



# ASEAN Early Warning Information



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## Rice Situation in ASEAN

### Production

The ASEAN paddy production in 2012 (crop year 2011/12) was estimated at 212.82 million tons, an increase of 6.01 million tons which is about 3 percent from the previous year (Table 1, Figure 1). The increase in production came from the increase in both planted area and yield. However, the increase in area was about one percent while the increase in yield was about 3 percent which compensated the decrease in harvested area due to the damage. In terms of the amount of production increase, Indonesia, the Philippines and Thailand has increased the most. In terms of percentage increase, Lao PDR and Brunei were the first and the second respectively. However, Brunei produces very small quantity. Myanmar the only country in the region that the paddy production has decreased. For the increasing countries, the farmers' response to the price increase used more improved varieties. Moreover, the favorable weather were the most cited as the factors attributed to the increase in production. Unfavorable weather was the factor that causes the reduction in production in Myanmar.

The paddy production in 2013 (crop year 2012/13) was estimated at 212.56 million tons, a decrease of 0.26 million tons which is 0.12 percent from the previous year. The decrease in production came from the reduction in both planted area and yield which were reduced to less than one percent. In terms of decreasing amount of production, Thailand and Myanmar has reduced the most. For Thailand, the production has projected to decrease about 3 percent due to the reduction in planted area of the first (major crop) which some area was left idle to keep the water for preventing flood in the urban area. Nevertheless, it is expected that the first crop lost will be able to compensate by the increase in production of the second crop in response to the high price received under the rice pledging scheme of the government. The unfavorable weather was the factors that caused the reduction in production in Myanmar and Malaysia.

## **Harvested Area**

The harvested area of paddy in ASEAN in 2012 (crop year 2011/12) was estimated at 49.79 million hectares compared to 49.81 million hectares in 2011 (crop year 2010/11), a decrease of less than one percent (Table 3, Figure 3). There were three countries namely: Thailand, Myanmar and Cambodia that the harvested areas have decreased. For other countries, the harvesting area has increased. The increases in harvested area were very eminent in the Lao PDR which was about 14 percent increase from previous year.

The harvested area for 2013 is forecast to be 50.25 million hectares, an increase of 0.46 million hectares. The increase in harvested area is expected in every country except Myanmar, Vietnam and Malaysia. The decrease in harvested area is due to the unfavorable weather.

## **Yield**

The average paddy yield in ASEAN in 2012 was estimated at 4.27 ton/ha. When compared to 4.15 tons/ha in 2011, which is about 3 percent (Table 4, Figure 4). Myanmar and Lao PDR were the two countries in the region that the yields have decreased. The reduction in yield in Myanmar and Lao PDR were due to the flood. In terms of percentage increase in yield, the increase in Thailand was very high due to the recovery from the severe flood in the previous year.

The average paddy yield in ASEAN is forecast to reduce little from 4.27 tons/ha in 2012 to 4.23 ton/ha in 2013 due to the decrease in yield in Indonesia, Malaysia Thailand and Cambodia. However, for other countries in the region, the yields of 2013 are expected to increase.

## **Damaged Area**

The total damaged area of paddy in 2012 which affected the 2012 (crop year 2011/12) production was about 1.71 million hectares of which almost 90 percent came from the flood. The most damage was occurred in Thailand and followed by Cambodia. The data on the damaged area was not available for Vietnam. The second and the third ranked in terms of damaged areas were caused by the drought and pests respectively. The damaged areas by the cause of damage by country in 2012 are shown in Table 5.

**Table 1 Paddy production in ASEAN countries, 2011-2013**

Unit: 1,000 Tons

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |              |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|--------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)          |
| <b>ASEAN</b> | <b>206,803.70</b> | <b>212,817.25</b> | <b>6,013.55</b>          | <b>2.91</b> | <b>212,560.73</b> | <b>-256.52</b>           | <b>-0.12</b> |
| Brunei       | 2.28              | 2.70              | 0.42                     | 18.65       | 2.77              | 0.07                     | 2.41         |
| Cambodia     | 8,249.45          | 8,779.37          | 529.91                   | 6.42        | 9,290.94          | 511.58                   | 5.83         |
| Indonesia    | 65,756.90         | 69,045.14         | 3,288.24                 | 5.00        | 69,844.51         | 799.37                   | 1.16         |
| Lao PDR      | 3,065.76          | 3,432.80          | 367.04                   | 11.97       | 3,800.00          | 367.20                   | 10.70        |
| Malaysia     | 2,578.52          | 2,750.41          | 171.89                   | 6.67        | 2,626.88          | -123.52                  | -4.49        |
| Myanmar      | 32,064.43         | 29,009.91         | -3,054.52                | -9.53       | 28,079.86         | -930.05                  | -3.21        |
| Philippines  | 16,684.06         | 18,032.42         | 1,348.36                 | 8.08        | 18,353.71         | 321.28                   | 1.78         |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Thailand     | 36,003.80         | 38,102.71         | 2,098.91                 | 5.83        | 36,854.37         | -1,248.34                | -3.28        |
| Vietnam      | 42,398.50         | 43,661.80         | 1,263.30                 | 2.98        | 43,707.70         | 45.90                    | 0.11         |

**Table 2 Paddy planted area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |              |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|--------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)          |
| <b>ASEAN</b> | <b>51,020.06</b>  | <b>51,504.27</b>  | <b>484.21</b>            | <b>0.95</b> | <b>51,172.24</b>  | <b>-332.03</b>           | <b>-0.64</b> |
| Brunei       | 1.76              | 1.98              | 0.21                     | 12.02       | 2.03              | 0.06                     | 2.86         |
| Cambodia     | 2,795.89          | 2,968.53          | 172.64                   | 6.17        | 3,007.55          | 39.01                    | 1.31         |
| Indonesia    | 13,382.21         | 13,517.86         | 135.65                   | 1.01        | 13,994.70         | 476.84                   | 3.53         |
| Lao PDR      | 914.54            | 935.54            | 21.00                    | 2.30        | 960.00            | 24.47                    | 2.62         |
| Malaysia     | 687.94            | 692.34            | 4.40                     | 0.64        | 688.21            | -4.13                    | -0.60        |
| Myanmar      | 8,047.28          | 7,592.76          | -454.52                  | -5.65       | 7,321.41          | -271.35                  | -3.57        |
| Philippines  | 4,626.81          | 4,702.77          | 75.96                    | 1.64        | 4,705.66          | 2.89                     | 0.06         |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Thailand     | 12,908.22         | 13,339.29         | 431.07                   | 3.34        | 12,760.69         | -578.61                  | -4.34        |
| Vietnam      | 7,655.40          | 7,753.20          | 97.80                    | 1.28        | 7,732.00          | -21.20                   | -0.27        |

**Table 3 Paddy harvested area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |              | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|--------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)          |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>49,806.10</b>  | <b>49,790.00</b>  | <b>-16.10</b>            | <b>-0.03</b> | <b>50,249.93</b>  | <b>459.93</b>            | <b>0.92</b> |
| Brunei       | 1.60              | 1.80              | 0.19                     | 12.02        | 1.84              | 0.05                     | 2.56        |
| Cambodia     | 2,777.32          | 2,766.62          | -10.71                   | -0.39        | 2,980.30          | 213.68                   | 7.72        |
| Indonesia    | 13,203.64         | 13,443.44         | 239.80                   | 1.82         | 13,868.21         | 424.76                   | 3.16        |
| Lao PDR      | 817.25            | 934.27            | 117.02                   | 14.32        | 960.00            | 25.73                    | 2.75        |
| Malaysia     | 683.23            | 682.35            | -0.89                    | -0.13        | 673.72            | -8.63                    | -1.27       |
| Myanmar      | 8,011.48          | 7,566.94          | -444.54                  | -5.55        | 7,287.89          | -279.04                  | -3.69       |
| Philippines  | 4,536.64          | 4,689.96          | 153.32                   | 3.38         | 4,703.34          | 13.38                    | 0.29        |
| Singapore    | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Thailand     | 12,119.52         | 11,951.42         | -168.10                  | -1.39        | 12,042.64         | 91.22                    | 0.76        |
| Vietnam      | 7,655.40          | 7,753.20          | 97.80                    | 1.28         | 7,732.00          | -21.20                   | -0.27       |

Note: The value of 2013 is forecasted by AFSIS

**Table 4 Paddy yield in ASEAN countries, 2011-2013**

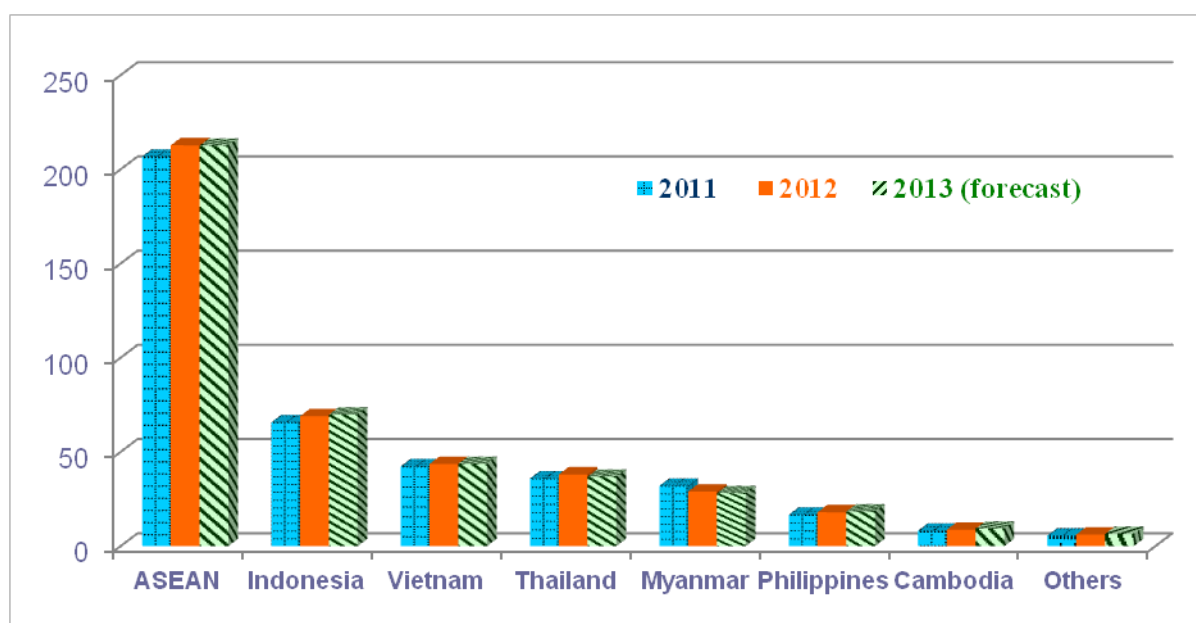
Unit: Ton/Hectare

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |              |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|--------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)          |
| <b>ASEAN</b> | <b>4.15</b>       | <b>4.27</b>       | <b>0.12</b>              | <b>2.89</b> | <b>4.23</b>       | <b>-0.04</b>             | <b>-0.94</b> |
| Brunei       | 1.42              | 1.50              | 0.08                     | 5.63        | 1.50              | 0.00                     | 0.00         |
| Cambodia     | 2.97              | 3.17              | 0.20                     | 6.73        | 3.12              | -0.05                    | -1.58        |
| Indonesia    | 4.98              | 5.14              | 0.16                     | 3.21        | 5.04              | -0.10                    | -1.95        |
| Lao PDR      | 3.75              | 3.67              | -0.08                    | -2.13       | 3.96              | 0.29                     | 7.90         |
| Malaysia     | 3.77              | 4.03              | 0.26                     | 6.90        | 3.90              | -0.13                    | -3.23        |
| Myanmar      | 4.00              | 3.83              | -0.17                    | -4.25       | 3.85              | 0.02                     | 0.52         |
| Philippines  | 3.68              | 3.84              | 0.16                     | 4.35        | 3.90              | 0.06                     | 1.56         |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Thailand     | 2.97              | 3.19              | 0.22                     | 7.41        | 3.06              | -0.13                    | -4.08        |
| Vietnam      | 5.54              | 5.63              | 0.09                     | 1.62        | 5.65              | 0.02                     | 0.36         |

