



COCONUT TRADE PERFORMANCE AND MARKET TRENDS

(January-December 2022)



TRADE INFORMATION & RELATIONS DIVISION
TRADE & MARKET DEVELOPMENT DEPARTMENT
PHILIPPINE COCONUT AUTHORITY

I. Introduction

Coconut is one of the country's natural endowments. The Philippines is known as the world's 2nd biggest producer of coconut and the biggest exporter of coconut products. The industry has been contributing an average of **35%** share to the **country's total agricultural exports** in the past decades up to the present (Figure 1) and providing sources of livelihood and income to millions of Filipinos. As such, the coconut industry is considered as one of the pillars of the Philippine economy being the source of the country's biggest agricultural exports.

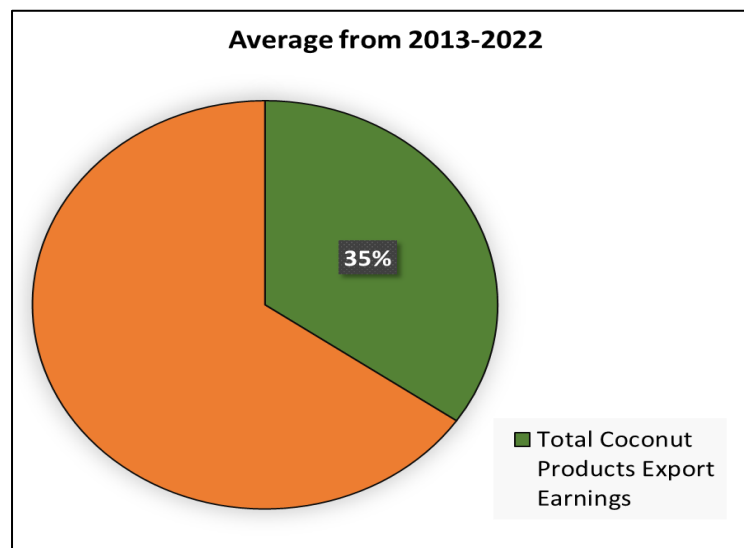


Fig. 1 Average Percent Share of Total Coconut Export Earnings to Total Agro-based Products Export Earnings

II. Industry Performance (Calendar Year 2022)

In CY 2022, coconut products continued to be the country's agricultural export champions. Total **coconut exports earnings** accounted **43%** of the country's total agricultural exports. Among the top 5 agricultural exports of the country, coconut oil is the number one with an export value of USD 1.4 Billion thus consistently remained in the Billionaire's Club category as per export categorization of the Department of Trade and Industry (DTI). The desiccated coconut, activated carbon, and oleo chemicals belong to the Global Leaders category. Coconut water registered as the top earners among the emerging products category.

In CY 2021, two agricultural products were in the Top 10 Philippine exports: coconut oil and banana. **Coconut oil** was the "**highest jumper**" in terms of annual growth rate among the gainers (Table 1). However, in CY 2022, **coconut oil** was the only **agricultural product** that made it to the **Top 10 Philippine exports**, but with a 39.5% negative growth rate (Table 2). This negative growth rate was a result of the **supply glut of vegetable oils** in the global market in the 2nd semester of the year brought about by the lifting of the temporary ban on export of palm oil by Indonesia, and the low demand for rapeseed oil and other vegetable oils in the

European Union (EU), due to the high prices in the early part of the year as triggered by the Russia-Ukraine conflict. Despite the ups and downs in the 2022 market trend, total coconut export earnings still hit the 3 billion US dollar mark. Total export value amounted to **USD 3.22 Billion**.

