



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

**Report on**

## **ASEAN Agricultural Commodity Outlook**

No. 3 December 2009

*Released by  
ASEAN Food Security Information and Training (AFSIT) Center  
Office of Agricultural Economics (OAE)  
Ministry of Agriculture and Cooperatives  
Bangkok, Thailand  
<http://afsis.oae.go.th>*

## **PREFACE**

The ASEAN Food Security Information System (AFSIS) Project is publishing the Agricultural Commodity Outlook (ACO) Report semi-annually. The contents of the Report include national and regional information on production, utilization, stock, trade and FOB prices. The explanation for significant changes and unusual phenomena were also provided in the Report. The first and the second Reports, which focused only on rice, were issued in December 2008 and June 2009 respectively. This third Report include both rice and maize. The pertinent information was mainly gathered from Member States through the submission of respective National ACO Reports. The Report was scrutinized by the ACO Committee comprises national experts nominated from ASEAN Countries before publication.

The Project planned to increase the number of commodities to be studied for the development of the ACO Report step by step to cover at least 5 major food crops namely rice, maize, soybean, sugarcane and cassava.

The ASEAN Food Security Information and Training (AFSIT) Center, the Secretariat Unit of the Project, would like to thank all Member States and delegates who participated in the ACO Committee Meeting during 13 - 14 January 2010 in Petchburi, Thailand for the provision of information and the review of this Report. The list of delegates in the Meeting is presented in the ANNEX 3.

The AFSIT Center would like to record its appreciation to the ASEAN Secretariat, MAFF Japan and other concerned parties including Dr. Apichart Pongsrihadulchai, AFSIS Consultant responsible for ACO Report development, for their support to the implementation of the AFSIS Project and the development of this Report.

## List of Tables

<b>Table</b>		<b>Page</b>
1	Summary of the ASEAN rice situation, 2009-2010	1
2	Summary of the ASEAN maize situation, 2009-2010	6
3	Paddy production in ASEAN countries, 2008-2010	9
4	Paddy planted area in ASEAN countries, 2008-2010	9
5	Paddy yield in ASEAN countries, 2008-2010	9
6	Rice balance sheet of ASEAN countries, 2009 (milled rice)	10
7	Rice balance sheet of ASEAN countries, 2010 (milled rice)	10
8	Ratio of rice production to domestic utilization in ASEAN countries (Self-sufficiency ratio)	11
9	Ratio of rice stock to domestic utilization in ASEAN countries (Food security ratio)	11
10	FOB Price of rice in selected ASEAN countries	12
11	Maize production in ASEAN countries, 2008-2010	17
12	Maize Planted area in ASEAN countries, 2008-2010	17
13	Maize Yield in ASEAN countries, 2008-2010	17
14	Maize balance sheet of ASEAN countries, 2009	18
15	Maize balance sheet of ASEAN countries, 2010	18
16	Ratio of maize production to domestic utilization in ASEAN countries (Self-sufficiency ratio)	19
17	Ratio of maize stock to domestic utilization in ASEAN countries (Food security ratio)	19
18	FOB Price of maize (feed grain) in selected ASEAN countries	20
19	CIF Price of maize (feed grain) in selected ASEAN countries	20

## List of Figures

<b>Figure</b>		<b>Page</b>
1	Paddy production of selected countries in ASEAN, 2008-2010	13
2	Paddy planted area of selected countries in ASEAN, 2008-2010	13
3	Paddy yield of countries in ASEAN, 2008-2010	13
4	Amount of rice export (million tons) of selected countries in ASEAN in 2009-2010	14
5	Share of rice export (ton) among ASEAN countries, 2009	14
6	Share of rice export (ton) among ASEAN countries, 2010	14
7	Amount of rice import (million tons) by selected countries in ASEAN in 2009-2010	14
8	Share of rice import (ton) among ASEAN countries, 2009	15
9	Share of rice import (ton) among ASEAN countries, 2010	15
10	Amount of ending stock of rice in ASEAN countries	15
11	Ratio of rice production to domestic utilization in ASEAN countries (Self-sufficiency ratio)	15
12	Ratio of rice stock to domestic utilization in ASEAN countries (Food security ratio)	16
13	FOB price (US\$) of milled rice of selected countries in ASEAN in 2008-2009	16
14	FOB price (US\$) of 5% milled rice of selected countries in ASEAN in 2008-2009	16
15	Maize production of selected countries in ASEAN, 2008-2010	21
16	Maize planted area of selected countries in ASEAN, 2008-2010	21
17	Maize yield of countries in ASEAN, 2008-2010	21
18	Amount of maize export (million tons) of selected countries in ASEAN in 2009-2010	22
19	Share of maize export (ton) among ASEAN countries, 2009	22
20	Share of maize export (ton) among ASEAN countries, 2010	22
21	Amount of maize import (million tons) by selected countries in ASEAN in 2009-2010	22
22	Share of maize import (ton) among ASEAN countries, 2009	23
23	Share of maize import (ton) among ASEAN countries, 2010	23
24	Amount of ending stock of maize in ASEAN countries	23

## List of Figures (Continued)

<b>Figure</b>		<b>Page</b>
25	Ratio of maize production to domestic utilization in ASEAN countries (Self-sufficiency ratio)	23
26	Ratio of maize stock to domestic utilization in ASEAN countries (Food security ratio)	24
27	FOB price (US\$) of maize of selected countries in ASEAN in 2008-2009	24
28	CIF price (US\$) of maize of selected countries in ASEAN in 2008-2009	24



# ASEAN Agricultural Commodity Outlook



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<http://afsis.oae.go.th/>

No.3 December 2009

## Highlights of Rice Outlook

- ASEAN rice supply is forecast to increase about 4.13 percent from 149.27 million tons of milled rice in 2009 to 155.44 million tons in 2010.
- Rice production is forecast to increase only 1 percent while the increase in supply is mostly due to the increase in beginning stock and the import. The beginning stock is expected to increase about 20.34 percent from 20.59 million tons to 24.78 million tons.
- The import is forecast to increase from 3.23 million tons to 4.08 million tons while the export is also expected to increase from 16.62 million tons to 17.70 million tons for the same period. These figures include within and outside ASEAN import and export.
- The ratio of production to domestic utilization (self-sufficiency ratio) is expected to be about the same. However, the ratio of beginning stock to domestic utilization (food security ratio) is forecast to increase from 19.09 percent to 22.61 percent. The increase in food security ratio is mainly due to importation rather than from increase of production.

**Table 1 : Summary of the ASEAN rice situation, 2009-2010**

Items	2009	2010	% change
Supply (Million tons)	149.27	155.44	4.13
Beginning stock	20.59	24.78	20.34
Production	125.45	126.57	0.90
Import	3.23	4.08	26.27
Demand (Million tons)	149.27	155.44	4.13
Domestic utilization	107.87	109.58	1.59
Export	16.62	17.70	6.49
Ending stock	24.78	28.15	13.59
Ratio of production to domestic utilization (%)	116.30	115.51	-0.68
Ratio of beginning stock to domestic utilization (%)	19.09	22.61	18.46

## ASEAN Rice Situation in 2009

### Production

Paddy production in ASEAN in 2009 (crop year 2008/09) was estimated at 195.49 million tons, up from 190.84 million tons in 2008. The 2009 estimated production has been revised upward from 194.08 million tons from the Early Warning Information report in September 2009 (EWI-3). Indonesia and Vietnam have revised their estimates upward from 62.56 million tons to 63.84 million tons and from 38.73 million tons to 38.90 million tons respectively. Brunei has also revised its estimate from 1,210 tons to 1,336 tons. The Philippines has revised its estimate downward very little. For other countries, the estimated production remained the same. The increase in 2009 production occurred in every country except Thailand, the Philippines and Brunei (Table 3, Figure 1).

In **Brunei**, the government food security programs such as buy-back paddy programme, improvement of infrastructure and technological support has resulted in an increase in the planted area from 1,300 to 1,730 hectares. However, the yield has decreased due to the unfavorable weather condition and occurrence of pests and diseases (Table 4 and 5, Figure 2 and 3).

In **Cambodia**, the increase in production was due to the increase in both planted area and yield. The increase in planted area contributed to the government policy which promoted and guided the private sector in agricultural investment especially in land concessions. The increase in yield was mainly due to the favorable weather.

For **Indonesia**, the increase in production was mostly due to the increase in yield as a result of technology improvement and better crop management including some incentives such as fertilizer and seed subsidy and price policy implemented by the government.

In **Lao PDR**, the increase in production was mostly due to the expansion of the lowland planted area, the increase in yield and also a result of the government policy which promoted the planting of upland rice intercropping with plantation crops such as rubber, jatropha and other crops. The increase in yield was due to the farmers' adoption of improved varieties through seed network established by government, the favorable weather condition and new planting techniques.

The increase in production in **Malaysia** was mainly due to the increase in yield. The government encouraged farmer to practice better farm management

through more efficient use of inputs to increase soil fertility, land leveling, better utilization of water resources and improving the irrigation system.

Favorable weather and the use of more improved variety as well as improvement of irrigation facilities contributed to the increase in both planted area and yield in **Myanmar**.

For **the Philippines**, the decrease in production was due to the decrease in yield which dominated the increase in planted area. The increase in planted area was due to the positive response of farmers to the increase in domestic prices. The decrease in yield was due to the unfavorable weather.

In **Thailand**, the total planted area has decreased due to the reduction in dry season (second) crop area because of the falling in farm-gate price just before planting season as well as the government policy to discourage farmers not to grow more paddy due to the shortage of water. The drop in yield of this crop was due to the effect of the cold weather during flowering stage.

In **Vietnam**, the increase in production derived mainly from the increase in planted area while the yield was relatively the same. The increase in the area was due to the farmers' response to profitable prices of rice and the lower prices of competing crops.

### **Utilization and Stock**

The domestic utilization of rice in ASEAN in 2009 (calendar year) was estimated at 107.87 million tons of milled rice (Table 6). This estimate has been revised from 101.90 million tons in the Agricultural Commodity Outlook report (ACO-2) in June 2009. The ratio of production to domestic utilization for 2009 was 116.30 percent (Table 8, Figure 11). This implied that ASEAN as a whole produced 16.30 percent more than utilization within the region. However, on a country by country basis, Brunei, Malaysia and the Philippines have ratio less than 100 percent. This implied that these countries produced rice not enough for their own consumption. Singapore imported all rice for domestic consumption.

The estimated ending rice stock of ASEAN in 2009 was 24.78 million tons. Thailand, Vietnam, Myanmar, and Indonesia carried most of the rice stock in the region (Table 6, Figure 10). These four countries together have stock almost 90 percent of the total stock in ASEAN.



## **Trade**

In 2009, ASEAN exported about 16.62 million tons of milled rice (Table 6, Figure 4 and 5). Thailand and Vietnam are the two major exporting countries which exported about 8.50 million tons and 5.95 million tons respectively. Cambodia is now emerging as one of the major rice exporting country in the world and ranked third in ASEAN in rice export. It exported about 1.47 million tons of rice.

For the imports, ASEAN imported about 3.23 million tons of milled rice in 2009 (Table 6, Figure 7 and 8). The Philippines and Malaysia are the two major importing countries which imported about 1.64 and 1.09 million tons of milled rice respectively.

## **Prices**

Most of the FOB prices of traded rice in exporting countries in ASEAN start rising again toward the end of 2009. The annual average of FOB prices of 5% rice in exporting countries in 2009, in general, were lower than 2008 prices except Thai Hommali rice. The average monthly prices of Thailand Hommali (fragrant) rice, Thailand 5% rice, Vietnam 5% rice, Cambodia 5% rice and Myanmar 25% rice are shown in Table 10 and Figure 13.

## **Prospects for Rice in 2010**

### **Production**

Paddy production of ASEAN in 2010 is forecast to be 197.27 million tons, up 1.77 million tons or 0.9 percent from 195.49 million tons in 2009 (Table 3, Figure 1). The increase in production is predicted in every country except Thailand and Vietnam. In terms of quantity, Indonesia, the Philippines and Myanmar are expected to increase the most as compared to other countries in the region. In terms of percentage, the most increase is in Brunei.

The increase in production is due to the expected increase in planted area and the yield. However, the change in area and yield are very small amount (Table 4 and 5, Figure 2 and 3). The increase in planted area is expected because of the farmers' response to the price increase together with the government policy in solving the food security problem in many countries of the region. The decreases in areas in Thailand and Vietnam are due to the limitation of irrigated water.

## **Utilization and Stock**

The domestic utilization of rice in ASEAN is forecast to increase about 1.6 percent from 107.87 million tons in 2009 to 109.58 million tons in 2010 due to the increase in population (Table 7).

The beginning stock in ASEAN is forecast to increase almost 20.3 percent from 20.59 million tons in 2009 to 24.78 million tons in 2010. The ending stock is forecast to increase from 24.78 million tons to 28.15 million tons (Table 7, Figure 10). The increase in stock is due to the increase in production and import. The increase in ending stock is very eminent in Indonesia, from 3.27 million tons in 2009 to 5.49 million tons in 2010 or an increase about 68 percent.