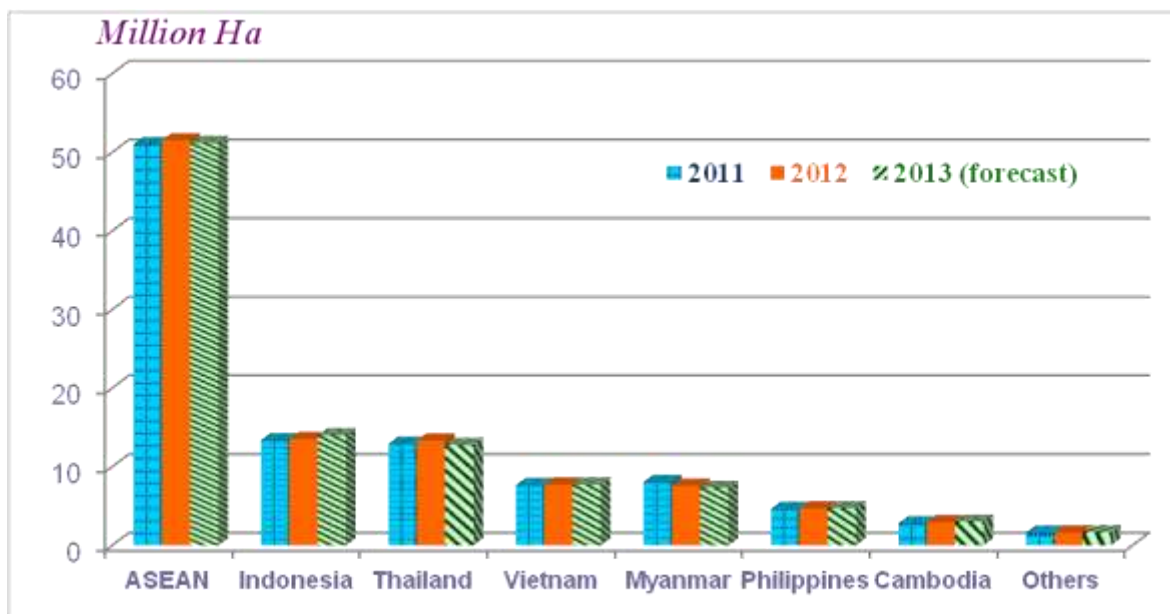
Note: Yield related to harvested area excepts Vietnam which related to planted area.

**Table 5 Paddy damaged area in ASEAN by cause of damage, 2012**

| Country      | Cause of Damage (Hectares) |                |               |              |              | Total            |
|--------------|----------------------------|----------------|---------------|--------------|--------------|------------------|
|              | Flood                      | Drought        | Pests         | Diseases     | Unspecified  |                  |
| <b>ASEAN</b> | <b>1,545,986</b>           | <b>142,679</b> | <b>11,973</b> | <b>6,451</b> | <b>7,179</b> | <b>1,714,268</b> |
| Brunei       | 23                         | 11             | 68            | 78           | -            | 180              |
| Cambodia     | 201,860                    | 53             | -             | -            | -            | 201,913          |
| Indonesia    | 29,233                     | 43,392         | 1,797         | 0            | 0            | 74,422           |
| Lao PDR      | 1,191                      | 70             | 0             | 0            | 0            | 1,261            |
| Malaysia     | 0                          | 0              | 3,619         | 6,373        | 0            | 9,992            |
| Myanmar      | 16,478                     | 2,010          | 156           | 0            | 7,179        | 25,823           |
| Philippines  | 12,808                     | 0              | 0             | 0            | -            | 12,808           |
| Singapore    | -                          | -              | -             | -            | -            | -                |
| Thailand     | 1,284,393                  | 97,143         | 6,333         | 0            | 0            | 1,387,869        |
| Vietnam      | n.a.                       | n.a.           | n.a.          | n.a.         | n.a.         | n.a.             |



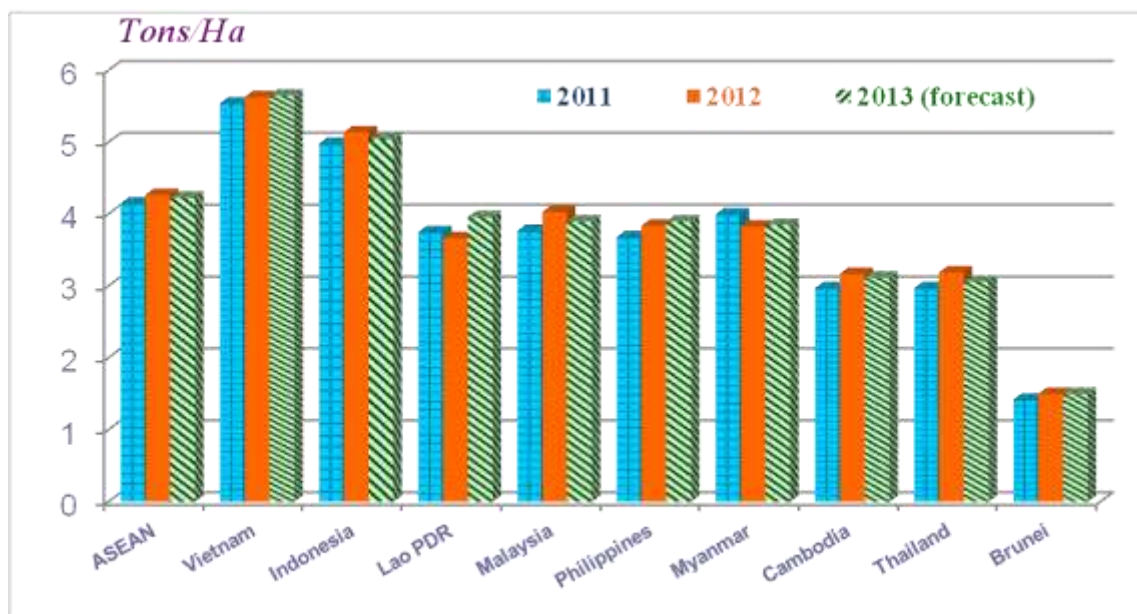
**Figure 1 Paddy production of selected countries in ASEAN, 2011-2013**



**Figure 2 Paddy planted area of selected countries in ASEAN, 2011-2013**



**Figure 3 Paddy harvested area of selected countries in ASEAN, 2011-2013**



**Figure 4 Paddy yield of countries in ASEAN, 2011-2013**

## **Maize Situation in ASEAN**

### **Production**

The maize production in ASEAN in 2012 (crop year 2011/12) was estimated at 39.92 million tons compared to 37.23 million tons in 2011 an increase of 2.69 million tons or about 7.23 percent (Table 6, Figure 5). On the country by country basis, all production countries have increased in production. The increases in production in Cambodia came from the expansion in area attributed due to the increase in the price of maize and the decrease in price of competing crops. For Indonesia, the biggest maize producing in the region the increase in production, attributed to the increase in both area and the yield.

The maize production is forecast to be 39.34 million tons in 2013, down about 1.46 percent from the previous year. Most countries, except Indonesia, the production is forecast to increase. The decrease in production comes from the decrease in yield due to El Nino phenomenon. The expansion of area is due to farmers respond to the price increase and the promotion policy of the government in many countries.

### **Harvested Area**

The total harvested area of maize in ASEAN in 2012 (crop year 2011/12) was estimated at 9.63 million hectares, up 0.24 million hectare or about 2.6 percent from 9.39 million hectares in 2011 (Table 8, Figure 7). On the country by country basis, only Vietnam that the harvested area has decreased.

The harvested area of maize in 2013 (crop year 2012/13) is forecast to be 9.64 million hectares, up less than one percent from 2012. All countries, except Indonesia, the Philippines and Thailand, are expected to have an increase in harvested area.

### **Yield**

The average maize yield in ASEAN in 2012 (crop year 2011/12) was estimated at 4.15 tons/ha, up about 4.53 percent from 3.97 tons/ha in 2011 (Table 9, Figure 8). All countries, except Cambodia, the yields have increased. The increases in the use of improved variety and favorable weather are the factors that contributed to the increase in the yield in most countries in the region.



The average yield in ASEAN in 2013 is forecast to be 4.08 tons/ha, down about 1.7 percent from the previous year. Only Cambodia and Indonesia that the yield is expected to decrease while other countries the yields are expected to increase due to the use of improved variety and favorable weather.

### Damaged Area

The total damaged area for maize in ASEAN in 2012 was reported to be 39,569 hectares. The biggest damaged area came from the drought which shared about 61 percent of the total damaged area. The rest of the damage was caused by the diseases, flood and pests respectively. The most affected by the drought has occurred in Thailand (Table 10).

**Table 6 Maize production in ASEAN countries, 2011-2013**

Unit: 1,000 Tons

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |              |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|--------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)          |
| <b>ASEAN</b> | <b>37,229.28</b>  | <b>39,919.61</b>  | <b>2,690.34</b>          | <b>7.23</b> | <b>39,337.35</b>  | <b>-582.27</b>           | <b>-1.46</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Cambodia     | 717.19            | 950.90            | 233.71                   | 32.59       | 952.00            | 1.10                     | 0.12         |
| Indonesia    | 17,643.25         | 19,377.03         | 1,733.78                 | 9.83        | 18,413.34         | -963.69                  | -4.97        |
| Lao PDR      | 911.38            | 933.27            | 21.89                    | 2.40        | 1,044.46          | 111.20                   | 11.91        |
| Malaysia     | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Myanmar      | 1,354.64          | 1,484.97          | 130.33                   | 9.62        | 1,519.44          | 34.47                    | 2.32         |
| Philippines  | 6,971.22          | 7,406.83          | 435.61                   | 6.25        | 7,593.27          | 186.44                   | 2.52         |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Thailand     | 4,846.00          | 4,963.42          | 117.42                   | 2.42        | 4,978.83          | 15.41                    | 0.31         |
| Vietnam      | 4,785.60          | 4,803.20          | 17.60                    | 0.37        | 4,836.00          | 32.80                    | 0.68         |

**Table 7 Maize planted area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>9,454.95</b>   | <b>9,667.76</b>   | <b>212.81</b>            | <b>2.25</b> | <b>9,687.97</b>   | <b>20.21</b>             | <b>0.21</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 174.26            | 216.33            | 42.07                    | 24.14       | 219.00            | 2.67                     | 1.23        |
| Indonesia    | 3,874.22          | 3,964.07          | 89.85                    | 2.32        | 3,954.41          | -9.66                    | -0.24       |
| Lao PDR      | 180.39            | 184.50            | 4.12                     | 2.28        | 206.00            | 21.50                    | 11.65       |
| Malaysia     | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Myanmar      | 389.44            | 411.68            | 22.25                    | 5.71        | 421.85            | 10.17                    | 2.47        |
| Philippines  | 2,556.08          | 2,594.37          | 38.29                    | 1.50        | 2,585.68          | -8.69                    | -0.34       |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 1,148.47          | 1,178.60          | 30.13                    | 2.62        | 1,178.03          | -0.57                    | -0.05       |
| Vietnam      | 1,132.10          | 1,118.20          | -13.90                   | -1.23       | 1,123.00          | 4.80                     | 0.43        |

**Table 8 Maize harvested area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>9,385.99</b>   | <b>9,628.19</b>   | <b>242.20</b>            | <b>2.58</b> | <b>9,641.23</b>   | <b>13.04</b>             | <b>0.14</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 159.79            | 215.44            | 55.65                    | 34.82       | 218.20            | 2.76                     | 1.28        |
| Indonesia    | 3,864.69          | 3,959.91          | 95.21                    | 2.46        | 3,947.56          | -12.35                   | -0.31       |
| Lao PDR      | 180.39            | 184.50            | 4.12                     | 2.28        | 206.00            | 21.50                    | 11.65       |
| Malaysia     | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Myanmar      | 389.07            | 411.48            | 22.41                    | 5.76        | 418.88            | 7.40                     | 1.80        |
| Philippines  | 2,544.61          | 2,593.83          | 49.21                    | 1.93        | 2,583.91          | -9.91                    | -0.38       |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 1,115.34          | 1,144.84          | 29.50                    | 2.64        | 1,143.67          | -1.17                    | -0.10       |
| Vietnam      | 1,132.10          | 1,118.20          | -13.90                   | -1.23       | 1,123.00          | 4.80                     | 0.43        |

