ASEAN Early Warning Information

CROP SITUATION

No.29 September 2022

Released by AFSIS Secretariat
Office of Agricultural Economics (OAE)
Ministry of Agriculture and Cooperatives
Bangkok, Thailand
http://www.aptfsis.org

Crop Situation in Brunei Darussalam 2022 (P.1/2)

The weather in Brunei Darussalam in 2022 is favorable for cultivating crops. With appropriate rainfall, sufficient sunlight for the plants, and good water management and irrigation system in the country, these allow farmers to grow crops for the whole year. The average temperature is 38 degrees Celsius. The heavy rainfall Northeast Monsoon in early December 2021 is expected to persist until around end of March 2022. The first two months of Northeast Monsoon (December 2021 and January 2022), also known as the rainy season, are the months that normally receive the highest amount of rainfall and have recorded the highest number of rain days, in comparison to the other months. During this period, the country normally experiences unsettled weather conditions with occasional heavy showers or thundershowers, especially during the night until early morning. ***The climatological data recorded*** that an average rainfall in December 2021 was 358.9 mm, and an average rainfall in January 2022 was 320.6 mm. The average number of rain days for December 2021 and January 2022 are 22 days and 18 days, respectively. Whereas, during the second half of Northeast Monsoon (February and March 2022), the atmospheric conditions tend to be more stable with less rainfall activities, with average rainfall for February 2022 of 162.9 mm and 143.4 mm for March 2022. However, the overall weather condition in 2022 is still suitable for growing crops. The spread of COVID-19 has affected to borders movement restrictions causes labor shortage mainly in vegetable farms, and increasing of some agricultural commodities' prices, especially corn and cassava, because of the higher demand for these products.

Rice production is predicted to ***increase*** due to increase in planted area and yield. Rice planted area is expected to ***increase*** as the weather is suitable for crop cultivation and there is good water management and irrigation system. ***Although, some rice plantations*** (approximately 100 hectares) ***were infested by Rice Leaf Folders (LF)***, which was estimated to damage up to 30-50% per hectare, the total production of the country is not severely affected. Likewise, rice yield is expected to increase because farmers have improved rice management, use good rice varieties called "Sembada 188" instead of other kind of rice, use more fertilizer, and take good care of crops. The harvesting period of rice in 2022 is around from February 2022 to April 2022 in the wet season, and from July to September 2022 in the dry season.

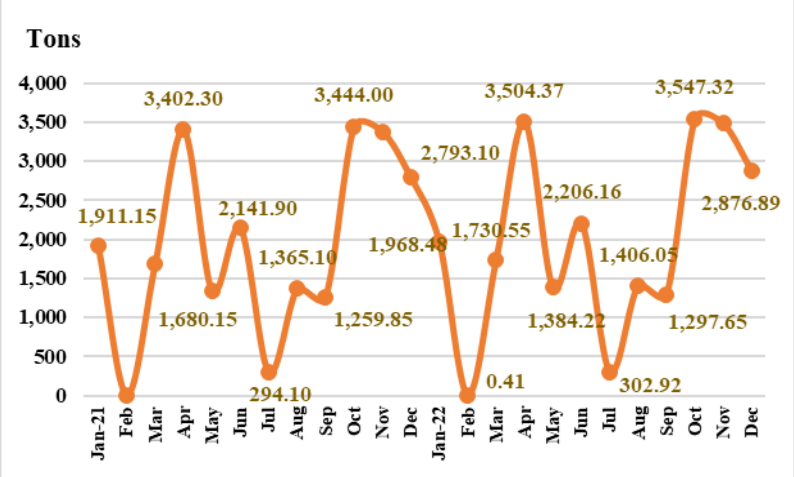

***Figure1*: Monthly quantity of rice import in 2021-2022**

For sugarcane, the production is forecast to ***increase*** from the previous year because the weather is suitable for planting crops and farmers also take good care of crops, and use more fertilizer resulting in the increase in yield.

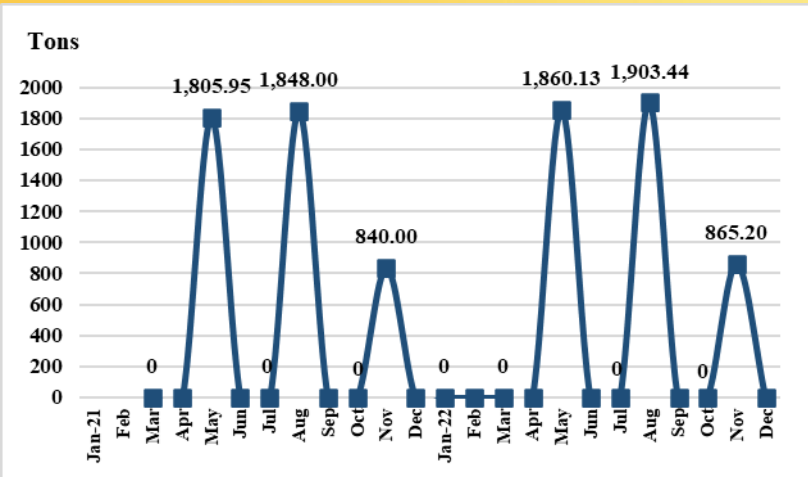

***Figure 2*: Monthly quantity of sugar import in 2021-2022**

For Corn, the planted area is forecast to ***increase*** from the previous year because the weather is suitable for planting crops and farmers respond to price increase which encourages corn farmers to expand planted areas. ***Moreover, borders movement restrictions during COVID-19 causes labor shortages in majority of vegetables farms***, due to this, many farmers switch to planting corns since it requires less maintenance and less workforce and has valuable price in the market. Farmers also take good care of crops, use good variety, and use more fertilize resulting in the increase in yield.

Crop Situation in Brunei Darussalam 2022 (P.2/2)

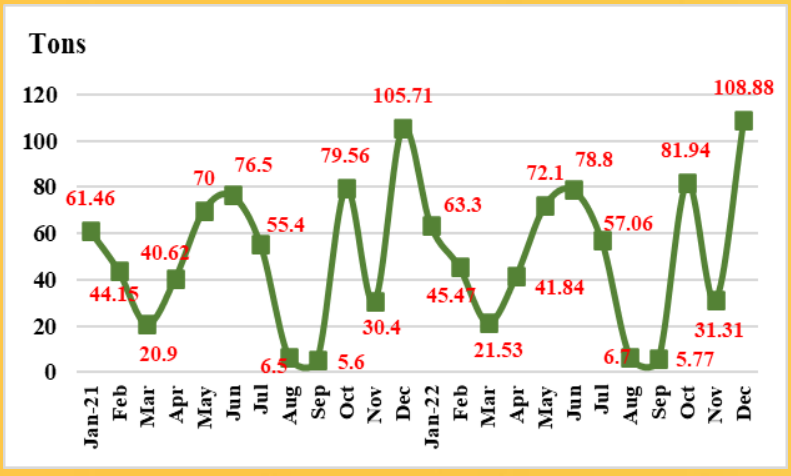

***Figure 3*: Monthly quantity of soybean import in 2021-2022**

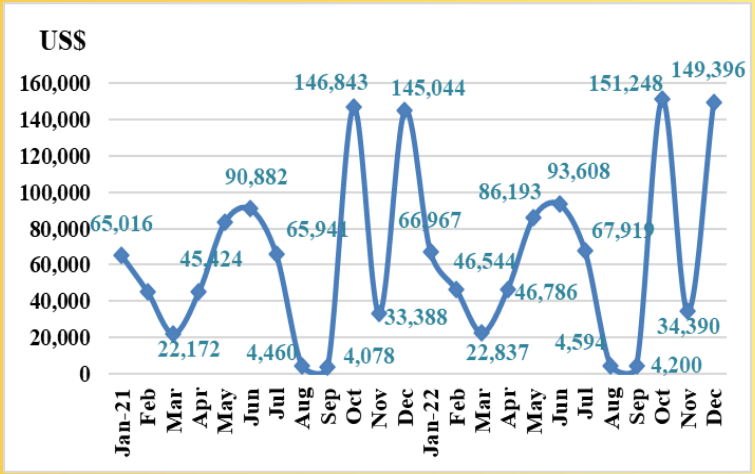

***Figure 4*: Monthly value of soybean import in 2021-2022**

For cassava, the planted area and production are forecast to ***increase*** from the previous year because the weather is suitable for planting crops and cassava is getting high on demand for food processing industry. Farmers also prefer to plant this crop because it is very convenient, less workforce needed, high in yield, and considered valuable in the market. In addition, farmers also take good care of crops, use good variety, and use more fertilize resulting in the increase in yield.

