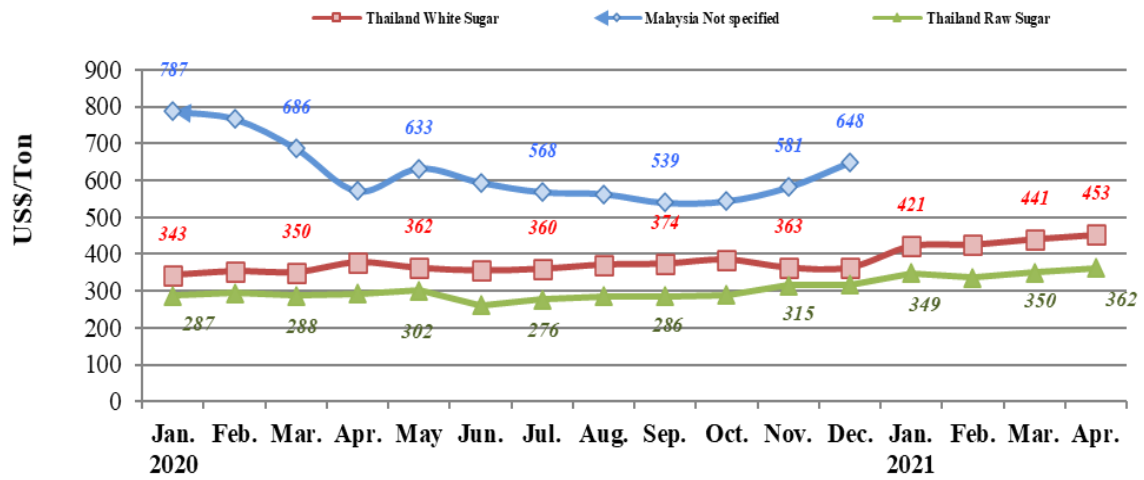


Figure 45 FOB price (US\$/Ton) of sugar of selected countries in ASEAN in 2020 – 2021

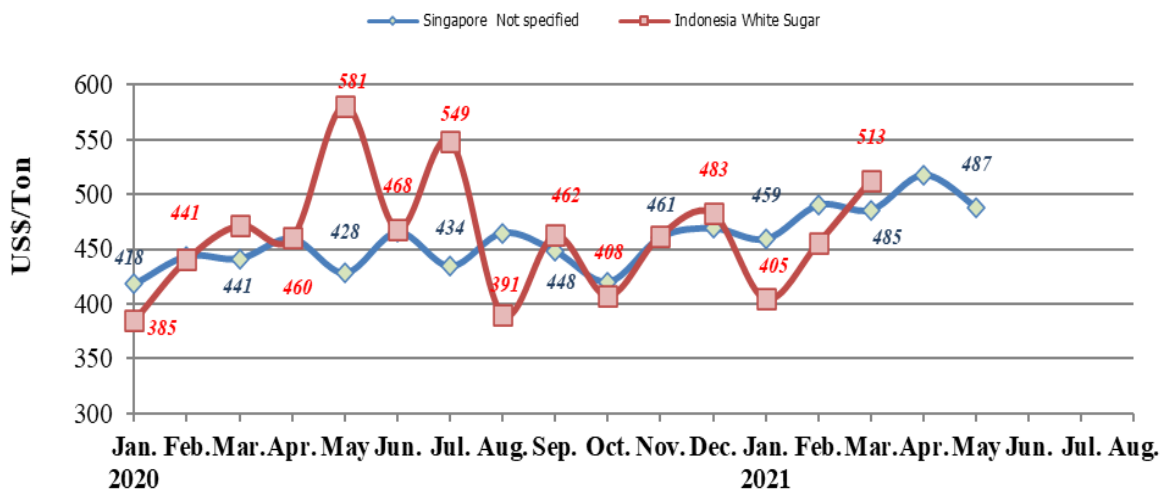


Figure 46 CIF price (US\$/Ton) of sugar of selected countries in ASEAN in 2020 – 2021

## Soybean Outlook for 2022

### Highlights

The supply of ASEAN soybean in 2022 is forecasted to increase from 10.89 million tons in 2021 to 10.95 million tons or approximately 0.55 percent (Table 46). The growth in supply mainly comes from the increase in production and import, which increase by approximately 25.68 percent and 0.10 percent, respectively. The soybean production is predicted to be 0.93 million tons in 2022, which increases from the previous year at 0.19 million tons.

In 2022, the beginning stock of soybean in ASEAN is forecasted to decline to 0.35 million tons, which decreases by 0.15 million tons from 0.50 million tons in 2021. Additionally, the ending stock is expected to be 0.37 million tons in 2022, an increase by 0.02 million tons or approximately 5.71 percent from 0.35 million tons in 2021.

In terms of soybean's demand in ASEAN in 2022, the domestic utilization is estimated at 10.55 million tons, which is rising in the demand for 0.04 million tons from 10.51 million tons in 2021.

The import of soybean is forecasted to increase from 9.66 million tons in 2021 to 9.67 million tons in 2022. Besides, the export in 2022 is forecasted to be 0.03 million tons. This indicates that ASEAN exports very few amounts of soybeans.

The production to domestic utilization ratio (self-sufficiency ratio) in 2022 is forecasted to be 8.84 percent, which increases by 1.85 percent from the previous year.

The beginning stock to domestic utilization ratio (food security ratio) is predicted to be 3.34 percent in 2022, which decreases by approximately 1.40 percent from 2021.

**Table 46 Summary of the ASEAN soybean situation, 2021 – 2022**

Unit: Million tons

Items	2021	2022	Change	
			Quantity	%
Supply (Million tons)	10.89	10.95	0.06	0.55
Beginning stock	0.50	0.35	-0.15	-30.00
Production	0.74	0.93	0.19	25.68
Import	9.66	9.67	0.01	0.10
Demand (Million tons)	10.89	10.95	0.06	0.55
Domestic utilization	10.51	10.55	0.04	0.38
Export	0.03	0.03	0.00	0.00
Ending stock	0.35	0.37	0.02	5.71
Ratio of production to domestic utilization (%)	6.99	8.84	1.85	-
Ratio of beginning stock to domestic utilization (%)	4.74	3.34	-1.40	-

## ASEAN Soybean Situation 2021

### ► **Production**

*The estimate of soybean production in ASEAN in 2021 (crop year 2020/21) was 0.74 million tons, an increase of 0.11 million tons from 0.62 million tons in 2020 (crop year 2020/21). The increase in production was due to the increase in planted 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 production of soybean decreased in Myanmar and Thailand (Table 47-50, Figure 47-50).*

For **Cambodia**, the increase in production was due to the increase in planted area.

For **Indonesia**, the estimated soybean production in 2021 has increased to 0.39 million tons, increasing approximately 45.87 percent from 0.27 million tons in 2020. The increase in production is attributed to the increase in planted area and yield. The increasing in planted area is caused by farmers' response to the price increase. The yield has increased because farmers took care of the soybean crop better.

For **Lao PDR**, the increase in production was due to the increase in planted area, which caused by favorable weather and sufficient sunlight for plants.

For **Myanmar**, the second-largest soybean producing country in ASEAN, the production has decreased due to the reduction of the planted area and yield. The decline in the planted area came from unfavorable weather affected by heavy rainfall. The yield has decreased because it was also affected by the flood.

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

For **Thailand**, the decrease in production was due to the decrease in planted area, which caused by unfavorable weather affected by drought, labor shortage, high production costs, and lack of the development of mechanical soybean harvesting technology.

For **Vietnam**, the increase in production was due to the increase in planted area because farmers responded to the price increase.

### ► **Utilization and Stock**

The domestic utilization of soybean in ASEAN in 2021 was estimated at 10.51 million tons, an increase of 0.04 million tons or about 0.37 percent from 10.47 million tons in 2020. While the beginning stock was estimated at 0.50 million tons in 2021, a sharp decrease by 0.62 million tons or 55.29 percent from 1.12 million tons in 2020. Indonesia had the greatest soybean stock in the region (Table 52-53).

The ratio of production to domestic utilization (self-sufficiency ratio) of ASEAN in 2021 was 6.99 percent, which increased by approximately 1.04 percent from the previous year. However, none of the member countries has the ratio above 100 percent except Cambodia, Lao PDR, and Myanmar (Table 55, Figure 58). The ratio of the beginning stock to the domestic utilization of ASEAN in 2021 was estimated to be 4.74 percent, which dropped from the previous year (Table 56, Figure 59).



### ► *Trade*

In 2021, ASEAN altogether exported soybean 30,080 tons, which decreased 13,151 tons compared to 43,231 tons in 2020 (Table 52-53, Figure 51-52).

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.

### ► *Prices*

The monthly FOB price of soybean for exporting countries during 2020-2021 are shown in Table 59 and the monthly CIF prices for importing countries are shown in Table 60. The annual average FOB prices in 2021 in Myanmar was 578 US\$/ton, in Cambodia was 918 US\$/ton, and in Indonesia was 219 US\$/ton (Table 59, Figure 60).

For CIF prices of 2021, the annual average in Thailand was 507 US\$/ton, in Vietnam was 547 US\$/ton, in Indonesia was 547 US\$/ton, in Lao PDR was 554 US\$/ton, and in Singapore was 757 US\$/ton (Table 60, Figure 61).

### ► *Damaged Area*

The total damaged area of soybean in the ASEAN in 2021 was estimated to be 1,286 hectares. The major cause of damage was drought, which constituted about 68.61 percent of the overall damaged area. The majority of drought areas had occurred in Thailand (Table 51).

## Prospects for Soybean in 2022

### ► *Production*

*Soybean production of ASEAN in 2022 is forecasted to be 0.93 million tons, which increase from 2021 approximately 26.87 percent (Table 47, Figure 47). The increase in production is expected in Cambodia, Indonesia, the Philippines, Thailand, and Vietnam. Indonesia, the biggest soybean-producing country in ASEAN, is forecasted to increase in its production from 0.39 million tons in 2021 to 0.59 million tons in 2022, which accounted for 50.56 percent increase. The growth in Indonesian production is derived from the increasing in planted area and yield. (Table 47-50, Figure 47-50). The increase in production is also expected in Cambodia, the Philippines, Thailand, and Vietnam, which is mainly caused by the expansion of the planted area. The increase in planted area is because farmers respond to soybean's price increase.*

### ► *Utilization and Stock*

The domestic utilization of soybeans in ASEAN is forecasted to increase by 0.39 percent from 10.51 million tons in 2021 to 10.55 million tons in 2022 (Table 53-54).

The beginning stock in ASEAN in 2022 is forecasted to decrease by 0.15 million tons or about 29.32 percent from 0.50 million tons in

2021 to 0.35 million tons in 2022 (Table 53-54). Nevertheless, the ending stock in ASEAN in 2022 is forecasted to increase from 0.35 million tons in 2021 to 0.37 million tons, which increases about 4.52 percent (Table 53-54, Figure 57).

In 2022, the ratio of production to domestic utilization (self-sufficiency ratio) is forecasted to be 8.84 percent, which increases from 6.99 percent in 2021 (Table 55, Figure 58). The ratio of beginning stock to the domestic utilization (food security ratio) is forecasted to be 3.34 percent, which decreases 1.40 percent from the previous year (Table 56, Figure 59).

### ► *Trade*

In 2022, the export of soybeans from the ASEAN is forecasted to reach 30,552 tons, increasing 472 tons or 1.57 percent compared to the previous year. While the total import by the ASEAN in 2022 is forecasted to be 9.67 million tons, increasing 6,380 tons from 9.66 million tons in 2021 (Table 53-54, Figure 51, 53, 54, and 56).