The ratio of production to domestic utilization is forecast to decrease from 116.30 percent in 2009 to 115.51 percent in 2010 which is not much different (Table 8, Figure 11). The ratio of rice stock to domestic utilization is forecast to increase from 19.09 percent to 22.61 percent which is better situation in terms of food security (Table 9, Figure 12). At the beginning of rice stock, the ratio is low for Lao PDR and Indonesia which imply that the food situation for early 2010 is still tight for domestic consumption.

## **Trade**

Rice exports by ASEAN countries are forecast to increase from 16.62 million tons in 2009 to 17.70 million tons in 2010 (Table 7, Figure 4 and 6). Thailand, Cambodia and Myanmar are expected to increase their exports. For Vietnam, it is expected that the export will be decreased due to the increase in the domestic utilization while the production is forecast to decrease.

Regarding imports, all ASEAN countries together is forecast to increase imports from 3.23 million tons in 2009 to 4.08 million tons in 2010 (Table 7, Figure 7 and 9). Most of the increase is expected in the Philippines, from 1.64 million tons to 2.40 million tons due to the decrease in the ending stock of 2009.

## **Highlights of Maize Outlook**

- Maize (for feed) supply in ASEAN is forecast to increase about 5.8 percent from 41.42 million tons in 2009 to 43.82 million tons in 2010. The increase in maize supply comes from the increase in production and the stock carried over from the previous year.

- The maize production is forecast to increase from 36.78 million tons in 2009 to 38.30 million tons mainly due to the expansion of planted area. The average yield is forecast to increase very little.
- The maize export from ASEAN is expected to decrease from 1.76 million tons to 1.48 million tons during the same period. The import is also predicted to decrease from 1.94 million tons to 1.60 million tons.
- The ratio of production to domestic utilization (self-sufficient ratio) in 2010 is forecast to be 102.63 percent which is about the same as in 2009. The ratio of stock to domestic utilization (feed security ratio) is forecast to increase from 7.56 percent to 10.50 percent.

**Table 2 : Summary of the ASEAN maize situation, 2009-2010**

Items	2009	2010	% change
Supply (Million tons)	41.42	43.82	5.80
Beginning stock	2.70	3.92	45.11
Production	36.78	38.30	4.13
Import	1.94	1.60	-17.43
Demand (Million tons)	41.42	43.82	5.80
Domestic utilization	35.74	37.32	4.41
Export	1.76	1.48	-16.12
Ending stock	3.92	5.03	28.27
Ratio of production to domestic utilization (%)	102.91	102.63	-0.27
Ratio of beginning stock to domestic utilization (%)	7.56	10.50	38.98

## ASEAN Maize Situation in 2009

### Production

Maize production in ASEAN in 2009 was estimated at 36.78 million tons, up 2.40 million tons or 7.0 percent from 34.38 million tons in 2008 (Table 11, Figure 15). The increase was found in every country in the region except Vietnam. Brunei and Singapore do not grow any maize. The increase in production was mostly due to the expansion of the planted area in response to the rise in prices received by farmers and the increase in yield was a result of the use of more improved variety together with favorable weather (Table 12 and 13, Figure 16 and 17). The increase in planted area was very eminent in Lao PDR and Cambodia. Indonesia ranked first in the region, in terms of maize production which produced about 17.66 million tons or almost half of the regional production.

## **Utilization and Stock**

Out of 36.78 million tons of maize production, about 35.74 million tons or 97 percent were utilized within ASEAN in 2009 (Table 14). Indonesia the major maize producer was also the major user of maize in the region and followed by the Philippines, Thailand and Vietnam respectively.

The ratio of maize production to domestic utilization for ASEAN in 2009 was estimated at 102.91 percent (Table 16, Figure 25). This indicated that, on the average, ASEAN as a whole produced maize just about enough for their own consumption. On a country by country basis, most countries also produced almost sufficient for their own domestic consumption. The ratio of maize stock to domestic utilization in the ASEAN was estimated at 7.56 percent which was not secured enough for domestic consumption (Table 16, Figure 26).

## **Trade**

In 2009 ASEAN exported 1.76 million tons and imported 1.94 million tons of maize (Table 14, Figure 21 and 22). The major exporters were Thailand, Cambodia and Lao PDR respectively (Table 14, Figure 18 and 19). The major importers were Vietnam, the Philippines, Thailand and Indonesia. Noted that Thailand was considered as both major exporting and importing country in ASEAN. This was due to the fact that the domestic users preferred the lower imported price while the exporters enjoy the higher price oversea.

## **Prices**

The monthly and annual average of FOB prices of maize in 2008 and 2009 for Cambodia, Indonesia, Myanmar and Thailand are shown in Table 18 and Figure 27. In general the prices were relatively stable over the years.

The monthly and annual average of CIF prices of maize in 2008 and 2009 for the Philippines and Vietnam are shown in Table 19 and Figure 28. In general, the average CIF prices were higher than FOB prices. Similar to the FOB prices, the CIF prices were relatively stable.

## **Prospects for Maize in 2010**

### **Production**

Maize production in ASEAN in 2010 is forecast to be 38.30 million tons, up from 36.78 million tons in 2009, an increase of 1.52 million tons or 4.1 percent (Table 11, Figure 15). The increase in production is expected in every country except Thailand. The increase is mainly due to the expansion of planted area especially in Vietnam, Lao PDR, and Indonesia. The decrease in planted area in Thailand is expected because of the price of competing crops such as sugarcane and cassava are increasing (Table 12, Figure 16).

### **Utilization and Stock**

The domestic utilization of maize in ASEAN is forecast to increase about 4.4 percent from 35.74 million tons in 2009 to 37.32 million tons in 2010 (Table 15). The ratio of production to domestic utilization is expected to be 102.63 percent which is about the same as previous year (Table 16, Figure 25). The ratio of stock to domestic utilization is forecast to increase from 7.56 percent in 2009 to 10.50 percent in 2010 (Table 17, Figure 26). Most countries have very low ratio except Myanmar and Thailand. Although this ratio is expected to increase, as compared to previous year, the ratio itself is still very low and consider as a tight situation for maize supply.

### **Trade**

The 2010 maize export from ASEAN is forecast to be 1.48 million tons down from 1.76 million tons from previous year (Table 15, Figure 18 and 20). The 2010 maize import by ASEAN countries are forecast to be 1.60 million tons, down from 1.94 million tons in 2009 (Table 15, Figure 21 and 23). Cambodia, Thailand and Lao PDR are the major exporting countries while Vietnam, Thailand and Indonesia are major importing countries.

**Table 3 : Paddy production in ASEAN countries, 2008-2010**

Unit : 1,000 Tons

Country	2008 (2007/08)	2009 (2008/09)	change 2009 over 2008		2010 (2009/10)	change 2010 over 2009	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>190,838.37</b>	<b>195,492.49</b>	<b>4,654.12</b>	<b>2.44</b>	<b>197,267.41</b>	<b>1,774.92</b>	<b>0.91</b>
Brunei	1.40	1.34	-0.07	-4.69	6.37	5.03	376.65
Cambodia	6,727.12	7,173.84	446.72	6.64	7,315.93	142.09	1.98
Indonesia	60,251.07	63,840.07	3,588.99	5.96	64,776.46	936.39	1.47
Lao PDR	2,847.38	3,034.58	187.21	6.57	3,163.88	129.30	4.26
Malaysia	2,374.18	2,420.93	46.74	1.97	2,499.54	78.62	3.25
Myanmar	31,442.47	32,057.87	615.40	1.96	32,487.08	429.21	1.34
Philippines	16,815.55	16,417.74	-397.81	-2.37	16,940.81	523.07	3.19
Singapore	-	-	-	-	-	-	-
Thailand	32,099.40	31,650.63	-448.77	-1.40	31,277.35	-373.29	-1.18
Vietnam	38,279.80	38,895.50	615.70	1.61	38,800.00	-95.50	-0.25

**Table 4 : Paddy planted area in ASEAN countries, 2008-2010**

Unit : 1,000 Hectares

Country	2008 (2007/08)	2009 (2008/09)	change 2009 over 2008		2010 (2009/10)	change 2010 over 2009	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>48,314.93</b>	<b>48,322.07</b>	<b>7.14</b>	<b>0.01</b>	<b>48,586.66</b>	<b>264.60</b>	<b>0.55</b>
Brunei	1.30	1.73	0.43	33.10	2.36	0.63	36.34
Cambodia	2,585.91	2,615.74	29.84	1.15	2,693.18	77.44	2.96
Indonesia	12,993.28	12,908.17	-85.11	-0.66	13,144.86	236.69	1.83
Lao PDR	818.62	888.74	70.12	8.57	908.01	19.27	2.17
Malaysia	670.52	672.30	1.78	0.27	673.75	1.44	0.21
Myanmar	8,089.65	8,094.30	4.65	0.06	8,090.42	-3.88	-0.05
Philippines	4,525.51	4,529.02	3.52	0.08	4,578.60	49.57	1.09
Singapore	-	-	-	-	-	-	-
Thailand	11,229.94	11,171.96	-57.98	-0.52	11,095.49	-76.48	-0.68
Vietnam	7,400.20	7,440.10	39.90	0.54	7,400.00	-40.10	-0.54

**Table 5 : Paddy yield in ASEAN countries, 2008-2010**

Unit : Tons/Hectare

Country	2008 (2007/08)	2009 (2008/09)	change 2009 over 2008		2010 (2009/10)	change 2010 over 2009	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>4.07</b>	<b>4.10</b>	<b>0.03</b>	<b>0.79</b>	<b>4.12</b>	<b>0.02</b>	<b>0.53</b>
Brunei	1.22	1.20	-0.02	-1.42	3.00	1.80	149.57
Cambodia	2.62	2.75	0.13	4.78	2.76	0.02	0.55
Indonesia	4.89	4.97	0.08	1.71	4.97	0.00	0.01
Lao PDR	3.45	3.61	0.16	4.61	3.69	0.08	2.34
Malaysia	3.56	3.61	0.06	1.63	3.72	0.11	3.04
Myanmar	3.92	3.97	0.04	1.12	4.02	0.05	1.20
Philippines	3.77	3.63	-0.15	-3.85	3.70	0.07	2.07
Singapore	-	-	-	-	-	-	-
Thailand	3.01	2.96	-0.05	-1.54	2.95	-0.01	-0.40
Vietnam	5.17	5.23	0.06	1.06	5.24	0.02	0.30

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

**Table 6 : Rice balance sheet of ASEAN countries, 2009 (milled rice)**

Unit : Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>20,592,404</b>	<b>125,449,397</b>	<b>3,231,465</b>	<b>149,273,266</b>	<b>107,867,551</b>	<b>16,624,056</b>	<b>24,781,659</b>	<b>149,273,266</b>
Brunei	15,505	869	32,294	48,667	33,797	0	14,871	48,667
Cambodia	128,000	4,590,000	Nil	4,718,000	2,927,000	1,471,000	320,000	4,718,000
Indonesia	1,172,435	40,346,922	186,438	41,705,795	38,433,251	2,897	3,269,647	41,705,795
Lao PDR	30,169	1,820,750	NA	1,850,918	1,764,642	NA	86,276	1,850,918
Malaysia	275,899	1,585,708	1,094,419	2,956,026	2,531,159	NA	424,867	2,956,026
Myanmar	4,345,208	20,196,456	Nil	24,541,664	19,157,000	667,000	4,717,664	24,541,664
Philippines	2,638,287	10,737,201	1,638,314	15,013,802	13,163,706	159	1,849,937	15,013,802
Singapore	55,000	-	280,000	335,000	262,000	33,000	40,000	335,000
Thailand	6,251,800	20,889,417	Nil	27,141,217	11,267,000	8,500,000	7,374,217	27,141,217
Vietnam	5,680,101	25,282,075	Nil	30,962,176	18,327,996	5,950,000	6,684,180	30,962,176

**Table 7 : Rice balance sheet of ASEAN countries, 2010 (milled rice)**

Unit : Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>24,781,659</b>	<b>126,574,564</b>	<b>4,080,270</b>	<b>155,436,493</b>	<b>109,583,196</b>	<b>17,703,698</b>	<b>28,149,599</b>	<b>155,436,493</b>
Brunei	14,871	4,140	33,262	52,273	38,056	0	14,217	52,273
Cambodia	320,000	4,682,193	Nil	5,002,193	2,961,392	1,690,801	350,000	5,002,193
Indonesia	3,269,647	40,938,721	186,438	44,394,806	38,904,962	2,897	5,486,947	44,394,806
Lao PDR	86,276	1,898,330	NA	1,984,606	1,825,961	NA	158,645	1,984,606
Malaysia	424,867	1,641,985	1,180,570	3,247,422	2,590,004	NA	657,418	3,247,422
Myanmar	4,717,664	20,466,859	Nil	25,184,523	19,346,000	1,500,000	4,338,523	25,184,523
Philippines	1,849,937	11,079,288	2,400,000	15,329,225	13,421,363	Nil	1,907,862	15,329,225
Singapore <sup>1</sup>	40,000	-	280,000	320,000	270,000	10,000	40,000	320,000
Thailand	7,374,217	20,643,048	Nil	28,017,265	11,767,000	9,000,000	7,250,265	28,017,265
Vietnam	6,684,180	25,220,000	-	31,904,180	18,458,458	5,500,000	7,945,722	31,904,180