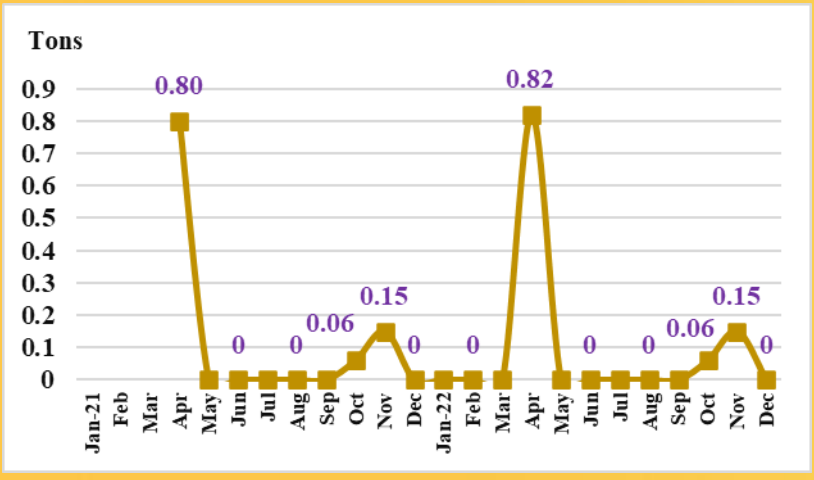

***Figure 5*: Monthly quantity of cassava import in 2021-2022**

Crop Situation in Cambodia 2022

The overall weather in Cambodia in 2022 (2021/2022) has medium to ***Heavy rainfall*** with rain amount ranges from 50 to 100 millimeters per day. There is a sufficient amount of sunlight and an irrigation system to contain water during dry season. The average temperature is at 25 to 38 degrees Celsius. ***Mostly Cambodia's natural disasters are flood and heavy rainfall.*** Those areas with Floods are Banteay Mean chey, Batambang, Kampong Cham,Kampong Thom, , Kampot Pursat , Siem Reap and Tbong khmom. With regard to the spread of COVID-19, rice crop is affected because farmers respond to price of competing crops increase, and the cost of production gets higher due to increasing in agricultural inputs.

The total Cambodia rice exported 9monts in 2022 was increased by 9,4 percent compared to the volume exported in 2021. The major challenges of these decreasing were lacking of containers and increasing of freight cost, it affected the orders of premium fragrant rice mainly to EU markets and the dropped selling price (FOB). For Cambodia Cassava exported in 2022 was increased by 6 percent compared to the volume exported in 2021. The cassava slice which was mainly exported to Thailand, Vietnam and China was increased by 12.37 percent compared to 2021. The Cambodian situation of export and import always changes based on market demand.

According to climate change and global warming situation, ***agricultural products in Cambodia have affected from climate change and global warming situation***. The climate change and global warming situation that have been occurred in Cambodia are extreme drought conditions (El Nino) and extreme rainfall conditions (La Nina) caused an extreme flood and extreme drought during the year. Thus, the Cambodian government helps alleviate the suffering of agriculture from the effects of global warming and climate change by supporting new technologies to farmers, increasing channels for farmers to access to credit, providing markets for farmers, coordinating and delivering agriculture extensions services to support both technically and financially from national to local communities, encouraging and empowering women to cope with disaster risk and climate change impact on farming and livestock, and promoting climate resilience through improving food, water and energy security. While farmers adjusted their cultivation plan or new planting times to suitable for changing in weather patterns, and used good variety that are resistant to climate change and global warming for reducing the risk caused by climate change and global warming.

The planted area and yield of rice in this year are ***expected to rise from last year*** due to favorable weather together with government policies. Farmers also use good varieties and take good care of their crops from planting period to harvesting period. Although some areas in the country were affected by droughts, flood and heavy rainfall in harvesting period occurred in the wet season (the total damaged areas 4 percent of cultivated area 2.74million ha, but 50% of damaged area was recovery on time and the damaged areas caused by flooding the climate change and global warming is approximately 75 percent of the total damaged areas), it is not affected the total production of the country. This is because the Cambodian government has various policies to deal with these situations which are 1) to develop early-warning systems and programmers for climate-related disaster management and recovery, 2) to strengthen cooperation and coordination mechanisms among different sector agencies at local, national, regional and international levels, applying Integrated Water Resources Management (IWRM) aspects to the climate change adaptation and mitigation response, and 3) to ensure climate resilience of critical ecosystems (Tonle Sap Lake, Mekong River, coastal ecosystems, highlands, etc.), biodiversity, protected areas and cultural heritage sites. The harvesting period of rice in 2022 is from August to December 2022 for wet season, and from February to April 2022 for dry season.

For maize, the planted area is forecast to ***slightly increase than the previous year*** due to the increasing price of maize together with the increasing prices of the competing crops. ***Maize exported 9monts in 2022 was decreased by 4 percent compared to the volume exported in 2021*** However, the maize production is expected to increase because farmers use improved crop varieties together with favorable weather. The harvesting period of maize is July to September 2022 for wet season, and February to March 2022 for dry season

For sugarcane, the planted area is ***estimated to increase from last year*** due to the rising sugarcane price and the favorable weather for cultivating crops. While, the sugarcane production is expected to slightly increase because farmers take good care of their crops. The harvesting period of sugarcane in 2022 is from November 2022 to December 2022 or January 2023.

The planted area of soybean is predicted to decline from the last year due to falling soybean price and raising competing crops' prices. Likewise, soybean production is expected to decline due to flood and heavy rainfall. The harvesting period of soybean in 2022 is during September to October 2022.

For cassava, the planted area and production are expected to increase from the previous year as the price of cassava goes up. Additionally, the government supports to grow cassava by using good variety. Even through natural disaster occurred from climate change (flood, droughts), it does not affect the total production in the country. The harvesting period is from November 2022 to January 2023.

Crop Situation in Indonesia 2022 (P.1/2)

The weather in Indonesia in 2022 (2021/22) is favorable for growing crops as there are suitable sunlight, proper temperature, and adequate rainfall for crops due to good water management and irrigation system for planting crops. The amount of rain ranges from 20 to 150 millimeters per day. With regard to climate change and global warming, agricultural products in ***Indonesia have no affected from climate change and global warming situations. This is because the government implemented various policies*** to mitigate risks and damage that might occur from natural disasters by increasing channels for farmers to access to credit, providing markets for farmers, and providing agriculture insurance. While farmers adjusted their cultivation plan or new planting times to suitable for changing in weather patterns, and used good variety that are resistant to climate change for reducing the risk caused by climate change and global warming. In addition, the spread of COVID-19 does not affect the production in the country. The situation of five main crops can be described as follow.

Rice production is forecast to increase due to the expansion of planted areas. ***The planted area is expected to increase*** due to favorable weather together with government policy. Farmers also use good varieties and take good care of their crops from planting period to harvesting period resulting in the increase in yield. The harvesting periods in 2022 are from October 2021 to March 2022 for wet season and from April to September 2022 for dry season.

For maize, the planted area is expected to increase from previous year because the weather is suitable for planting crops, maize prices rise and completing crops prices decrease which increase farmer's incentive to grow maize. Farmers also take good care of crops and select to use good varieties together with favorable weather resulting in the increase in yield. The harvesting period of maize in 2022 can be divided into 3 periods which are during January to April 2022 for the first crop, May to August 2022 for the second crop, and September to December 2022 for the third crop.

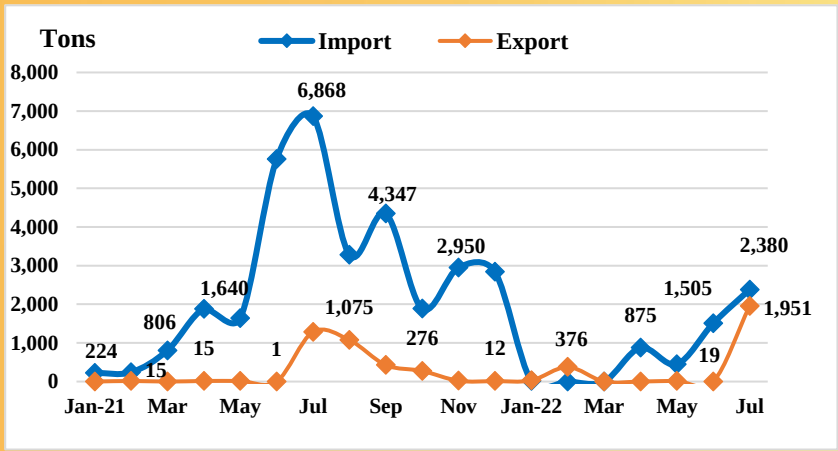

Figure 1: **Monthly quantity of rice import and export in 2021-2022**

For sugarcane, the planted area is expected to increase as the weather is suitable for crop cultivation***. Moreover, government is also launching the sugar self-sufficiency program***. This government program is the key factors for increasing sugar planted area and production. Farmers also take good care of crops and weather is suitable for the crop resulting in the increase in yield. The harvesting period in 2022 is from February 2022 to December 2022.

Soybeans production is forecast to increase due to the expansion of planted and harvested areas. The planted area of soybean is expected to increase due to suitable weather for planting crops. The harvesting periods of soybean in 2022 are divided into 3 phrases which are January to April 2022 for the first crop, May to August 2022 for the second crop, and September to December 2022 for the last crop

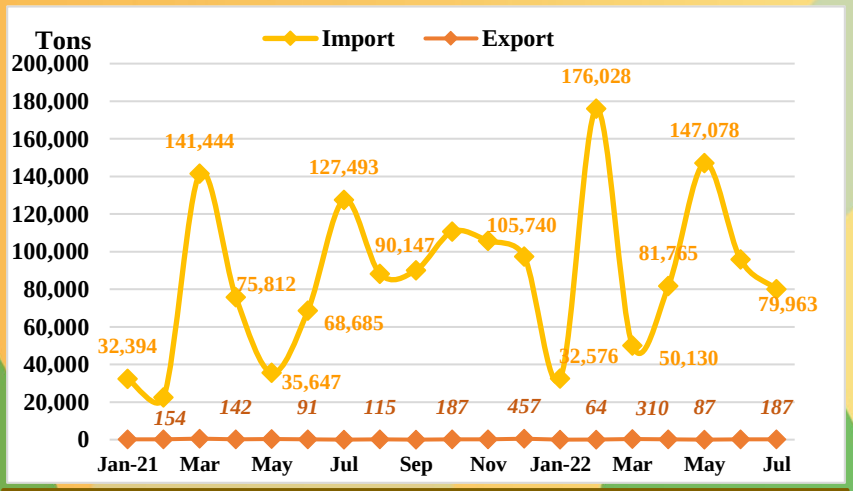

***Figure 2*:** **Monthly quantity of maize import and export in 2021-2022**

Crop Situation in Indonesia 2022 (P.2/2)