Table 1. Year-on-Year Growth Rate of Value of Philippine Exports for Top Ten Major Commodity Groups: December 2021^p

| Major Commodity Group | Annual Growth Rate (%) |
|--|------------------------|
| Gainers | |
| 1) Coconut Oil ^{1/} | 135.2 ▲ |
| 2) Other Manufactured Goods | 53.5 ▲ |
| 3) Chemicals | 43.0 ▲ |
| 4) Machinery and Transport Equipment | 19.2 ▲ |
| 5) Electronic Eqpt. and Parts | 16.5 ▲ |
| 6) Other Mineral Products | 4.9 ▲ |
| 7) Electronic Products | 1.8 ▲ |
| Losers | |
| 8) Ignition Wiring Set and Other Wiring Sets Used in Vehicles, Aircrafts and Ships ^{2/} | -24.1 ▼ |
| 9) Metal Components ^{3/} | -5.3 ▼ |
| 10) Bananas (Fresh) | -4.8 ▼ |

1/ - includes crude and refined

2/ - consists only of electrical wiring harness for motor vehicles

3/ - excludes brakes and servo-brakes

p – preliminary

Source: Philippine Statistics Authority

Table 2. Year-on-Year Growth Rate of Value of Philippine Exports for Top Ten Major Commodity Groups: December 2022^p

| Major Commodity Group | Annual Growth Rate (%) |
|--|------------------------|
| Gainers | |
| 1) Cathodes and Sections Of Cathodes, Of Refined Copper | 69.1 ▲ |
| 2) Ignition Wiring Set and Other Wiring Sets Used in Vehicles, Aircrafts and Ships ^{1/} | 24.0 ▲ |
| 3) Other Mineral Products | 13.2 ▲ |
| 4) Machinery and Transport Equipment | 12.4 ▲ |
| Losers | |
| 5) Coconut Oil ^{2/} | -39.5 ▼ |
| 6) Chemicals | -24.7 ▼ |
| 7) Electronic Products | -13.9 ▼ |
| 8) Other Manufactured Goods | -9.8 ▼ |
| 9) Metal Components ^{3/} | -3.0 ▼ |
| 10) Electronic Equipment and Parts | -2.7 ▼ |

1/ - consists only of electrical wiring harness for motor vehicles

2/ - includes crude and refined

3/ - excludes brakes and servo-brakes

p – preliminary

Source: Philippine Statistics Authority

2.1 Top 10 Coconut Exports

- In CY 2022, the country's top 10 coconut exports in terms of volume were: 1) Crude coconut oil (CNO), 2) Copra meal, 3) Refined, bleached & deodorized (RBD) oil, 4) Desiccated coconut (DCN), 5) Coconut water, 6) Cochin oil, 7) Coco peat, 8) Activated carbon, 9) Agglomerated coconut shell charcoal, and 10) Other fractions of coconut oil (Table 3).

Table 3. CY 2022 Top 10 Exported Coconut Products, in terms of volume (MT)

| COMMODITY | Volume (MT) | Market Share (%) <i>in terms of volume</i> | Rank <i>in terms of volume</i> |
|---------------------------------------|-------------|---|-----------------------------------|
| Crude Coconut Oil | 862,038.72 | 35.86% | 1 |
| Copra Meal/Cake | 352,936.54 | 14.68% | 2 |
| RBD Oil | 184,564.23 | 7.68% | 3 |
| Desiccated Coconut | 156,955.79 | 6.53% | 4 |
| Coconut Water | 139,692.34 | 5.81% | 5 |
| Cochin Oil | 138,365.56 | 5.76% | 6 |
| Coco Peat | 90,342.89 | 3.76% | 7 |
| Activated Carbon | 79,726.58 | 3.32% | 8 |
| Coconut Shell Charcoal (Agglomerated) | 78,607.45 | 3.27% | 9 |
| Other fractions of Coconut Oil | 42,044.48 | 1.75% | 10 |

- In terms of value, the top 10 coconut exports were: 1) CNO, 2) DCN, 3) RBD Oil, 4) Cochin oil, 5) Activated Carbon, 6) Coconut water, 7) Virgin coconut oil (VCO), 8) Other fractions of CNO, 9) Copra meal, 10) Coconut Methyl Ester (Table 4).