**Table 9 Maize yield in ASEAN countries, 2011-2013**

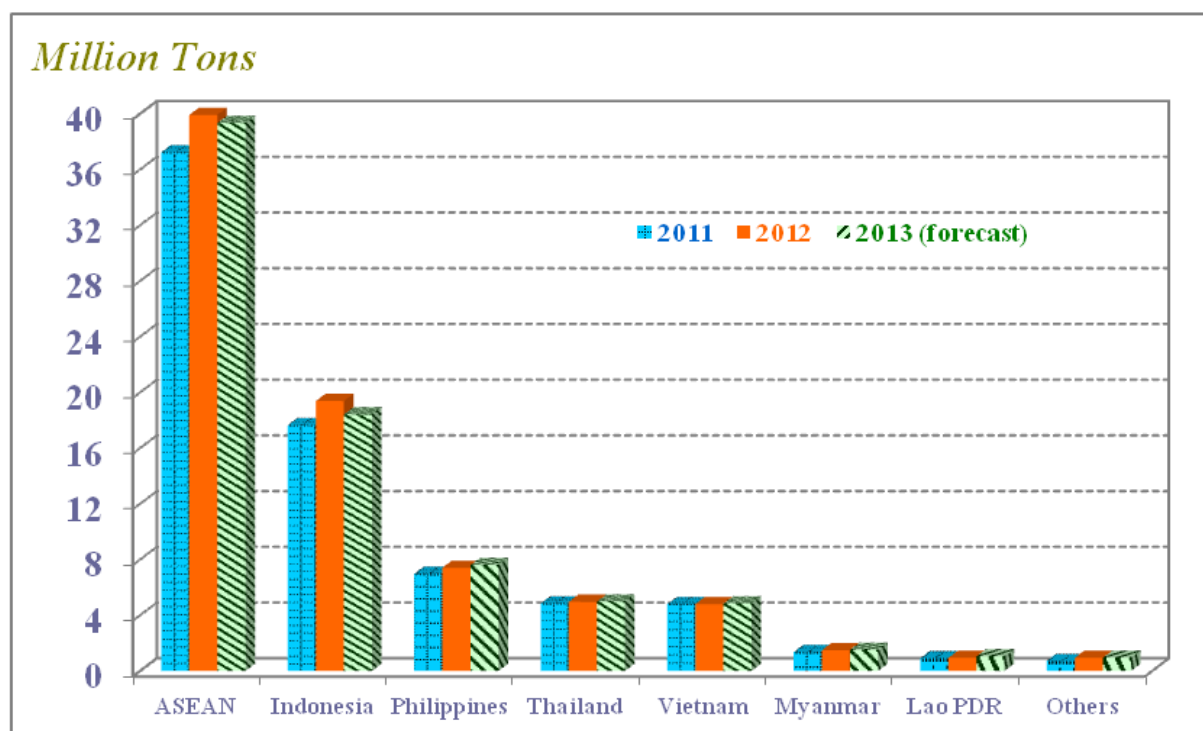
Unit: Ton/Hectare

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |              |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|--------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)          |
| <b>ASEAN</b> | <b>3.97</b>       | <b>4.15</b>       | <b>0.18</b>              | <b>4.53</b> | <b>4.08</b>       | <b>-0.07</b>             | <b>-1.69</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Cambodia     | 4.49              | 4.41              | -0.08                    | -1.78       | 4.36              | -0.05                    | -1.13        |
| Indonesia    | 4.57              | 4.89              | 0.32                     | 7.00        | 4.66              | -0.23                    | -4.70        |
| Lao PDR      | 5.05              | 5.06              | 0.01                     | 0.20        | 5.07              | 0.01                     | 0.20         |
| Malaysia     | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Myanmar      | 3.48              | 3.61              | 0.13                     | 3.74        | 3.63              | 0.02                     | 0.55         |
| Philippines  | 2.74              | 2.86              | 0.12                     | 4.38        | 2.94              | 0.08                     | 2.80         |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Thailand     | 4.34              | 4.34              | 0.00                     | 0.00        | 4.35              | 0.01                     | 0.23         |
| Vietnam      | 4.23              | 4.30              | 0.07                     | 1.65        | 4.31              | 0.01                     | 0.23         |

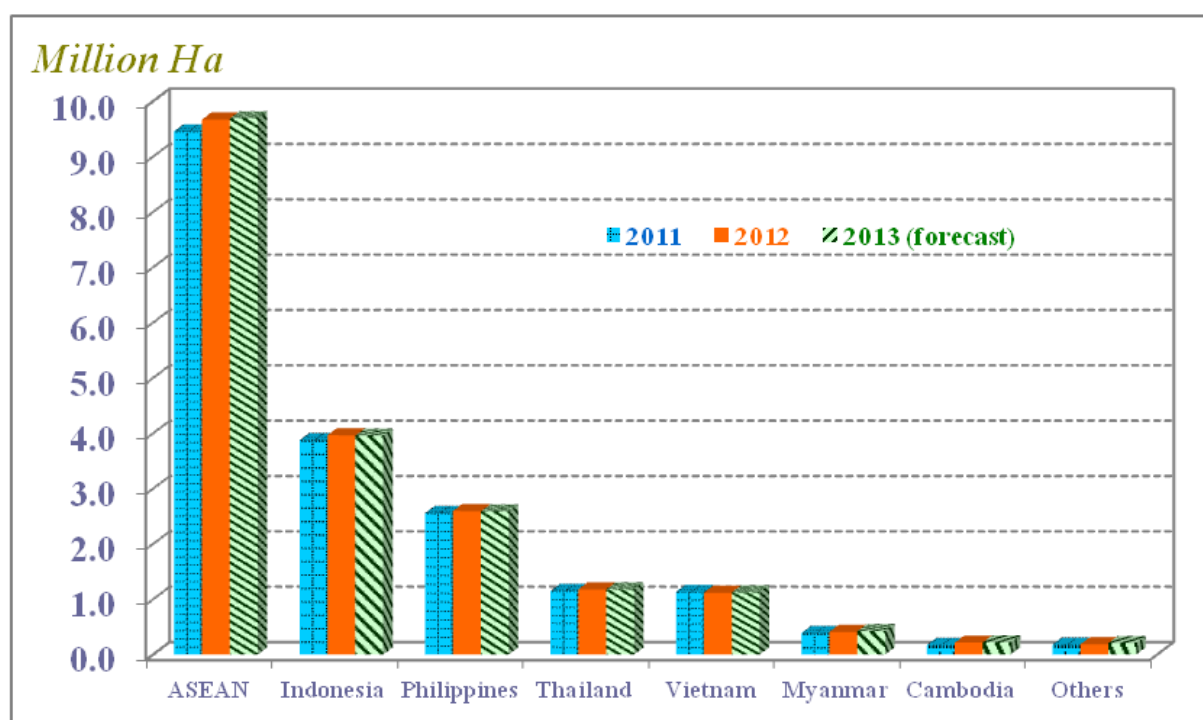
**Table 10 Maize damaged area in ASEAN by cause of damage, 2012**

| Country      | Cause of Damage (Hectares) |               |              |              |          |             |               |
|--------------|----------------------------|---------------|--------------|--------------|----------|-------------|---------------|
|              | Flood                      | Drought       | Pests        | Diseases     | Others   | Unspecified | Total         |
| <b>ASEAN</b> | <b>2,905</b>               | <b>24,300</b> | <b>2,898</b> | <b>9,014</b> | <b>0</b> | <b>452</b>  | <b>39,569</b> |
| Brunei       | -                          | -             | -            | -            | -        | -           | -             |
| Cambodia     | -                          | 890           | -            | -            | -        | -           | 890           |
| Indonesia    | 2,605                      | 1,508         | 53           | -            | -        | -           | 4,166         |
| Lao PDR      | -                          | -             | -            | -            | -        | -           | 0             |
| Malaysia     | -                          | -             | -            | -            | -        | -           | 0             |
| Myanmar      | 205                        | -             | -            | -            | -        | -           | 205           |
| Philippines  | 95                         | 0             | 0            | -            | -        | 452         | 547           |
| Singapore    | -                          | -             | -            | -            | -        | -           | -             |
| Thailand     | 0                          | 21,902        | 2,845        | 9,014        | -        | -           | 33,761        |
| Vietnam      | n.a.                       | n.a.          | n.a.         | n.a.         | n.a.     | n.a.        | n.a.          |

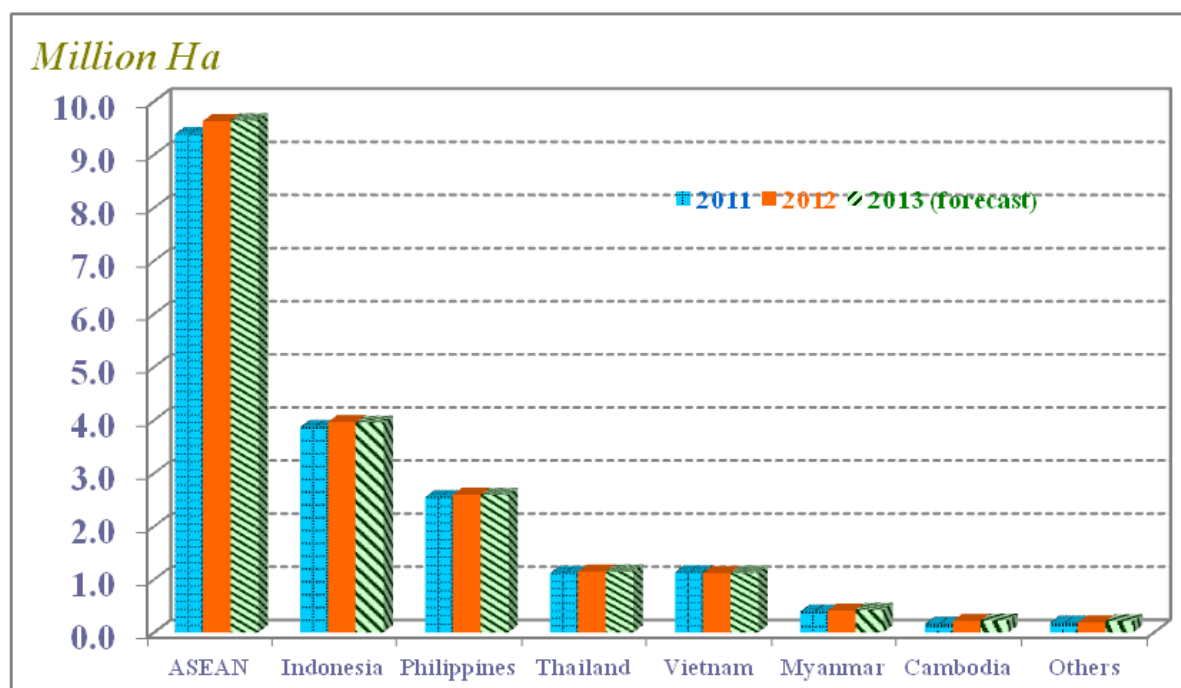
Note: For Philippines cause of damaged (2nd crop) is Typhoons and southwest monsoon rains.