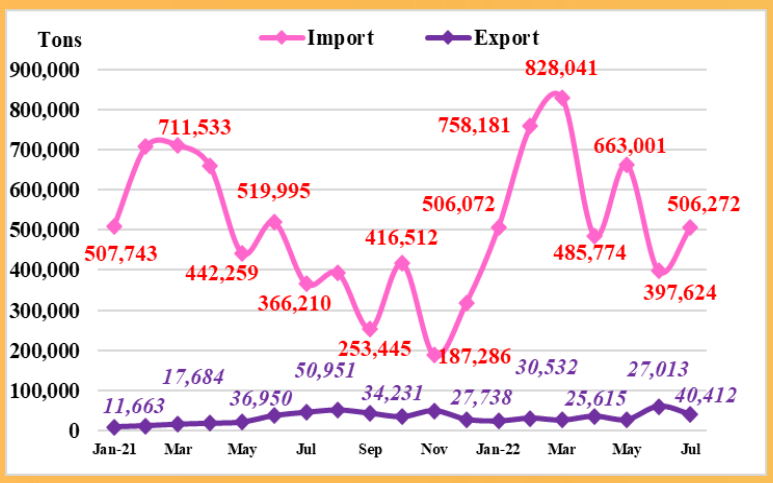

Figure 3: **Monthly quantity of sugar import and export in 2021-2022**

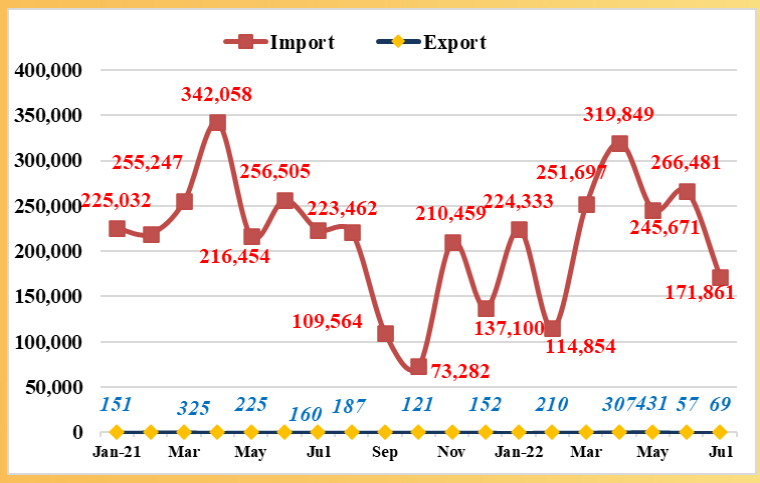

Figure 4: **Monthly quantity of soybean import and export in 2021-2022**

Cassava production is forecast to raise due to the increasing in planted area, harvested area, and yield. The planted area of cassava is expected to increase due to the raising prices of cassava, the falling prices of completing crops, and favorable weather. Besides, the cassava yield is expected increases because farmers take good care of the crops together with favorable weather. The harvesting period of cassava in 2022 can be divided into 3 phrases which are January to April 2022 for the first crop, May to August 2022 for second phrase, and September to December 2022 for the last crop.

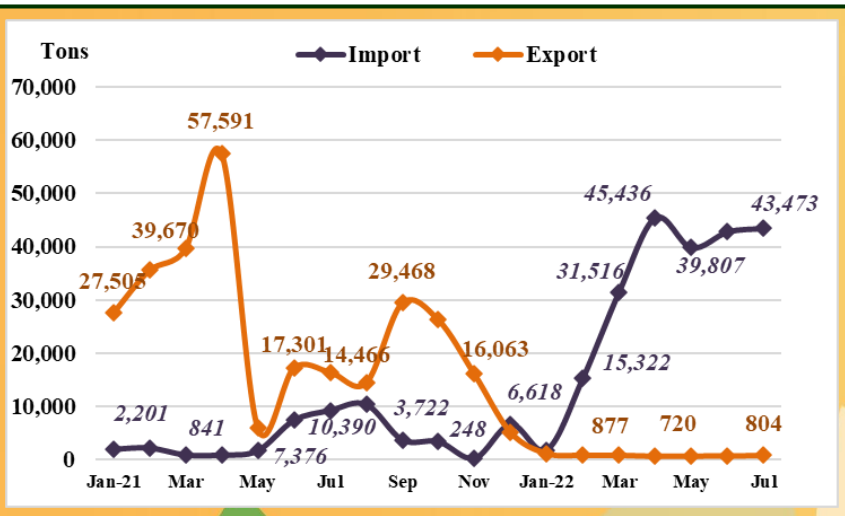

Figure 5: **Monthly quantity of cassava import and export in 2021-2022**

Crop Situation in Lao PDR 2022 (P.1/2)

The weather situation of Lao PDR in 2022 (2021/2022) is recorded with moderate rainfall of around 20 – 50 millimeters per day. Generally, the weather is favorable for cultivating crop as usual as it has adequate rainfall, good water management and irrigation system for planting crops, and sufficient sunlight for plants. The average temperature is between 23 to 34 degrees Celsius. Natural disasters which occurred in Lao PDR are flood, landslides, mudslides, and pests almost in the northern region. In 2021, ***the COVID-19's effect*** on the export of maize, sugar, and cassava because the country's border is temporally close resulted in limited export of the production. However, in 2022 the export of agricultural production rises due to government policy. For the import situations of rice, maize, and soybean are increased due to the decrease of domestic production and higher demand for domestic consumption. Moreover, ***climate change and global warming situations*** which is extreme rainfall conditions (La Nina) caused an extreme flood during the year have affected to agricultural products in Lao PDR. Thus, the government and farmers collaborate in water management to effectively reduce damage from these situations. Farmers adjusted their cultivation plan or new planting times to suitable for changing in weather patterns, however, they are still having some damaged areas caused by climate change and global warming. The production situations of five main crops are as follows.

For rice, the planted areas are expected to increase due to the increasing price of rice and government policy for supporting export. ***The production is expected to increase*** as farmers take good care of crops, together with favorable weather and appropriate rainfall for plants. Although some areas in the country were affected by droughts, flood and heavy rainfall in the wet season ***(the total damaged areas are 1,584 hectares, and the damaged areas caused by the climate change and global warming is approximately 0.2% of the total damaged areas)***, it is not affected the total production of the country. The harvesting period of rice in 2022 is from October 2022 to December 2022 for wet season, and from March to May 2022 for dry season.

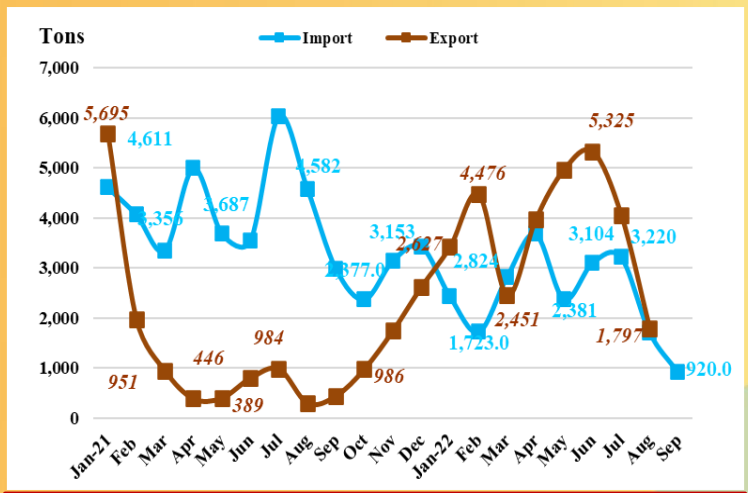

***Figure 1*: Monthly quantity of rice import and export in 2021-2022**

For maize, the planted area and the yield are estimated to decrease due to the unfavorable weather. The harvesting period of maize in 2022 is from September 2022 to December 2022 for wet season, and from March to May 2022 for dry season.

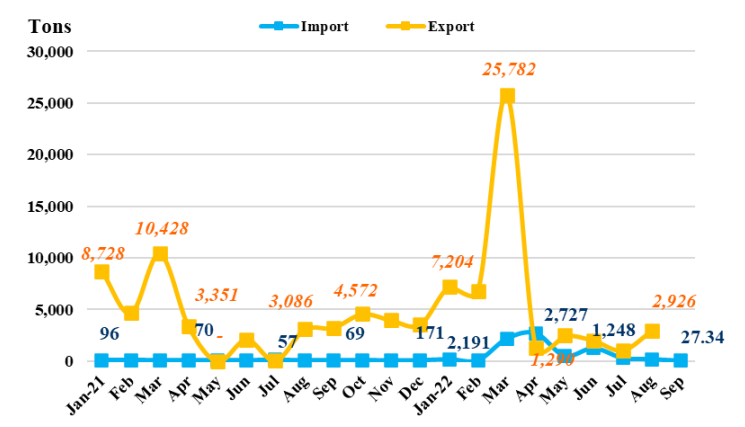

***Figure 2*: Monthly quantity of maize import and export in 2021-2022**

Crop Situation in Lao PDR 2022 (P.2/2)

For Soybean, the planted area and yield are estimated to increase because of government policy for supporting export and good taking care of the crops by famers. The harvesting period of soybean in 2022 is during September 2022 to November 2022 for wet season and January to April 2022 for dry season.