**Table 8 : Ratio of rice production to domestic utilization in ASEAN countries  
(Self-sufficiency ratio)**

Unit : Ton

Country	2009			2010		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>125,449,397</b>	<b>107,867,551</b>	<b>116.30</b>	<b>126,574,564</b>	<b>109,583,196</b>	<b>115.51</b>
Brunei	869	33,797	2.57	4,140	38,056	10.88
Cambodia	4,590,000	2,927,000	156.82	4,682,193	2,961,392	158.11
Indonesia	40,346,922	38,433,251	104.98	40,938,721	38,904,962	105.23
Lao PDR	1,820,750	1,764,642	103.18	1,898,330	1,825,961	103.96
Malaysia	1,585,708	2,531,159	62.65	1,641,985	2,590,004	63.40
Myanmar	20,196,456	19,157,000	105.43	20,466,859	19,346,000	105.79
Philippines	10,737,201	13,163,706	81.57	11,079,288	13,421,363	82.55
Singapore	-	262,000	-	-	270,000	-
Thailand	20,889,417	11,267,000	185.40	20,643,048	11,767,000	175.43
Vietnam	25,282,075	18,327,996	137.94	25,220,000	18,458,458	136.63

**Table 9 : Ratio of rice stock to domestic utilization in ASEAN countries  
(Food security ratio)**

Unit : Ton

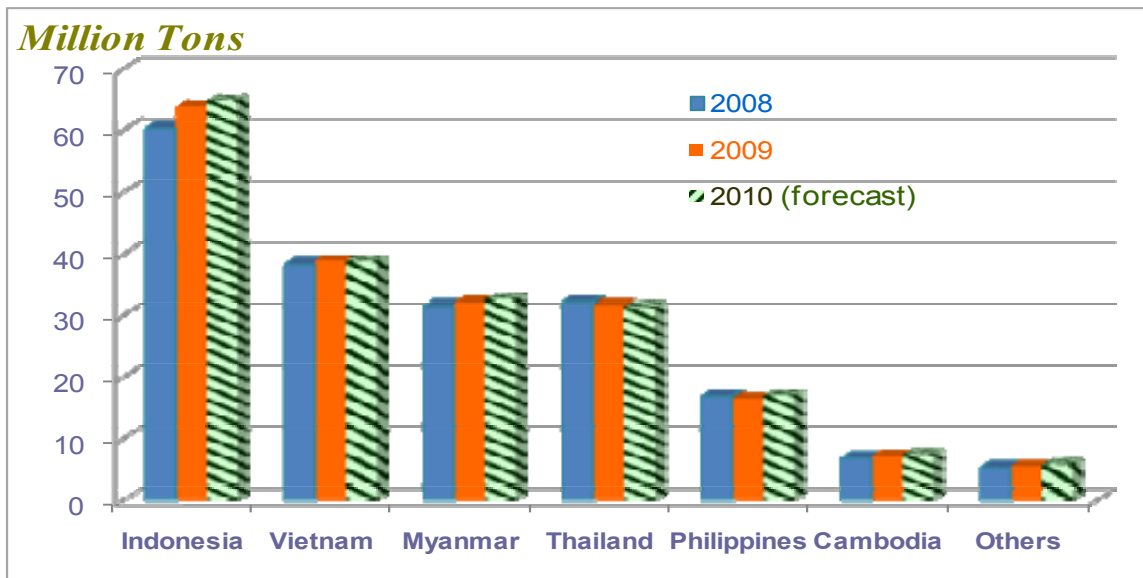
Country	2009			2010		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>20,592,404</b>	<b>107,867,551</b>	<b>19.09</b>	<b>24,781,659</b>	<b>109,583,196</b>	<b>22.61</b>
Brunei	15,505	33,797	45.88	14,871	38,056	39.08
Cambodia	128,000	2,927,000	4.37	320,000	2,961,392	10.81
Indonesia	1,172,435	38,433,251	3.05	3,269,647	38,904,962	8.40
Lao PDR	30,169	1,764,642	1.71	86,276	1,825,961	4.72
Malaysia	275,899	2,531,159	10.90	424,867	2,590,004	16.40
Myanmar	4,345,208	19,157,000	22.68	4,717,664	19,346,000	24.39
Philippines	2,638,287	13,163,706	20.04	1,849,937	13,421,363	13.78
Singapore	55,000	262,000	20.99	40,000	270,000	14.81
Thailand	6,251,800	11,267,000	55.49	7,374,217	11,767,000	62.67
Vietnam	5,680,101	18,327,996	30.99	6,684,180	18,458,458	36.21



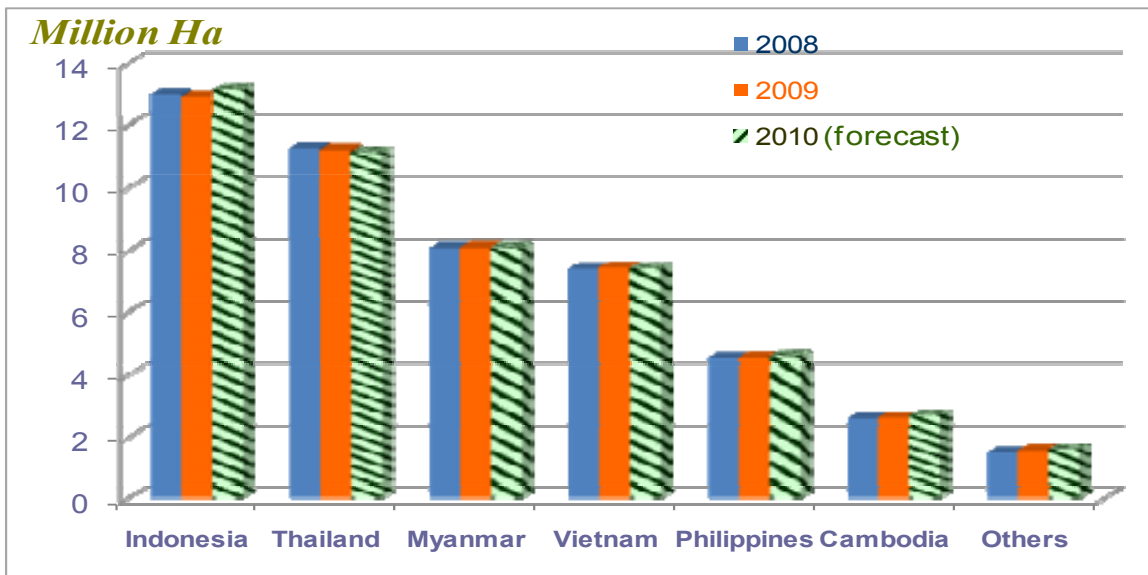
**Table 10 : FOB Price of rice in selected ASEAN countries**

Unit : US\$/Ton

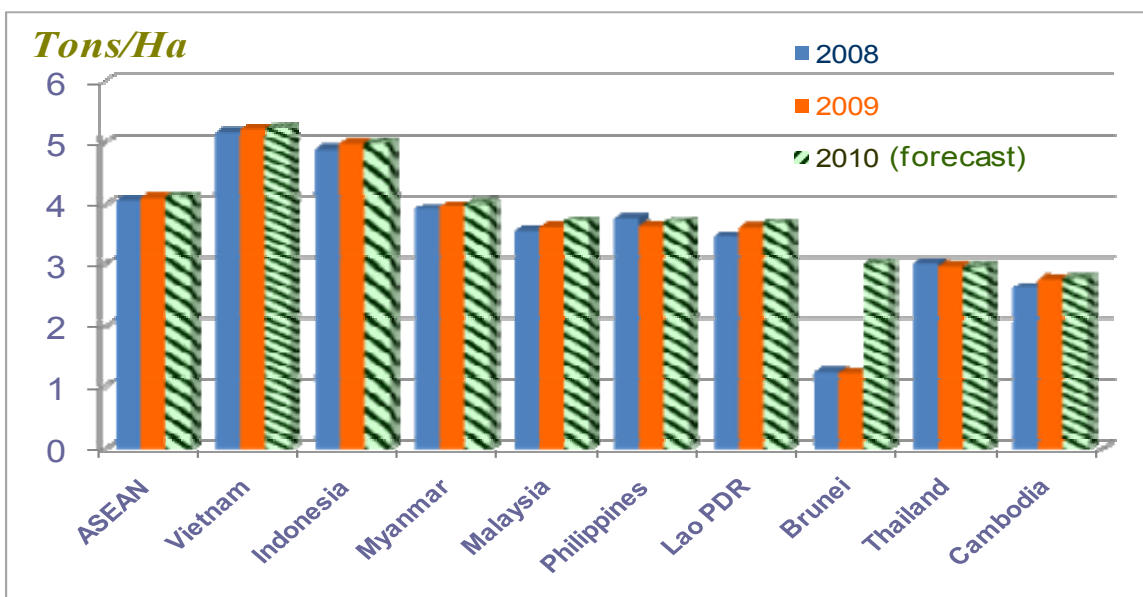
<b>Country</b>	<b>Grade</b>	<b>Year</b>	<b>Jan.</b>	<b>Feb.</b>	<b>Mar.</b>	<b>Apr.</b>	<b>May</b>	<b>Jun.</b>	<b>Jul.</b>	<b>Aug.</b>	<b>Sep.</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>	<b>Average</b>
<b>Cambodia</b>	Milled Rice 5%	2008	404	510	515	760	828	897	796	725	738	666	702	684	685
		2009	553	587	588	566	549	654	585	553	587	547	594	587	579
<b>Myanmar</b>	Milled Rice 25%	2008	277	287	305	323	319		380	415	448	380	325	304	342
		2009	288	283	286	283	298	308	311						294
<b>Thailand</b>	Hommali Rice	2008	672	739	821	1,103	1,205	1,079	991	924	883	820	795	805	903
		2009	865	862	865	876	887	901	941	956	1,013	1,045	1,063		934
	Milled Rice 5%	2008	389	454	554	833	973	854	814	764	749	667	576	566	683
		2009	581	594	608	558	526	551	556	535	528	499	527	588	554
<b>Vietnam</b>	Milled Rice 5%	2008	355	425	510	489	565	802	823	764	617	478	459	422	559
		2009	397	400	409	417	426	410	396	398	372	389	411		402



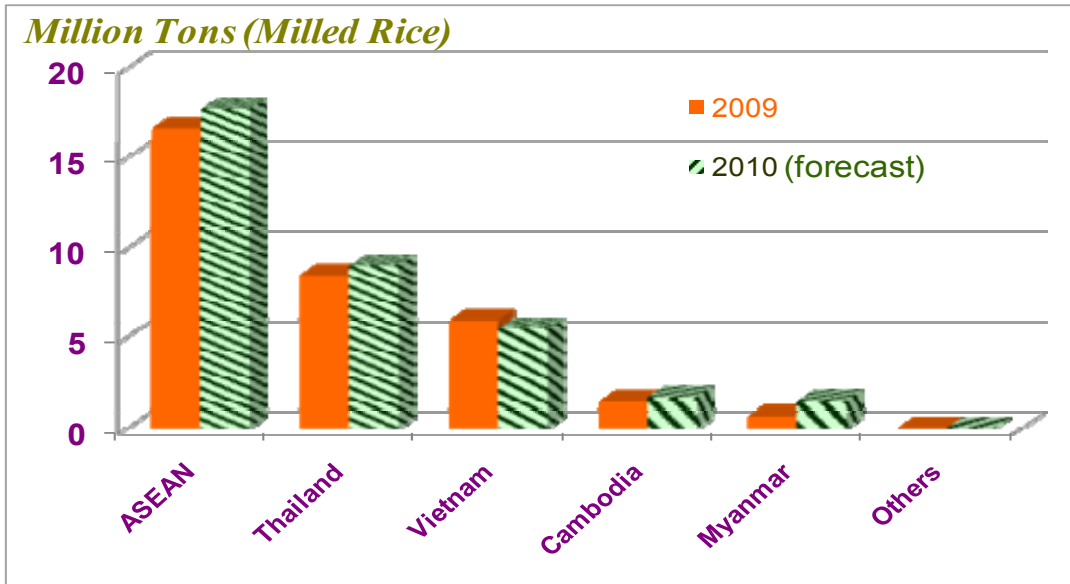
**Figure 1** : Paddy production of selected countries in ASEAN, 2008-2010