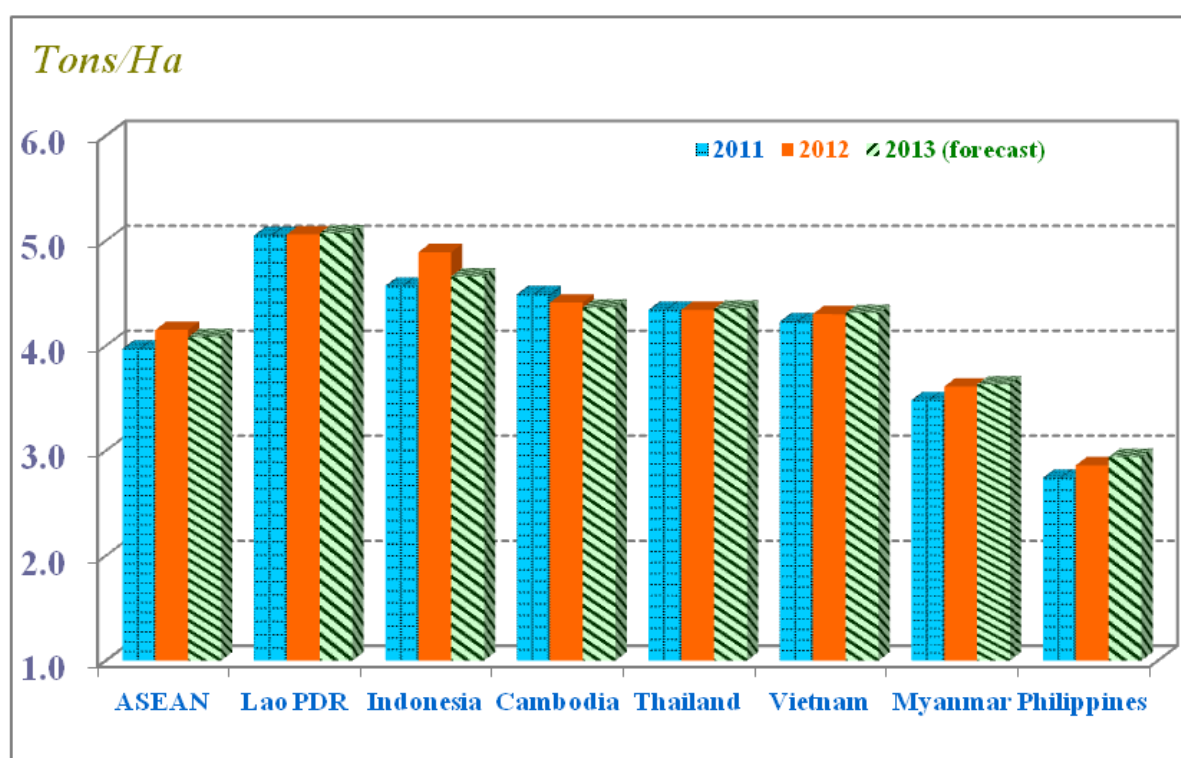
**Figure 5 Maize production of selected countries in ASEAN, 2011-2013**



**Figure 6 Maize planted area of selected countries in ASEAN, 2011-2013**



**Figure 7 Maize harvested area of selected countries in ASEAN, 2011-2013**



**Figure 8 Maize yield of countries in ASEAN, 2011-2013**

## **Sugarcane Situation in ASEAN**

### **Production**

The estimate of sugarcane production in ASEAN in 2012 (crop year 2011/12) was 156.49 million tons, an increase of 3.6 million tons or 2.35 percent from 152.89 million tons in 2011 (Table 11, Figure 11). All countries, except the Philippines, the production have increased. A prominent increase was occurred in Cambodia which the cane production has increased about 1.11 million tons or 235.75 percent from the previous year. The increase in production of Cambodia was due to the increase in both planted area and yield.

In 2013 (crop year 2012/13), sugarcane production in ASEAN is forecast to increase to 160.26 million tons, up about 3.77 million tons which is about 2.41 percent from the previous year. The expansion of the production in the region is mainly due to the increase in the Philippines and Thailand.

### **Harvested area**

The harvested area of sugarcane in ASEAN in 2012 (crop year 2011/12) was estimated to be 2.68 million hectares, up 79.67 thousand hectares which is 3.06 percent from the previous year (Table 13, Figure 11). The increase in harvested area was due to the price response of the farmers. The harvested area has increased the most in Cambodia and Thailand which the biggest sugarcane producing country in the region. However, in terms of percentage growth, the highest increase was occurred in Cambodia which is 116.87 percent increase from 2011. In addition to the harvested area in Cambodia has increased very significantly due to the increase in both planted area and yield.

For 2013, the harvested area of sugarcane in ASEAN is forecast to be 2.70 million hectares, up by 0.59 percent from the previous year. The increase is forecast in Lao PDR, Indonesia, Myanmar and Thailand. The increase in harvested area in these countries was due to the positive response of the farmers to the increase in sugarcane price. On the other hand, the harvested area of the Cambodia, Philippines and Vietnam are forecast to decrease (Table 13, Figure 11).

## Yield

The average yield of sugarcane in ASEAN in 2012 (crop year 2011/12) was estimated at 58.30 tons per hectare, down from 58.71 tons per hectares in 2011 or 0.70 percent (Table 14, Figure 12). All countries, except the Philippines, the yields have increased. The decrease in yield in the Philippines relative to the small increases in other countries caused the minimal drop in the regional yield. The reasons for the increases in the yield was due to the farmers taking care of their crop better in response to the increase in price received together with the favorable weather. The decrease in the yield in the Philippines was due to the farmer used less fertilizer.

The forecast yield in ASEAN for 2013 is 59.36 tons per hectare, a slightly increase from 58.30 tons per hectare in 2012. Most countries are expected to have an increase in yield, except for Myanmar where the yield is anticipated to decrease.

## Damaged Area

The estimate damages area for sugarcane in the whole ASEAN in 2012 was 39,824 hectares. Thailand has the biggest damage area which reported to be about 36,431 hectares. The damage was mainly caused by the flood and the drought respectively (Table 15).

**Table 11 Sugarcane production in ASEAN countries, 2011-2013**

Unit: 1,000 Tons

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>152,891.37</b> | <b>156,486.99</b> | <b>3,595.63</b>          | <b>2.35</b> | <b>160,260.18</b> | <b>3,773.18</b>          | <b>2.41</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 468.74            | 1,573.77          | 1,105.03                 | 235.75      | 1,553.90          | -19.87                   | -1.26       |
| Indonesia    | 2,267.89          | 2,438.20          | 170.31                   | 7.51        | 2,581.04          | 142.84                   | 5.86        |
| Lao PDR      | 1,222.00          | 1,534.50          | 312.50                   | 25.57       | 1,683.34          | 148.84                   | 9.70        |
| Malaysia     | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Myanmar      | 9,249.46          | 9,537.43          | 287.98                   | 3.11        | 9,445.59          | -91.84                   | -0.96       |
| Philippines  | 26,193.27         | 23,961.83         | -2,231.44                | -8.52       | 26,599.62         | 2,637.79                 | 11.01       |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 95,950.42         | 98,400.47         | 2,450.05                 | 2.55        | 99,596.69         | 1,196.23                 | 1.22        |
| Vietnam      | 17,539.60         | 19,040.80         | 1,501.20                 | 8.56        | 18,800.00         | -240.80                  | -1.26       |

**Table 12 Sugarcane planted area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br><i>2012 over 2011</i> |             | 2013<br>(2012/13) | change<br><i>2013 over 2012</i> |             |
|--------------|-------------------|-------------------|---------------------------------|-------------|-------------------|---------------------------------|-------------|
|              |                   |                   | Quantities                      | (%)         |                   | Quantities                      | (%)         |
| <b>ASEAN</b> | <b>2,627.37</b>   | <b>2,723.86</b>   | <b>96.49</b>                    | <b>3.67</b> | <b>2,743.38</b>   | <b>19.51</b>                    | <b>0.72</b> |
| Brunei       | -                 | -                 | -                               | -           | -                 | -                               | -           |
| Cambodia     | 22.61             | 48.58             | 25.97                           | 114.82      | 46.10             | -2.48                           | -5.10       |
| Indonesia    | 451.79            | 461.08            | 9.29                            | 2.06        | 469.59            | 8.51                            | 1.85        |
| Lao PDR      | 24.77             | 31.00             | 6.24                            | 25.18       | 34.00             | 3.00                            | 9.68        |
| Malaysia     | -                 | -                 | -                               | -           | -                 | -                               | -           |
| Myanmar      | 151.51            | 154.28            | 2.77                            | 1.83        | 154.09            | -0.19                           | -0.12       |
| Philippines  | 415.24            | 412.91            | -2.33                           | -0.56       | 434.24            | 21.33                           | 5.17        |
| Singapore    | -                 | -                 | -                               | -           | -                 | -                               | -           |
| Thailand     | 1,279.25          | 1,318.51          | 39.26                           | 3.07        | 1,313.35          | -5.16                           | -0.39       |
| Vietnam      | 282.20            | 297.50            | 15.30                           | 5.42        | 292.00            | -5.50                           | -1.85       |

**Table 13 Sugarcane harvested area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2010/11) | change<br><i>2011 over 2010</i> |             | 2013<br>(2012/13) | change<br><i>2013 over 2012</i> |             |
|--------------|-------------------|-------------------|---------------------------------|-------------|-------------------|---------------------------------|-------------|
|              |                   |                   | Quantities                      | (%)         |                   | Quantities                      | (%)         |
| <b>ASEAN</b> | <b>2,604.37</b>   | <b>2,684.04</b>   | <b>79.67</b>                    | <b>3.06</b> | <b>2,699.94</b>   | <b>15.90</b>                    | <b>0.59</b> |
| Brunei       | -                 | -                 | -                               | -           | -                 | -                               | -           |
| Cambodia     | 22.07             | 47.86             | 25.79                           | 116.87      | 46.10             | -1.76                           | -3.68       |
| Indonesia    | 450.83            | 459.41            | 8.58                            | 1.90        | 468.59            | 9.19                            | 2.00        |
| Lao PDR      | 24.77             | 31.00             | 6.24                            | 25.18       | 34.00             | 3.00                            | 9.68        |
| Malaysia     | -                 | -                 | -                               | -           | -                 | -                               | -           |
| Myanmar      | 150.02            | 153.28            | 3.26                            | 2.17        | 153.57            | 0.29                            | 0.19        |
| Philippines  | 415.24            | 412.91            | -2.33                           | -0.56       | 410.80            | -2.11                           | -0.51       |
| Singapore    | -                 | -                 | -                               | -           | -                 | -                               | -           |
| Thailand     | 1,259.24          | 1,282.08          | 22.84                           | 1.81        | 1,294.88          | 12.79                           | 1.00        |
| Vietnam      | 282.20            | 297.50            | 15.30                           | 5.42        | 292.00            | -5.50                           | -1.85       |



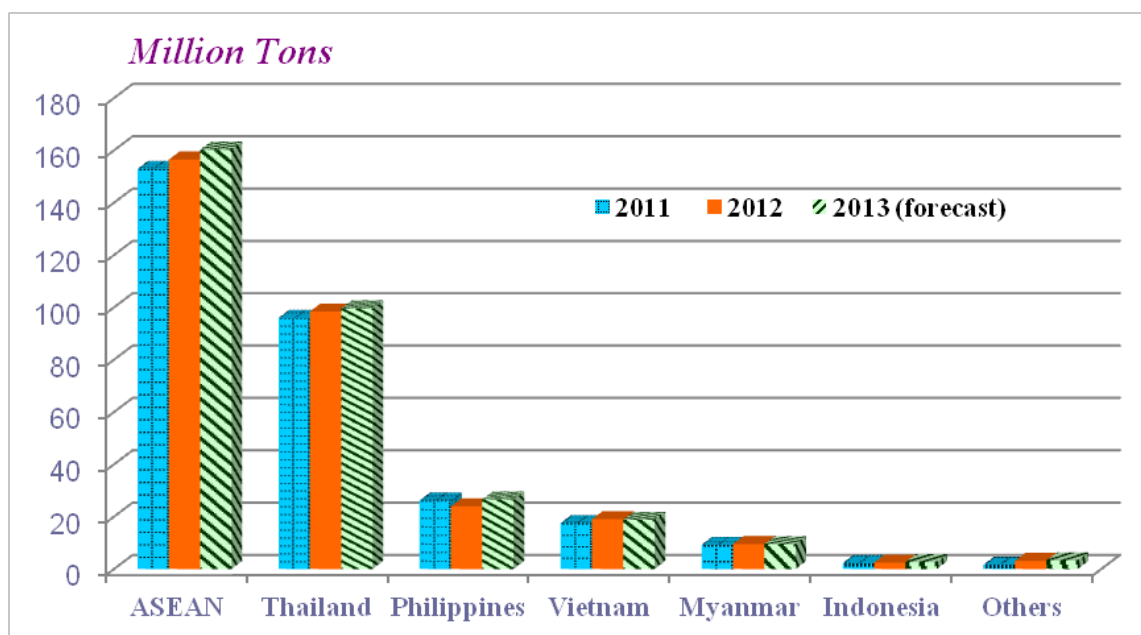
**Table 14 Sugarcane yield in ASEAN countries, 2011-2013**