For sugarcane, planted area and yield are predicted to increase due to the favorable weather. The sugarcane gets sufficient sunlight, enough water, and governmental support under the project which focuses on producing crops that have the potential to be commercialized for export. The harvesting period of sugarcane in 2022 is from December 2021 to May 2022.

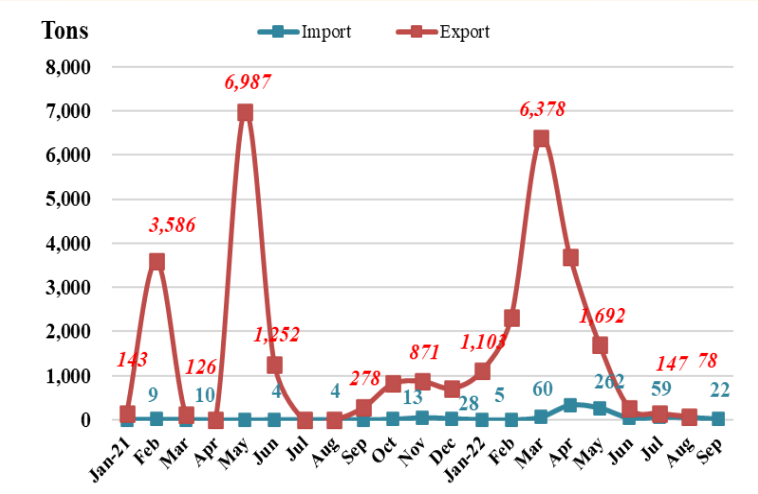

Figure 3: **Monthly quantity of soybean import and export in 2021-2022**

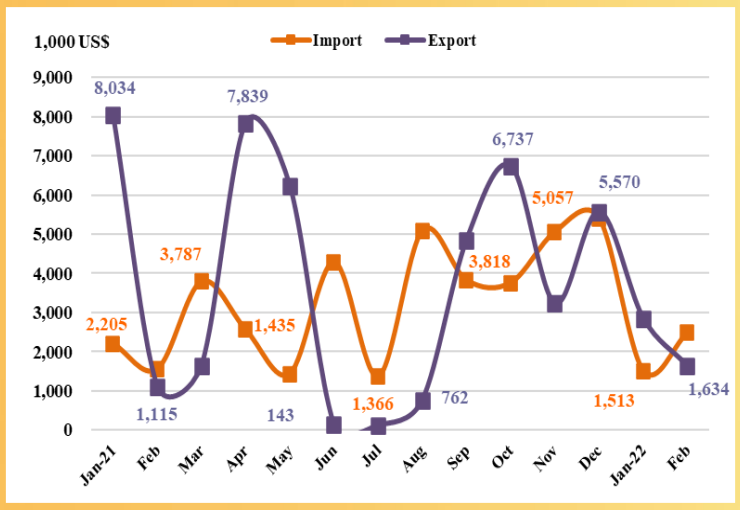

Figure 4: **Monthly value of sugar import and export in 2021-2022**

The production of cassava is forecast to increase due to the increase in planted area and yield. The planted area is expected to increase due to the increasing price of cassava and government policy for supporting export. The yield is expected to increase because of good taking care of the crops by farmers. The harvesting period of cassava in 2022 is during November 2021 to June 2022.

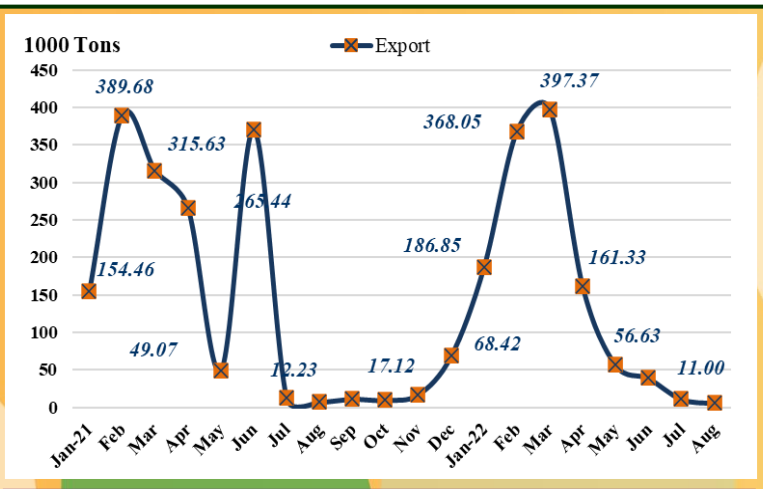

Figure 5: **Monthly quantity of cassava export in 2021-2022**

Crop Situation in Malaysia 2022

The natural disasters* that have occurred in *Malaysia* in 2022 (2021/2022) were floods**. These floods caused damaged area in many provinces which were Negeri Sembilan (Jelebu, Jempol, Kuala Pilah), Selangor (Sabak Bernam,Kuala Selangor), Kelantan (Pasir Mas, Tumpat,Tanah Merah, Kuala Krai, Machang, Pasir Puteh, Kota Bharu, Bachok), Pahang (Maran, Rompin, Pekan), Johor (Tangkak), Terengganu (Kuala Nerus, Besut, Kuala Terengganu, Marang), Sabah (Kota Belud, Kota Marudu, Ranau), Melaka (Melaka Tengah, Alor Gajah, Jasin), Kedah (Kubang Pasu, Kota Setar, Pendang,Pokok Sena,Yan, Sik, Bandar Bahru, Baling), Perlis (Kangar, Arau, Beseri, Bintong,Paya, Mata Ayer), Perak (Hilir Perak), and Sarawak (Tebedu, Matu, Lawas). With regard to the import situations, the ***import* of *rice is expected to increase *to ensure that the population will have sufficient food* as well as maintain food security per domestic consumption. Besides, ***cassava import*** is also forecasted to increase to sufficient food processing factories and feed processing factories with ingredients for economic viability and also to meet the demand. In terms of ***cassava export*** is expected to rise as the exports are necessary to survive economically and to respond to the other countries demand. In addition, the spread of COVID-19 has affected to agricultural sector by increasing the prices of fertilizer, pesticide and herbicide which resulted in higher cost of rice and cassava production. However, the government has a policy to increase rice production by intervene in the prices of agricultural products to help farmers.