Table 4. CY 2022 Top 10 Exported Coconut Products (in terms of value, in FOB USD)

| COMMODITY | Value (FOB USD) | Market Share (%) <i>in terms of volume</i> | Rank <i>in terms of volume</i> |
|--------------------------------|-----------------|---|-----------------------------------|
| Crude Coconut Oil | 1,368,532,088 | 35.86% | 1 |
| Desiccated Coconut | 369,974,022 | 6.53% | 2 |
| RBD Oil | 339,898,348 | 7.68% | 3 |
| Cochin Oil | 223,903,256 | 5.76% | 4 |
| Activated Carbon | 154,880,321 | 3.32% | 5 |
| Coconut Water | 122,140,651 | 5.81% | 6 |
| Virgin Coconut Oil | 91,989,937 | 1.05% | 7 |
| Other fractions of Coconut Oil | 80,754,593 | 1.75% | 8 |
| Copra Meal/Cake | 62,878,342 | 14.68% | 9 |
| Coconut Methyl ester | 55,819,910 | 1.17% | 10 |

- As shown in Tables 3 and 4, it can be noted that in terms of volume and value, ranking of coconut products changed. This is due to the fact that there are products with high volume but low value, while others are with high value. In development planning, these figures should be considered particularly in value chain development and management.
- As shown in Table 3, copra meal ranked number 2 in terms of volume but ranked number 9 in terms of value. Activated carbon was number 8 in terms of volume but went up to number 5 in terms of value. CME was not in the top 10 in terms of volume but came in as number 10 in terms of value, dropping the agglomerated coconut shell charcoal.
- Crude coconut oil remained to be the biggest export with The Netherlands as the number 1 export destination followed by Malaysia, United States of America, Italy, and Spain (Figure 2). Other top importing countries of crude coconut oil are Indonesia, Germany, Sri Lanka, China, and Greece.
- In CY 2022, total coconut oil products export comprised 52.50% of the country's total coconut exports and remained as the country's number one export despite the fluctuating price trend.
- In terms of value per metric ton, VCO has the highest value at 3,649 USD/MT, followed by desiccated coconut at 2,357 USD/MT, and activated carbon (AC) at 1,943 USD/MT.

Figure 2. Top 5 Market Destination of Crude Coconut Oil Exports (2018-2022)