**Table 47 Soybean production in ASEAN countries, 2020 – 2022**

Unit: 1,000 Tons

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>623.10</b>	<b>735.05</b>	<b>111.95</b>	<b>17.97</b>	<b>932.56</b>	<b>197.51</b>	<b>26.87</b>
Brunei	N/A						
Cambodia	30.01	30.96	0.94	3.15	31.95	0.99	3.20
Indonesia	270.72	394.89	124.17	45.87	594.53	199.64	50.56
Lao PDR	4.62	6.24	1.61	34.87	5.91	-0.33	-5.21
Malaysia	N/A						
Myanmar	204.40	194.60	-9.80	-4.80	188.51	-6.09	-3.13
Philippines	0.548	0.552	0.004	0.80	*0.56	0.00	0.82
Singapore	N/A						
Thailand	35.53	27.23	-8.30	-23.36	29.01	1.78	6.53
Vietnam	77.26	80.59	3.33	4.31	82.10	1.51	1.87

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 48 Soybean planted area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>412.55</b>	<b>456.81</b>	<b>44.26</b>	<b>10.73</b>	<b>564.86</b>	<b>108.05</b>	<b>23.65</b>
Brunei	N/A						
Cambodia	18.88	19.83	0.94	5.00	20.82	0.99	5.00
Indonesia	182.43	233.68	51.26	28.10	344.45	110.77	47.40
Lao PDR	1.84	2.60	0.76	41.00	2.69	0.09	3.46
Malaysia	N/A						
Myanmar	137.49	131.61	-5.88	-4.27	127.30	-4.31	-3.27
Philippines	*0.40	*0.40	0.00	-0.58	*0.39	0.00	-0.58
Singapore	N/A						
Thailand	22.10	17.08	-5.02	-22.71	17.20	0.12	0.69
Vietnam	49.41	51.62	2.20	4.46	52.00	0.38	0.75

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 49 Soybean harvested area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>410.60</b>	<b>455.52</b>	<b>44.92</b>	<b>10.94</b>	<b>564.13</b>	<b>108.60</b>	<b>23.84</b>
Brunei	N/A						
Cambodia	17.44	19.83	2.39	13.69	20.82	0.99	5.00
Indonesia	182.06	233.66	51.60	28.35	344.45	110.79	47.42
Lao PDR	1.84	2.60	0.76	41.00	2.69	0.09	3.46
Malaysia	N/A						
Myanmar	137.48	131.25	-6.23	-4.53	126.62	-4.63	-3.53
Philippines	0.40	0.40	0.00	-0.58	*0.39	0.00	-0.58
Singapore	N/A						
Thailand	21.97	16.18	-5.80	-26.38	17.15	0.98	6.03
Vietnam	49.41	51.62	2.20	4.46	52.00	0.38	0.75

Remark: \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 50 Soybean yield in ASEAN countries, 2020 – 2022**

Unit: Tons/Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>1.52</b>	<b>1.61</b>	<b>0.10</b>	<b>6.33</b>	<b>1.65</b>	<b>0.04</b>	<b>2.45</b>
Brunei	N/A						
Cambodia	1.72	1.56	-0.16	-9.27	1.53	-0.03	-1.71
Indonesia	1.49	1.69	0.20	13.65	1.73	0.04	2.13
Lao PDR	2.51	2.40	-0.11	-4.35	2.20	-0.20	-8.38
Malaysia	N/A						
Myanmar	1.49	1.48	0.00	-0.28	1.49	0.01	0.41
Philippines	1.38	1.40	0.02	1.39	*1.42	0.02	1.41
Singapore	N/A						
Thailand	1.62	1.68	0.07	4.10	1.69	0.01	0.47
Vietnam	1.56	1.56	0.00	-0.15	1.58	0.02	1.12

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 51 Soybean damaged area in ASEAN by cause of damage, 2021**

Unit: Hectares

Country	Cause of Damage (Hectares)						
	Flood	Drought	Pests	Diseases	Others	Unspecify	Total
<b>ASEAN</b>	<b>381</b>	<b>882</b>	<b>-</b>	<b>23</b>	<b>-</b>	<b>-</b>	<b>1,286</b>
Brunei	N/A						
Cambodia	N/A						
Indonesia	22	-	-		-	-	22
Lao PDR	N/A						
Malaysia	N/A						
Myanmar	359	-	-	-	-	-	359
Philippines	N/A						
Singapore	N/A						
Thailand	-	882	-	23	-	-	905
Vietnam	N/A						

**Remark:** N/A refers to data that is not available.

**Table 52 Soybean balance sheet of ASEAN countries, 2020**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>1,115,005</b>	<b>623,097</b>	<b>9,277,056</b>	<b>11,015,158</b>	<b>10,473,419</b>	<b>43,231</b>	<b>498,508</b>	<b>11,015,158</b>
Brunei	-	-	680	680	680	-	-	680
Cambodia		30,014	-	30,014	20,299	9,715	-	30,014
Indonesia	1,027,507	270,717	2,475,287	3,773,511	3,360,748	2,763	410,000	3,773,511
Lao PDR	426	4,623	150	5,199	3,532	805	862	5,199
Malaysia	-	-	732,891	732,891	720,792	12,098	-	732,891
Myanmar	16,162	204,400	371	220,933	203,817	14,892	2,224	220,933
Philippines	-	548	127,775	128,323	128,230	93	-	128,323
Singapore	-	-	20,459	20,459	20,068	390	-	20,459
Thailand	-	35,532	4,044,716	4,080,248	*4,078,530	1,718	-	4,080,248
Vietnam	70,910	77,263	1,874,728	2,022,901	1,936,722	757	85,422	2,022,901

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 53 Soybean balance sheet of ASEAN countries, 2021**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>498,508</b>	<b>735,049</b>	<b>9,661,009</b>	<b>10,894,567</b>	<b>10,512,162</b>	<b>30,080</b>	<b>352,323</b>	<b>10,894,566</b>
Brunei	-	-	748	748	748	-	-	748
Cambodia	-	30,958	-	30,958	22,736	8,222	-	30,958
Indonesia	410,000	394,886	2,746,404	3,551,290	3,358,424	2,866	190,000	3,551,290
Lao PDR	862	6,235	230	7,327	3,724	816	2,787	7,327
Malaysia	-	-	*716,805	716,805	*704,972	*11,833	-	716,805
Myanmar	2,224	194,598	6,353	203,175	194,537	3,388	5,250	203,175
Philippines	-	552	*127,136	127,688	*127,596	*92	-	127,688
Singapore	-	-	19,961	19,961	19,580	381	-	19,961
Thailand	-	27,230	3,800,000	3,827,230	*3,825,230	2,000	-	3,827,230
Vietnam	85,422	80,590	2,243,373	2,409,385	2,254,615	483	154,286	2,409,385

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 54 Soybean balance sheet of ASEAN countries, 2022**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>352,323</b>	<b>932,564</b>	<b>9,667,389</b>	<b>10,952,276</b>	<b>10,553,485</b>	<b>30,552</b>	<b>368,239</b>	<b>10,952,276</b>
Brunei	-	-	822	822	822	-	-	822
Cambodia	-	31,949	-	31,949	23,563	8,386	-	31,949
Indonesia	190,000	594,529	2,787,600	3,572,129	3,459,320	2,909	109,900	3,572,129
Lao PDR	2,787	5,910	300	8,997	3,880	867	4,250	8,997
Malaysia	-	-	*701,073	701,073	*689,499	*11,573	-	701,073
Myanmar	5,250	188,511	*6,671	200,431	*190,646	*3,625	*6,160	200,431
Philippines	-	*557	*129,043	129,600	*129,510	*90	-	129,600
Singapore	-	-	20,210	20,210	19,824	385	-	20,210
Thailand	-	29,008	3,600,000	3,629,008	*3,626,708	2,300	-	3,629,008
Vietnam	154,286	82,100	2,421,671	2,658,058	2,409,712	417	247,929	2,658,058

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 55 Ratio of soybean production to domestic utilization in ASEAN countries (Self-sufficiency ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>623,097</b>	<b>10,473,419</b>	<b>5.95</b>	<b>735,049</b>	<b>10,512,162</b>	<b>6.99</b>	<b>932,564</b>	<b>10,553,485</b>	<b>8.84</b>
Brunei	-	680	-	-	748	-	-	822	-
Cambodia	30,014	20,299	147.86	30,958	22,736	136.16	31,949	23,563	135.59
Indonesia	270,717	3,360,748	8.06	394,886	3,358,424	11.76	594,529	3,459,320	17.19
Lao PDR	4,623	3,532	130.89	6,235	3,724	167.43	5,910	3,880	152.32
Malaysia	-	720,792	-	-	704,972	-	-	689,499	-
Myanmar	204,400	203,817	100.29	194,598	194,537	100.03	188,511	190,646	98.88
Philippines	548	128,230	0.43	552	127,596	0.43	557	129,510	0.43
Singapore	-	20,068	-	-	19,580	-	-	19,824	-
Thailand	35,532	4,078,530	0.87	27,230	3,825,230	0.71	29,008	3,626,708	0.80
Vietnam	77,263	1,936,722	3.99	80,590	2,254,615	3.57	82,100	2,409,712	3.41

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 56 Ratio of soybean beginning stock to domestic utilization in ASEAN countries (Food security ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>1,115,005</b>	<b>10,473,419</b>	<b>10.65</b>	<b>498,508</b>	<b>10,512,162</b>	<b>4.74</b>	<b>352,323</b>	<b>10,553,485</b>	<b>3.34</b>
Brunei	-	680	-	-	748	-	-	822	-
Cambodia	-	20,299	-	-	22,736	-	-	23,563	-
Indonesia	1,027,507	3,360,748	30.57	410,000	3,358,424	12.21	190,000	3,459,320	5.49
Lao PDR	426	3,532	12.06	862	3,724	23.14	2,787	3,880	71.83
Malaysia	-	720,792	-	-	704,972	-	-	689,499	-
Myanmar	16,162	203,817	7.93	2,224	194,537	1.14	5,250	190,646	2.75
Philippines	-	128,230	-	-	127,596	-	-	129,510	-
Singapore	-	20,068	-	-	19,580	-	-	19,824	-
Thailand	-	4,078,530	-	-	3,825,230	-	-	3,626,708	-
Vietnam	70,910	1,936,722	3.66	85,422	2,254,615	3.79	154,286	2,409,712	6.40

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 57 Quantity and Value of Soybean Export by Countries of Destination in 2021**

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	N/A													
Cambodia	N/A													
Indonesia									0.17	53				
Lao PDR														
Malaysia	33	16,190			10,519	5,017,870								
Myanmar														
Philippines														
Singapore	N/A													
Thailand			7.46	13,535.77			194.25	160,371.12	5.00	8,939.71	0.19	2,312.34		
Vietnam							-	14,780						

[58]

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	N/A											
Cambodia	N/A											
Indonesia	0.016	12					0.186	65	839	277,436	840	277,501
Lao PDR							-	-	816	310,080	816	310,080
Malaysia	756	942,139			1.30	8,542	11,310	5,984,742	789	672,948	12,098	6,657,690
Myanmar			1,287	1,393			1,287	1,393	2,101	1,345	3,388	2,737
Philippines							-	-	14.64	46,400.00	15	46,400
Singapore	N/A											
Thailand	6.75	13,716.52			0.003	8.74	213.66	198,884.19	16.83	12,263.42	230.49	211,147.62
Vietnam							-	14,780	-	274	-	15,054

**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 2021**

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	N/A													
Cambodia	N/A													
Indonesia									1,434	701,632				
Lao PDR														
Malaysia	135	61,624												
Myanmar														
Philippines														
Singapore									2,288	2,431,868	0.07	7		
Thailand			3,000	1,435,958							493.68	266,614		
Vietnam			900	575,000					0.192	2,273				

[59]

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	N/A											
Cambodia	N/A											
Indonesia	0.08	434	0.003	10			1,434	702,076	1,040,305	576,949,711	1,041,739	577,651,787
Lao PDR					130	62,400	130	62,400	100	55,000	230	117,400
Malaysia	1,507	608,112					1,642	669,736	731,249	309,216,584	732,891	309,886,320
Myanmar							-	-	6,353	16,933	6,353	16,933
Philippines	0.93	1,212			240	187,200	240.93	188,412	868,822	455,981,728	869,063	456,170,140
Singapore			0.18	472			2,289	2,432,347	17,672	12,714,472	19,961	15,146,819
Thailand							3,494	1,702,572	1,194,504	589,120,572	1,197,998	590,823,144
Vietnam							900	577,273	746,891	410,184,500	747,791	410,761,773

**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\$/Tons

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Cambodia	2020	915	939	853	1,002	901	961	952	952	943	1,031	952	938	945
	2021	842	889	948	916	996	-	-	-	-	-	-	-	918
Indonesia	2020	163	204	166	100	120	146	168	180	173	185	210	266	174
	2021	-	275	162	-	-	-	-	-	-	-	-	-	219
Lao PDR	2020	N/A												
	2021	271	380	397	379	380								361
Malaysia	2020	534	602	820	556	495	580	468	479	497	509	545	524	551
	2021	N/A												
Myanmar	2020	404	378	361	491	513	521	625	499	507	633	653	523	509
	2021	611	499	625	-	-	-	-	-	-	-	-	-	578

Remark: N/A refers to data that is not available.

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

Unit: US\$/Tons

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Indonesia	2020	409	406	394	389	402	393	388	395	399	403	444	457	407
	2021	495	516	575	603	-	-	-	-	-	-	-	-	547
Lao PDR	2020	N/A												
	2021	480	480	680	546	586	-	-	-	-	-	-	-	554
Malaysia	2020	407	404	408	421	431	405	415	427	425	433	448	466	424
	2021	N/A												
Myanmar	2020	621	-	-	-	-	629	-	634	-	637	-	629	630
	2021	637	663	562	-	-	-	-	-	-	-	-	-	621
Singapore	2020	651	716	817	809	684	666	664	679	651	658	650	672	693
	2021	705	724	796	771	789	-	-	-	-	-	-	-	757
Thailand	2020	413	396	391	401	397	402	381	389	395	397	421	469	404
	2021	490	508	517	512	-	-	-	-	-	-	-	-	507
Vietnam	2020	414	414	406	397	394	386	388	399	406	437	454	414	409
	2021	512	545	560	570	-	-	-	-	-	-	-	-	547

Remark: N/A refers to data that is not available.