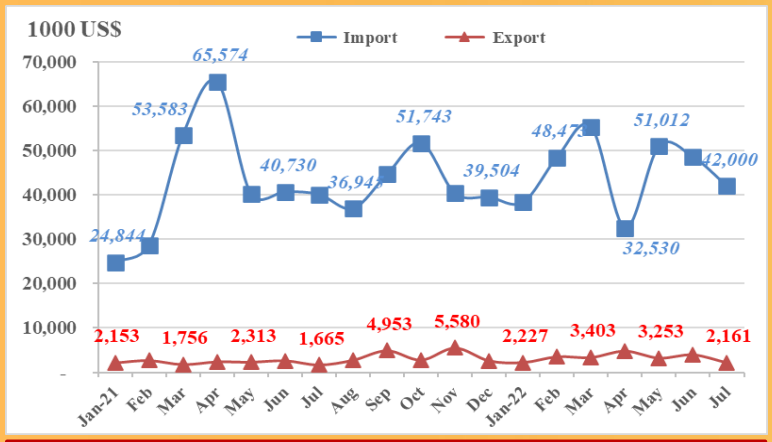

Figure 1: **Monthly quantity of rice import and export in 2021-2022**

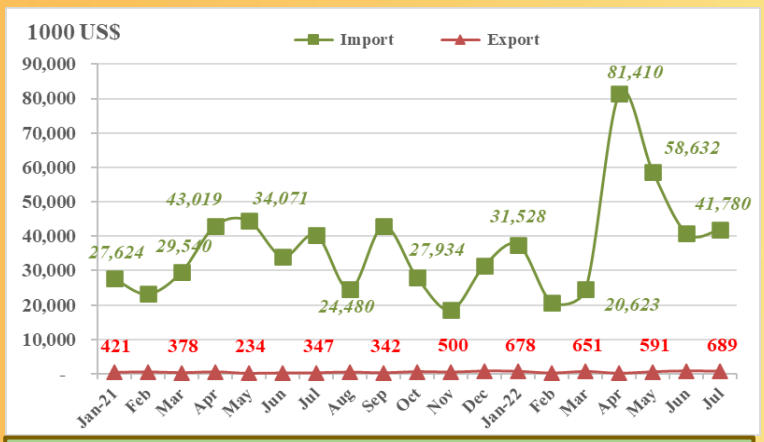

***Figure 2*: Monthly quantity of soybean import and export in 2021-2022**

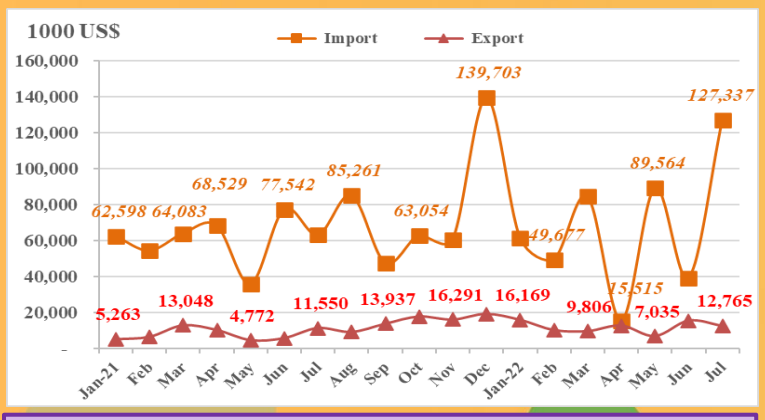

***Figure 3*: Monthly quantity of sugar import and export in 2021-2022**

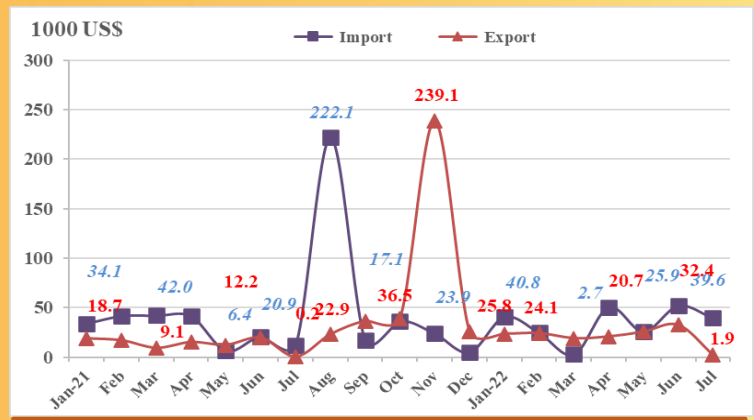

***Figure 4*: Monthly quantity of cassava import and export in 2021-2022**

For rice, the planted area and production are forecast to decrease due to unfavorable weather effect by floods and rising production costs effected by COVID-19. Some areas in the country were affected by floods and heavy rainfall in wet season with the total damaged area around 12,266.53 hectares. The harvesting period of rice in 2022 is from March to July 2022 for wet season, and from June to November 2022 for the dry season.

The planted area and production of cassava is forecasted to decrease due to unfavorable weather effect by floods and rising production costs effect by COVID-19. The harvesting period of cassava in 2022 is from January to December 2022.

Crop Situation in Myanmar 2022

The weather in Myanmar in 2022 (2021/2022) is generally aberrant. The areas have low rainfall with an average amount of 0.5-20 millimeters per day. ***With the effect of the climate change and global warming situation***, some regions which were Magwe and Rakhine faced drought, while some regions which were Nay Pyi Taw, Ka Chin, Chin, Sagaing, Bago, Magwe, Madalay, Mon, Yangon, Shan, and Ayeyawaddy, occured heavy rain. These phenomena have affected to agricultural products in Myanmar. Thus, the government and farmers collaborate in water management to effectively reduce damage from natural disasters. Farmers also adjusted their cultivation plan or new planting times to suitable for changing in weather patterns. However, farmers are still having some damaged areas caused by climate change and global warming situation. It is suspected to be the consequence of the decreasing of natural resources resulted from deforestation within the country. ***In addition, the spread of COVID-19 does not affect the production in the country***. The import situations of rice and maize are expected to increase for ensuring food security in the country. While the import of soybean and cassava are expected to decrease as these crops' productions are already sufficient for the domestic consumption. In the meantime, the export of maize, soybean and sugar are expected to decrease due to less order from international markets. While the export of rice and cassava are expected to increase because of higher productions of these crops and higher market demand. The production situation of five main crops are as follows.

For rice, the planted area declined due to the unfavorable weather. Moreover, the aberrant weather caused by the decreasing of natural resources in the country resulted in flood and drought. Consequently, the planted areas were damaged around 2,270.74 hectares which resulted in declining in its harvested area. ***However, the production is expected to increase because farmers take good care of crops***, and use more fertilizer. The harvesting period of rice in 2022 is from August 2021 to February 2022 for the wet season, and from February 2022 to August 2022 for the dry season.

For maize, the planted area is forecast to decline due to the unfavorable weather caused by the aberrant weather resulted in flood and drought. The damage of the planted areas are around 664.51 hectares. ***However, the production is expected to increase because farmers take good care of crops***, and use good varieties. The harvesting period of maize in 2022 is from August 2021 to December 2021 for wet season, and from January 2022 to June 2022 for the dry season.

For sugarcane, the planted area declined due to the unfavorable weather caused by the aberrant weather resulted in flood and drought. The harvesting period of sugarcane in 2022 is from October 2021 to March 2022.

For soybean, the planted area and the production declined due to the unfavorable weather caused by the aberrant weather resulted in flood and drought. ***However, the production is expected to increase because farmers take good care of crops***, and use good varieties. The harvesting period of soybean in 2022 is from August 2021 to January 2022 for wet season, and from December 2021 to May 2022 for the dry

For cassava, the planted area declined due to the unfavorable weather caused by the aberrant weather resulted in flood and drought. ***However, the production is expected to increase because the cassava price has increased***, consequently, farmers take good care of crops, use good varieties, and use more fertilizer. The harvesting period of cassava in 2022 is between September 2021 and June 2022.

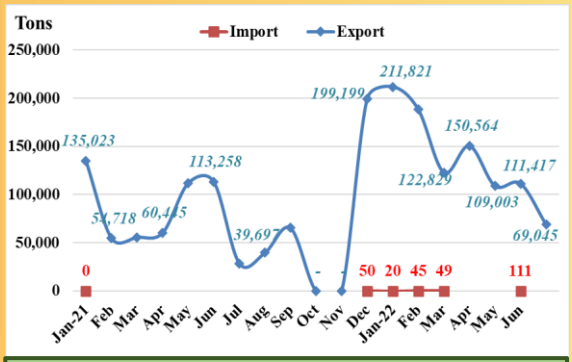

Figure 1: : Monthly quantity of rice import and export in 2021-2022

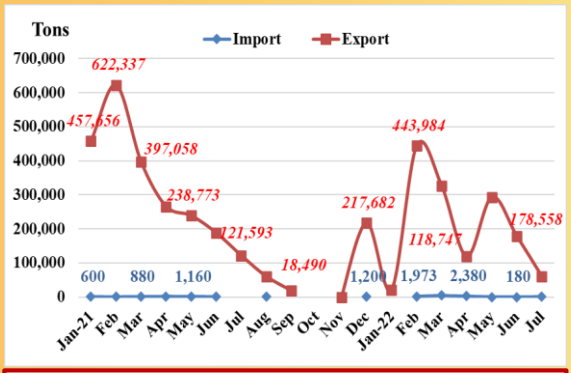

Figure 2: Monthly quantity of maize import and export in 2021-2022

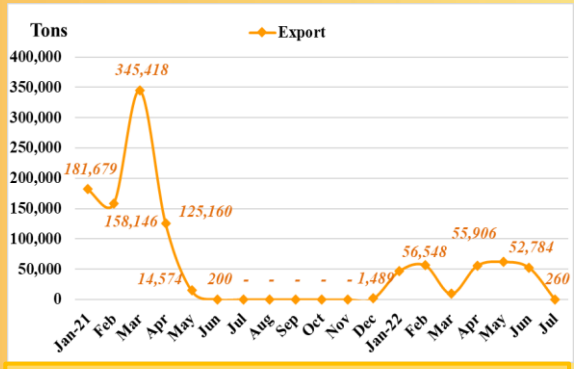

Figure 3: Monthly quantity of sugar export in 2021-2022

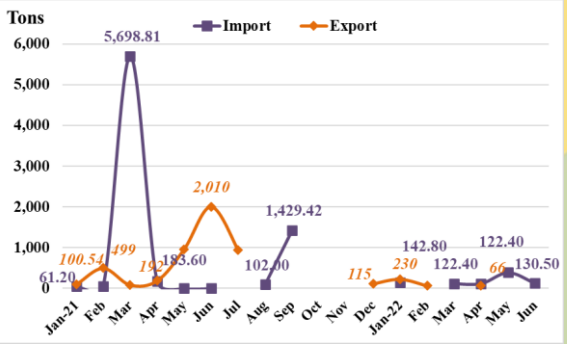

Figure 4: Monthly quantity of soybean import and export in 2021-2022

Figure 5: Monthly quantity of cassava import and export in 2021-2022

Crop Situation in Philippines 2022 (P.1/2)

The crop conditions of the Philippines in 2022 (2021/22) have natural disasters in the country which was hit by Typhoon Maring (October 2021), Typhoon Odette (December 2021), and Typhoon Agaton (April 2022). These Typhoons caused damaged area in many provinces which were Cagayan, Surigao del Norte, Dinagat Islands, Southern Leyte, Bohol, Cebu, Negros Oriental, Palawan, Negros Occidental, Antique, Negros Oriental, Siquijor, Cebu, Camiguin, and Iloilo. The effect of damage from natural disasters are caused by strong wind, heavy rainfall which has a volume of 100 – 150 millimeter per day. However, the number of total damaged area of crop have not reported yet because the crop situations of rice, maize, cassava, and soybean cannot be assessed in this time. While climate change and global warming have not affected the agricultural products of the country. With regard to the spread of COVID-19, it is great to hear that the situation of import-export crop production and food security of the Philippines is not affected by COVID-19. The situation of main crops are as follows.

For rice, the harvested area and yield are estimated to decrease. The decreasing in the harvested area is due to unfavorable weather (frequent rainfall), diseases and pests (rat infestations, tungro, stemborer and black bug). Besides, the declining in yield is because farmers use less fertilizer. The harvesting period of rice in 2022 is from July 2021 to December 2021 for wet season, and January 2022 to June 2022 for dry season.