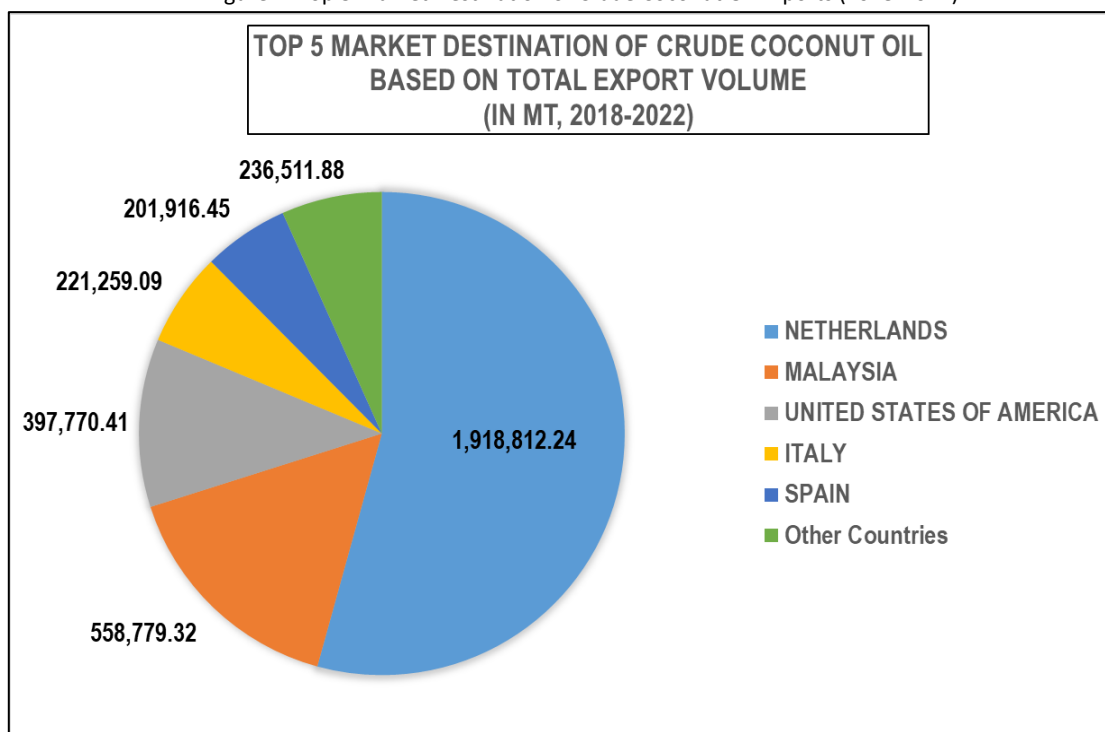


Table 5. Export Volume of Major Coconut Products (2021 vs. 2022)

| COMMODITY | 2021 Volume (MT) | 2022 Volume (MT) | |
|---------------------------------------|---------------------|---------------------|-------------|
| Crude Coconut Oil | 645,032 | 862,039 | ▲ |
| Copra Meal/Cake | 323,805 | 352,937 | ▲ |
| RBD Oil | 122,517 | 184,564 | ▲ |
| Desiccated Coconut | 163,829 | 156,956 | ▼ |
| Coconut Water | 47,502 | 139,692 | ▲ (194.08%) |
| Cochin Oil | 97,784 | 138,366 | ▲ |
| Coco Peat | 111,681 | 90,343 | ▼ |
| Activated Carbon | 73,262 | 79,727 | ▲ |
| Coconut Shell Charcoal (Agglomerated) | 56,212 | 78,607 | ▲ (39.84%) |

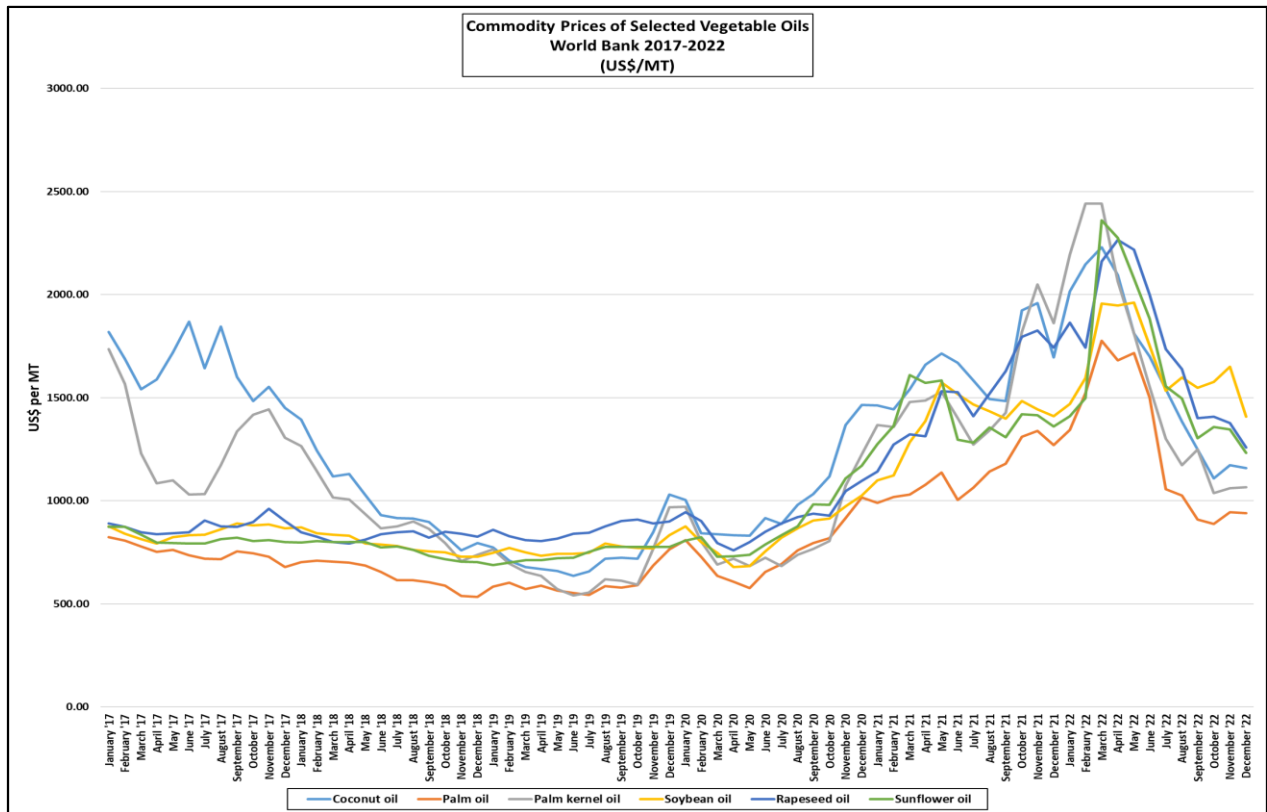
- Among the top 10 coconut exports in 2022, the non-traditional products that showed a leap in export performance compared to 2021 were the **coconut water (194.08%)**, and **agglomerated coconut shell charcoal (39.84%)**.
- For **coconut water**, the major market destinations in CY 2022 were: United States accounting for a total of 81,646.40 MT or 58.45% of the total coconut water exports, followed by United Kingdom (21,020.63 MT), Canada (10,892.03 MT), Netherlands (7,827.44 MT), and Australia (5,938.23 MT).
- For the **agglomerated coconut shell charcoal**, China was the leading buyer with 51,058.83 MT of export or 65.04% of the total export volume, valued at about 29.90 million USD. This is followed by Japan (21,255.50 MT), South Korea (3,133.57 MT), and Turkey (2,741.32 MT).