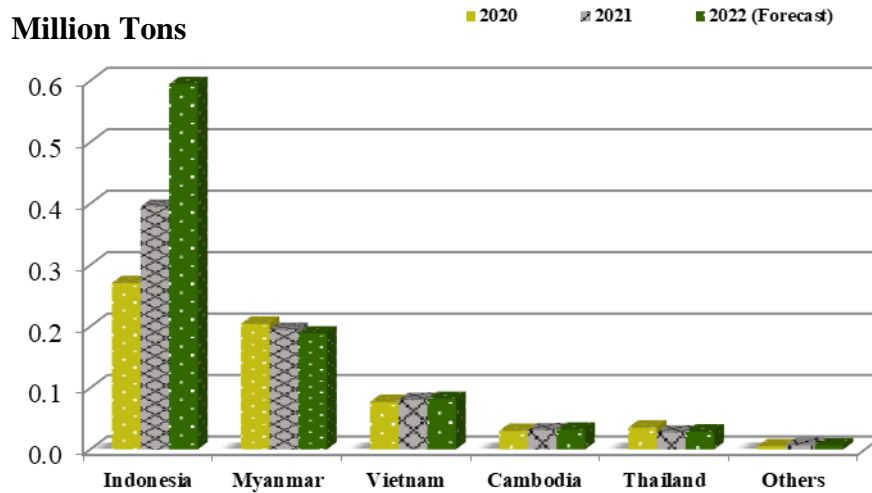


Figure 47 Soybean production of selected countries in ASEAN, 2020 – 2022

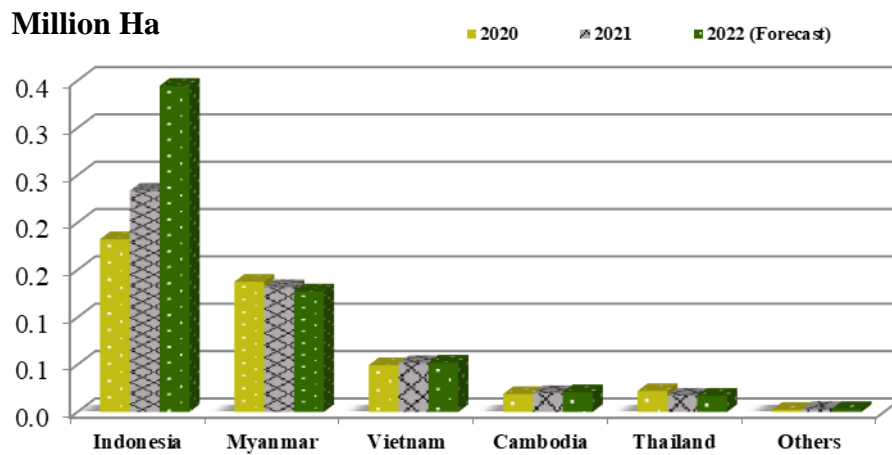


Figure 48 Soybean planted area of selected countries in ASEAN, 2020 – 2022

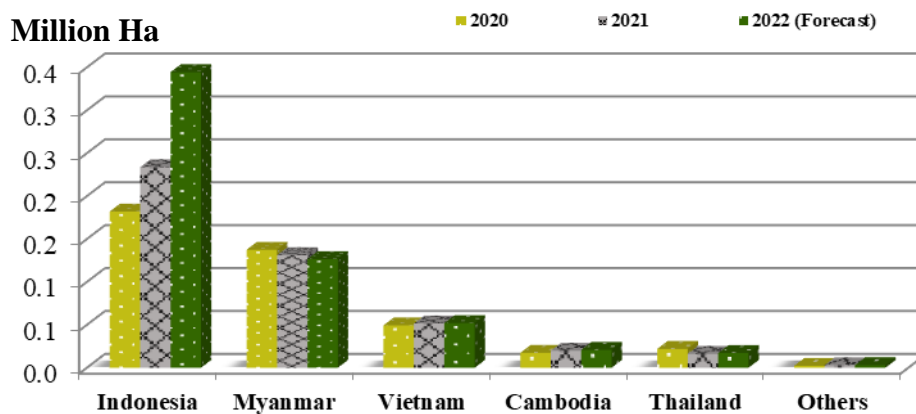


Figure 49 Soybean harvested area of selected countries in ASEAN, 2020 – 2022

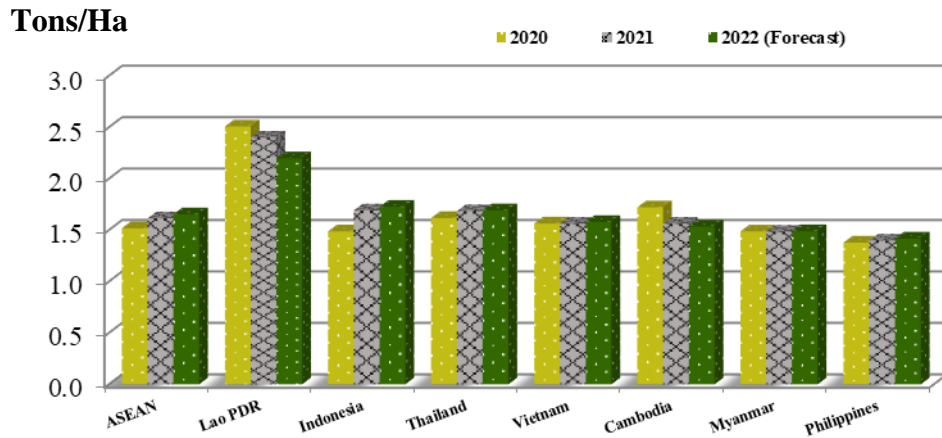


Figure 50 Soybean yield of countries in ASEAN, 2020 – 2022

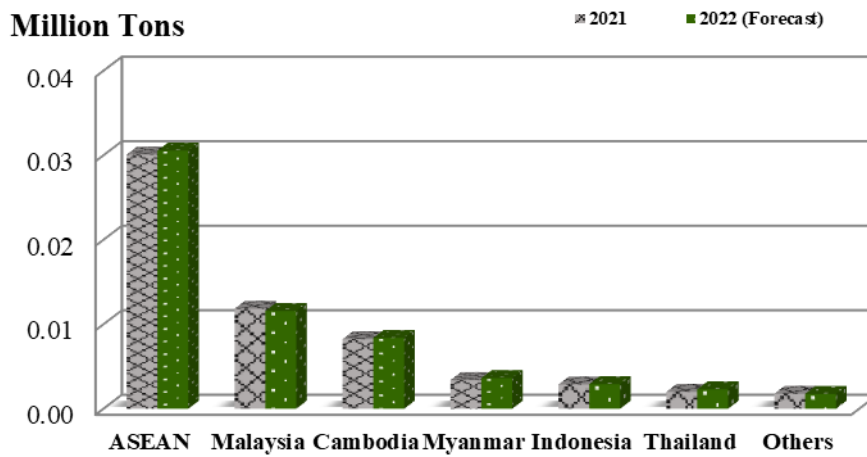
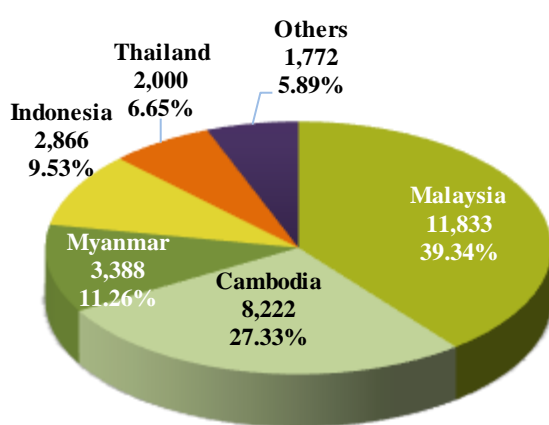
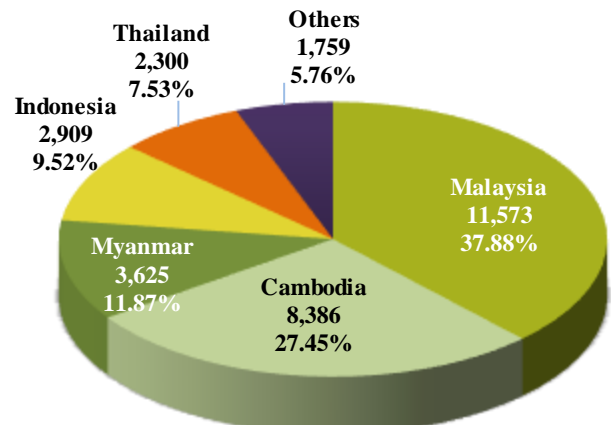


Figure 51 Amount of soybean export (million tons) of selected countries in ASEAN in 2021 – 2022



**Total 0.030 million tons**

Figure 52 Share of soybean export (tons) among ASEAN countries, 2021



**Total 0.031 million tons**

Figure 53 Share of soybean export (tons) among ASEAN countries, 2022

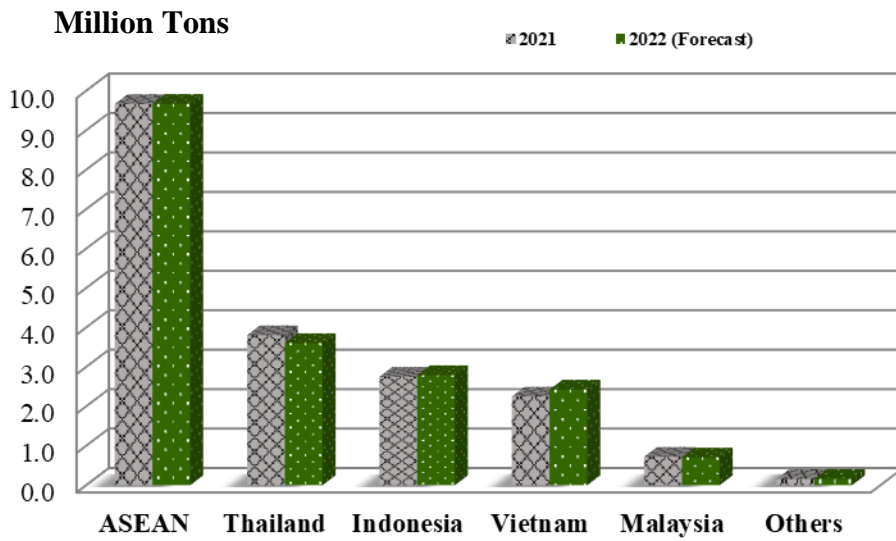
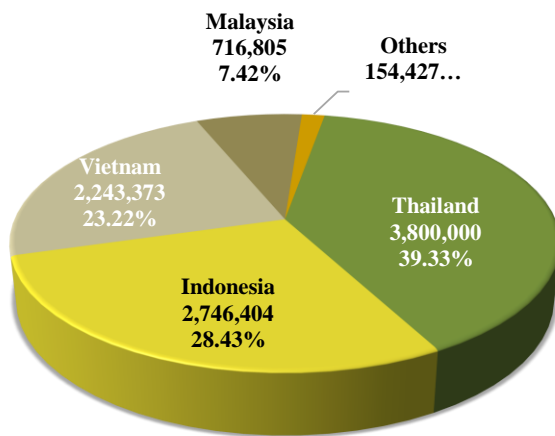
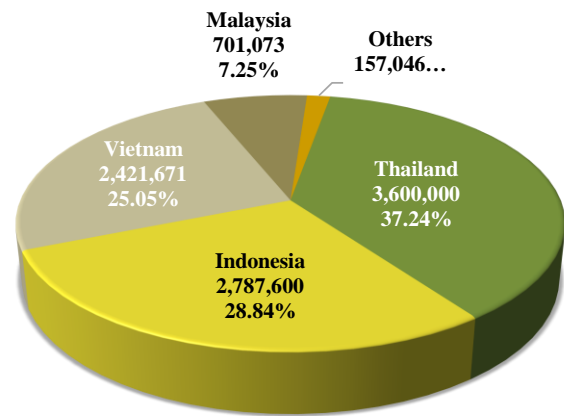


Figure 54 Amount of soybean import (million tons) by selected countries in ASEAN in 2021 – 2022