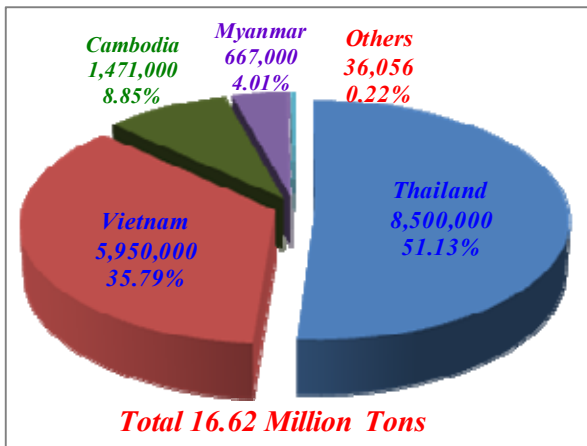
**Figure 2** : Paddy planted area of selected countries in ASEAN, 2008-2010



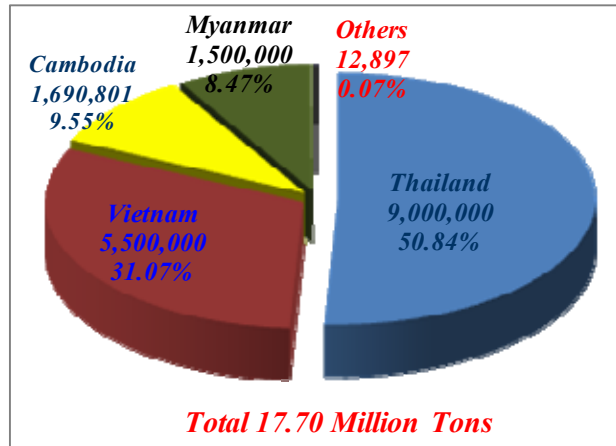
**Figure 3** : Paddy yield of countries in ASEAN, 2008-2010



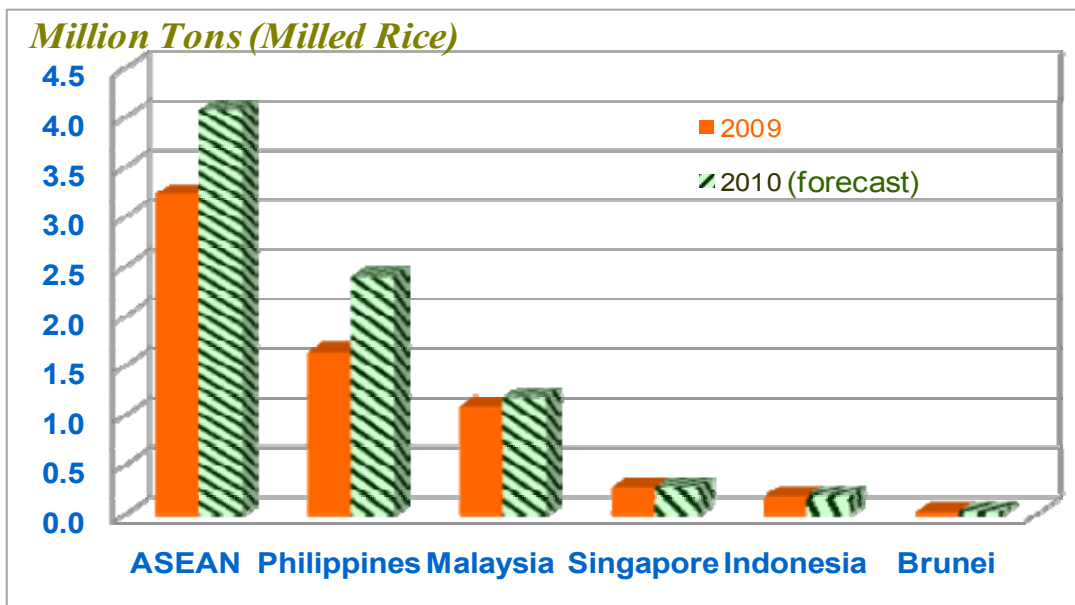
**Figure 4 :** Amount of rice export (million tons) of selected countries in ASEAN in 2009-2010



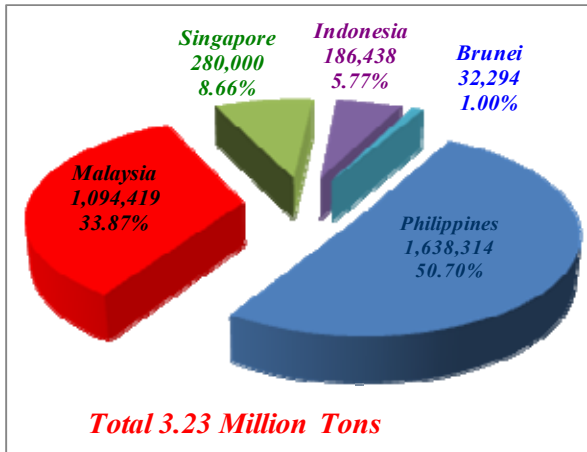
**Figure 5 :** Share of rice export (ton) among ASEAN countries, 2009



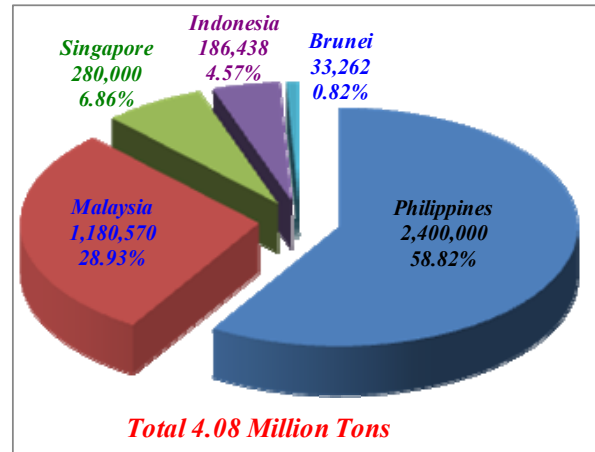
**Figure 6 :** Share of rice export (ton) among ASEAN countries, 2010



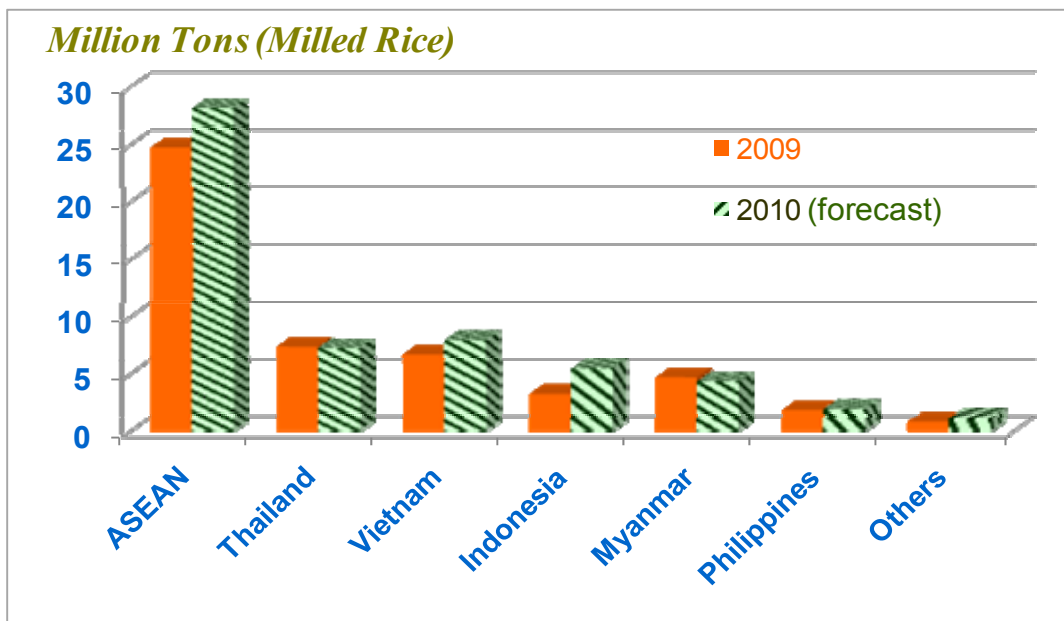
**Figure 7 :** Amount of rice import (million tons) by selected countries in ASEAN in 2009-2010



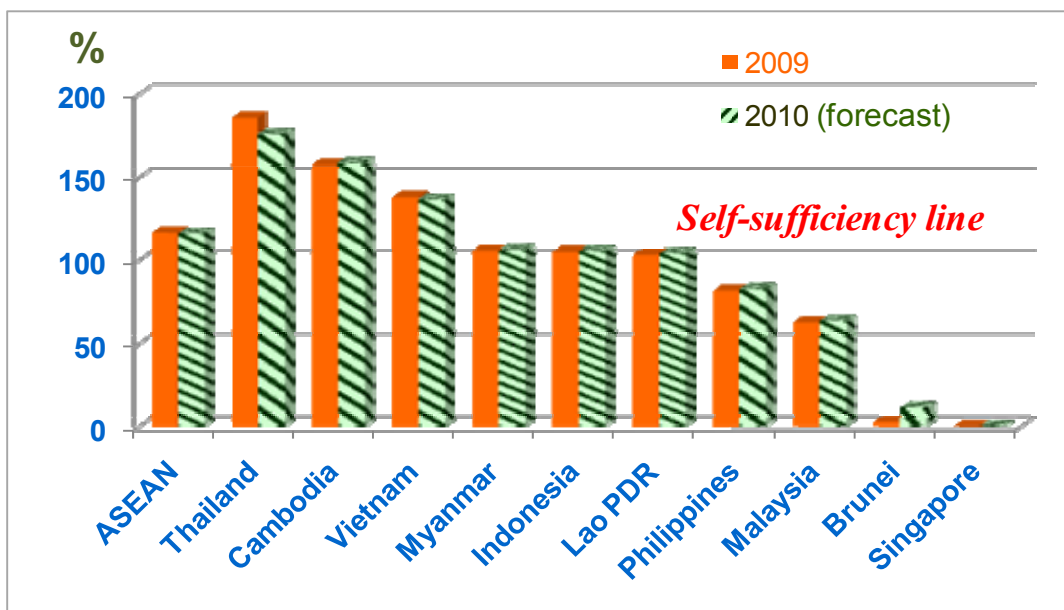
**Figure 8 :** Share of rice import (ton) among ASEAN countries, 2009



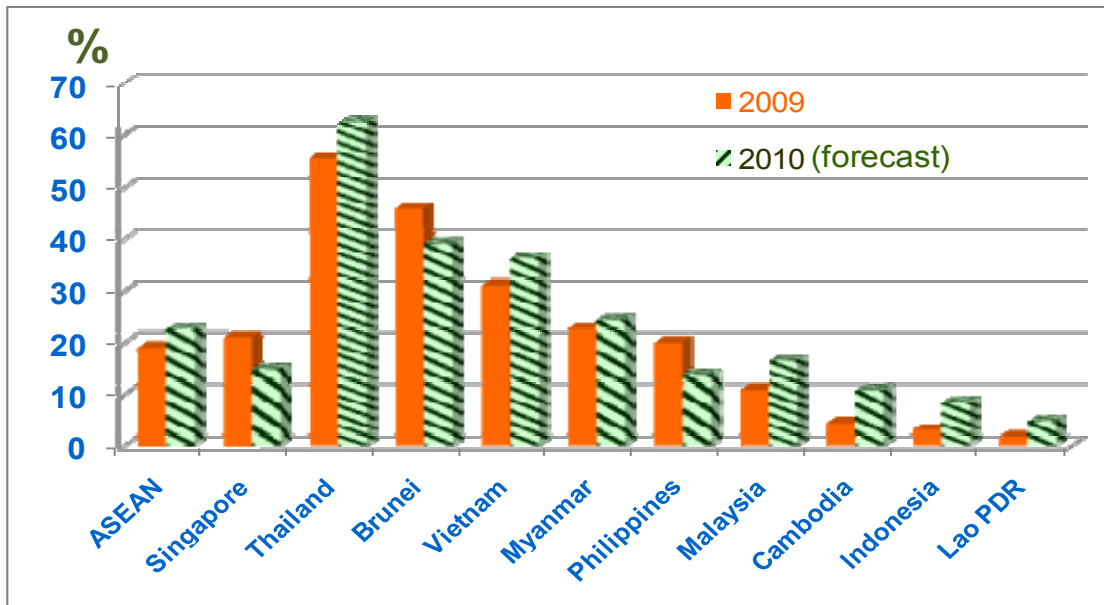
**Figure 9 :** Share of rice import (ton) among ASEAN countries, 2010