2.2 Global Supply & Price Trend of Major Vegetable Oils

- In CY 2022, the prices of major vegetable oils in the global market were in a roller coaster trend. It went up sharply to its highest in the 1st quarter, dropped abruptly in the 2nd quarter, and continued to decline up to the last quarter of the year. (Figure 3).
- As shown in Figure 3, in January 2022, prices of vegetable oils started to went up. In March 2022, CNO prices went up to its highest at USD 2230.22/MT. However, palm kernel oil (PKO) price likewise goes up to USD 2441.48/MT (Table 6). In the last five years, CNO price remained in the top, but in CY 2022 it was overtaken by palm kernel oil (PKO) in the 1st quarter and by the soybean oil in the 3rd and 4th quarters.

- The March 2022 price at USD 2230.22/MT was the highest CNO price recorded in the last 5 years. The 2nd highest price of CNO was recorded in June 2017 at USD 1869/MT.

Figure 3. Global Prices of Selected Vegetable Oils (2017-2022)



- The increase of prices of vegetable oils in the 1st quarter was triggered by the **Russia-Ukraine conflict** that caused **disruption of supply** of vegetable oils in the global market. Russia and Ukraine supply 60% of the world's demand for sunflower oil, thus the interrupted shipments because of the war has caused cooking oil prices & other vegetable oils to go up.
- Likewise, contributing to the limited supply of vegetable oils in the global market was Indonesia's **imposition of temporary export ban** of palm oil to ensure domestic supply and neutralize their spiking domestic prices of cooking oil. Palm oil occupies 40% of the total vegetable oils in the global market, thus its high supply can cause an impact to the prices of other vegetable oils.
- On the other hand, when Indonesia lifted the temporary export ban on palm oil, supply of vegetable oils in the global market increased due to the release of huge inventory that coincided with the peak season of palm oil in August 2022. This resulted to the **sustained decline of vegetable oil prices** in the 2nd semester of CY 2022.