**Total 9.66 million tons**

Figure 55 Share of soybean import (tons) among ASEAN countries, 2021



**Total 9.67 million tons**

Figure 56 Share of soybean import (tons) among ASEAN countries, 2022

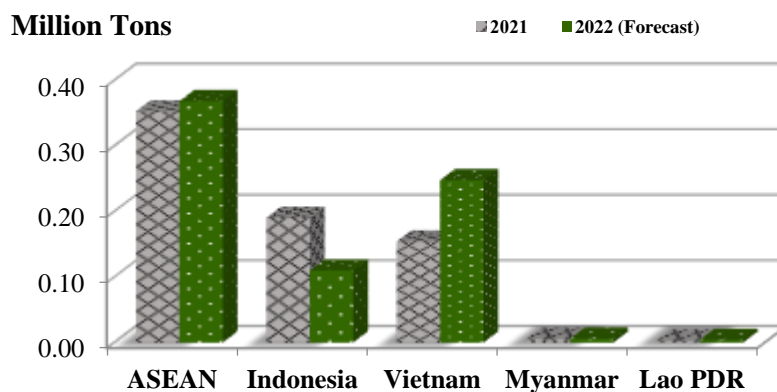


Figure 57 Amount of ending stock of soybean in ASEAN countries in 2021 – 2022

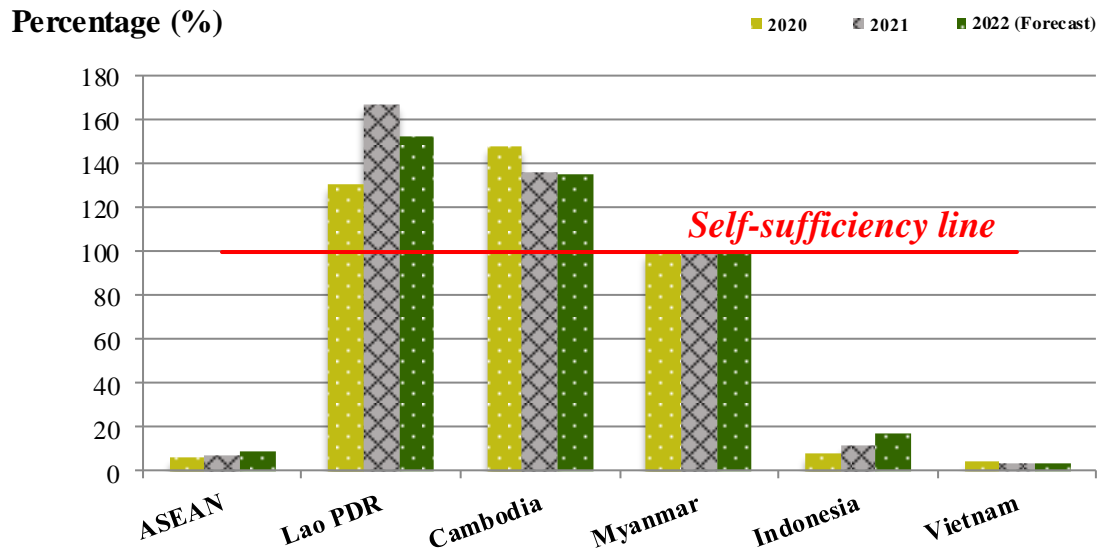


Figure 58 Ratio of soybean production to domestic utilization in ASEAN countries, 2020 – 2022

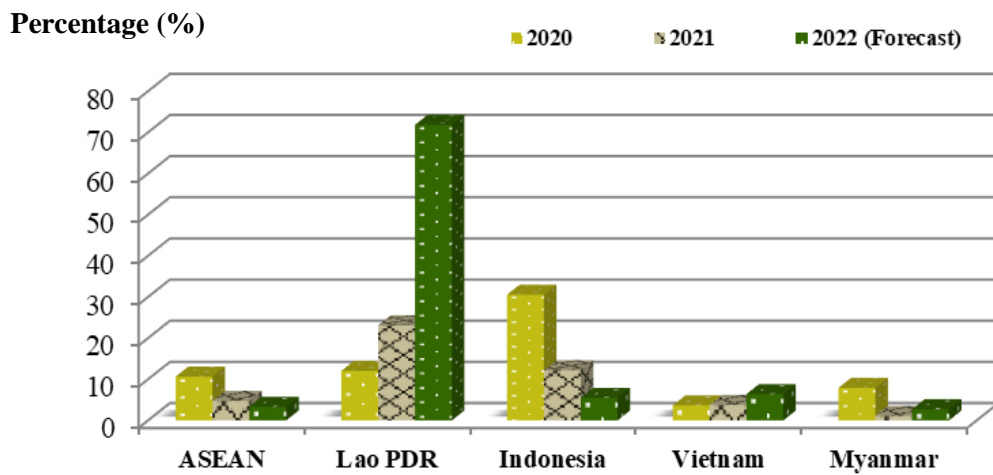


Figure 59 Ratio of soybean beginning stock to domestic utilization in ASEAN countries, 2020 – 2022

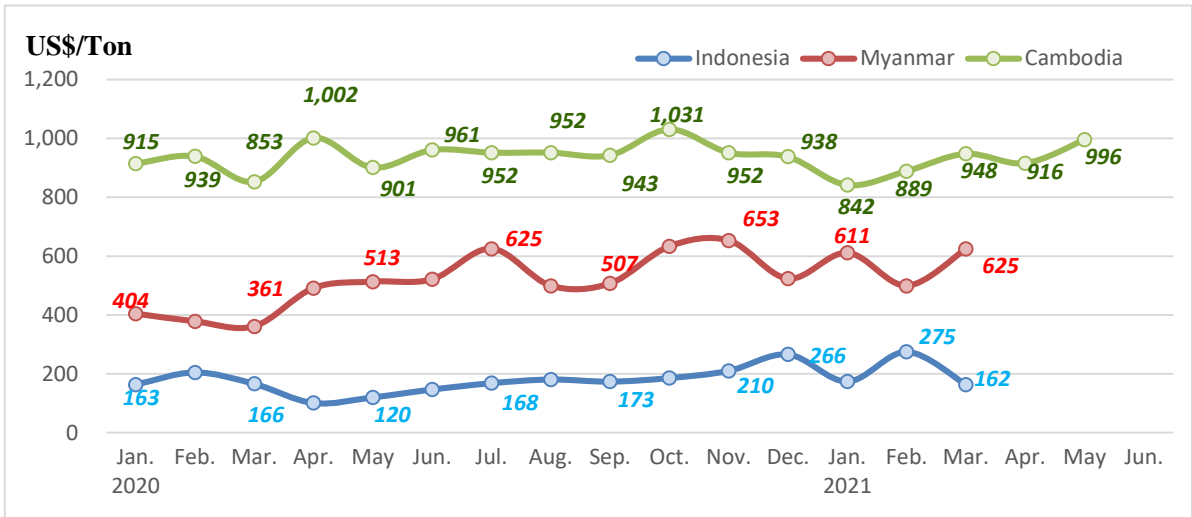


Figure 60 FOB price (US\$/Ton) of soybean of selected countries in ASEAN in 2020 – 2021

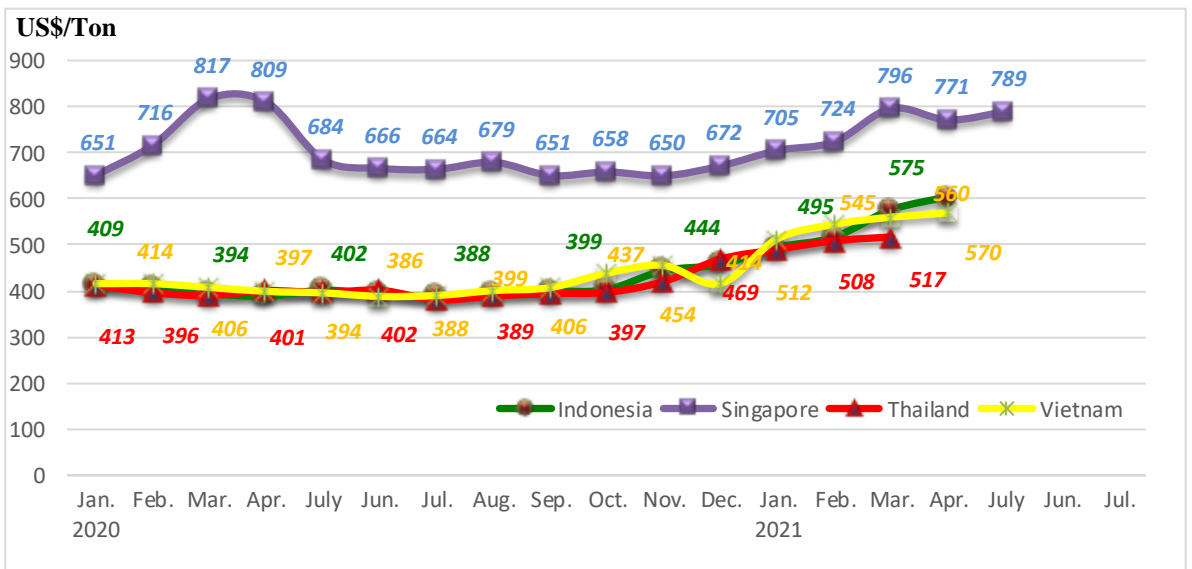


Figure 61 CIF price (US\$/Ton) of soybean of selected countries in ASEAN in 2020 – 2021

## Cassava Outlook for 2022

### Highlights

In 2022, the supply of cassava in ASEAN is forecasted to be 102.33 million tons, an increase of 3.72 million tons or about 3.77 percent from 98.61 million tons in 2021 (Table 61). The rise in supply is due to the increase in beginning stock and production.

The beginning stock of cassava in 2022 is projected to be 11.89 million tons, which increased from 9.99 million tons in 2021 due to the increase in stock in Cambodia and Lao PDR (Table 61, 68-69). While the ending stock in 2022 is expected to reach 14.49 million tons, which increased from 11.89 million tons in 2021 (Table 61).

The export of cassava is expected to decrease by 0.07 million tons or around 0.18 percent from 37.98 million tons in 2021 to 37.91 million tons in 2022. Likewise, the import of cassava is forecasted to be 8.49 million tons in 2022, decreased about 2.86 percent from 8.74 million tons in 2021 (Table 61).

The ratio of production to domestic utilization in 2022 is forecasted to be 164.16 percent, which increased about 0.28 percent from 163.88 percent in 2021. The ratio of beginning stock to domestic utilization in 2022 is forecasted to be 23.81 percent, which increased about 3.32 percent from 20.49 percent in 2021 (Table 61).

**Table 61 Summary of the ASEAN cassava situation, 2021-2022**

Unit: Million tons

Items	2021	2022	Change	
			Quantity	%
Supply (Million tons)	98.61	102.33	3.72	3.77
Beginning stock	9.99	11.89	1.90	19.02
Production	79.88	81.94	2.06	2.58
Import	8.74	8.49	-0.25	-2.86
Demand (Million tons)	98.61	102.33	3.72	3.77
Domestic utilization	48.74	49.92	1.18	2.42
Export	37.98	37.91	-0.07	-0.18
Ending stock	11.89	14.49	2.60	21.87
Ratio of production to domestic utilization (%)	163.88	164.16	0.28	-
Ratio of beginning stock to domestic utilization (%)	20.49	23.81	3.32	-

# ASEAN Cassava Situation in 2021

## ► **Production**

*The estimated cassava production (root fresh) in ASEAN in 2021 (crop year 2020/21) was 79.88 million tons, which increased from 76.23 million tons in 2020 or about 4.79 percent. The increase has occurred in Brunei, Cambodia, Indonesia, Malaysia, Myanmar, Thailand, and Vietnam (Table 62-65, Figure 62-65).*

For the country that reported the highest volume in production, **Thailand**, the production was reported to increase about 6.43 percent or 1.86 million tons (from 29.00 million tons in 2020 to 30.86 million tons in 2021). The increase in production came from the increase in harvested area and yield. Moreover, farmers used more fertilizer and took better care of the crop.

For **Vietnam**, the increase in production was approximately 13.73 percent or 1.29 million tons (from 9.40 million tons in 2020 to 10.69 million tons in 2021). The increase in production is due to the increase in planted area and yield. This was because farmers responded to price increases and better taking care of their crops.

For **Cambodia**, the production was reported to increase about 3.00 percent or 0.38 million tons (from 12.68 million tons in 2020 to 13.06 million tons in 2021). The planted area increased from the previous year as the price of cassava raised up. Additionally, the government supported to grow cassava by using good varieties and farmers also used more fertilizer.

**Indonesia**, the production was reported to increase by 1.31 percent or 0.23 million tons (from 17.49 million tons in 2020 to 17.72 million tons in 2021). The increase in production came from the increase in yield due to better taking care of the crops by farmers, and favorable weather as a result of rainfall and sunlight sufficiency.

For **Myanmar**, the increase in production was approximately 0.96 percent or 3,750 tons (from 0.392 million tons in 2020 to 0.396 million tons in 2021). The increase in planted area and yield as a result of increased production.

For **Malaysia**, the production was reported to increase about 8.53 percent or 2,500 tons (from 0.029 million tons in 2020 to 0.032 million tons in 2021). The increase in cassava production was attributed to increase in planted area and yield.

For **Brunei**, the production was reported to increase about 5.00 percent or 15 tons from 304 tons in 2020 to 319 tons in 2021. The increase in production was because farmers took better care of the crop.

For **the Philippines**, the production was reported to decrease by 0.86 percent or 0.02 million tons (from 2.60 million tons in 2020 to 2.58 million tons in 2021). The decrease in production came from the decrease in planted area.

For **Lao PDR**, the production was reported to decrease about 2.07 percent or 0.09 million tons (from 4.63 million tons in 2020 to 4.54 million tons in 2021). The decrease in production came from the decrease in planted area and yield because prices of competing crops increased and farmers used less fertilizer.