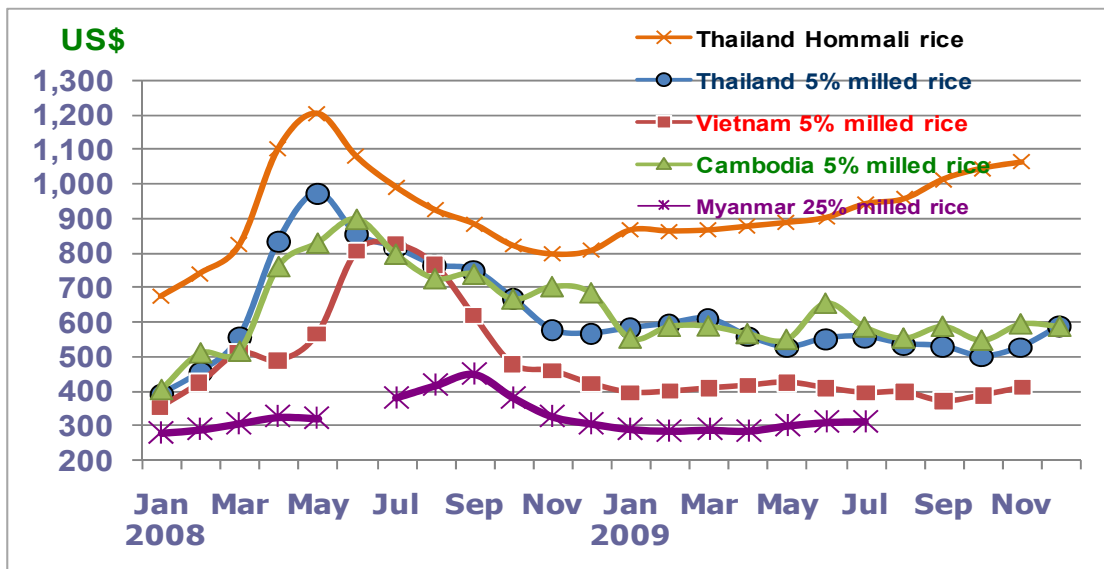
**Figure 10 :** Amount of ending stock of rice in ASEAN countries



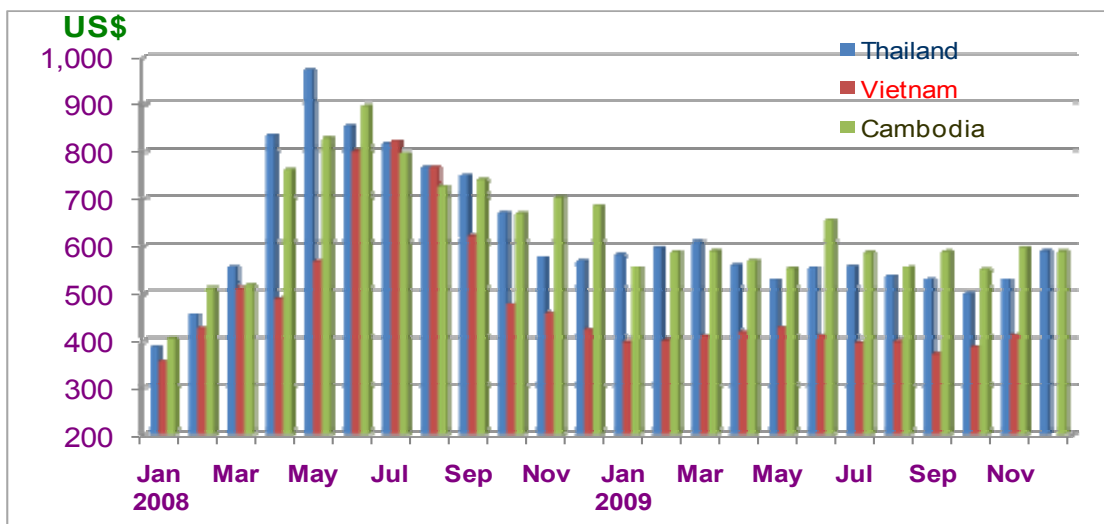
**Figure 11 :** Ratio of rice production to domestic utilization in ASEAN countries (Self-sufficiency ratio)



**Figure 12 :** Ratio of rice stock to domestic utilization in ASEAN countries (Food security ratio)



**Figure 13 :** FOB price (US\$) of milled rice of selected countries in ASEAN in 2008-2009



**Figure 14 :** FOB price (US\$) of 5% milled rice of selected countries in ASEAN in 2008-2009

**Table 11 : Maize production in ASEAN countries, 2008-2010**

Unit : 1,000 Tons

Country	2008 (2007/08)	2009 (2008/09)	change 2009 over 2008		2010 (2009/10)	change 2010 over 2009	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>34,376.51</b>	<b>36,778.86</b>	<b>2,402.35</b>	<b>6.99</b>	<b>38,299.09</b>	<b>1,520.24</b>	<b>4.13</b>
Brunei	-	-	-	-	-	-	-
Cambodia	611.38	854.33	242.95	39.74	981.00	126.68	14.83
Indonesia	16,317.25	17,659.07	1,341.82	8.22	18,233.42	574.35	3.25
Lao PDR	690.80	1,107.76	416.96	60.36	1,691.54	583.78	52.70
Malaysia	32.96	35.19	2.23	6.77	35.64	0.45	1.29
Myanmar	1,177.52	1,215.62	38.10	3.24	1,218.68	3.06	0.25
Philippines	6,736.94	7,041.28	304.34	4.52	7,099.87	58.59	0.83
Singapore	-	-	-	-	-	-	-
Thailand	4,236.56	4,433.82	197.25	4.66	4,238.94	-194.87	-4.40
Vietnam	4,573.10	4,431.80	-141.30	-3.09	4,800.00	368.20	8.31

**Table 12 : Maize Planted area in ASEAN countries, 2008-2010**

Unit : 1,000 Hectares

Country	2008 (2007/08)	2009 (2008/09)	change 2009 over 2008		2010 (2009/10)	change 2010 over 2009	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>9,556.46</b>	<b>9,922.44</b>	<b>365.97</b>	<b>3.83</b>	<b>10,128.61</b>	<b>206.17</b>	<b>2.08</b>
Brunei	-	-	-	-	-	-	-
Cambodia	163.11	219.85	56.74	34.79	220.00	0.15	0.07
Indonesia	4,019.64	4,205.69	186.04	4.63	4,261.78	56.09	1.33
Lao PDR	154.26	233.65	79.40	51.47	318.71	85.05	36.40
Malaysia	6.32	6.34	0.02	0.40	6.37	0.03	0.39
Myanmar	356.03	360.42	4.39	1.23	362.07	1.65	0.46
Philippines	2,648.32	2,700.03	51.71	1.95	2,701.08	1.05	0.04
Singapore	-	-	-	-	-	-	-
Thailand	1,068.60	1,109.67	41.07	3.84	1,058.61	-51.05	-4.60
Vietnam	1,140.20	1,086.80	-53.40	-4.68	1,200.00	113.20	10.42

**Table 13 : Maize Yield in ASEAN countries, 2008-2010**

Unit : Tons/Hectare

Country	2008 (2007/08)	2009 (2008/09)	change 2009 over 2008		2010 (2009/10)	change 2010 over 2009	
			Quantities	(%)		Quantities	(%)
<b>ASEAN</b>	<b>3.60</b>	<b>3.71</b>	<b>0.11</b>	<b>3.04</b>	<b>3.78</b>	<b>0.07</b>	<b>2.01</b>
Brunei	-	-	-	-	-	-	-
Cambodia	3.75	4.04	0.29	7.72	4.50	0.46	11.41
Indonesia	4.08	4.21	0.13	3.26	4.29	0.08	1.92
Lao PDR	4.48	4.83	0.35	7.91	5.44	0.60	12.49
Malaysia	5.22	5.55	0.33	6.35	5.60	0.05	0.89
Myanmar	3.31	3.37	0.06	1.86	3.37	-0.01	-0.21
Philippines	2.53	2.62	0.09	3.53	2.63	0.01	0.42
Singapore	-	-	-	-	-	-	-
Thailand	4.07	4.10	0.04	0.87	4.12	0.01	0.30
Vietnam	4.01	4.08	0.07	1.67	4.00	-0.08	-1.91

**Table 14 : Maize balance sheet of ASEAN countries, 2009**

Unit : Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>2,701,212</b>	<b>36,779,147</b>	<b>1,937,924</b>	<b>41,418,283</b>	<b>35,739,711</b>	<b>1,758,762</b>	<b>3,919,810</b>	<b>41,418,283</b>
Brunei	-	-	-	-	-	-	-	-
Cambodia	16,918	854,325	0	871,243	180,764	672,600	17,879	871,243
Indonesia	1,354,485	17,659,067	283,272	19,296,824	17,657,060	73,781	1,565,983	19,296,824
Lao PDR	0	1,107,775	0	1,107,775	906,837	200,938	0	1,107,775
Malaysia	0	35,190	12,196	47,386	36,563	10,823	0	47,386
Myanmar	NA	1,215,891	-	1,215,891	759,307	120	456,464	1,215,891
Philippines	197,600	7,041,282	392,456	7,631,338	7,044,563	500	586,275	7,631,338
Singapore	-	-	-	-	-	-	-	-
Thailand	920,940	4,433,817	350,000	5,704,757	3,824,726	800,000	1,080,031	5,704,757
Vietnam	211,269	4,431,800	900,000	5,543,069	5,329,891	0	213,178	5,543,069

**Table 15 : Maize balance sheet of ASEAN countries, 2010**

Unit : Ton

Country	Supply				Demand			
	Beginning Stock	Production	Imports	Total	Domestic Utilization	Exports	Ending stock	Total
<b>ASEAN</b>	<b>3,919,810</b>	<b>38,299,094</b>	<b>1,600,068</b>	<b>43,818,972</b>	<b>37,315,871</b>	<b>1,475,164</b>	<b>5,027,937</b>	<b>43,818,972</b>
Brunei	-	-	-	-	-	-	-	-
Cambodia	17,879	981,000	0	998,879	186,390	750,000	62,489	998,879
Indonesia	1,565,983	18,233,417	283,272	20,082,672	18,123,987	73,781	1,884,904	20,082,672
Lao PDR	0	1,691,539	0	1,691,539	1,397,866	239,208	54,465	1,691,539
Malaysia	0	35,644	16,796	52,440	40,415	12,025	0	52,440
Myanmar	456,464	1,218,677	-	1,675,141	761,056	150	913,935	1,675,141
Philippines	586,275	7,099,873	-	7,686,148	7,118,057	Nil	568,091	7,686,148
Singapore	-	-	-	-	-	-	-	-
Thailand	1,080,031	4,238,944	300,000	5,618,975	3,892,847	400,000	1,326,128	5,618,975
Vietnam	213,178	4,800,000	1,000,000	6,013,178	5,795,253	0	217,925	6,013,178

**Table 16 : Ratio of maize production to domestic utilization in ASEAN countries  
(Self-sufficiency ratio)**

Unit : Ton

Country	2009			2010		
	Production	Domestic Utilization	Ratio (%)	Production	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>36,779,147</b>	<b>35,739,711</b>	<b>102.91</b>	<b>38,299,094</b>	<b>37,315,871</b>	<b>102.63</b>
Brunei	-	-	-	-	-	-
Cambodia	854,325	180,764	472.62	981,000	186,390	526.32
Indonesia	17,659,067	17,657,060	100.01	18,233,417	18,123,987	100.60
Lao PDR	1,107,775	906,837	122.16	1,691,539	1,397,866	121.01
Malaysia	35,190	36,563	96.24	35,644	40,415	88.19
Myanmar	1,215,891	759,307	160.13	1,218,677	761,056	160.13
Philippines	7,041,282	7,044,563	99.95	7,099,873	7,118,057	99.74
Singapore	-	-	-	-	-	-
Thailand	4,433,817	3,824,726	115.93	4,238,944	3,892,847	108.89
Vietnam	4,431,800	5,329,891	83.15	4,800,000	5,795,253	82.83

**Table 17 : Ratio of maize stock to domestic utilization in ASEAN countries  
(Food security ratio)**

Unit : Ton

Country	2009			2010		
	Beginning Stock	Domestic Utilization	Ratio (%)	Beginning Stock	Domestic Utilization	Ratio (%)
<b>ASEAN</b>	<b>2,701,212</b>	<b>35,739,711</b>	<b>7.56</b>	<b>3,919,810</b>	<b>37,315,871</b>	<b>10.50</b>
Brunei	-	-	-	-	-	-
Cambodia	16,918	180,764	9.36	17,879	186,390	9.59
Indonesia	1,354,485	17,657,060	7.67	1,565,983	18,123,987	8.64
Lao PDR	0	906,837	0.00	0	1,397,866	0.00
Malaysia	0	36,563	0.00	0	40,415	0.00
Myanmar	NA	759,307	-	456,464	761,056	59.98
Philippines	197,600	7,044,563	2.81	586,275	7,118,057	8.24
Singapore	-	-	-	-	-	-
Thailand	920,940	3,824,726	24.08	1,080,031	3,892,847	27.74
Vietnam	211,269	5,329,891	3.96	213,178	5,795,253	3.68