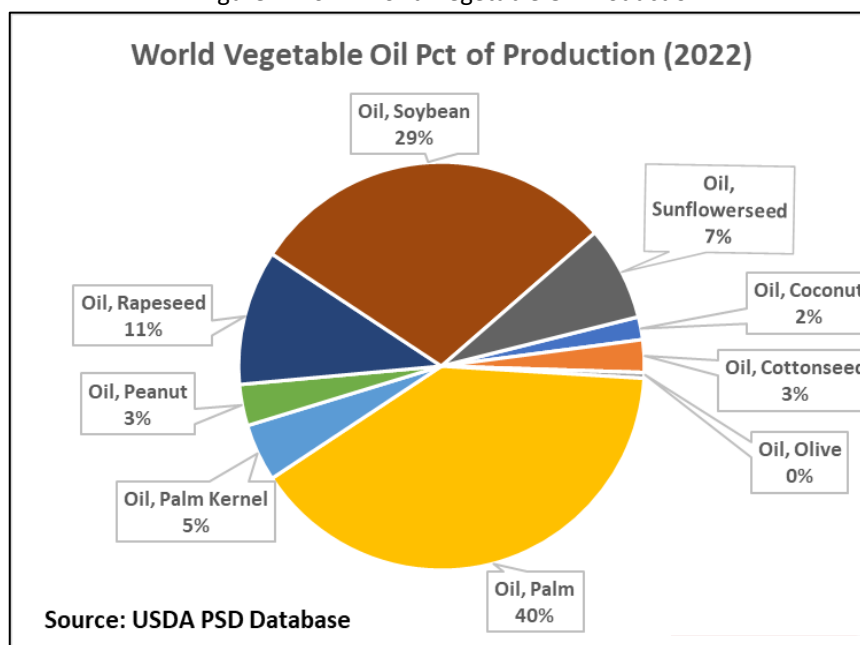
Table 6. World Bank Monthly Vegetable Oil Price Monitor (2020-2022)