## ► **Utilization and Stock**

Cassava root in ASEAN, in general, it can be used for human food, animal feed, and ethanol production. In 2021, the domestic utilization of cassava for all purposes in ASEAN was estimated at 48.74 million tons, which increased by 1.34 million tons or about 2.83 percent from 47.40 million tons in 2020 (Table 67-68).



The beginning stock in 2021 was estimated at 9.99 million tons, which increased sharply to around 2.36 million tons compared to 7.62 million tons in 2020. The ending stock of cassava in 2021 was estimated to be 11.89 million tons, which increased to around 1.90 million tons compared to 9.99 million tons in 2020. This came from the increase in ending stock of Cambodia and Lao PDR.

The ratio of production to domestic utilization in 2021 was estimated to be 163.88 percent, which decreased from 177.43 percent in 2020. This indicated that, aggregately, the cassava production in ASEAN is sufficient for the demand within ASEAN (Table 70, Figure 73).

In 2021, the ratio of the ASEAN beginning stock to domestic utilization is estimated to be 20.49 percent, which increased from 16.09 percent in 2020 (Table 71, Figure 74).

### ► *Trade*

The cassava exported from ASEAN in 2021 is expected to be 37.98 million tons, which increased 2.62 million tons from 35.36 million tons in 2020. The cassava imported by ASEAN in 2021 was estimated to be 8.74 million tons, which decreased by approximately 0.16 million tons from 8.90

million tons in 2020 (Table 67-68, Figure 66-67, and 69-70).

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

### ► *Prices*

The FOB prices of cassava in Cambodia, Indonesia, Malaysia, Myanmar, Thailand, and Vietnam between 2020 and 2021, and the CIF prices of Malaysia, Myanmar, and Singapore are presented in Table 74-75. The average FOB prices of starch in Thailand in 2021 increased from 2020, while the average FOB prices of pellets in Thailand in 2021 decreased from 2020. Besides, the average FOB prices of shredded in Thailand in 2021 increased from 2020.

### ► *Damaged Area*

In 2021, the cassava damaged area in ASEAN was reported to be 14,488 hectares, of which 7,634 hectares or about 52.69 percent was caused by flood and occurred in Vietnam (Table 66).

## Prospects for Cassava in 2022

### ► **Production**

*The cassava production in ASEAN in 2022 is forecasted to be 81.94 million tons, which increased by 2.06 million tons or about 2.58 percent from 79.88 million tons in 2021. The increase in production is expected in all countries except Lao PDR and the Philippines (Table 62). The greatest increase in terms of quantity is expected in **Thailand**, which is forecasted to be 32.16 million tons or an increase of 1.30 million tons from 30.86 million tons in 2021. The increase is expected from the increase in planted area and yield, which, is due to favorable weather and farmers' response to price increases (Table 62-65, Figure 62-65).*

*The increase in production in **Vietnam**, which is forecasted to be 11.22 million tons or an increase by 5.00 percent from 10.69 million tons in 2021, is due to the expansion of the planted area.*

*The increase in production in **Indonesia**, which is forecasted to be 17.99 million tons or an increase by 1.57 percent from 17.72 million tons in 2021, is due to the increase in yield.*

*The increase in production in **Cambodia**, which is forecasted to be 13.20 million tons or an increase by 1.00 percent from 13.06 million tons in 2021, is due to the expansion of the planted area.*

*The increase in production in **Myanmar**, which is forecasted to be 0.402 million tons or an increase by 1.50 percent from 0.396 million tons in 2021, is due to the increase in planted area and yield.*

*The increase in production in **Malaysia**, which is forecasted to be 0.034 million tons or an increase by 8.53 percent from 0.032 million tons in 2021, is due to the increase in planted area and yield.*

*The increase in production in **Brunei**, which is forecasted to be 335 million tons or an increase of 5.00 percent from 319 million tons in 2021, is because farmers took better care of the crop.*

### ► **Utilization and Stock**

The domestic utilization of cassava is predicted to increase to 49.92 million tons in 2022 compared to 48.74 million tons in 2021, an increase by 1.18 million tons. The beginning stock in 2021 is forecasted to be 11.89 million tons, an increase by 1.90 million tons, compared to 9.99 million tons in 2021. The ending stock in 2022 is predicted to be 14.49 million tons, an increase of 2.60 million tons from 11.89 million tons in 2021 (Table 68-69).

The ratio of production to domestic utilization for 2022 is forecasted to be 164.16 percent, which increases from 163.88 percent in 2021. This indicates that the self-sufficiency in cassava in ASEAN is slightly increasing (Table 70, Figure 73). The ratio of beginning stock to the domestic utilization in 2022 is predicted to be 23.81 percent, compared to 20.49 percent in 2021. This indicates that the cassava supply situation in ASEAN is slightly increasing (Table 71, Figure 74).

### ► **Trade**

The cassava export from ASEAN is expected to decrease to 37.91 million tons in 2022, a decrease by 0.06 million tons compared to 37.98 million tons in 2021. For the import, it is estimated to be 8.49 million tons in 2022, a decrease about 0.24 million tons from 8.74 million tons in 2021 (Table 68-69, Figure 66, 68, 69, and 71).

**Table 62 Cassava production in ASEAN countries, 2020 – 2022**

Unit: 1,000 Tons

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>76,227.55</b>	<b>79,879.77</b>	<b>3,652.22</b>	<b>4.79</b>	<b>81,943.64</b>	<b>2,063.86</b>	<b>2.58</b>
Brunei	0.30	0.32	0.020	5.00	0.33	0.02	5.00
Cambodia	12,683.99	13,064.51	380.52	3.00	13,195.15	130.65	1.00
Indonesia	17,486.89	17,715.96	229.07	1.31	17,994.78	278.82	1.57
Lao PDR	4,634.44	4,538.71	-95.73	-2.07	4,375.68	-163.03	-3.59
Malaysia	29.28	31.78	2.50	8.53	34.49	2.71	8.53
Myanmar	392.43	396.18	3.75	0.96	402.12	5.94	1.50
Philippines	2,603.36	2,580.91	-22.45	-0.86	2,559.01	-21.90	-0.85
Singapore	N/A						
Thailand	28,999.12	30,863.20	1,864.08	6.43	32,159.46	1,296.25	4.20
Vietnam	9,397.74	10,688.20	1,290.46	13.73	11,222.61	534.41	5.00

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 63 Cassava planted area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>3,740.59</b>	<b>3,727.94</b>	<b>-12.65</b>	<b>-0.34</b>	<b>3,799.77</b>	<b>71.83</b>	<b>1.93</b>
Brunei	N/A						
Cambodia	663.93	670.57	6.64	1.00	673.89	3.32	0.50
Indonesia	649.49	635.69	-13.80	-2.13	623.46	-12.23	-1.92
Lao PDR	140.95	138.58	-2.37	-1.68	135.46	-3.12	-2.25
Malaysia	1.99	2.05	0.06	3.00	2.11	0.06	3.00
Myanmar	33.07	33.30	0.23	0.70	33.61	0.31	0.94
Philippines	221.62	218.43	-3.19	-1.44	215.29	-3.14	-1.44
Singapore	N/A						
Thailand	1,510.24	1,484.06	-26.18	-1.73	1,543.42	59.36	4.00
Vietnam	519.30	545.27	25.97	5.00	572.53	27.26	5.00

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.

**Table 64 Cassava harvested area in ASEAN countries, 2020 – 2022**

Unit: 1,000 Hectares

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>3,584.21</b>	<b>3,713.45</b>	<b>129.24</b>	<b>3.61</b>	<b>3,805.77</b>	<b>92.31</b>	<b>2.49</b>
Brunei	N/A						
Cambodia	617.09	667.25	50.16	8.13	673.89	6.64	1.00
Indonesia	649.49	635.69	-13.80	-2.13	623.46	-12.23	-1.92
Lao PDR	140.95	138.58	-2.37	-1.68	135.46	-3.12	-2.25
Malaysia	1.74	1.79	0.05	3.00	1.84	0.05	3.00
Myanmar	33.07	33.30	0.23	0.70	33.61	0.31	0.94
Philippines	221.62	218.43	-3.19	-1.44	215.29	-3.14	-1.44
Singapore	N/A						
Thailand	1,426.92	1,484.06	57.14	4.00	1,543.42	59.36	4.00
Vietnam	493.34	534.36	41.02	8.32	578.80	44.44	8.32

**Remark:** \* The value is estimated by AFSIS Secretariat. Brunei reported only production.

**Table 65 Cassava yield in ASEAN countries, 2020 – 2022**

Unit: Ton/Hectare

Country	2020 (2019/20)	2021 (2020/21)	Change 2021 over 2020		2022 (2021/22)	Change 2022 over 2021	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>21.27</b>	<b>21.51</b>	<b>0.24</b>	<b>1.13</b>	<b>21.53</b>	<b>0.02</b>	<b>0.09</b>
Brunei	N/A						
Cambodia	20.55	19.58	-0.97	-4.72	19.58	0.00	0.00
Indonesia	26.92	27.87	0.95	3.53	28.86	0.99	3.55
Lao PDR	32.88	32.75	-0.13	-0.40	32.30	-0.45	-1.37
Malaysia	16.84	17.75	0.91	5.40	18.70	0.95	5.35
Myanmar	11.87	11.90	0.03	0.25	11.96	0.06	0.50
Philippines	11.75	11.82	0.07	0.60	11.89	0.07	0.59
Singapore	N/A						
Thailand	20.32	20.80	0.48	2.36	20.84	0.04	0.19
Vietnam	19.05	20.00	0.95	4.99	19.39	-0.61	-3.05

**Remark:** \* The value is estimated by AFSIS Secretariat. N/A refers to data that is not available.**Table 66 Cassava damaged area in ASEAN by cause of damage, 2021**

Unit: Hectares

Country	Cause of Damage (Hectares)						
	Flood	Drought	Pests	Diseases	Others	Unspecitfy	Total
<b>ASEAN</b>	<b>7,634</b>	<b>3,272</b>	-	-	-	<b>3,582</b>	<b>14,488</b>
Brunei	N/A						
Cambodia	-	-	-	-	-	3,320	<b>3,320</b>
Indonesia	N/A						
Lao PDR	N/A						
Malaysia	-	-	-	-	-	262	<b>262</b>
Myanmar	N/A						
Philippines	N/A						
Singapore	N/A						
Thailand	N/A						
Vietnam	7,634	3,272	-	-	-	-	10,906

**Remark:** N/A refers to data that is not available.

**Table 67 Cassava balance sheet of ASEAN countries, 2020 (Cassava roots fresh)**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>7,624,973</b>	<b>76,227,554</b>	<b>8,897,707</b>	<b>92,750,233</b>	<b>47,400,581</b>	<b>35,361,509</b>	<b>9,988,143</b>	<b>92,750,233</b>
Brunei	-	304	3.12	307	307	-	-	307
Cambodia	2,957,204	12,683,987		15,641,191	4,439,476	7,203,128	3,998,587	15,641,191
Indonesia	-	17,486,890	150,974	17,637,864	17,542,435	95,430	-	17,637,865
Lao PDR	1,664,253	4,634,436		6,298,689	2,220,468	253,362	3,824,859	6,298,689
Malaysia		29,283	1,110	30,393	29,876	518	-	30,393
Myanmar	12,523	392,430	509.00	405,462	392,882	55	12,525	405,462
Philippines	-	2,603,358	73,431	2,676,789	2,676,233	556	-	2,676,789
Singapore	-	-	1,945	1,945	1,942.98	2.49	-	1,945
Thailand	2,661,185	28,999,122	8,000,000	39,660,307	12,800,000	25,000,000	1,860,307	39,660,307
Vietnam	329,808	9,397,743	669,734	10,397,284	7,296,961	2,808,458	291,865	10,397,284

**Remark:** \* The value is estimated by AFSIS Secretariat.**Table 68 Cassava balance sheet of ASEAN countries, 2021 (Cassava roots fresh)**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>9,988,143</b>	<b>79,879,774</b>	<b>8,739,006</b>	<b>98,606,924</b>	<b>48,742,480</b>	<b>37,977,301</b>	<b>11,887,143</b>	<b>98,606,925</b>
Brunei	-	319	3.44	322	322	-	-	322
Cambodia	3,998,587	13,064,507	-	17,063,094	4,515,778	8,118,384	4,428,932	17,063,094
Indonesia	-	17,715,961	55,371	17,771,332	17,519,985	251,347	-	17,771,332
Lao PDR	3,824,859	4,538,710	-	8,363,569	2,189,493	235,742	5,938,334	8,363,569
Malaysia	-	31,781	1,205	32,986	32,424	562	-	32,986
Myanmar	12,525	396,179	235	408,939	398,894	345	9,700	408,939
Philippines	-	2,580,912	75,267	2,656,179	2,655,410	769	-	2,656,179
Singapore	-	-	1,843	1,843	1,841	2.36	-	1,843
Thailand	1,860,307	30,863,204	7,265,615	39,989,126	12,800,000	26,000,000	1,189,126	39,989,126
Vietnam	291,865	10,688,201	1,339,467	12,319,534	8,628,333	3,370,150	321,052	12,319,534