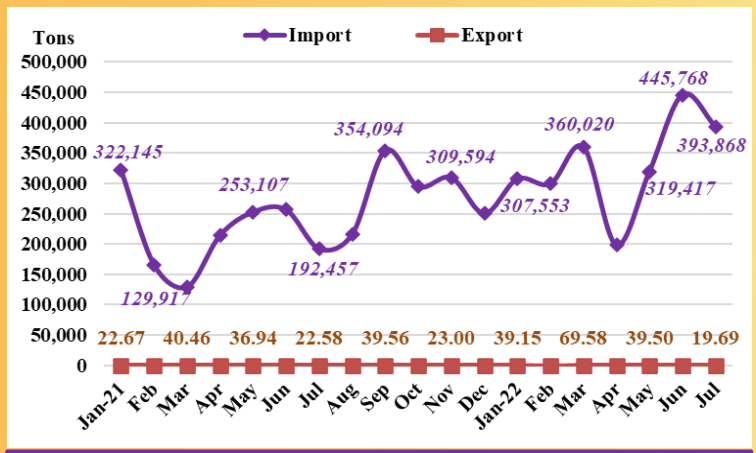

***Figure 1*: Monthly quantity of rice import and export in 2021-2022**

For Maize, the production is estimated to decrease due to unfavorable weather impacted by Typhoon Odette and prevailing heavy rainfall during reproductive stage resulted to smaller ears of corn. The declining in production is also caused by diseases and pests which were affected by rat infestation and army worms. Moreover, farmers use less fertilizers in the area due to high cost of inputs. The harvesting period of Maize in 2022 is from July 2021 to December 2021 for wet season, and January 2022 to June 2022 for dry season.

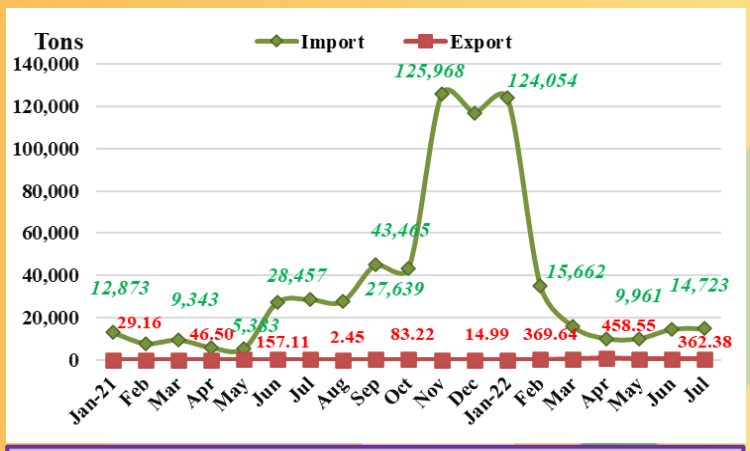

***Figure 2*: Monthly quantity of maize import and export in 2021-2022**

For Soybean, the production is forecast to decrease because farmers apply less fertilizer due to high cost of fertilizers. The harvesting period of Soybean in 2022 is from July 2021 to December 2021 for wet season, and January 2022 to June 2022 for dry season.

Crop Situation in Philippines 2022 (P.2/2)

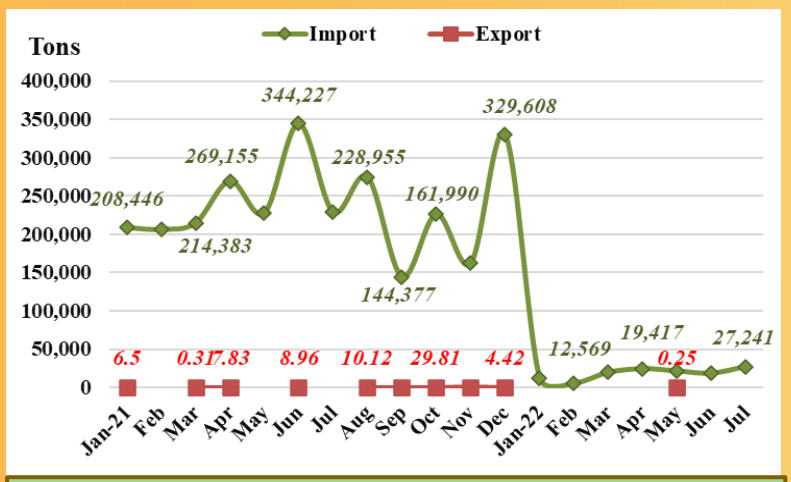

Figure 3: **Monthly quantity of soybaen import and export in 2021-2022**

For Sugarcane, the production is expected to decrease because farmers apply less fertilizers in the area due to high cost of fertilizers. The harvesting period of sugarcane in 2022 is from September 2021 to August 2022.

For Cassava, the production is predicted to increase due to higher demand of the cassava. The harvesting period of Cassava sugarcane in 2022 is from July 2021 to December 2021 for the 1st crop and January 2022 to June 2022 for the 2nd crop.

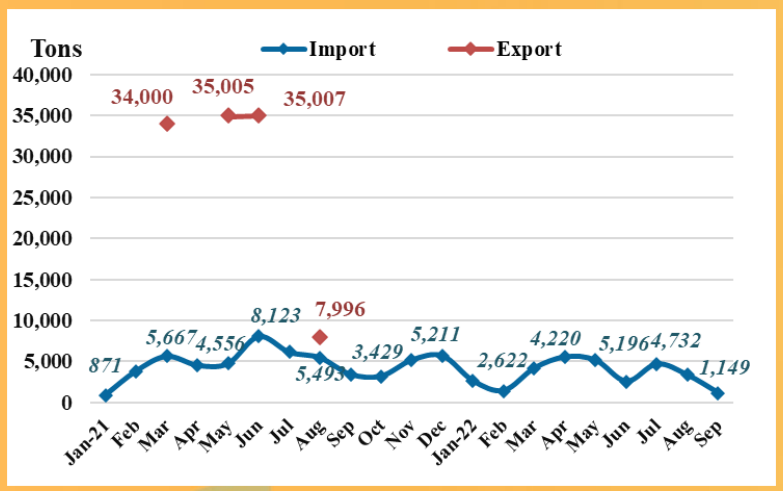

Figure 4: **Monthly quantity of sugar import and export in 2021-2022**

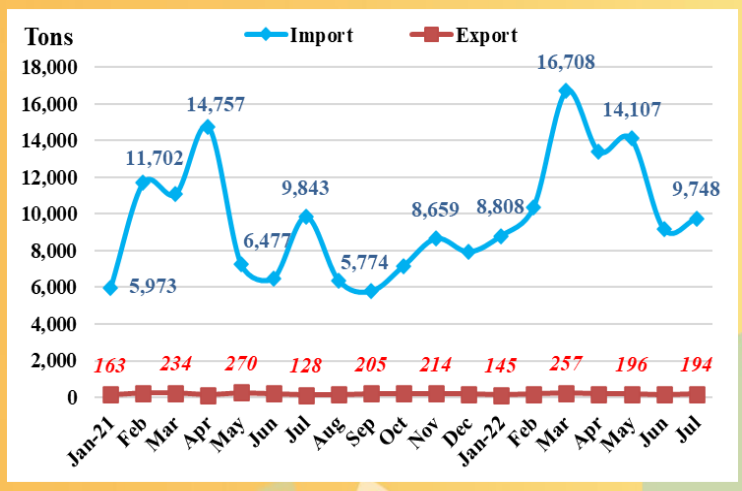

Figure5: **Monthly quantity of cassava import and export in 2021-2022**

Crop Situation in Thailand 2022 (P.1/2)

The weather in Thailand in 2022 (2022/2023) compared to 2021 (2021/2022) has good conditions. With a sufficient amount of water supply which allows the farmers to use water per crops' need, farmers are capable to cultivate crops for the whole year. The amount of rain ranges from 100 to 150 millimeters per day. There was a natural disaster which floods occurred in some areas such as Kamphaeng Phet, Chiang Mai, Tak, Phitsanulok, Phetchabun, Lamphun, Sukhothai, Khon Kaen, Chaiyaphum, Loei, Roi Et, Maha Sarakham, Nakhon Ratchasima, Yasothon, Sisaket, Surin, Ubon Ratchathani, Chainat, Singburi, Saraburi, Pathum Thani, Phra Nakhon Si Ayutthaya, Ang Thong, Nakhon Pathom, Suphan Buri and Prachin Buri. However, no significant damage was observed during the planting season. The spread of COVID-19, it does not affect the agricultural production as the production begins to come back to a normal state in order to provide enough for the domestic consumption and maintain food security. Moreover, agricultural products in Thailand have been affected by climate change and global warming situation. These climate change and global warming situations that have been occurred in Thailand were extreme rainfall conditions (La Nina) caused an extreme flood during the year. Thus, local authorities have warned farmers to refrain their planting during September-October 2022 because La Nina flooding may occur during that period. Although farmers have adjusted their cultivation plans or new planting times to suitable for changes in weather patterns, they have still had some damaged areas affected by these climate change and global warming situations.

In terms of importing situation, the import of rice is expected to increase because of the higher demand for Basmati and Japanese rice for consumption and higher demand for some poor-quality rice (broken rice) imported from Myanmar and Cambodia for the agricultural processing industry. The import of cassava is also expected to increase because the domestic production is insufficient to meet the demand of entrepreneurs and cassava exporters. As a result, cassava was imported from neighboring countries, mostly from Cambodia and Lao PDR to process/collect/improve quality and then export to the international market. On the contrary, the imports of maize, soybean, and sugar are forecast to decrease. The reduction in maize import resulted from a shortage of maize product in the world market as the maize producing countries intend to keep their product for domestic utilization which is caused by ***the impact of the Russian-Ukrainian war***, together with the higher freight cost and price of maize product. Besides, the decline in the import of soybean is due to the higher world market price of soybean caused by the increase in soybean demand from China. While, the decrease in sugarcane import is due to the rising in the domestic production. ***For the export situation***, the exports of rice, sugar, and cassava become greater than the previous year because trading partner countries have increased purchasing power after economic recovery from ***the COVID-19 pandemic.*** The exports of maize and soybean are forecast to decrease because domestic productions are insufficient for the domestic consumption. In addition, the demand of maize for the animal feed industry in the country has increased.