**Table 18 : FOB Price of maize (Feed grain) in selected ASEAN countries**

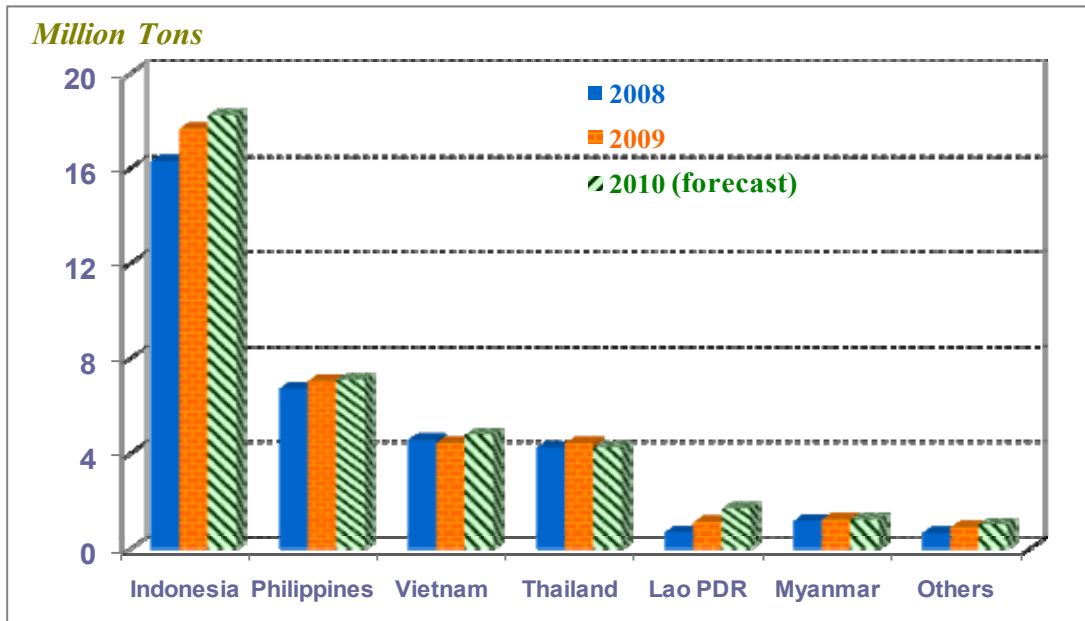
Unit : US\$/Ton

Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Cambodia	2008	215	220	231	218	216	215	230	223	225	230	235	240	225
	2009	220	230	240	220	230	225	240	230	245	230	221	231	230
Indonesia	2008	207	220	234	246	243	287	265	235	234	183	164	158	223
	2009	173	163	165	168	180	180	152	152	150	167	172		166
Myanmar	2008	204	208	209	214	224	223	230	245	262	254	194	191	222
	2009	194	197	239	198	176	199	212						202
Thailand	2008	257	274	300	307	295	297	337	318	270	241	231	205	278
	2009	220	223	217	220	212	227	210	190	188	195			210

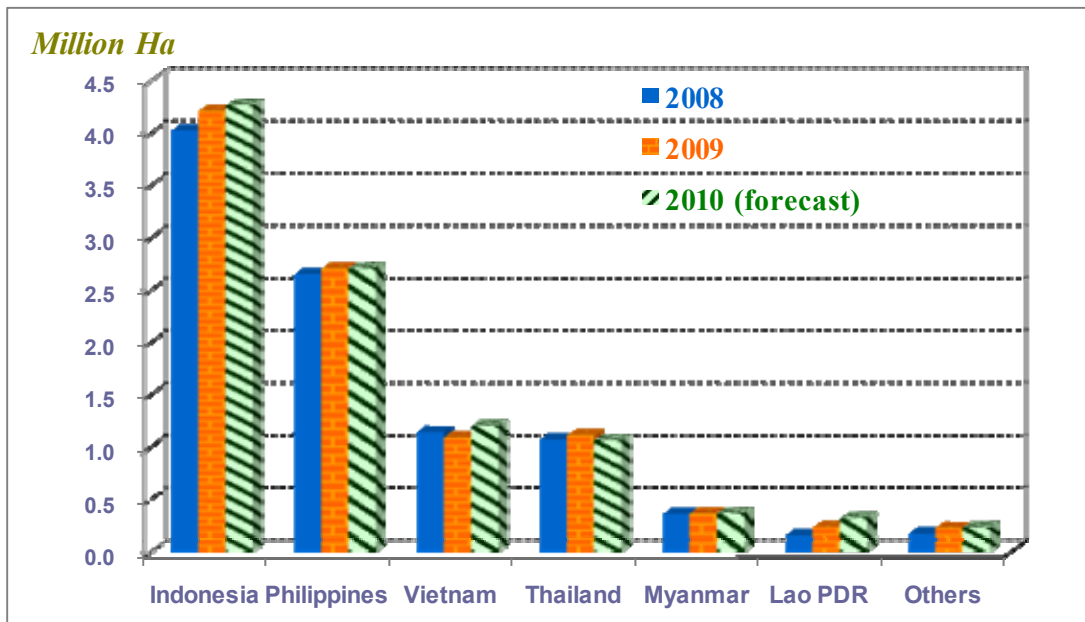
**Table 19 : CIF Price of maize (Feed grain) in selected ASEAN countries**

Unit : US\$/Ton

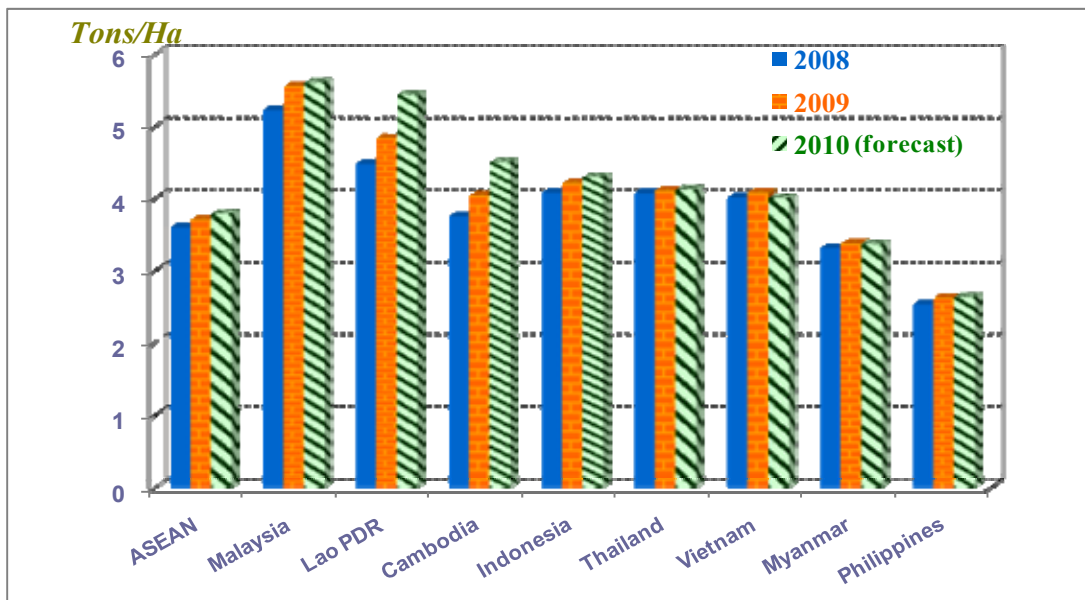
Country	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
Malaysia	2008	188	190	183	191	195	165	161	201	253	180	229	182	193
	2009	158	211	223	160	217	200	135	224	307	152	254	221	205
Philippines In-quota	2008	204	-	-	249	216	-	-	216	-	-	-	231	223
	2009	-	408	212	242	-	392	242	-	NA	NA	NA		299
Out-quota	2008	-	-	564	-	573	-	-	216	223	373	219	125	328
	2009	-	206	300	165	256	265	-	297	NA	NA	NA		248
Vietnam	2008	240	245	240	243			237	253	249	269	269	281	253
	2009	270	235	257	270	252	225	213	219	235	226	195		236



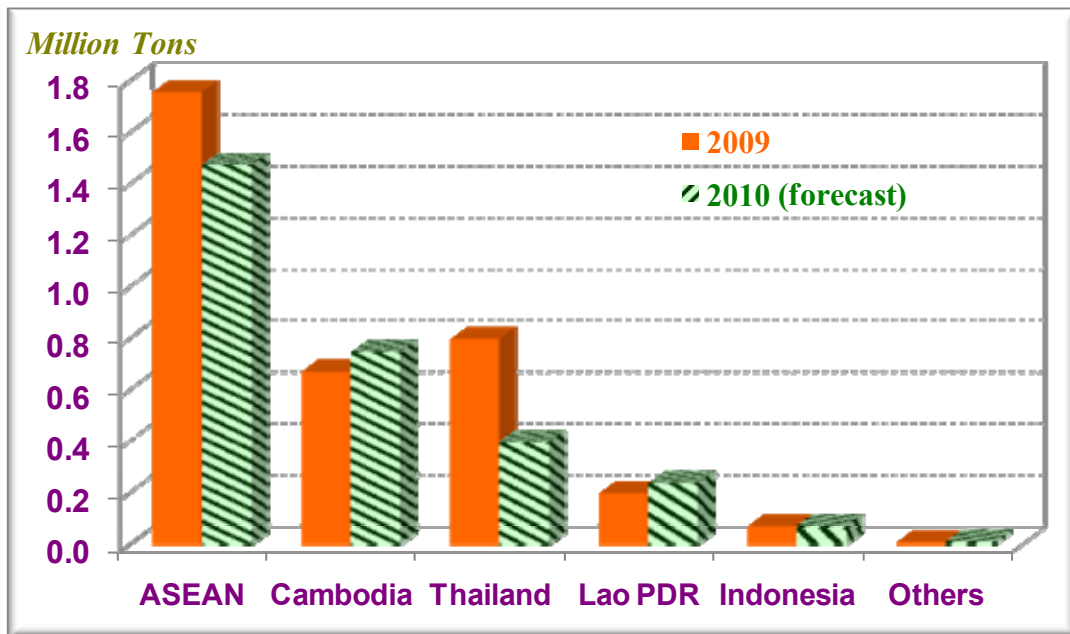
**Figure 15 :** Maize production of selected countries in ASEAN, 2008-2010



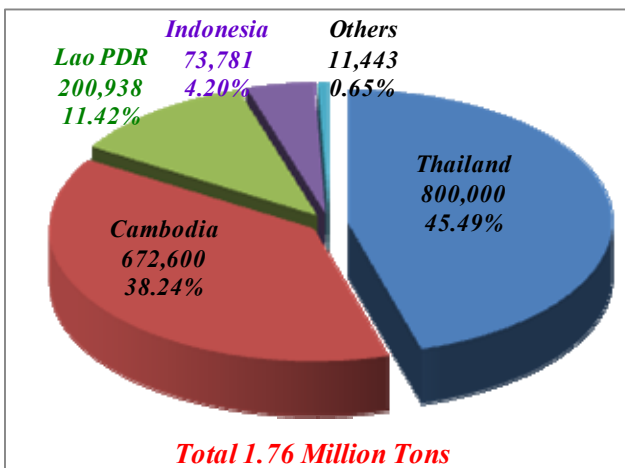
**Figure 16 :** Maize planted area of selected countries in ASEAN, 2008-2010



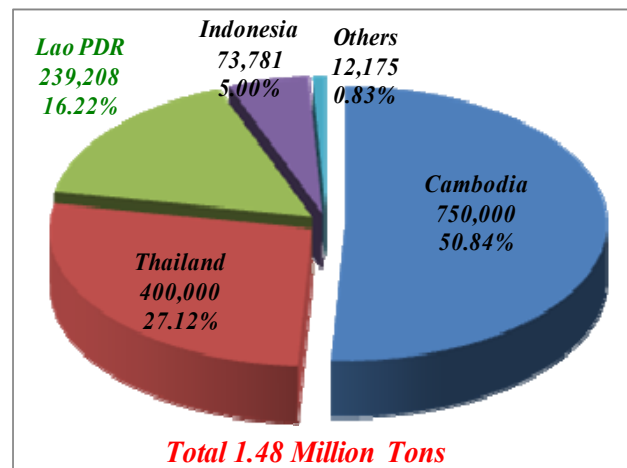
**Figure 17 :** Maize yield of countries in ASEAN, 2008-2010