**Remark:** \* The value is estimated by AFSIS Secretariat.**Table 69 Cassava balance sheet of ASEAN countries, 2022 (Cassava roots fresh)**

Unit: Tons

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>11,887,143</b>	<b>81,943,639</b>	<b>8,494,322</b>	<b>102,325,104</b>	<b>49,918,154</b>	<b>37,914,644</b>	<b>14,492,306</b>	<b>102,325,104</b>
Brunei	-	335	3.61	338	338	-	-	338
Cambodia	4,428,932	13,195,152	-	17,624,084	4,664,245	8,385,295	4,574,544	17,624,084
Indonesia	-	17,994,782	54,263	18,049,045	17,793,928	255,117	-	18,049,045
Lao PDR	5,938,334	4,375,680	-	10,314,014	2,156,148	239,470	7,918,395	10,314,014
Malaysia	-	34,492	1,308	35,800	35,190	610	-	35,800
Myanmar	9,700	402,122	353	412,174	406,617	352	5,205	412,174
Philippines	-	2,559,007	74,349	2,633,356	2,632,693	662	-	2,633,356
Singapore	-	-	1,894	1,894	1,892	2.42	-	1,894
Thailand	1,189,126	32,159,459	7,156,631	40,505,216	12,800,000	26,000,000	1,705,216	40,505,216
Vietnam	321,052	11,222,612	1,205,521	12,749,184	9,427,103	3,033,135	288,947	12,749,184

**Remark:** \* The value is estimated by AFSIS Secretariat.

**Table 70 Ratio of cassava production to domestic utilization in ASEAN countries (Self-sufficiency ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>76,227,554</b>	<b>47,400,581</b>	<b>160.82</b>	<b>79,879,774</b>	<b>48,742,480</b>	<b>163.88</b>	<b>81,943,639</b>	<b>49,918,154</b>	<b>164.16</b>
Brunei	304	307	98.98	319	322	98.93	335	338	98.93
Cambodia	12,683,987	4,439,476	285.71	13,064,507	4,515,778	289.31	13,195,152	4,664,245	282.90
Indonesia	17,486,890	17,542,435	99.68	17,715,961	17,519,985	101.12	17,994,782	17,793,928	101.13
Lao PDR	4,634,436	2,220,468	208.71	4,538,710	2,189,493	207.29	4,375,680	2,156,148	202.94
Malaysia	29,283	29,876	98.02	31,781	32,424	98.02	34,492	35,190	98.02
Myanmar	392,430	392,882	99.88	396,179	398,894	99.32	402,122	406,617	98.89
Philippines	2,603,358	2,676,233	97.28	2,580,912	2,655,410	97.19	2,559,007	2,632,693	97.20
Singapore	-	1,943	0.00	-	1,841	0.00	-	1,892	0.00
Thailand	28,999,122	12,800,000	226.56	30,863,204	12,800,000	241.12	32,159,459	12,800,000	251.25
Vietnam	9,397,743	7,296,961	128.79	10,688,201	8,628,333	123.87	11,222,612	9,427,103	119.05

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 71 Ratio of cassava beginning stock to domestic utilization in ASEAN countries (Food security ratio), 2020 – 2022**

Unit: Tons

Country	2020			2021			2022		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>7,624,973</b>	<b>47,400,581</b>	<b>16.09</b>	<b>9,988,143</b>	<b>48,742,480</b>	<b>20.49</b>	<b>11,887,143</b>	<b>49,918,154</b>	<b>23.81</b>
Brunei	-	307	0.00	-	322	0.00	-	338	-
Cambodia	2,957,204	4,439,476	66.61	3,998,587	4,515,778	88.55	4,428,932	4,664,245	94.95
Indonesia	-	17,542,435	0.00	-	17,519,985	0.00	-	17,793,928	-
Lao PDR	1,664,253	2,220,468	74.95	3,824,859	2,189,493	174.69	5,938,334	2,156,148	275.41
Malaysia	-	29,876	0.00	-	32,424	0.00	-	35,190	-
Myanmar	12,523	392,882	3.19	12,525	398,894	3.14	9,700	406,617	2.39
Philippines	-	2,676,233	0.00	-	2,655,410	0.00	-	2,632,693	-
Singapore	-	1,943	0.00	-	1,841	0.00	-	1,892	-
Thailand	2,661,185	12,800,000	20.79	1,860,307	12,800,000	14.53	1,189,126	12,800,000	9.29
Vietnam	329,808	7,296,961	4.52	291,865	8,628,333	3.38	321,052	9,427,103	3.41

Remark: \* The value is estimated by AFSIS Secretariat.

**Table 72 Quantity and Value of Cassava Export by Countries of Destination in 2021**

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	N/A													
Cambodia														
Indonesia									210	52,244				
Lao PDR														
Malaysia													37	52,618
Myanmar									25	5				
Philippines														
Singapore	N/A													
Thailand	183	117,230	303	288,146	45,657	28,825,279	11,385	5,169,873	61,065	29,442,852	2,279	1,928,327	46,125	21,790,421
Vietnam									1,520	764,664			2,712	1,217,912

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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	N/A											
Cambodia							-	-	1625461	-	1,625,461	-
Indonesia	32	35,236					242	87,480	2,622	1,159,686	2,864	1,247,166
Lao PDR			112,425	5,059,130	63,447	4,187,520	175,872	9,246,650	59,870	5,388,300	235,742	14,634,950
Malaysia	481	686,543					518	739,161	-	-	518	739,161
Myanmar			320	1,638			345	1,643	-	-	345	1,643
Philippines	9	36,000					9	36,000	760	924,434	769	960,434
Singapore	N/A											
Thailand	20,479	8,537,185			17,535	11,743,332	205,012	107,842,645	3,665,474	1,240,318,461	3,870,486	1,348,161,106
Vietnam							4,232	1,982,576	1,186,547	442,080,268	1,190,779	444,062,844

**Remark:** The data in this table is obtained from national focal points of member. N/A refers to data that is not available.

**Table 73 Quantity and Value of Cassava Import by Countries of Origin in 2021**

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	N/A													
Cambodia	N/A													
Indonesia														
Lao PDR	N/A													
Malaysia														
Myanmar														
Philippines					3,309	1,331,289								
Singapore					4.31	18,826			1,831	551,428				
Thailand			951,157	152,798,981	827	1,339,349	963,070	152,241,425	17	67,316	11,130	1,904,577	0.023	537
Vietnam			-	178,014,400	-	8,506,453	-	32,883,664						

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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	N/A											
Cambodia	N/A											
Indonesia							-	-	0.005	86	0.005	86
Lao PDR	N/A											
Malaysia			1.9	6,678	174	606,761	176	613,439	934	3,263,476	1,110	3,876,915
Myanmar			235	7,400			235	7,400			235	7,400
Philippines	47	127,987	41,893	19,883,511	4,258	1,988,223	49,507	23,331,010	1,195	1,017,286	50,702	24,348,296
Singapore			0.00024	8.01	0.01	17	1,836	570,278	8	28,821	1,843	599,099
Thailand	2.90	108,568			13	22,398	1,926,216	308,483,151	6,065	15,797,191	1,932,282	324,280,342
Vietnam			-	1,762,249			-	221,166,766	-	1,491,935	-	222,658,701

**Remark:** The data in this table is obtained from national focal points of member. N/A refers to data that is not available.



**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
Cambodia	Shredded	2020	174	179	176	173	189	172	148	144	147	146	151	157	163
		2021	N/A												
	Starch	2020	N/A												
		2021	223	330	367	366	343	-	-	-	-	-	-	-	-
Indonesia	Not specified	2020	1,350	1,375	1,516	2,629	2,065	965	1,829	1,530	378	269	257	473	1,220
		2021	331	1,196	1,623	674	-	-	-	-	-	-	-	-	-
Malaysia	Starch	2020	305	313	1,079	356	-	335	217	319	323	456	237	318	355
Myanmar	Not specified	2020	-	-	-	-	400	-	-	-	-	-	-	-	400
		2021	-	321	50	-	-	-	-	-	-	-	-	-	186
Thailand	Starch	2020	424	410	404	409	412	427	411	418	415	421	434	435	441
		2021	444	446	440	459	-	-	-	-	-	-	-	-	447
	Pellets	2020	302	312	295	248	305	313	306	330	326	325	342	324	311
		2021	261	318	305	333	-	-	-	-	-	-	-	-	304
	Shredded	2020	213	204	204	208	210	217	225	245	246	252	265	269	230
		2021	256	247	245	242	-	-	-	-	-	-	-	-	247
Vietnam	Not specified	2020	344	314	349	349	354	341	367	364	395	390	380	371	360
		2021	369	365	373	376	-	-	-	-	-	-	-	-	371

Remark: N/A refers to data that is not available.

**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
Malaysia	Not specified	2020	1,217	645	1,335	1,098	330	522	385	333	308	304	1,292	546	693
		2021	N/A												
Myanmar	Not specified	2020	570	306	529	522	486	-	946	297	517	850	529	325	534
		2021	1,000	500	1,020	-	-	-	-	-	-	-	-	-	840
Singapore	Not specified	2020	304	307	329	311	299	304	347	301	297	301	559	540	350
		2021	299	300	334	377	306	323	-	-	-	-	-	-	323

Remark: N/A refers to data that is not available.