Rice production in 2022 (the crop year 2022/23) is predicted to decline due to the decrease in planted area, harvested area, and yield. The planted area of rice is forecast to decrease because farmers respond to the falling price of rice and the increasing price of the competing crops by switching to alternative crops that can be obtained the higher income with easily to take care of and lower inputs cost. Besides, the decreasing in harvested area and yield were affected by tropical Storm Noru which caused heavy rain and widespread floods in all regions in late September. The most damage to rice fields occurred in the Northeastern region. It is forecast to be as high as 20% of the total planted area in the region. While the damage to rice fields in the Northern and Central regions were less than in the Northeastern region because some areas have been harvested prior to floods. The ***total damaged area of rice for the whole country is around 400,000 hectares***. In addition, ***the damaged areas of rice caused by the climate change and global warming situations are approximately 2.00% of the total damaged areas.*** The harvesting period of rice in 2022 is from August 2022 to April 2023 for wet season, and February 2023 to October 2023 for dry season.

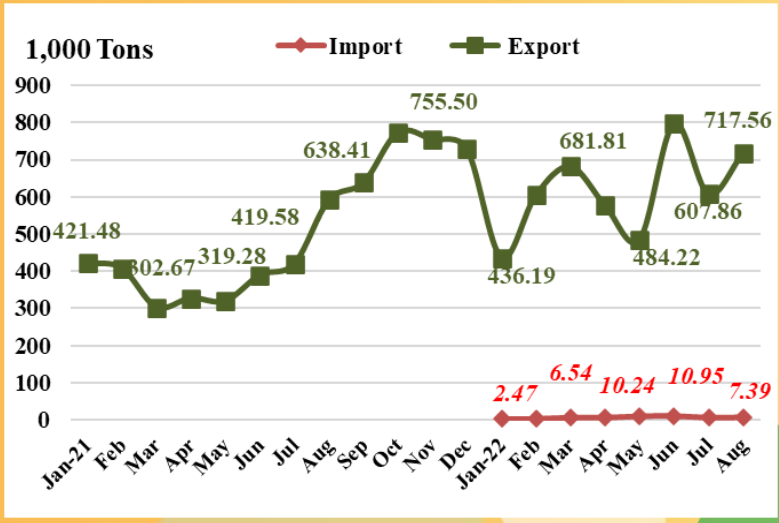

Figure 1: **Monthly quantity of rice import and export in 2021-2022**

For sugarcane, the production in 2022 (the crop year 2022/23) is forecast to increase as the planted area and yield tend to increase resulting from the rising sugarcane price together with favorable weather and appropriate rainfall. The harvesting period of sugarcane in 2022 is from December 2022 to April 2023.

Crop Situation in Thailand 2022 (P.2/2)

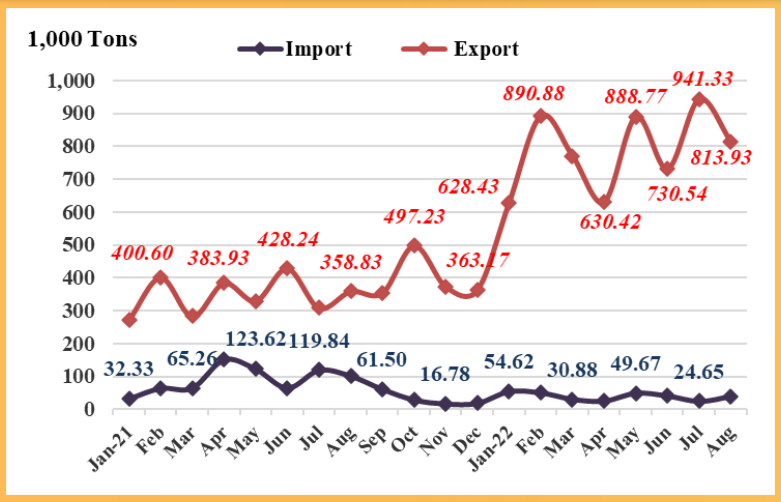

Figure 2: **Monthly quantity of sugar import and export in 2021-2022**

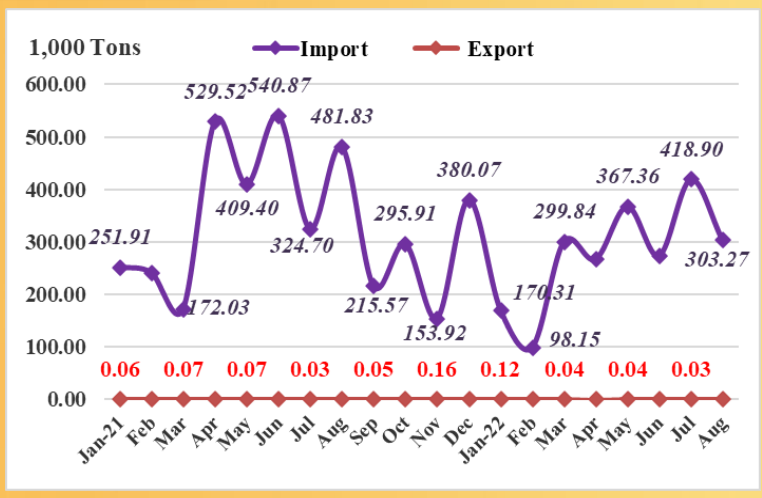

Figure 3: **Monthly quantity of soybean import and export in 2021-2022**

The production of soybean in 2022 (the crop year 2022/23) is predicted to decrease as the planted area of soybean tends to decrease from the last year due to labor shortage, high production costs, and lack of the development of mechanical soybean harvesting technology. The harvesting period of soybean in 2022 is from July 2022 to December 2022 for wet season, and January 2023 to May 2023 for dry season.

The production of maize in 2022 (the crop year 2022/23) is forecast to increase due to the increase in yield resulting from the favorable weather. ***However, the planted area of maize is estimated to decrease*** due to the increasing price of the competing crops and high cost of production. The harvesting period of maize in 2022 is from June 2022 to February 2023 for wet season, and February 2023 to May 2023 for dry season.

The planted area and production of cassava in 2022 (the crop year 2022/23) are forecast to increase from last year because the government has an income insurance scheme to help farmers to mitigate risks from price fluctuation together with the rising price of cassava which increases farmers' incentive to expand planted area of cassava. ***Furthermore, cassava yield tends to rise from previous year*** due to the decrease in Cassava Mosaic Disease and favorable weather. Although some areas in the country were affected by floods and heavy rainfall in wet season with ***the total damaged area around 20,000 hectares***, it is not affected the total production of the country. ***The damaged areas caused by the climate change and global warming situation are approximately 1.25% of the total damaged areas***. The harvesting period of cassava in 2022 is from October 2022 to September 2023.

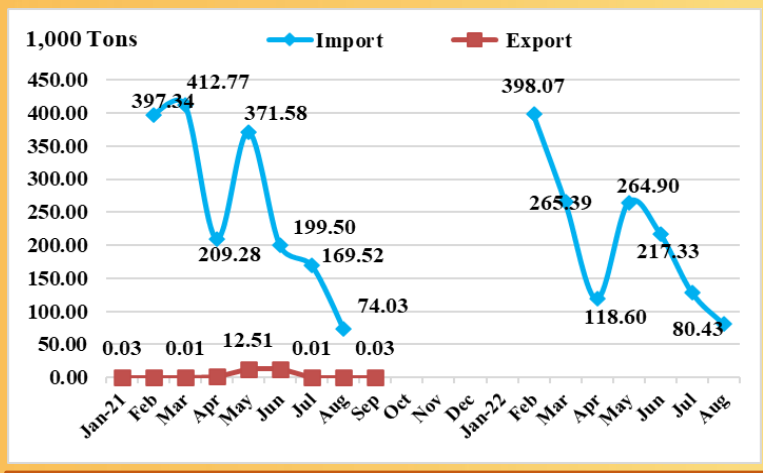

Figure 4: **Monthly quantity of maize import and export in 2021-2022**

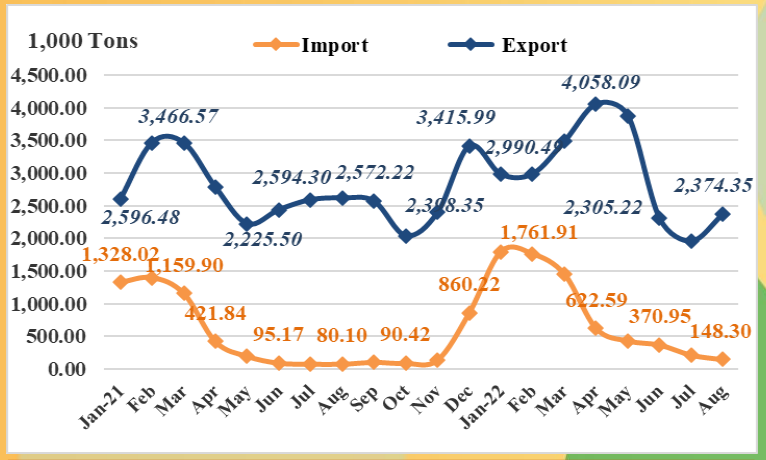

Figure 5: **Monthly quantity of cassava import and export in 2021-2022**

Crop Situation in Vietnam 2022 (P.1/2)

The weather condition, impact of climate change or global warming and COVID-19 on crop production, and trade of Vietnam in 2022 (for all agricultural commodities): The COVID-19 epidemic has not had a significant impact on Vietnam's agricultural, forestry and fishery production and trade in 2022. Vietnam's agricultural, forestry and fishery exports faced difficulties due to the Russia-Ukraine war, causing the prices of raw materials, logistics costs, and inflation in many important export markets of Vietnam to increase. However, the total export value of Vietnam's agriculture, forestry and fishery in 2022 is still likely to grow by about 8.6% compared to 2021 thanks to increased exports in most key product groups and markets. According to the National Center for Hydro-Meteorological Forecasting, this year, cold air is likely to act soon. The Northern provinces may experience colder winter than every year. The central region is likely to face storms with complicated movements and heavy rains in the last months of 2022. The central and southern regions are forecast to receive much higher rainfall than average from October to November 2022.