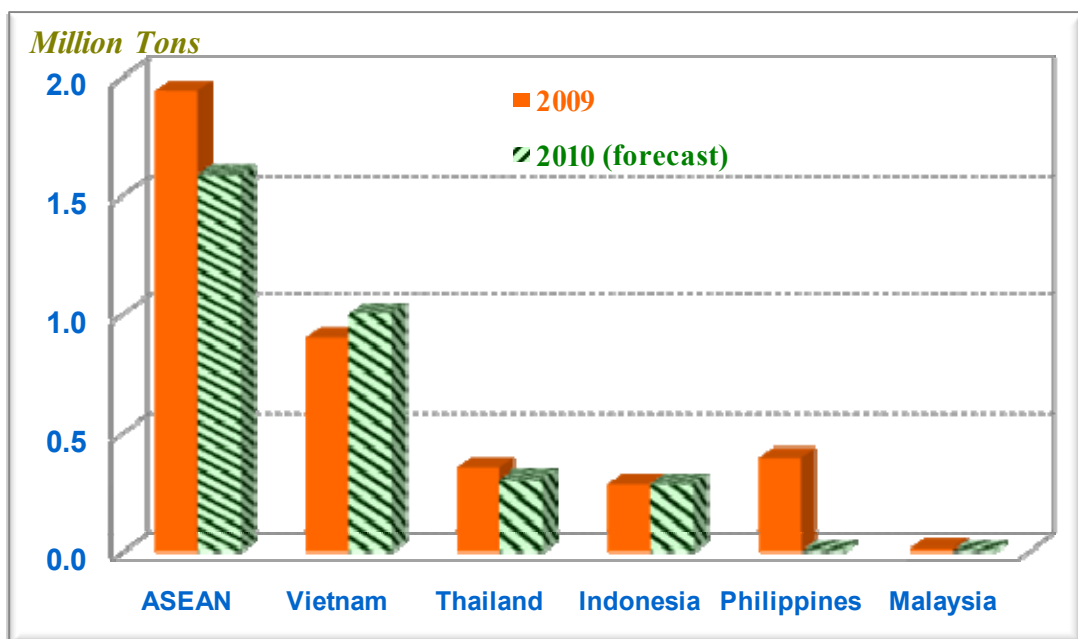
**Figure 18 :** Amount of maize export (million tons) of selected countries in ASEAN in 2009-2010



**Figure 19 :** Share of maize export (ton) among ASEAN countries, 2009



**Figure 20 :** Share of maize export (ton) among ASEAN countries, 2010



**Figure 21 :** Amount of maize import (million tons) by selected countries in ASEAN in 2009-2010

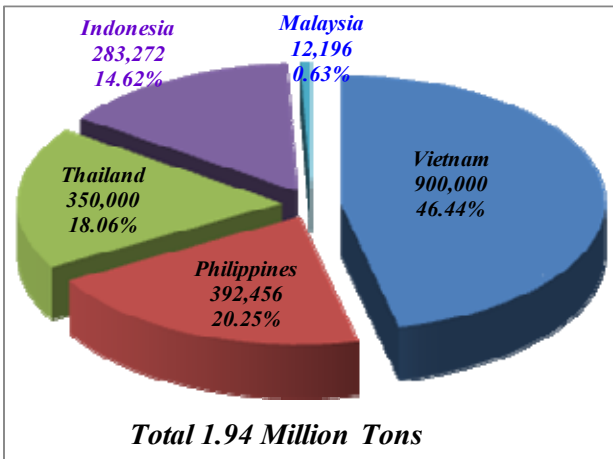


Figure 22 : Share of maize import (ton) among ASEAN countries, 2009

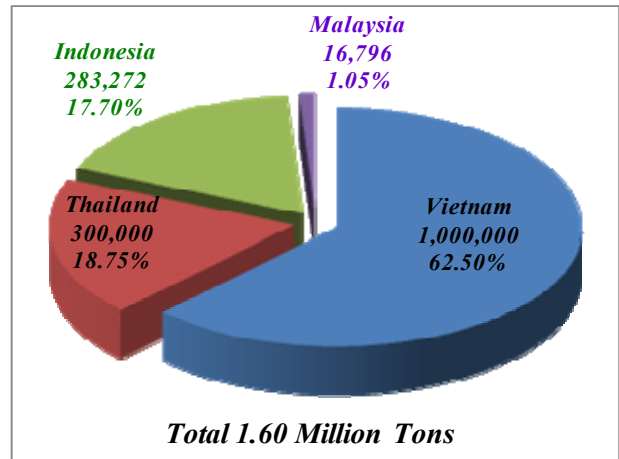


Figure 23 : Share of maize import (ton) among ASEAN countries, 2010

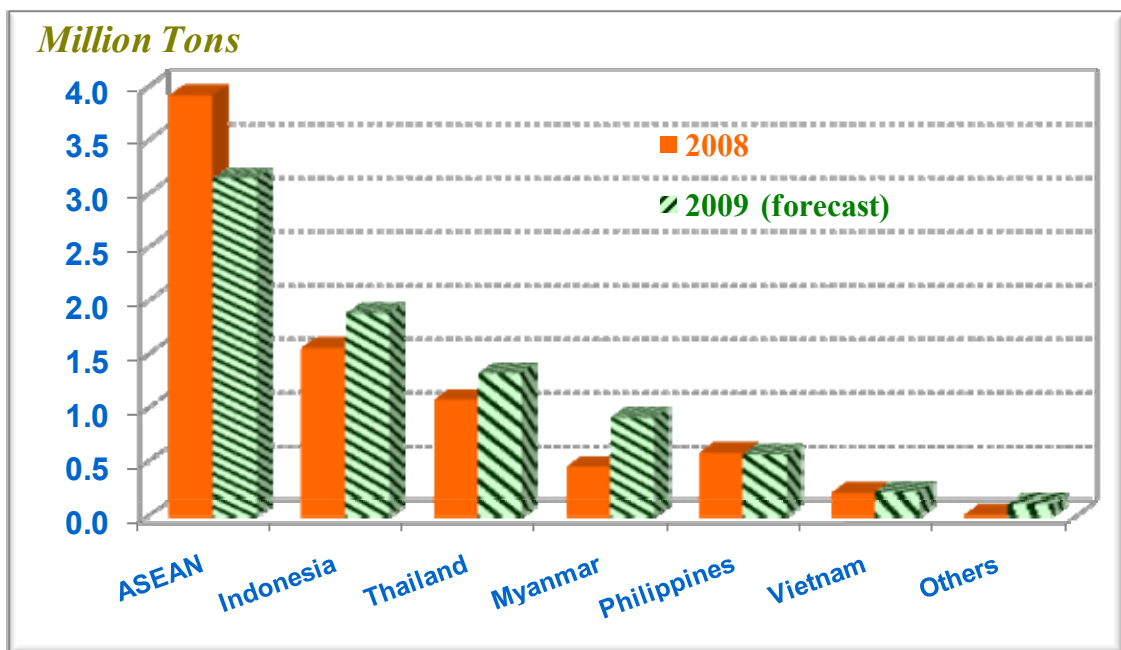


Figure 24 : Amount of ending stock of maize in ASEAN countries

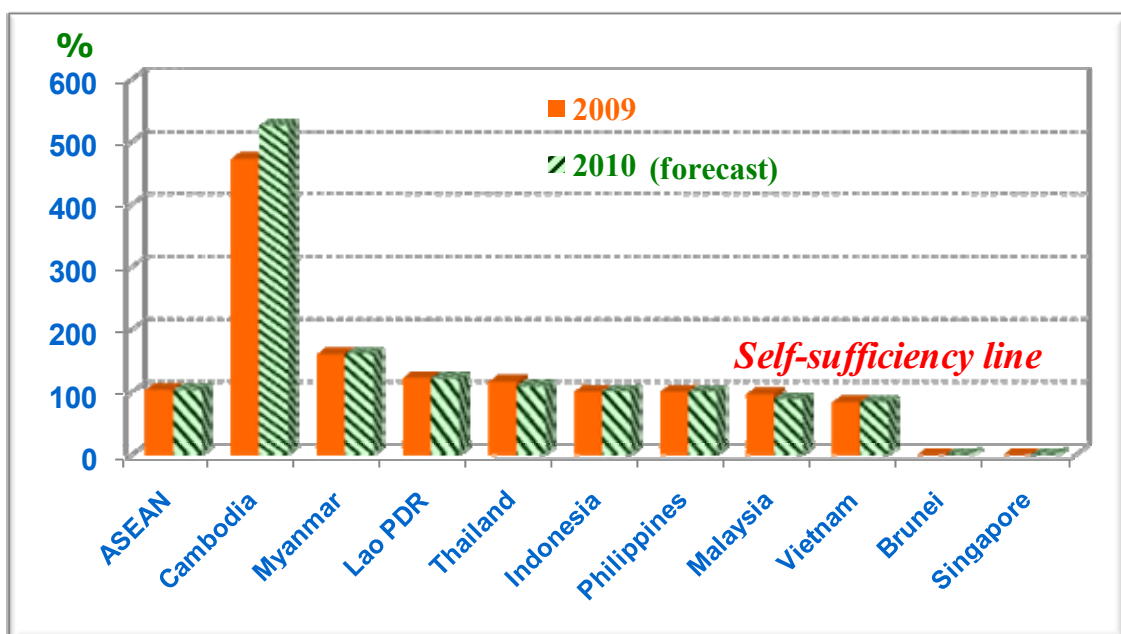
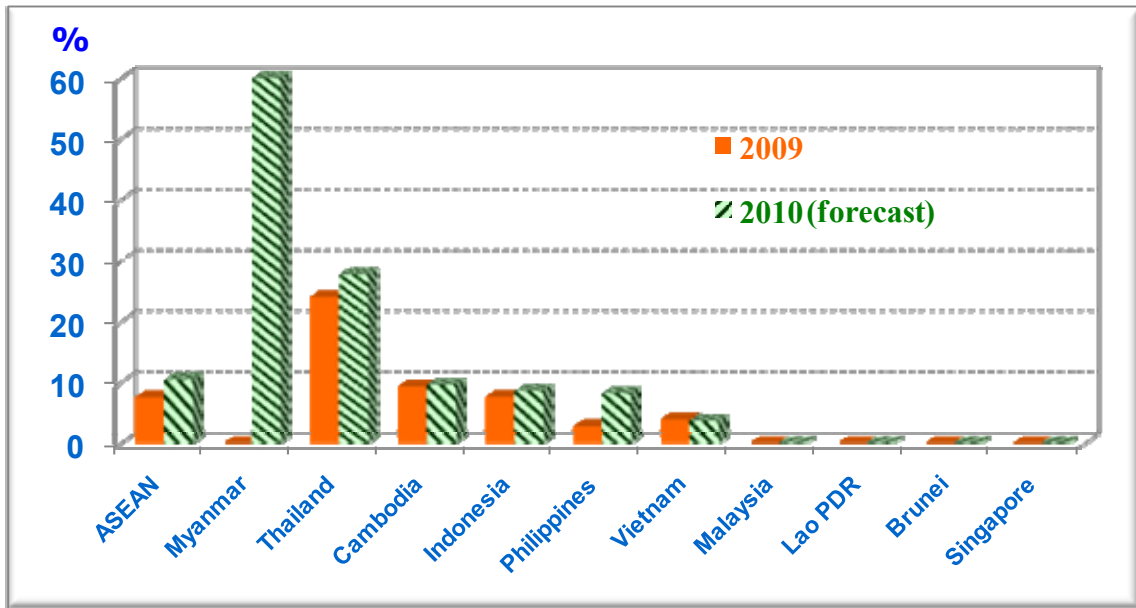
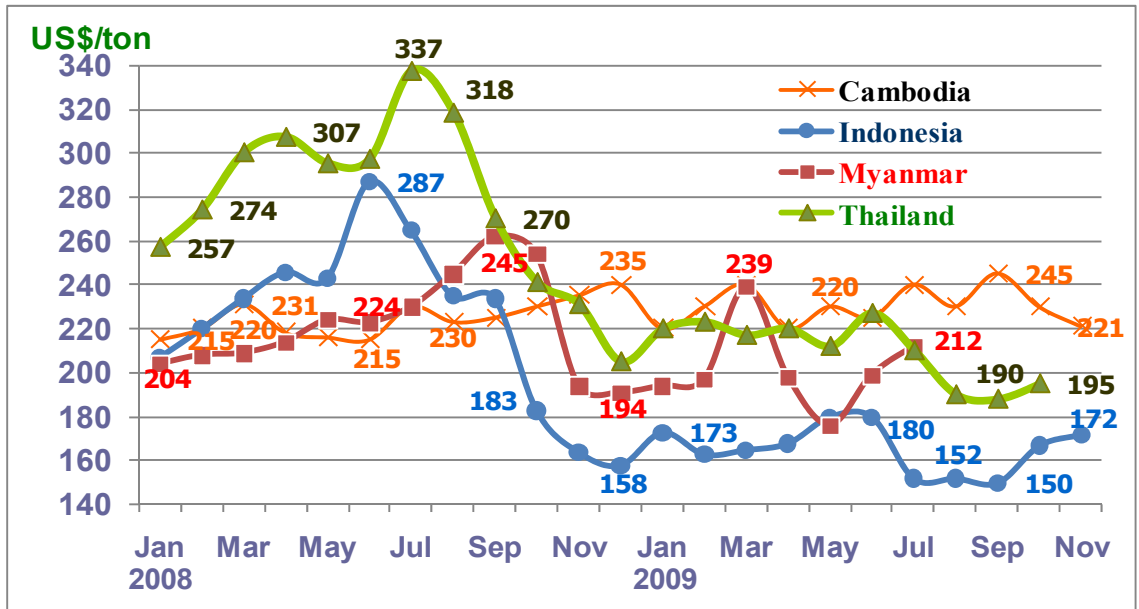