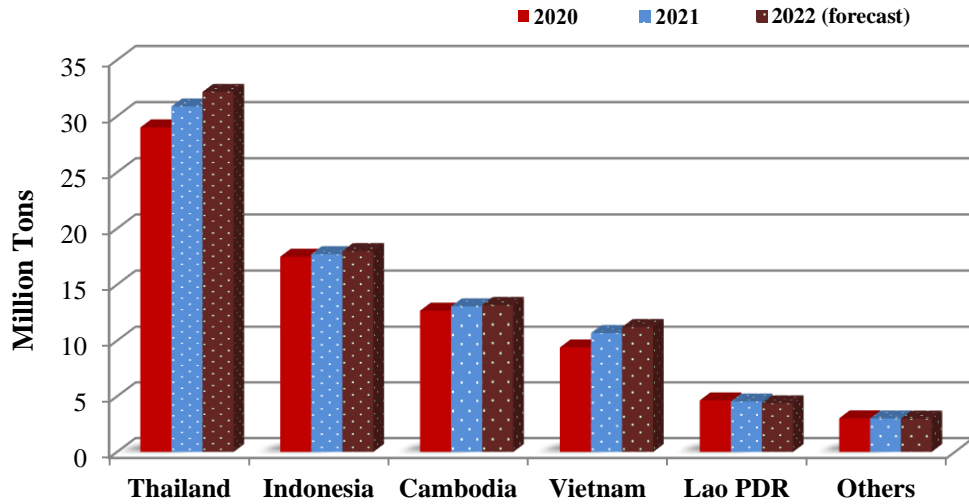


Figure 62 Cassava production of selected countries in ASEAN, 2020 – 2022

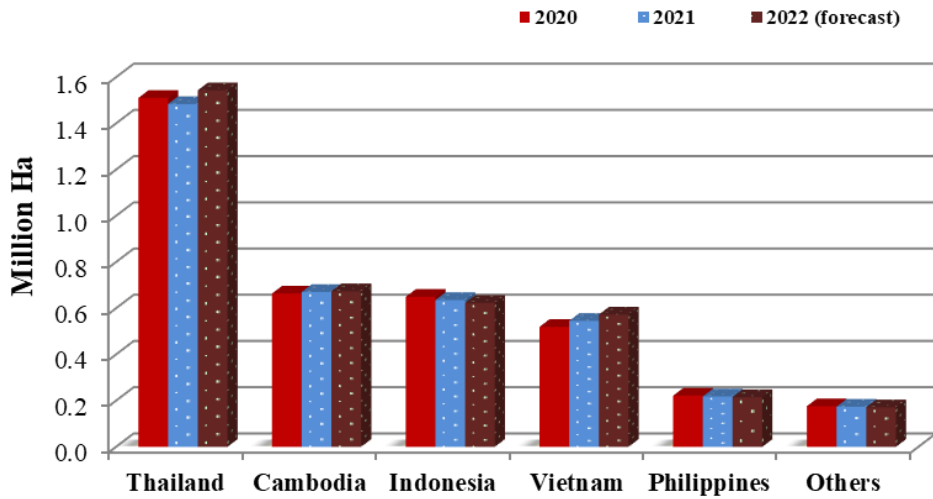


Figure 63 Cassava planted area of selected countries in ASEAN, 2020 – 2022

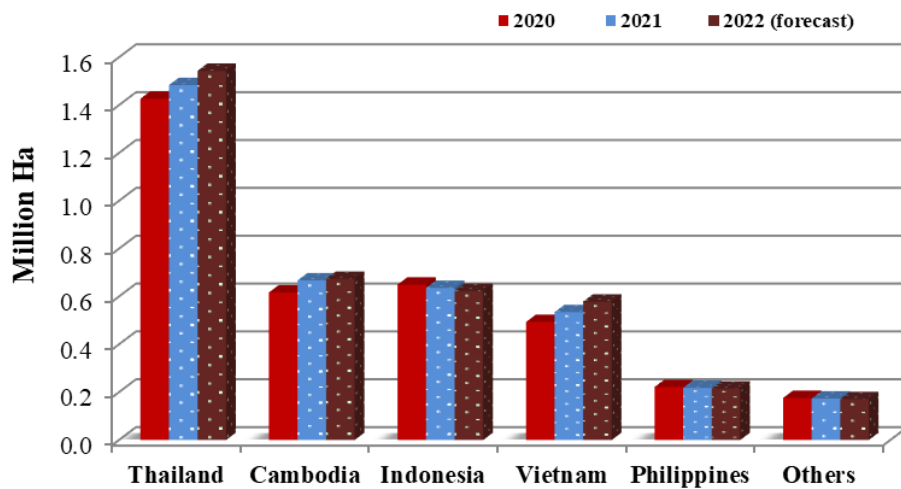


Figure 64 Cassava harvested area of selected countries in ASEAN, 2020 – 2022

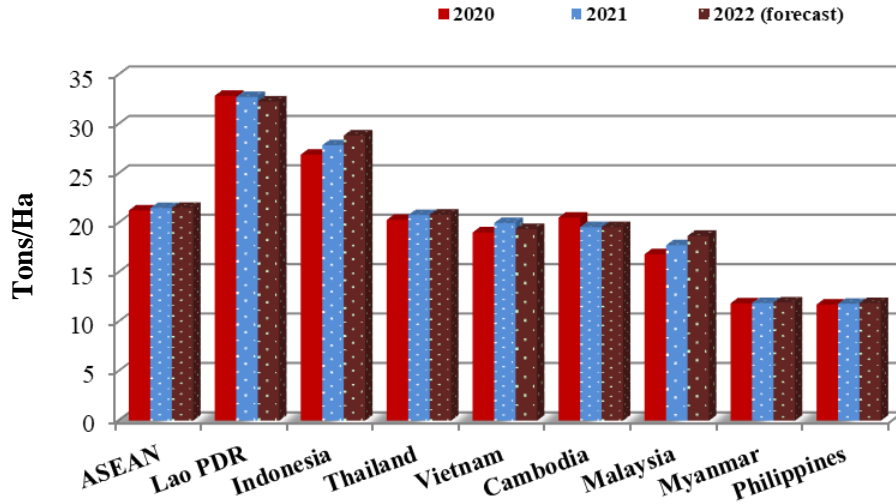


Figure 65 Cassava yield of countries in ASEAN, 2020 – 2022

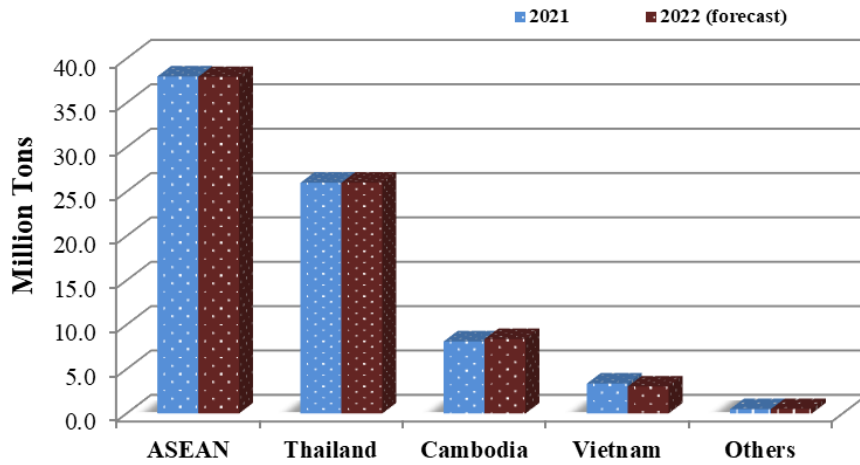
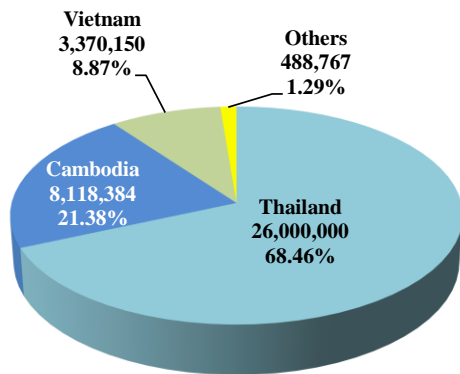
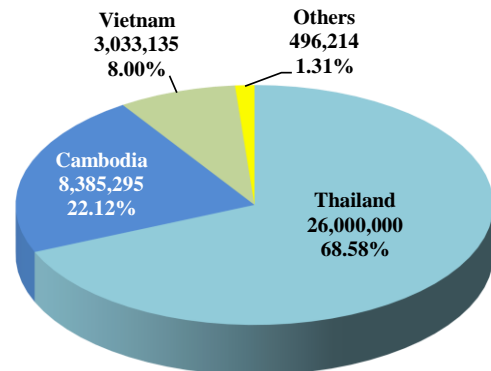


Figure 66 Amount of cassava export (million tons) of selected countries in ASEAN in 2021 – 2022



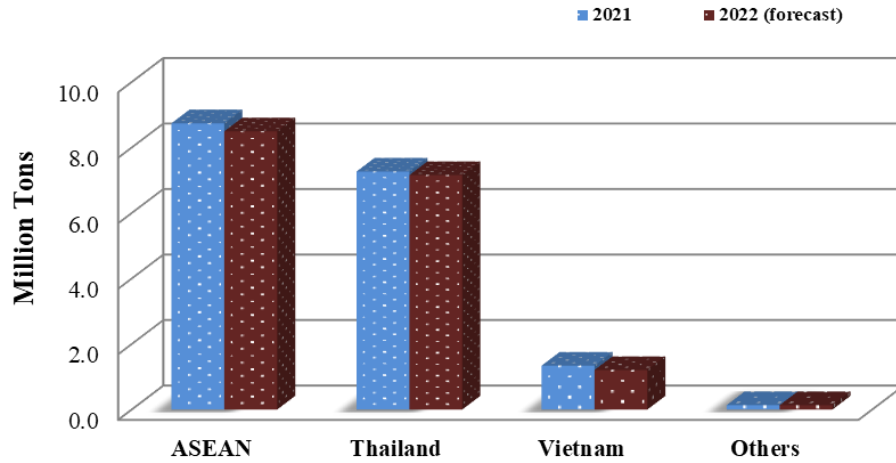
Total 37.98 Million Tons

Figure 67 Share of cassava export (tons) among ASEAN countries, 2021

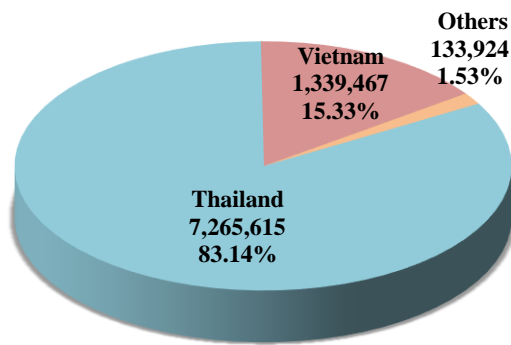


Total 37.91 Million Tons

Figure 68 Share of cassava export (tons) among ASEAN countries, 2022

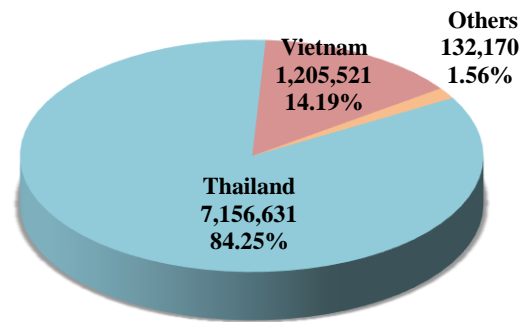


**Figure 69 Amount of cassava import (million tons) by selected countries in ASEAN in 2021 – 2022**



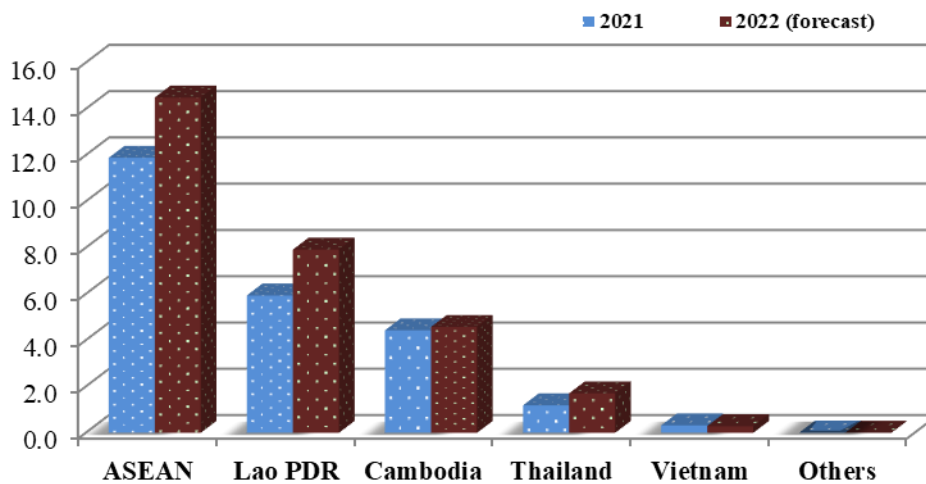
**Total 8.74 Million Tons**

**Figure 70 Share of cassava import (tons) among ASEAN countries, 2021**



**Total 8.49 Million Tons**

**Figure 71 Share of cassava import (tons) among ASEAN countries, 2022**



**Figure 72 Amount of ending stock of cassava in ASEAN countries in 2021 – 2022**

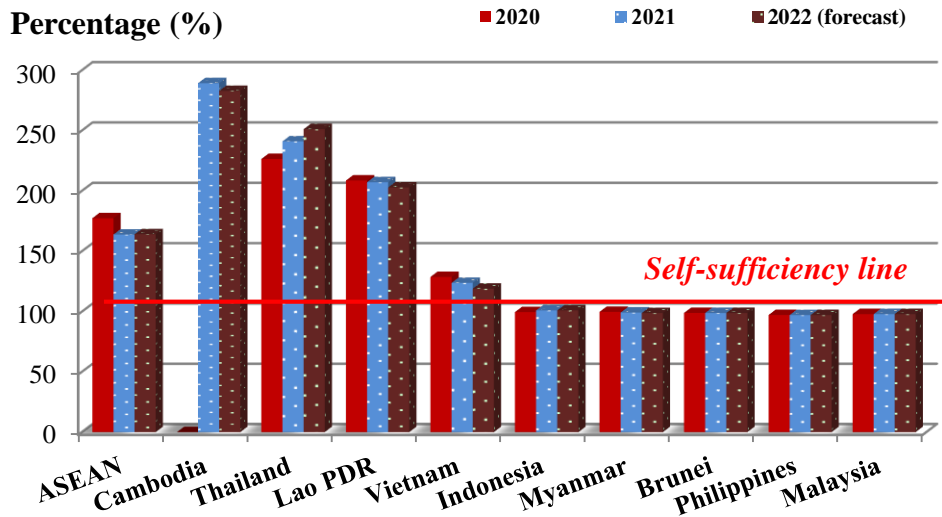


Figure 73 Ratio of cassava production to domestic utilization in ASEAN countries, 2020 – 2022

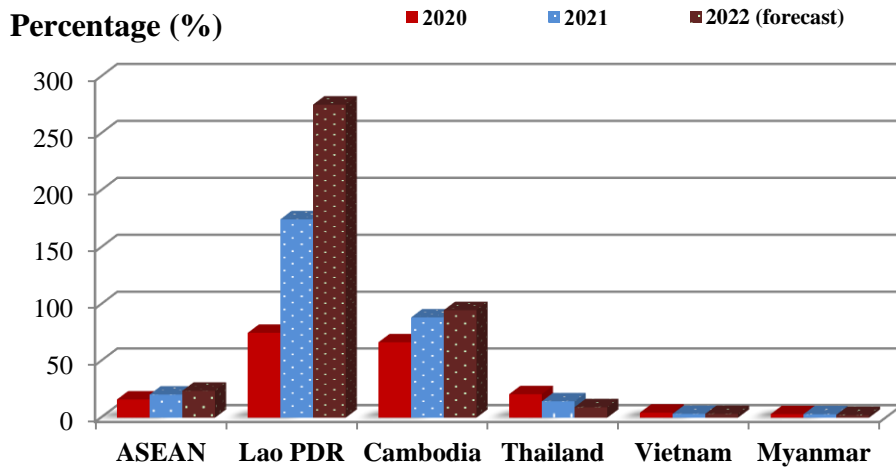


Figure 74 Ratio of cassava beginning stock to domestic utilization in ASEAN countries, 2020 – 2022