Unit: Ton/Hectare

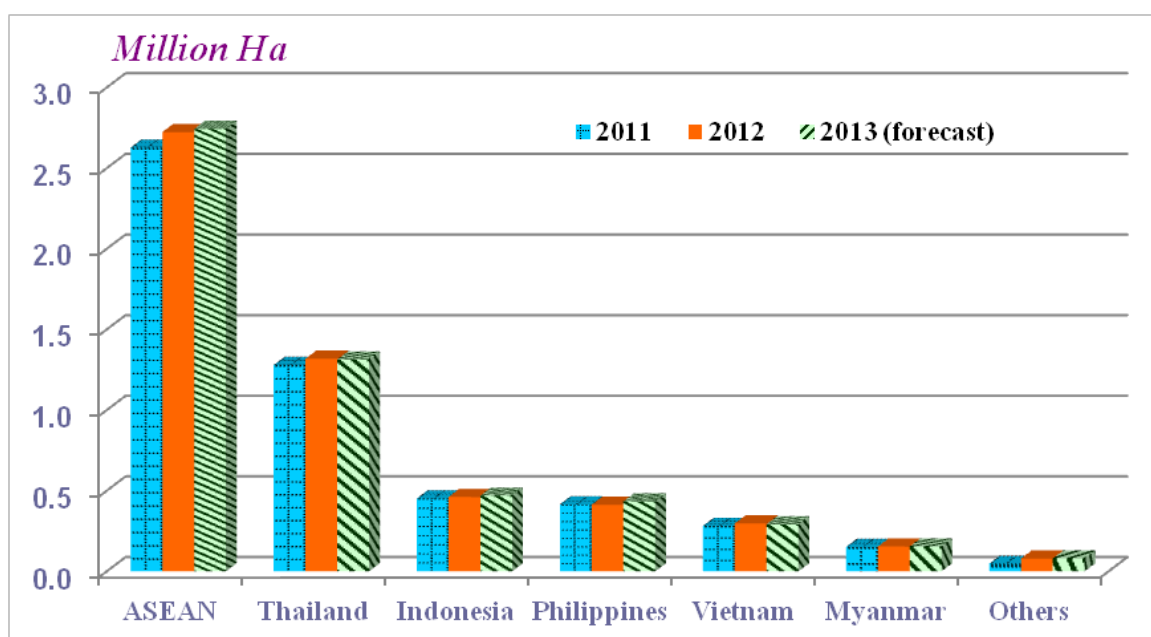
| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |              | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|--------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)          |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>58.71</b>      | <b>58.30</b>      | <b>-0.41</b>             | <b>-0.70</b> | <b>59.36</b>      | <b>1.06</b>              | <b>1.82</b> |
| Brunei       | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Cambodia     | 21.24             | 32.88             | 11.64                    | 54.80        | 33.71             | 0.83                     | 2.52        |
| Indonesia    | 5.03              | 5.31              | 0.28                     | 5.57         | 5.51              | 0.20                     | 3.77        |
| Lao PDR      | 49.34             | 49.50             | 0.16                     | 0.32         | 49.51             | 0.01                     | 0.02        |
| Malaysia     | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Myanmar      | 61.66             | 62.22             | 0.56                     | 0.91         | 61.51             | -0.71                    | -1.14       |
| Philippines  | 63.08             | 58.03             | -5.05                    | -8.01        | 64.75             | 6.72                     | 11.58       |
| Singapore    | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Thailand     | 76.20             | 76.75             | 0.55                     | 0.72         | 76.92             | 0.17                     | 0.22        |
| Vietnam      | 62.15             | 64.00             | 1.85                     | 2.98         | 64.38             | 0.38                     | 0.59        |

**Table 15 Sugarcane damaged area in ASEAN by cause of damage, 2012**

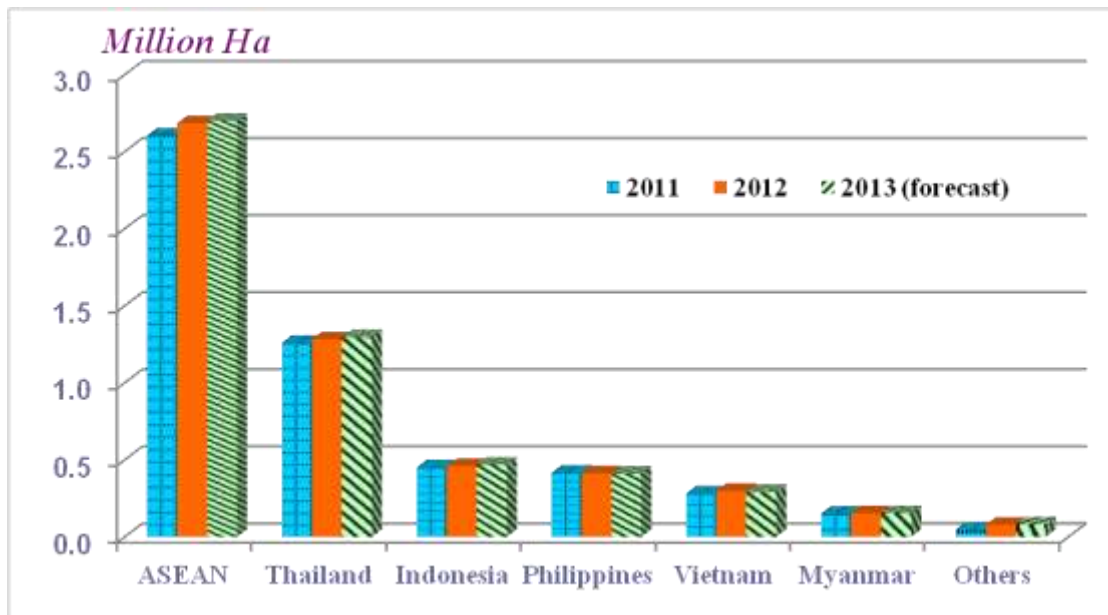
| Country      | Cause of Damage (Hectares) |               |          |          |              |              |               |
|--------------|----------------------------|---------------|----------|----------|--------------|--------------|---------------|
|              | Flood                      | Drought       | Pests    | Diseases | Others       | unspecified  | Total         |
| <b>ASEAN</b> | <b>17,857</b>              | <b>19,294</b> | <b>-</b> | <b>-</b> | <b>1,000</b> | <b>1,673</b> | <b>39,824</b> |
| Brunei       | -                          | -             | -        | -        | -            | -            | -             |
| Cambodia     | -                          | 720           | -        | -        | -            | -            | 720           |
| Indonesia    | -                          | -             | -        | -        | -            | 1,673        | 1,673         |
| Lao PDR.     | -                          | -             | -        | -        | -            | -            | -             |
| Malaysia     | -                          | -             | -        | -        | -            | -            | -             |
| Myanmar      | -                          | -             | -        | -        | 1,000        | -            | 1,000         |
| Philippines  | -                          | -             | -        | -        | -            | -            | -             |
| Singapore    | -                          | -             | -        | -        | -            | -            | -             |
| Thailand     | 17,857                     | 18,574        | -        | -        | -            | -            | 36,431        |
| Vietnam      | n.a.                       | n.a.          | n.a.     | n.a.     | n.a.         | -            | n.a.          |



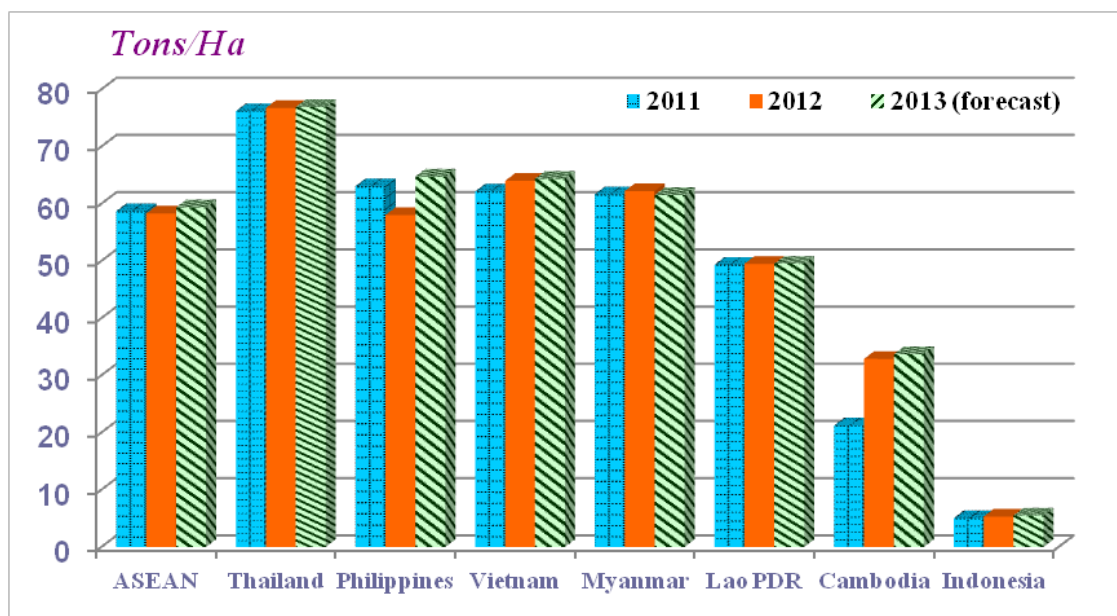
**Figure 9 Sugarcane production of selected countries in ASEAN, 2011-2013**



**Figure 10 Sugarcane planted area of selected countries in ASEAN, 2011-2013**



**Figure 11 Sugarcane harvested area of selected countries in ASEAN, 2011-2013**



**Figure 12 Sugarcane yield of selected countries in ASEAN, 2011-2013**

## **Soybean Situation in ASEAN**

### **Production**

In 2012 (crop year 2011/12), the estimated soybean production in ASEAN was 1.49 million tons, a decrease of 0.14 million tons or 8.49 percent compared to 1.63 million tons in 2011 (Table 16, Figure 13). When considered country by country, it was found that Myanmar, the Philippines, Thailand, and Vietnam the production have decreased. On the other hand, for Lao PDR, Cambodia and Indonesia, the production has increased. The increase in production was very eminent in Lao PDR which is 74.35 percent increase from the previous year. Brunei, Malaysia and Singapore did not grow soybeans.

The production forecast for soybeans in the region in 2013 is 1.50 million tons, up about one percent from the previous year. Most countries except Lao PDR and Thailand, the production in forecast to increase. The increase came from Indonesia, the biggest soybean producing country in the region, and Vietnam. For Indonesia, even though the yield is forecast to reduce but cannot offset the increase in planted area, thus the production has increased. For Thailand, the decrease in production is forecast to come from the reduction in area and yield.

### **Harvested area**

The estimated soybean harvested area for the whole ASEAN in 2012 (crop year 2011/12) was about 0.98 million hectares, down 0.15 million hectares or about 12.9 percent from 1.13 million hectares in 2011 (Table 18, Figure 15). Only Lao PDR and Cambodia that the harvested area has increased. For other countries, the harvested area has decreased. The decrease in price received by farmers compared to other competing crops was the factor attributed to the reduction in harvested area.

The harvested area in ASEAN is forecast to be 1.03 million hectares in 2013 compared to 0.98 million hectares in 2012 which is about 5.23 percent increase. Most countries except Lao PDR, Myanmar and Thailand that the harvested areas are forecast to be less than the previous year.

## Yield

The estimated soybean yield in the ASEAN in 2012 (crop year 2011/12) was 1.52 tons per hectare, compared to 1.44 tons per hectare which is about 5 percent higher than in 2011. All countries in the region, except the Philippines Vietnam and Myanmar were estimated to have an increase in yield for this period. (Table 19, Figure 16).

For 2013, the average yield of soybeans in ASEAN is forecast to be 1.46 tons per hectare, a decrease of 4 percent as compared with 2012 .Only Indonesia and Thailand are forecast to have a lower yield in 2013.

## Damaged Area

The total damaged area of soybeans in 2012 was reported to be 3,254 hectares. The major damaged area has occurred in Thailand and Indonesia which mainly caused by the drought and flood. The flood was also reported in Indonesia (Table 20).