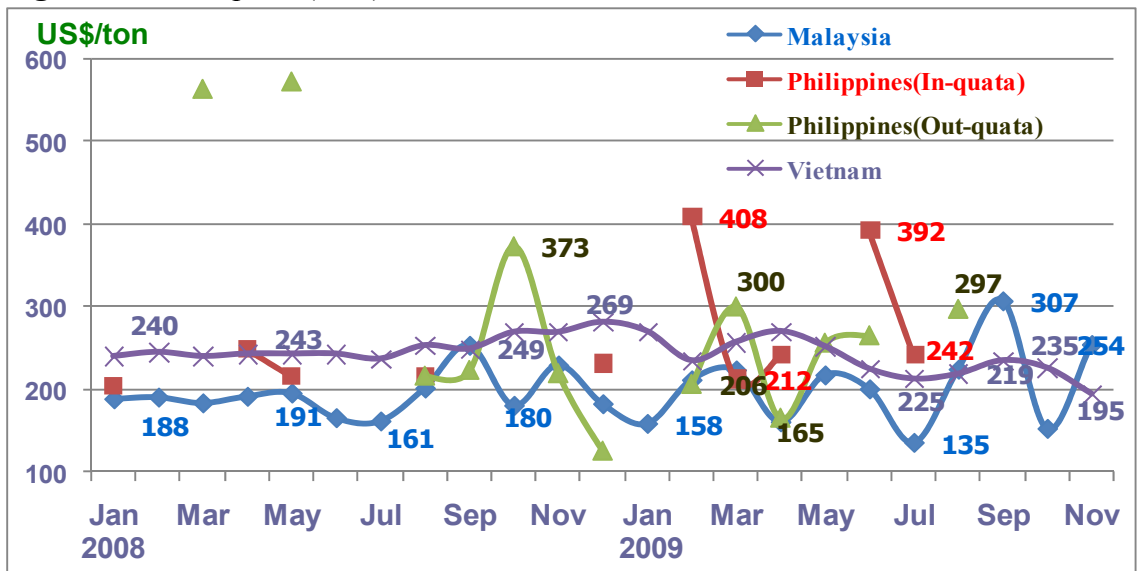
Figure 25 : Ratio of maize production to domestic utilization in ASEAN countries (Self-sufficiency ratio)



**Figure 26 :** Ratio of maize stock to domestic utilization in ASEAN countries (Food security ratio)



**Figure 27 :** FOB price (US\$) of maize of selected countries in ASEAN in 2008-2009



**Figure 28 :** CIF price (US\$) of maize of selected countries in ASEAN in 2008-2009

## **Explanatory notes**

### **Production of Paddy for 2010**

#### Brunei:

- Wet season refers to the crop harvested during August to October 2010.
- Dry season refers to the crop harvested during February to April 2010.

#### Cambodia:

- Wet-season refers to the crop harvested during August to December 2009.
- Dry-season refers to the crop harvested during January to March 2010.

#### Indonesia:

- Sumatera refers to the crop harvested during May to July 2010 and the crop harvested during November 2010 to January 2011.
- Jawa Bali and West Nusra refer to the crop harvested during April to July 2010 and the crop harvested during October to December 2010.
- East Nusra refers to the crop harvested during June to September 2010.
- Kalimantan refers to the crop harvested during March to June 2010 and the crop harvested during August to November 2010.
- Sulawesi refers to the crop harvested during June to August 2010 and the crop harvested during November 2010 to January 2011.
- Maluku and Papua refer to the crop harvested during April to July 2010 and the crop harvested during August to November 2010.

#### Lao PDR:

- Wet-season refers to the crop harvested during September 2009 to January 2010.
- Dry-season refers to the crop harvested during February to May 2010.

#### Malaysia:

- Wet-season refers to the crop harvested during December 2009 to June 2010.
- Dry-season refers to the crop harvested during July to November 2010.

#### Myanmar:

- Wet-season refers to the crop harvested during August 2009 to January 2010.
- Dry-season refers to the crop harvested during February to August 2010.

## Philippines:

- Wet-season refers to the crop harvested during September to December 2010.
- Dry-season refers to the crop harvested during February to May 2010.

## Thailand :

- Wet-season refers to the crop harvested during August 2009 to April 2010. The bulk of harvest occurred in November - December 2009.
- Dry-season refers to the crop harvested during February to October 2010.

## Vietnam:

## Spring-season

- North refers to the crop harvested during June to July 2010.
- South refers to the crop harvested during February to May 2010

## Autumn-season

- North refers to the crop harvested during August to September 2010
- South refers to the crop harvested during July to September 2010

## Winter-season

- North refers to the crop harvested during October to November 2010
- South refers to the crop harvested during October 2010 to January 2011

### **Production of Maize for 2010**

## Cambodia:

- 1<sup>st</sup> crop will be harvested during February to March 2010.
- 2<sup>nd</sup> crop will be harvested during August to October 2010.

## Indonesia:

- 1<sup>st</sup> crop will be harvested during January to October 2010.
- 2<sup>nd</sup> crop will be harvested during January to October 2010.

## Lao PDR:

- 1<sup>st</sup> crop will be harvested during June to July 2010.
- 2<sup>nd</sup> crop will be harvested during September to December 2010.

**Malaysia:**

- 1<sup>st</sup> crop will be harvested during April to May 2010.
- 2<sup>nd</sup> crop will be harvested during September to November 2010.

**Myanmar:**

- 1<sup>st</sup> crop will be harvested during January to March 2010.
- 2<sup>nd</sup> crop will be harvested during August to November 2010.

**Philippines:**

- 1<sup>st</sup> crop will be harvested during February to May 2010.
- 2<sup>nd</sup> crop will be harvested during July to November 2010.

**Thailand:**

- 1<sup>st</sup> crop will be harvested during February to July 2010.
- 2<sup>nd</sup> crop will be harvested during August 2010 to January 2011.

**Vietnam:**

- 1<sup>st</sup> crop will be harvested during January to March 2010.
- 2<sup>nd</sup> crop will be harvested during April to September 2010.
- 3<sup>rd</sup> crop will be harvested during July 2010 to January 2011.

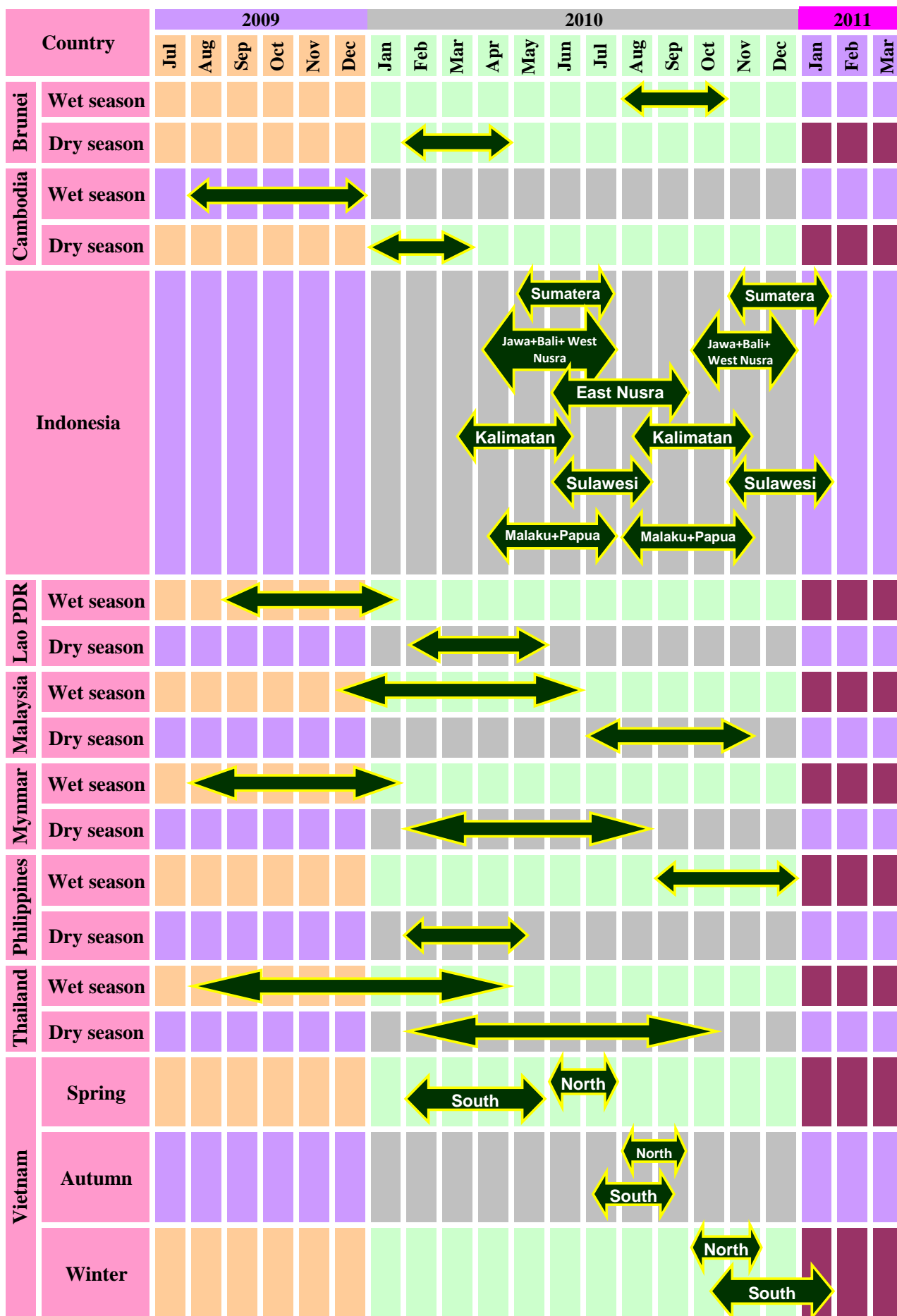
**Domestic Utilization, Stock, Import and Export: refer to calendar year**

**NA : The data is not available due to there is no collecting or reporting systems in the country yet.**

**Nil : Small amount**



Rice crop calendar (harvested months) for crop year 2009/10 (2010) in ACO-3 report





**List of Delegates**  
**The Third Agricultural Commodity Outlook Committee Meeting**  
**Springfield @ Sea Resort & Spa, Cha-AM**  
**Petchburi, Thailand**  
**13 - 14 January 2010**

Name	Position
1. Mr. Montol Jeamchareon	AFSIS Project Manager Chairman of the Meeting Ministry of Agriculture and Cooperatives Thailand
2. Dr.Somsak Pipoppinyo	Assistant Director ASEAN Secretariat
3. Dr.Haji Anjah Haji Abdul Rahman	Senior Livestock Husbandry Officer Department of Agriculture Ministry of Industry and Primary Resources Brunei Darussalam
4. Mr.Tuor Vannak	Deputy Chief of Statistics Office Department of Planning and Statistics Ministry of Agriculture Forestry and Fisheries Cambodia
5. Mr. Muhammad Tassim Billah	Head of Food Crops Statistics Center for Agricultural Data and Information Ministry of Agriculture Indonesia
6. Ms. Vivanh Souvannamethy	Deputy Director Center for Statistics and Information Department of Planning Ministry of Agriculture and Forestry Lao PDR
7. Ms.Yeoh Gim Bee	Undersecretary Strategic Planning & International Division Ministry of Agriculture and Agro-Based Industry Malaysia
8. Dr. Win Htut	Assistant Director Settlement and Land Records Department Ministry of Agriculture and Irrigation Myanmar

**ANNEX 3**

9. Ms.Nareenat Roomnaphai  
Deputy Secretary-General  
Office of Agricultural Economics  
Ministry of Agriculture and Cooperatives  
Thailand
10. Mr.Ha Hai Ly  
Senior Statistician  
Center for Information Technology and Statistics  
Ministry of Agriculture and Rural Development  
Vietnam
11. Mr.Tsurumi Kazuyoshi  
Director  
Statistics Planning Division  
Statistics Department Minister's Secretariat  
Ministry of Agriculture Forestry and Fisheries  
Japan
12. Mr. Hosaka Masahiro  
Section Chief  
Statistics Planning Division  
Statistics Department Minister's Secretariat  
Ministry of Agriculture Forestry and Fisheries  
Japan
13. Dr. Apichart Pongsrihadulchai  
AFSIS Consultant  
Adviser to the Minister  
Ministry of Agriculture and Cooperatives  
Thailand