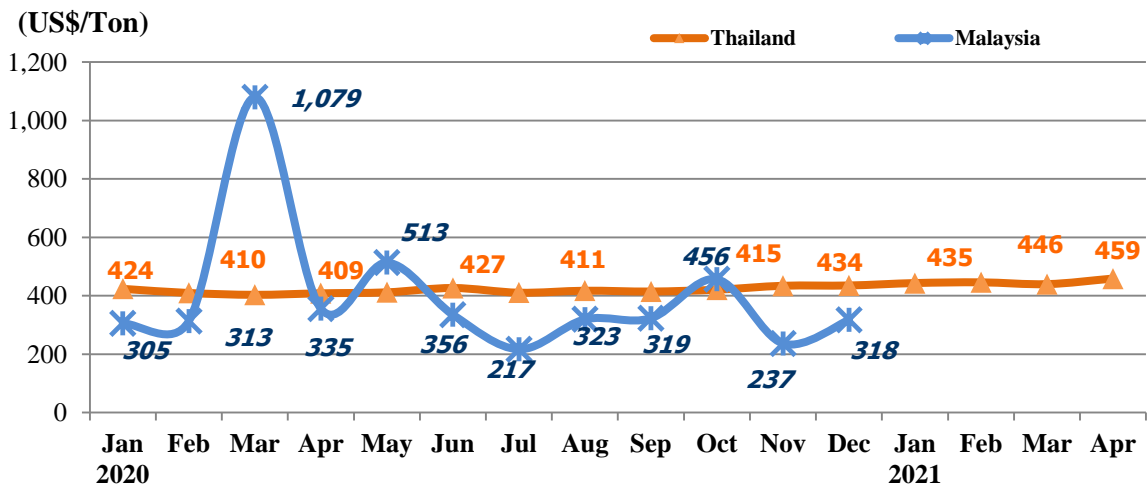


Figure 75 FOB price (US\$/Ton) of cassava starch of selected countries in ASEAN in 2020 – 2021

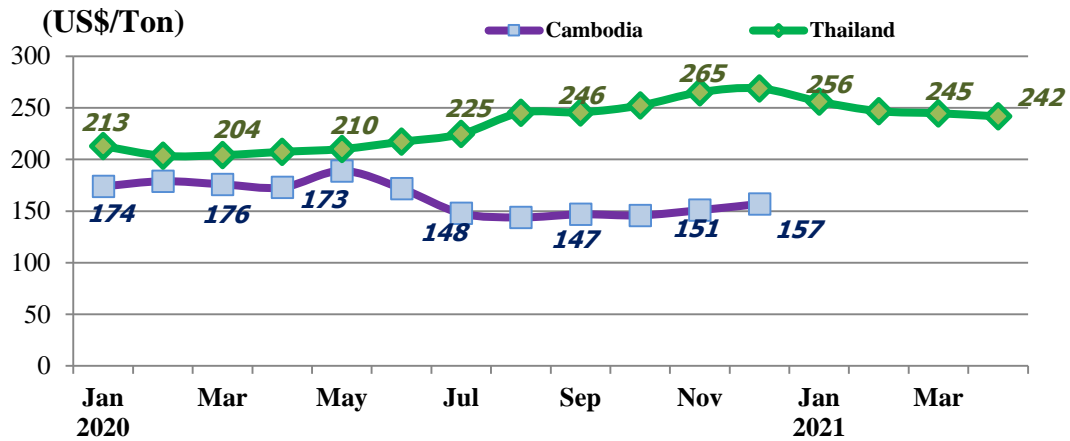


Figure 76 FOB price (US\$/Ton) of cassava shredded of selected countries in ASEAN in 2020-2021

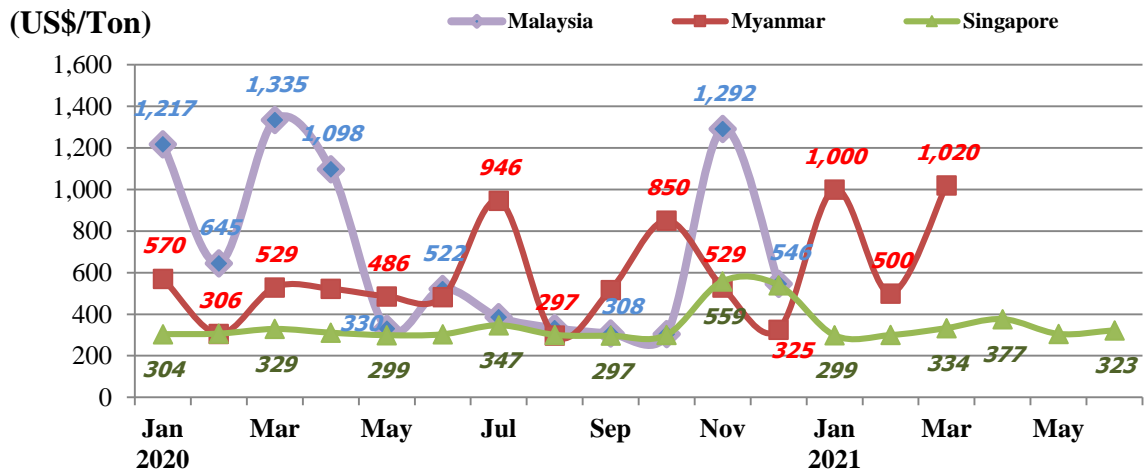


Figure 77 CIF price (US\$/Ton) of cassava of selected countries in ASEAN in 2020-2021

## **Explanatory Notes Production of Paddy for 2021**

### ▶ **Brunei:**

- Wet season refers to the crop harvested during January to June 2021.
- Dry season refers to the crop harvested during July to December 2021.

### ▶ **Cambodia:**

- Wet season refers to the crop harvested during July to December 2020.
- Dry season refers to the crop harvested during February to April 2021.

### ▶ **Indonesia:**

- Wet season refers to the crop harvested during October 2020 to March 2021.
- Dry season refers to the crop harvested during April to September 2021.

### ▶ **Lao PDR:**

- Wet season refers to the crop harvested during September to December 2021.
- Dry season refers to the crop harvested during February to May 2021.

### ▶ **Malaysia:**

- Wet season refers to the crop harvested during August 2020 to February 2021.
- Dry season refers to the crop harvested during March to July 2021.

### ▶ **Myanmar:**

- Wet season refers to the crop harvested during August 2020 to February 2021.
- Dry season refers to the crop harvested during February to August 2021.

### ▶ **Philippines:**

- Wet season refers to the crop harvested during July to December 2020.
- Dry season refers to the crop harvested during January to March 2021.

### ▶ **Thailand:**

- Wet season refers to the crop harvested during August 2020 to April 2021.
- Dry season refers to the crop harvested during February to October 2021.

### ▶ **Vietnam:**

#### ❖ **Spring-season**

- North refers to the crop harvested during May to July 2021.
- South refers to the crop harvested during March to June 2021.

#### ❖ **Autumn-season**

- North refers to the crop harvested during August to October 2021.
- South refers to the crop harvested during July to September 2021.

#### ❖ **Winter-season**

- North refers to the crop harvested during October to November 2021.
- South refers to the crop harvested during October to December 2021.





## Production of Maize for 2021

### ▶ Brunei:

- Wet season refers to the crop harvested during January to June 2021.
- Dry season refers to the crop harvested during July to December 2021.

### ▶ Cambodia:

- Wet season refers to the crop harvested during July to September 2021.
- Dry season refers to the crop harvested during February to March 2021.

### ▶ Indonesia:

- 1<sup>st</sup> crop harvested during January to April 2021.
- 2<sup>nd</sup> crop harvested during May to August 2021.
- 3<sup>rd</sup> crop harvested during September to December 2021.

### ▶ Lao PDR:

- Wet season refers to the crop harvested during May to September 2021.
- Dry season refers to the crop harvested during November 2020 to March 2021.

### ▶ Myanmar:

- Wet season refers to the crop harvested during July to December 2020.
- Dry season refers to the crop harvested during January to June 2021.

### ▶ Philippines:

- Wet season refers to the crop harvested during July to December 2020.
- Dry season refers to the crop harvested during January to March 2021.

### ▶ Thailand:

- Wet season refers to the crop harvested during June 2021 to February 2022.
- Dry season refers to the crop harvested during February to May 2021.

### ▶ Vietnam:

- 1<sup>st</sup> crop harvested during May to June 2021.
- 2<sup>nd</sup> crop harvested during October to November 2021.





## Production of Sugarcane for 2021

▶ **Brunei:**

- The crop harvested during January to December 2021.

▶ **Cambodia:**

- The crop harvested during November 2020 to January 2021.

▶ **Indonesia:**

- The crop harvested during February to May 2021.

▶ **Lao PDR:**

- The crop harvested during February to May 2021.

▶ **Myanmar:**

- The crop harvested during October 2020 to May 2021.

▶ **Philippines:**

- The crop harvested during October 2020 to June 2021.

▶ **Thailand:**

- The crop harvested during December 2020 to March 2021.

▶ **Vietnam:**

- The crop harvested during November 2020 to May 2021.



## Production of Soybean for 2021

### ▶ **Cambodia:**

- The crop harvested during September to October 2021.

### ▶ **Indonesia:**

- 1<sup>st</sup> crop harvested during January to April 2021.
- 2<sup>nd</sup> crop harvested during May to August 2021.
- 3<sup>rd</sup> crop harvested during September to December 2021.

### ▶ **Lao PDR:**

- Wet season refers to the crop harvested during May to October 2021.
- Dry season refers to the crop harvested during November 2020 to February 2021.

### ▶ **Myanmar:**

- Wet season refers to the crop harvested during August 2020 to January 2021.
- Dry season refers to the crop harvested during December 2020 to May 2021.

### ▶ **Philippines:**

- Wet season refers to the crop harvested during July to December 2020.
- Dry season refers to the crop harvested during January to June 2021.

### ▶ **Thailand:**

- Wet season refers to the crop harvested during July 2020 to February 2021.
- Dry season refers to the crop harvested during February to May 2021.

### ▶ **Vietnam:**

- Wet season refers to the crop harvested during February to May 2021.
- Dry season refers to the crop harvested during August to November 2021.



## Production of Cassava for 2021

### ▶ Brunei:

- The crop harvested during January to December 2021.

### ▶ Cambodia:

- The crop harvested during November 2020 to January 2021.

### ▶ Indonesia:

- 1<sup>st</sup> crop harvested during January to April 2021.
- 2<sup>nd</sup> crop harvested during May to August 2021.
- 3<sup>rd</sup> crop harvested during September to December 2021.

### ▶ Lao PDR:

- The crop harvested during October to November 2021.

### ▶ Malaysia:

- The crop harvested during October 2020 to December 2021.

### ▶ Myanmar:

- The crop harvested during September 2020 to June 2021.

### ▶ Philippines:

- 1<sup>st</sup> crop harvested during July to December 2020.
- 2<sup>nd</sup> crop harvested during January to June 2021.

### ▶ Thailand:

- The crop harvested during October 2020 to September 2021.

### ▶ Vietnam:

- Wet season refers to the crop harvested during September to October 2021.
- Dry season refers to the crop harvested during January to March 2021.

**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 (2021)

Unit: Tons

Country	Paddy	Rice
ASEAN	1	0.64
Brunei	1	0.65
Cambodia	1	0.64
Indonesia	1	0.63
Lao PDR	1	0.60
Malaysia	1	0.64
Myanmar	1	0.63
Philippines	1	0.67
Thailand	1	0.65
Vietnam	1	0.65

### Extraction rate of Sugar (2021)

Unit: Tons

Country	Sugarcane	Sugar
ASEAN	1,000	98.63
Brunei	1,000	102.84
Cambodia	1,000	100.00
Indonesia	1,000	76.82
Lao PDR	1,000	200.00
Myanmar	1,000	80.00
Philippines	1,000	92,90
Thailand	1,000	112.67
Vietnam	1,000	100.00



## ANNEX 1

**Rice crop calendar (harvested months) for crop year 2020/21 (2021) in ACO No.26 report**

Country		2020						2021												2022			
		Jul	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							
	Winter																←→ North						

## ANNEX 2

**Maize crop calendar (harvested months) for crop year 2020/21 (2021) in ACO No.26 report**

Country	Crop	2020							2021												2022		
		May	Jul	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	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																						

### ANNEX 3

**Sugarcane crop calendar (harvested months) for crop year 2020/21 (2021) in ACO No.26 report**

Country	Crop	2020				2021											
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Brunei																	
Cambodia																	
Indonesia																	
Lao PDR																	
Myanmar																	
Philippines																	
Thailand																	
Vietnam																	

## ANNEX 4

**Soybean crop calendar (harvested months) for crop year 2020/21 (2021) in ACO No.26 report**

Country	Crop	2020						2021												
		Jul	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																		↔	



## ANNEX 5

**Cassava crop calendar (harvested months) for crop year 2020/21 (2021) in ACO No.26 report**

Country	Crop	2020						2021														
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Brunei								←—————→														
Cambodia								←————→														
Indonesia	1st							←————→														
	2nd													←————→								
	3rd																←————→					
Lao PDR																		←————→				
Malaysia								←—————→														
Myanmar								←—————→														
Philippines	1st																	←————→				
	2nd							←————→														
Thailand								←—————→														
Vietnam	Wet season																	←————→				
	Dry season							←————→														



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