**Table 16 Soybean production in ASEAN countries, 2011-2013**

Unit: 1,000 Tons

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |              | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|--------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)          |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>1,628.34</b>   | <b>1,490.07</b>   | <b>-138.26</b>           | <b>-8.49</b> | <b>1,504.82</b>   | <b>14.75</b>             | <b>0.99</b> |
| Brunei       | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Cambodia     | 114.60            | 120.17            | 5.57                     | 4.86         | 121.70            | 1.53                     | 1.27        |
| Indonesia    | 851.29            | 851.65            | 0.36                     | 0.04         | 858.48            | 6.83                     | 0.80        |
| Lao PDR      | 13.82             | 24.10             | 10.28                    | 74.35        | 23.64             | -0.45                    | -1.87       |
| Malaysia     | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Myanmar      | 254.52            | 236.91            | -17.61                   | -6.92        | 239.87            | 2.95                     | 1.25        |
| Philippines  | 0.69              | 0.57              | -0.12                    | -17.23       | 0.67              | 0.00                     | 18.17       |
| Singapore    | -                 | -                 | -                        | -            | -                 | -                        | -           |
| Thailand     | 126.52            | 81.48             | -45.04                   | -35.60       | 77.66             | -3.82                    | -4.69       |
| Vietnam      | 266.90            | 175.20            | -91.70                   | -34.36       | 182.80            | 7.60                     | 4.34        |

**Table 17 Soybean planted area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |               | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|---------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)           |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>1,135.66</b>   | <b>985.89</b>     | <b>-149.77</b>           | <b>-13.19</b> | <b>1,037.94</b>   | <b>52.05</b>             | <b>5.28</b> |
| Brunei       | -                 | -                 | -                        | -             | -                 | -                        | -           |
| Cambodia     | 70.58             | 71.34             | 0.76                     | 1.07          | 72.00             | 0.66                     | 0.93        |
| Indonesia    | 626.16            | 569.35            | -56.81                   | -9.07         | 620.55            | 51.20                    | 8.99        |
| Lao PDR      | 9.15              | 15.79             | 6.64                     | 72.61         | 15.40             | -0.39                    | -2.44       |
| Malaysia     | -                 | -                 | -                        | -             | -                 | -                        | -           |
| Myanmar      | 169.00            | 157.50            | -11.50                   | -6.81         | 157.47            | -0.03                    | -0.02       |
| Philippines  | 0.52              | 0.43              | -0.08                    | -16.25        | 0.50              | 0.00                     | 0.00        |
| Singapore    | -                 | -                 | -                        | -             | -                 | -                        | -           |
| Thailand     | 79.16             | 50.69             | -28.47                   | -35.97        | 48.03             | -2.66                    | -5.25       |
| Vietnam      | 181.10            | 120.80            | -60.30                   | -33.30        | 124.00            | 3.20                     | 2.65        |

**Table 18 Soybean harvested area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |               | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|---------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)           |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>1,128.13</b>   | <b>982.64</b>     | <b>-145.49</b>           | <b>-12.90</b> | <b>1,034.00</b>   | <b>51.36</b>             | <b>5.23</b> |
| Brunei       | -                 | -                 | -                        | -             | -                 | -                        | -           |
| Cambodia     | 69.20             | 70.97             | 1.77                     | 2.56          | 71.50             | 0.53                     | 0.75        |
| Indonesia    | 622.25            | 567.87            | -54.38                   | -8.74         | 617.85            | 49.98                    | 8.80        |
| Lao PDR      | 9.15              | 15.79             | 6.64                     | 72.61         | 15.40             | -0.39                    | -2.44       |
| Malaysia     | -                 | -                 | -                        | -             | -                 | -                        | -           |
| Myanmar      | 169.00            | 157.50            | -11.50                   | -6.81         | 157.46            | -0.03                    | -0.02       |
| Philippines  | 0.52              | 0.43              | -0.08                    | -16.25        | 0.50              | 0.06                     | 14.32       |
| Singapore    | -                 | -                 | -                        | -             | -                 | -                        | -           |
| Thailand     | 76.92             | 49.29             | -27.63                   | -35.93        | 47.29             | -1.99                    | -4.04       |
| Vietnam      | 181.10            | 120.80            | -60.30                   | -33.30        | 124.00            | 3.20                     | 2.65        |

**Table 19 Soybean yield in ASEAN countries, 2011-2013**

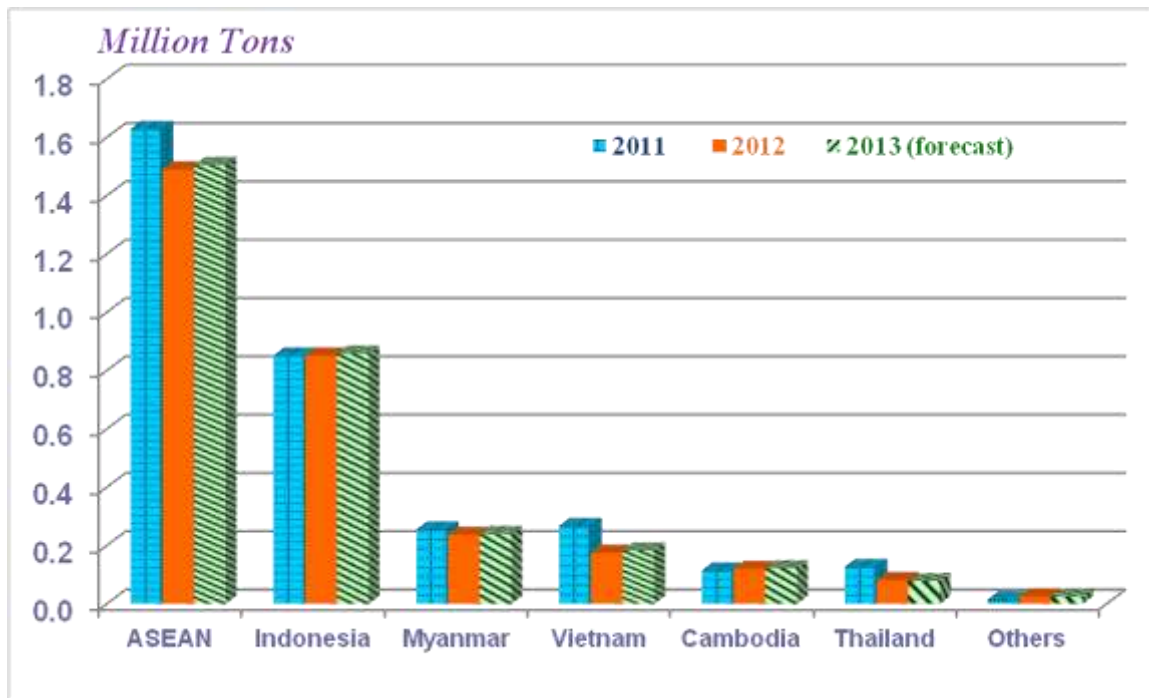
Unit: Ton/Hectare

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |              |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|--------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)          |
| <b>ASEAN</b> | <b>1.443</b>      | <b>1.516</b>      | <b>0.07</b>              | <b>5.06</b> | <b>1.455</b>      | <b>-0.060</b>            | <b>-4.03</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Cambodia     | 1.656             | 1.693             | 0.04                     | 2.24        | 1.702             | 0.010                    | 0.52         |
| Indonesia    | 1.368             | 1.500             | 0.13                     | 9.62        | 1.389             | -0.110                   | -7.35        |
| Lao PDR      | 1.511             | 1.526             | 0.02                     | 1.01        | 1.535             | 0.010                    | 0.58         |
| Malaysia     | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Myanmar      | 1.506             | 1.504             | 0.00                     | -0.12       | 1.523             | 0.020                    | 1.27         |
| Philippines  | 1.325             | 1.309             | -0.02                    | -1.17       | 1.354             | 0.040                    | 3.37         |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -            |
| Thailand     | 1.645             | 1.653             | 0.01                     | 0.51        | 1.642             | -0.010                   | -0.67        |
| Vietnam      | 1.474             | 1.450             | -0.02                    | -1.59       | 1.474             | 0.020                    | 1.65         |

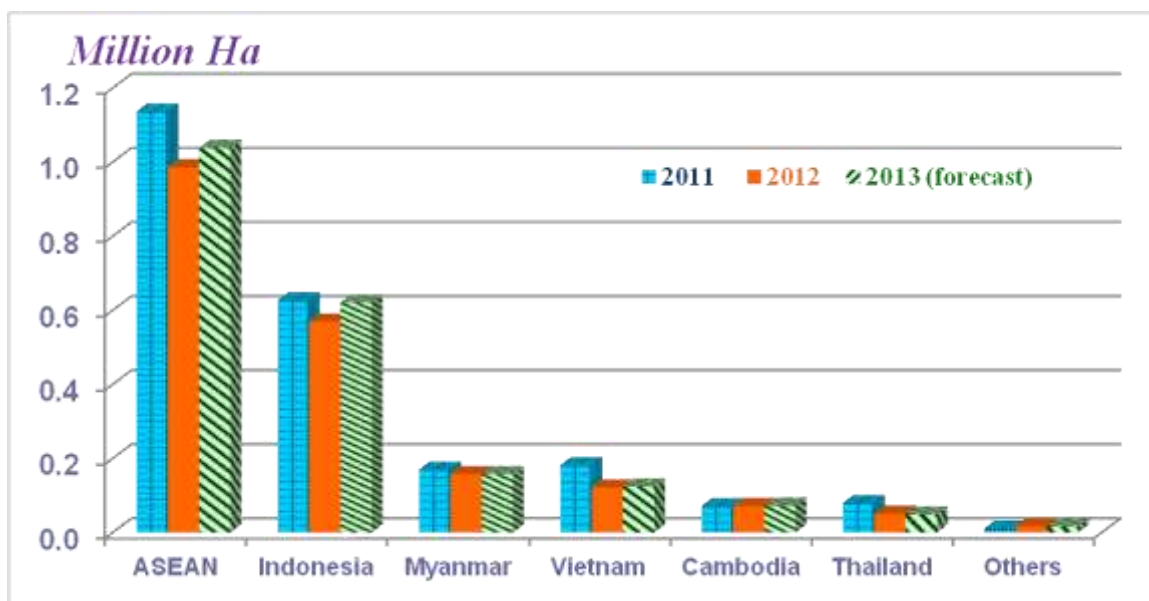
Note: Yield related to harvested area excepts Vietnam

**Table 20 Soybean damaged area in ASEAN by cause of damage, 2012**

| Country      | Cause of Damage (Hectares) |              |           |          |             |        |              |
|--------------|----------------------------|--------------|-----------|----------|-------------|--------|--------------|
|              | Flood                      | Drought      | Pests     | Diseases | Unspecified | Others | Total        |
| <b>ASEAN</b> | <b>1,338</b>               | <b>1,901</b> | <b>15</b> | -        | -           | -      | <b>3,254</b> |
| Brunei       | -                          | -            | -         | -        | -           | -      | -            |
| Cambodia     | -                          | 370          | -         | -        | -           | -      | 370          |
| Indonesia    | 1,338                      | 130          | 15        | -        | -           | -      | 1,483        |
| Lao PDR      | -                          | -            | -         | -        | -           | -      | -            |
| Malaysia     | -                          | -            | -         | -        | -           | -      | -            |
| Myanmar      | -                          | -            | -         | -        | -           | -      | -            |
| Philippines  | -                          | -            | -         | -        | -           | -      | -            |
| Singapore    | -                          | -            | -         | -        | -           | -      | -            |
| Thailand     | -                          | 1,401        | -         | -        | -           | -      | 1,401        |
| Vietnam      | -                          | -            | -         | -        | -           | -      | -            |