Rice: Vietnam's dry rice production in 2022 is worse than in 2021 due to decreases in both cultivated area and yield. The cultivated area decreased due to the conversion of land use purposes to urbanization, or to the planting of other crops of higher economic value, etc. Yield decreased because fertilizer and pesticides prices increased, so farmers switched to using homemade organic fertilizers and reducing the amount of synthetic fertilizers. Besides, the weather has been erratic, with heavy rain and flooding in the North Central and Central Coast regions from the end of March until now, and saltwater intrusion at the end of the season in the Mekong Delta, also reduced rice yield. In the last months of the year, the weather forecast is relatively favorable for the development of wet season rice. However, input prices continue to rise is expected to affect wet season rice production. Regarding exports, it is forecasted that rice exports in 2022 will increase in both volume and value. The Russia-Ukraine war reduces the supply of wheat, which promotes an increase in Vietnam's rice exports.

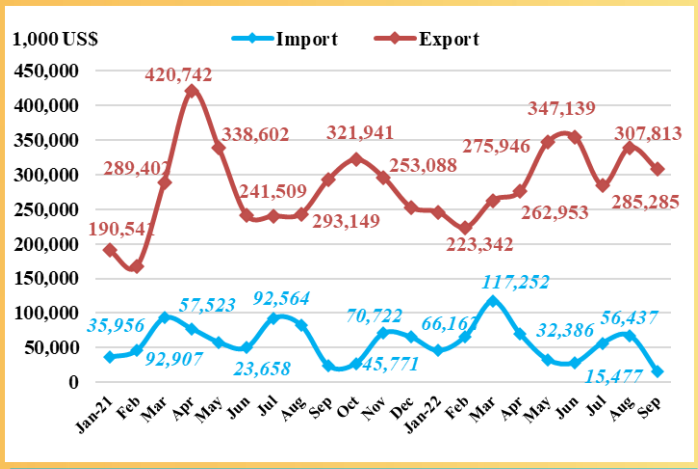

Figure 1: **Monthly value of rice import and export in 2021-2022**

Sugarcane: The serious decrease in the growing area of raw sugarcane is one of the big challenges of Vietnam's sugar industry. Vietnam's sugar industry has weak competitiveness compared with other countries, especially Thailand. Domestic sugarcane businesses are facing many difficulties after the tariff quota barrier on sugar imports from ASEAN was removed due to Vietnam's accession to the ASEAN Trade in Goods Agreement (ATIGA). In the first 9 months of 2022, value of imported sugar of Vietnam is estimated to be 5 times higher than export value.

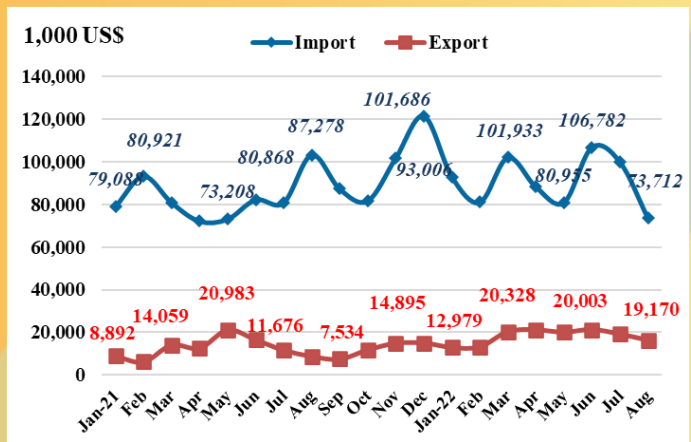

Figure 2: **Monthly value of sugar import and export in 2021-2022**

Crop Situation in Vietnam 2022 (P.2/2)

Maize and soybean: Due to the continuous increase in production input costs, maize and soybean production are not efficient. Therefore, the area under maize and soybean cultivation has continuously decreased over the years. The area of dry-crop maize in 2022 will reach 391.6 thousand hectares, a decrease of 6.1 thousand hectares compared to 2021. In the first 9 months of 2022, Vietnam's import volume of maize and soybeans both decreased, with import volume of maize estimated at 7.05 million tons, a decrease by 8% compared to the same period in 2021; import volume of soybean estimated at 1.3 million tons, a decrease by 16.4% year-on-year in 2021. The import volume of maize and soybean decreased due to increased import prices. In the first 9 months of the year, the import price of maize increased by 25.7% and soybean increased by 21%.

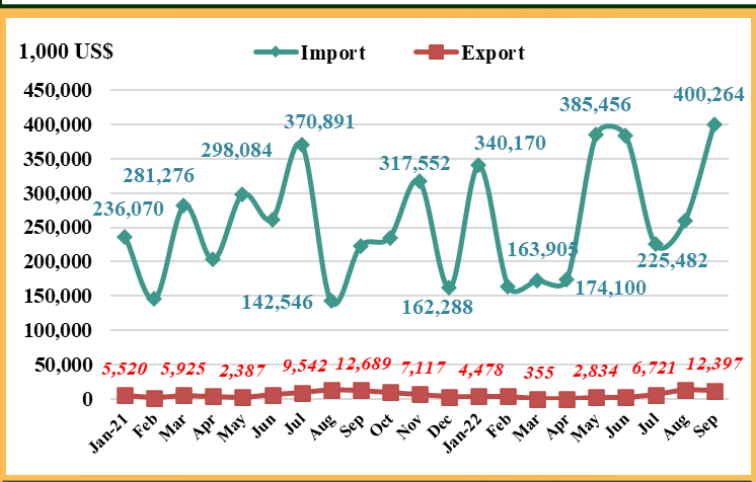

***Figure 3*: Monthly value of maize import and export in 2021-2022**

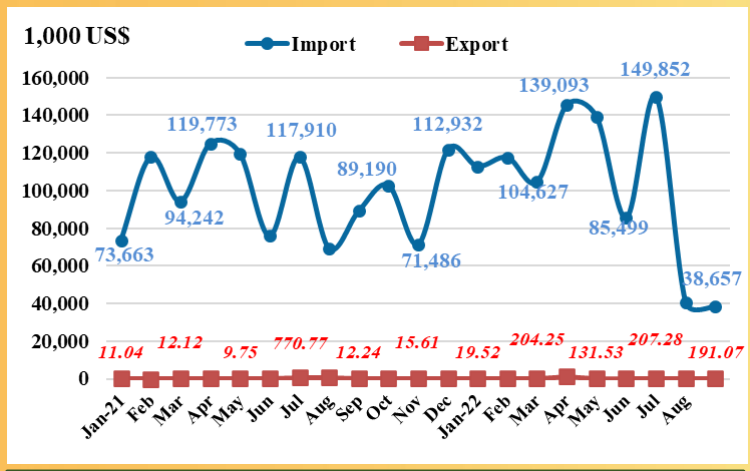

***Figure 4*: Monthly value of soybean import and export in 2021-2022**

Cassava: In the first 9 months of 2022, export value of Vietnam's cassava is estimated at 1.03 billion USD, an increase by 21% compared to the same period of 2021. However, Vietnam's cassava export mostly relies on export to China, which accounts for about 90% of total export value of Vietnam's cassava. Therefore, the cassava industry of Vietnam is very vulnerable to adverse information from the China's market.

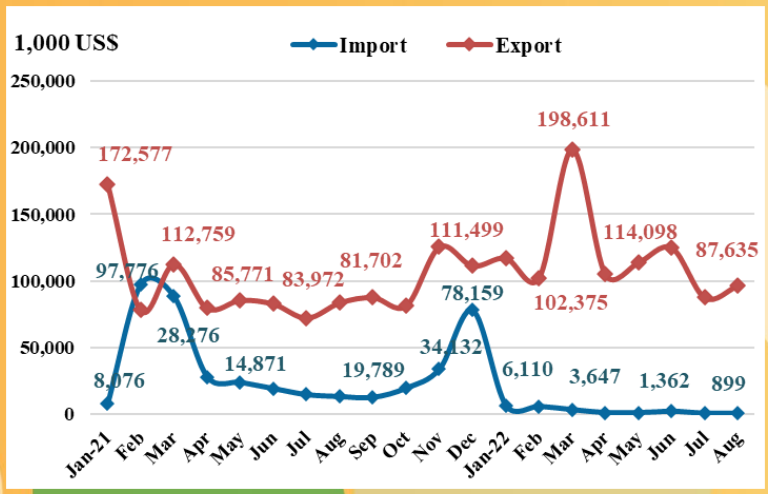

***Figure 5:* Monthly value of cassava import and export in 2021-2022**