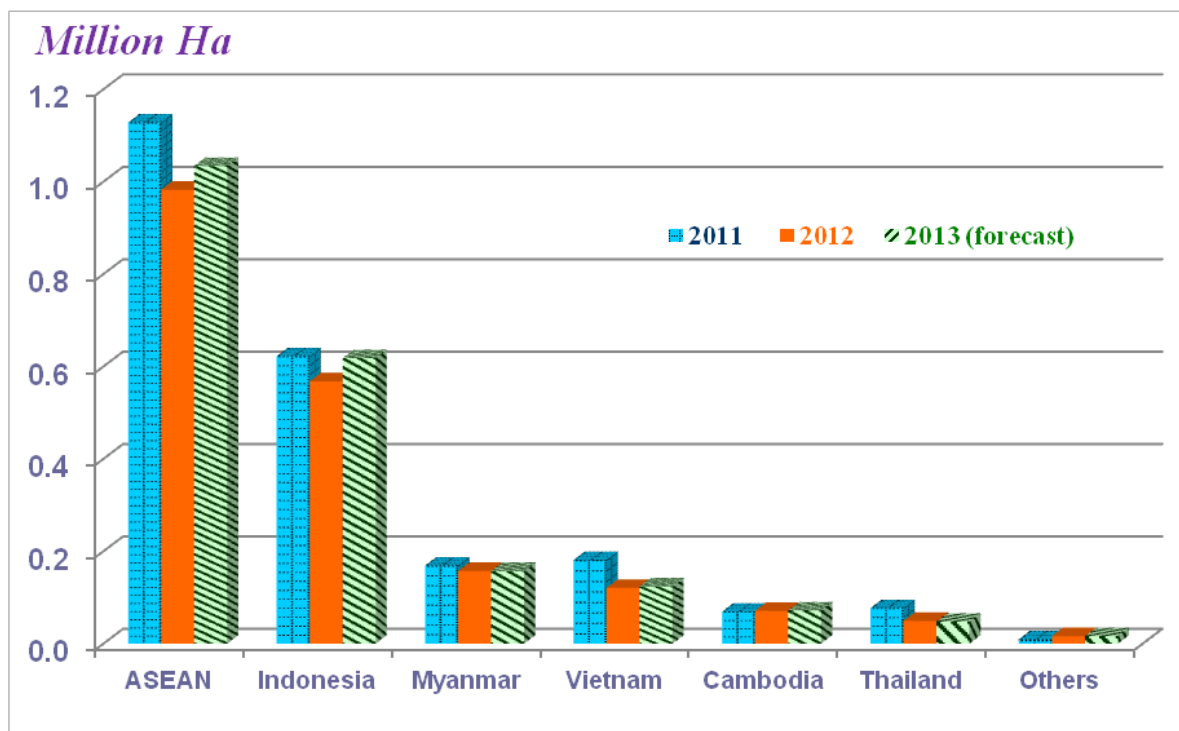


**Figure 13 Soybean production of selected countries in ASEAN, 2011-2013**

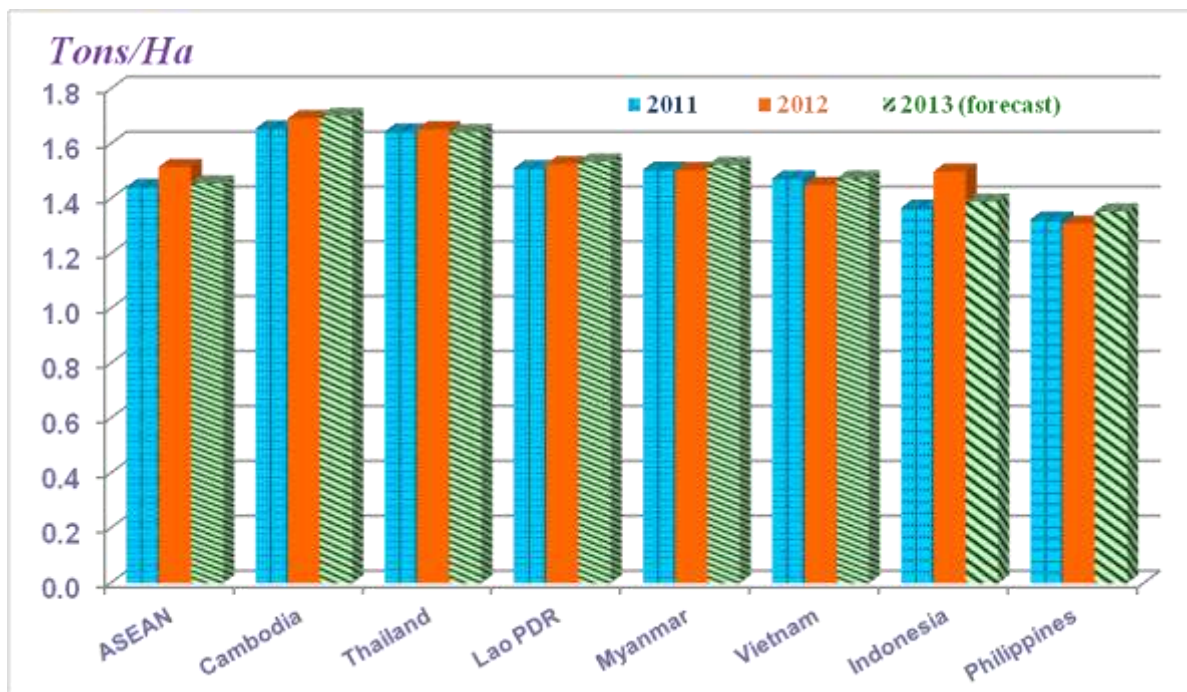


**Figure 14 Soybean planted area of selected countries in ASEAN, 2011-2013**





**Figure 15 Soybean harvested area of selected countries in ASEAN, 2011-2013**



**Figure 16 Soybean yield of countries in ASEAN, 2011-2013**

## **Cassava Situation in ASEAN**

### **Production**

The estimated cassava production in ASEAN in 2012 (Crop year 2011/12) was 71.63 million tons compared to 67.48 million tons in 2011, an increase of about 6.15 percent (Table 21, Figure 17). For Cambodia, Indonesia and Vietnam the production has decreased. The contraction in production in Cambodia and Indonesia were due to the reduction in area. The contraction in production in Vietnam was due to the reduction in both area and yield. The increases in production come from the area expansion in Lao PDR, Malaysia and Thailand. For the Philippines, the decrease in planted area was able to compensate by the increase in the yield. For Myanmar, even though the yield has decreased but the production has increased due to the increase in the planted area.

The cassava production is forecast to increase further to 75.77 million tons in 2013. All countries, except Myanmar, are expected to have an increase in production. The contraction in production in Myanmar was due to the reduction in area.

### **Harvested Area**

The estimated harvested area of cassava in ASEAN in 2012 (crop year 2011/12) was 3.58 million hectares, up less than one percent from the previous year (Table 23, Figure19). However, for Cambodia, Indonesia, the Philippines and Vietnam, the harvested areas have decreased which due to the unfavorable weather.

The forecast harvested area for ASEAN in 2013 is 3.68 million hectares, up about 0.1 million hectares or 2.74 percent from the previous year. All countries, except Cambodia, Myanmar and Thailand, the harvested area are expected to increase. The decrease in area in Cambodia and Thailand are expected due to the increase in price of competing crops. In Myanmar, the decrease is due to the failure in planting by private sector.

## Yield

The average cassava yield in ASEAN in 2012 (crop year 2011/12) was 20.00 tons per hectare, up from 19.02 tons per hectare in the previous year which is about 5.15 percent increase (Table 24, Figure20). Only Myanmar and Vietnam that the yields have decreased. The increase in yield in most cases due to the favorable weather and more improved varieties were used by the farmers.

The average yield in 2013 (Crop year 2012/13) is forecast to be 20.59 tons per hectare, an increase of 2.95 percent compared to the previous year. The increase in yield due to the favorable weather, more improved variety was used by the farmers and the farmer taking care their crops better.

## Damaged Area

The total damaged area of cassava in ASEAN in 2012 was reported to be 96,518 hectares of which 41,986 hectares or about 44 percent were caused by the drought which occurred only in Cambodia and Thailand. Another damage were caused by the flood due to the heavy rain which also affected Thailand the most (Table 25).

**Table 21 Cassava production in ASEAN countries, 2011-2013**

Unit: 1,000 Tons

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>67,481.36</b>  | <b>71,632.51</b>  | <b>4,151.14</b>          | <b>6.15</b> | <b>75,766.80</b>  | <b>4,134.29</b>          | <b>5.77</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 8,033.84          | 7,613.70          | -420.14                  | -5.23       | 8,150.00          | 536.30                   | 7.04        |
| Indonesia    | 24,044.03         | 23,922.08         | -121.95                  | -0.51       | 26,449.84         | 2,527.76                 | 10.57       |
| Lao PDR      | 743.19            | 745.68            | 2.49                     | 0.34        | 812.94            | 67.26                    | 9.02        |
| Malaysia     | 33.21             | 41.00             | 7.79                     | 23.47       | 43.05             | 2.05                     | 5.00        |
| Myanmar      | 607.10            | 729.92            | 122.82                   | 20.23       | 567.50            | -162.42                  | -22.25      |
| Philippines  | 2,209.68          | 2,233.54          | 23.86                    | 1.08        | 2,346.23          | 112.68                   | 5.05        |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 21,912.42         | 26,601.09         | 4,688.67                 | 21.40       | 27,547.24         | 946.15                   | 3.56        |
| Vietnam      | 9,897.90          | 9,745.50          | -152.40                  | -1.54       | 9,850.00          | 104.50                   | 1.07        |

**Table 22 Cassava planted area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>3,618.79</b>   | <b>3,678.45</b>   | <b>59.66</b>             | <b>1.65</b> | <b>3,745.82</b>   | <b>67.37</b>             | <b>1.83</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 391.71            | 361.85            | -29.86                   | -7.62       | 339.00            | -22.85                   | -6.32       |
| Indonesia    | 1,184.70          | 1,119.78          | -64.91                   | -5.48       | 1,236.26          | 116.48                   | 10.40       |
| Lao PDR      | 31.14             | 31.20             | 0.06                     | 0.21        | 34.00             | 2.80                     | 8.97        |
| Malaysia     | 2.60              | 3.05              | 0.46                     | 17.60       | 3.21              | 0.15                     | 4.98        |
| Myanmar      | 44.99             | 56.54             | 11.55                    | 25.68       | 43.70             | -12.84                   | -22.71      |
| Philippines  | 221.24            | 217.98            | -3.26                    | -1.47       | 220.50            | 2.52                     | 1.15        |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 1,184.02          | 1,337.54          | 153.52                   | 12.97       | 1,316.17          | -21.37                   | -1.60       |
| Vietnam      | 558.40            | 550.50            | -7.90                    | -1.41       | 553.00            | 2.50                     | 0.45        |

**Table 23 Cassava harvested area in ASEAN countries, 2011-2013**

Unit: 1,000 Hectares

| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>3,547.33</b>   | <b>3,581.93</b>   | <b>34.60</b>             | <b>0.98</b> | <b>3,680.17</b>   | <b>98.24</b>             | <b>2.74</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 369.52            | 337.80            | -31.72                   | -8.58       | 326.00            | -11.80                   | -3.49       |
| Indonesia    | 1,184.70          | 1,119.78          | -64.91                   | -5.48       | 1,236.26          | 116.48                   | 10.40       |
| Lao PDR      | 31.14             | 31.20             | 0.06                     | 0.21        | 34.00             | 2.80                     | 8.97        |
| Malaysia     | 1.97              | 2.32              | 0.35                     | 17.56       | 2.43              | 0.12                     | 5.01        |
| Myanmar      | 44.99             | 56.54             | 11.55                    | 25.68       | 43.18             | -13.36                   | -23.63      |
| Philippines  | 221.24            | 217.98            | -3.26                    | -1.47       | 220.50            | 2.52                     | 1.15        |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 1,135.39          | 1,265.81          | 130.42                   | 11.49       | 1,264.81          | -1.00                    | -0.08       |
| Vietnam      | 558.40            | 550.50            | -7.90                    | -1.41       | 553.00            | 2.50                     | 0.45        |

Note: Vietnam reported only planted area

**Table 24 Cassava yield in ASEAN countries, 2011-2013**

Unit: Ton/Hectare

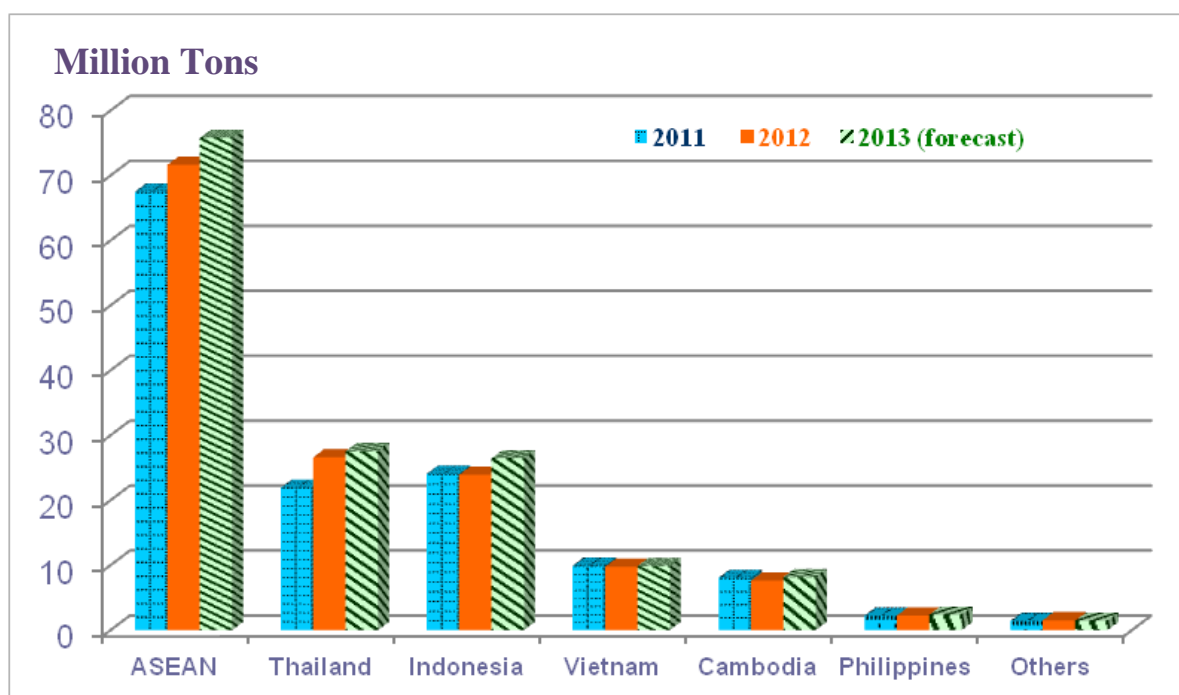
| Country      | 2011<br>(2010/11) | 2012<br>(2011/12) | change<br>2012 over 2011 |             | 2013<br>(2012/13) | change<br>2013 over 2012 |             |
|--------------|-------------------|-------------------|--------------------------|-------------|-------------------|--------------------------|-------------|
|              |                   |                   | Quantities               | (%)         |                   | Quantities               | (%)         |
| <b>ASEAN</b> | <b>19.02</b>      | <b>20.00</b>      | <b>0.98</b>              | <b>5.15</b> | <b>20.59</b>      | <b>0.59</b>              | <b>2.95</b> |
| Brunei       | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Cambodia     | 21.74             | 22.54             | 0.80                     | 3.68        | 25.00             | 2.46                     | 10.91       |
| Indonesia    | 20.30             | 21.36             | 1.06                     | 5.22        | 21.40             | 0.04                     | 0.19        |
| Lao PDR      | 23.87             | 23.90             | 0.03                     | 0.13        | 23.91             | 0.01                     | 0.04        |
| Malaysia     | 16.86             | 17.70             | 0.84                     | 4.98        | 17.70             | 0.00                     | 0.00        |
| Myanmar      | 13.50             | 12.91             | -0.59                    | -4.37       | 13.14             | 0.23                     | 1.78        |
| Philippines  | 9.99              | 10.25             | 0.26                     | 2.60        | 10.64             | 0.39                     | 3.80        |
| Singapore    | -                 | -                 | -                        | -           | -                 | -                        | -           |
| Thailand     | 19.30             | 21.02             | 1.72                     | 8.91        | 21.78             | 0.76                     | 3.62        |
| Vietnam      | 17.73             | 17.70             | -0.03                    | -0.17       | 17.81             | 0.11                     | 0.62        |

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

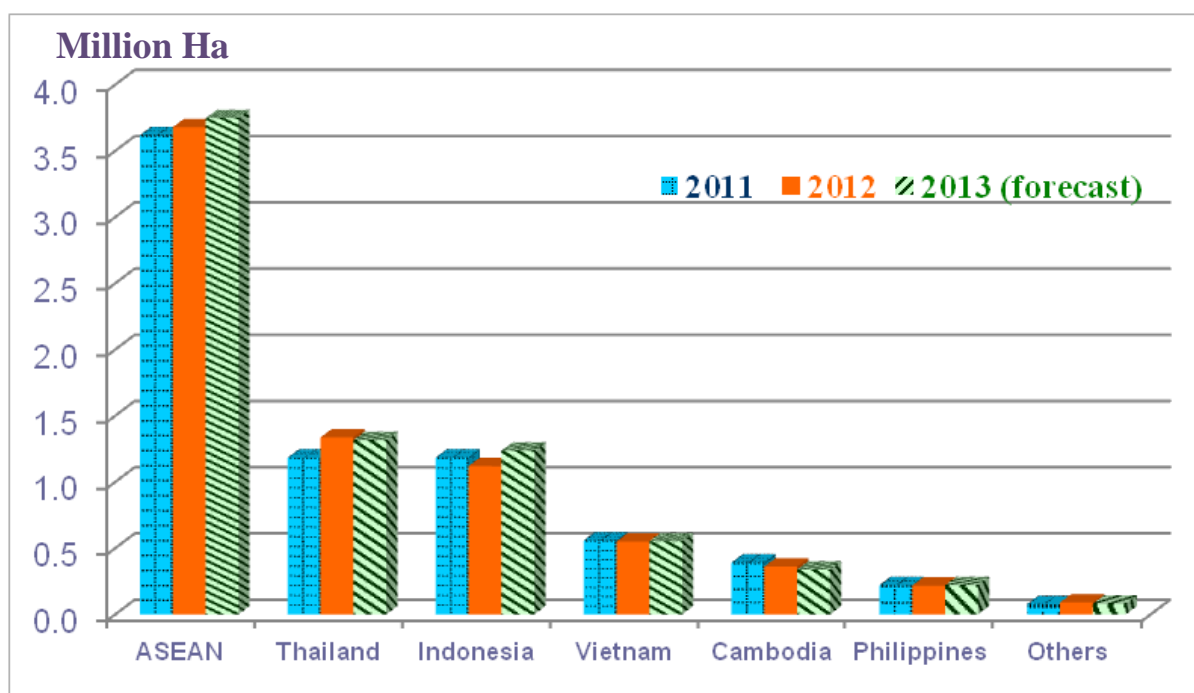
**Table 25 Cassava damaged area in ASEAN by cause of damage, 2012**

| Country      | Cause of Damage (Hectares) |               |          |          |               |             | Total         |
|--------------|----------------------------|---------------|----------|----------|---------------|-------------|---------------|
|              | Flood                      | Drought       | Pests    | Diseases | Others        | Unspecified |               |
| <b>ASEAN</b> | <b>21,518</b>              | <b>41,986</b> | <b>0</b> | <b>0</b> | <b>32,277</b> | <b>737</b>  | <b>96,518</b> |
| Brunei       | -                          | -             | -        | -        | -             | -           | -             |
| Cambodia     | -                          | 24,054        | -        | -        | -             | -           | 24,054        |
| Indonesia    | -                          | -             | -        | -        | -             | -           | 0             |
| Lao PDR      | -                          | -             | -        | -        | -             | -           | 0             |
| Malaysia     | -                          | -             | -        | -        | -             | 737         | 737           |
| Myanmar      | -                          | -             | -        | -        | -             | -           | 0             |
| Philippines  | -                          | -             | -        | -        | -             | -           | 0             |
| Singapore    | -                          | -             | -        | -        | -             | -           | 0             |
| Thailand     | 21,518                     | 17,932        | 0        | -        | 32,277        | 0           | 71,727        |
| Vietnam      | n.a.                       | n.a.          | n.a.     | n.a.     | n.a.          | n.a.        | n.a.          |

Note: For Malaysia cause of damage is total of flood and pests .



**Figure 17 Cassava production of selected countries in ASEAN, 2011-2013**



**Figure 18 Cassava planted area of selected countries in ASEAN, 2011-2013**

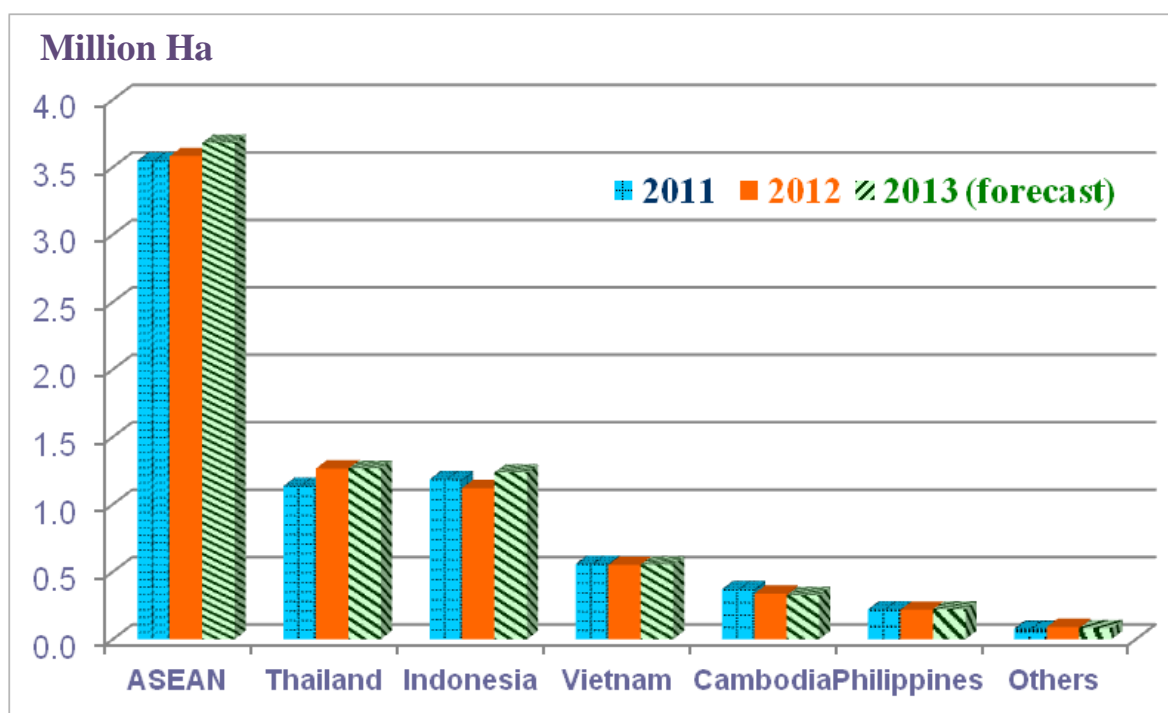


Figure 19 Cassava harvested area of selected countries in ASEAN, 2011-2013

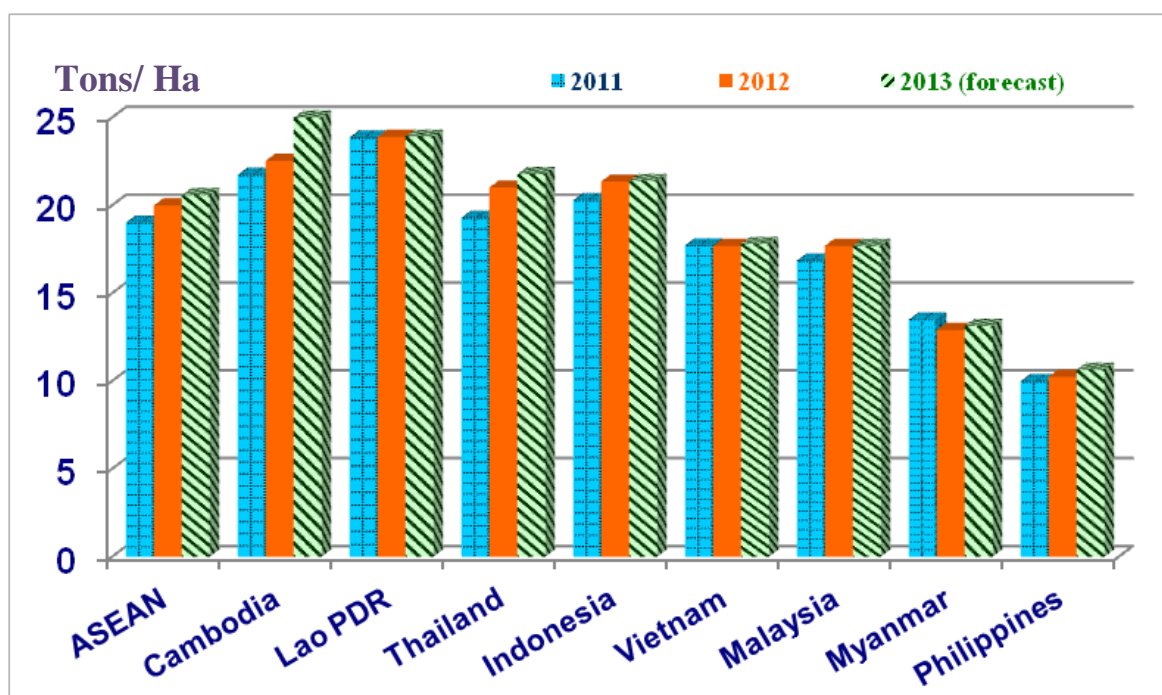


Figure 20 Cassava yield of countries in ASEAN, 2011-2013