| World Bank Commodity Price Data (The Pink Sheet) | | | | | | | |
|---|---------------|-------------|----------|-----------------|-------------|--------------|---------------|
| monthly prices in nominal US dollars, 1960 to present | | | | | | | |
| (monthly series are available only in nominal US dollars) | | | | | | | |
| | | Coconut oil | Palm oil | Palm kernel oil | Soybean oil | Rapeseed oil | Sunflower oil |
| | | (\$/mt) | (\$/mt) | (\$/mt) | (\$/mt) | (\$/mt) | (\$/mt) |
| 2020M01 | January '20 | 1003.72 | 810.07 | 970.53 | 875.64 | 945.39 | 806.91 |
| 2020M02 | February '20 | 844.12 | 728.81 | 801.84 | 800.41 | 902.34 | 823.00 |
| 2020M03 | March '20 | 837.72 | 636.25 | 691.04 | 747.80 | 796.67 | 730.00 |
| 2020M04 | April '20 | 834.51 | 608.88 | 720.69 | 679.98 | 758.96 | 732.10 |
| 2020M05 | May '20 | 832.33 | 576.56 | 684.95 | 684.78 | 799.83 | 738.26 |
| 2020M06 | June '20 | 916.38 | 656.49 | 724.62 | 755.71 | 850.98 | 788.36 |
| 2020M07 | July '20 | 888.31 | 694.16 | 683.93 | 821.11 | 890.21 | 833.17 |
| 2020M08 | August '20 | 981.30 | 760.30 | 739.17 | 866.94 | 921.55 | 877.14 |
| 2020M09 | September '20 | 1034.18 | 796.22 | 767.84 | 905.86 | 938.14 | 982.38 |
| 2020M10 | October '20 | 1118.36 | 819.27 | 805.91 | 914.77 | 927.71 | 981.40 |
| 2020M11 | November '20 | 1368.95 | 917.81 | 1073.48 | 973.88 | 1047.78 | 1109.11 |
| 2020M12 | December '20 | 1464.96 | 1016.37 | 1224.87 | 1026.20 | 1097.63 | 1170.02 |
| 2021M01 | January '21 | 1463.07 | 990.27 | 1368.31 | 1098.67 | 1141.24 | 1276.12 |
| 2021M02 | February '21 | 1444.50 | 1019.86 | 1359.50 | 1123.50 | 1272.13 | 1362.57 |
| 2021M03 | March '21 | 1540.65 | 1030.48 | 1478.59 | 1284.81 | 1321.88 | 1611.11 |
| 2021M04 | April '21 | 1659.64 | 1078.05 | 1487.14 | 1386.35 | 1312.33 | 1572.80 |
| 2021M05 | May '21 | 1715.24 | 1136.46 | 1530.50 | 1574.67 | 1531.38 | 1584.59 |
| 2021M06 | June '21 | 1670.68 | 1004.42 | 1400.45 | 1518.16 | 1527.59 | 1296.75 |
| 2021M07 | July '21 | 1584.09 | 1062.99 | 1274.09 | 1468.34 | 1410.08 | 1282.01 |
| 2021M08 | August '21 | 1493.64 | 1141.82 | 1341.14 | 1433.94 | 1519.19 | 1355.69 |
| 2021M09 | September '21 | 1485.00 | 1181.38 | 1427.27 | 1398.75 | 1629.14 | 1309.52 |
| 2021M10 | October '21 | 1922.86 | 1310.25 | 1818.33 | 1483.52 | 1795.17 | 1420.53 |
| 2021M11 | November '21 | 1960.68 | 1340.65 | 2050.23 | 1442.96 | 1825.34 | 1415.62 |
| 2021M12 | December '21 | 1695.71 | 1270.29 | 1861.43 | 1411.21 | 1742.50 | 1361.83 |
| 2022M01 | January '22 | 2016.14 | 1344.79 | 2195.79 | 1469.56 | 1865.36 | 1411.73 |
| 2022M02 | February '22 | 2147.89 | 1522.36 | 2442.63 | 1595.74 | 1744.20 | 1499.12 |
| 2022M03 | March '22 | 2230.22 | 1776.96 | 2441.48 | 1956.88 | 2162.30 | 2361.13 |
| 2022M04 | April '22 | 2094.61 | 1682.74 | 2064.31 | 1947.51 | 2266.17 | 2275.76 |
| 2022M05 | May '22 | 1813.33 | 1716.92 | 1811.19 | 1962.88 | 2218.45 | 2079.30 |
| 2022M06 | June '22 | 1700.50 | 1501.10 | 1554.50 | 1751.76 | 2000.53 | 1884.59 |
| 2022M07 | July '22 | 1540.53 | 1056.64 | 1301.05 | 1533.40 | 1737.34 | 1556.87 |
| 2022M08 | August '22 | 1384.57 | 1025.95 | 1173.04 | 1598.78 | 1638.85 | 1496.22 |
| 2022M09 | September '22 | 1248.10 | 909.32 | 1249.29 | 1548.32 | 1402.02 | 1304.75 |
| 2022M10 | October '22 | 1108.10 | 888.99 | 1038.81 | 1575.90 | 1408.01 | 1359.15 |
| 2022M11 | November '22 | 1173.25 | 945.74 | 1061.58 | 1651.60 | 1377.58 | 1347.28 |
| 2022M12 | December '22 | 1158.41 | 940.39 | 1067.05 | 1409.24 | 1259.95 | 1233.80 |

- Adding to the increase in supply of vegetable oils in the global market was the **rapeseed oil**. High inventory was observed as there was a **tepid demand from the biodiesel sector**, primarily in the EU, due to the very high prices in the 1st semester.
- Furthermore, in the last quarter of CY 2022, the slowing of the **Russia-Ukraine conflict** and **better global supply** of vegetable oils resulted to the **sustained decline of global prices**.

- CNO is the second most expensive vegetable oil next to olive oil. It is considered a premium oil and superfood in the global market because of its lauric acid content. However, CNO occupies only about 2% of the total vegetable oil supply in the global market. Hence, it is very much affected by the supply and demand situation of the big vegetable oils.

Figure 4. 2022 World Vegetable Oil Production



- Soybean oil, USA's leading vegetable oil, accounts the 2nd biggest share (29%) of the overall global vegetable oil supply. Though its price per metric ton is not as high as CNO and PKO, its price was almost consistent in the last 5 years. This is because, the biggest users of soybean oil are the different member states of the US and the Americas.
- Rapeseed oil, Europe's leading vegetable oil, is the 3rd biggest among vegetable oils in the global market supply accounting for 11% share. Same with soybean oil, its price is not high as compared to CNO and PKO but is consistent. This is due to the fact that the biggest users of rapeseed oil are the EU member countries.

2.3 Export Market and Demand Trend

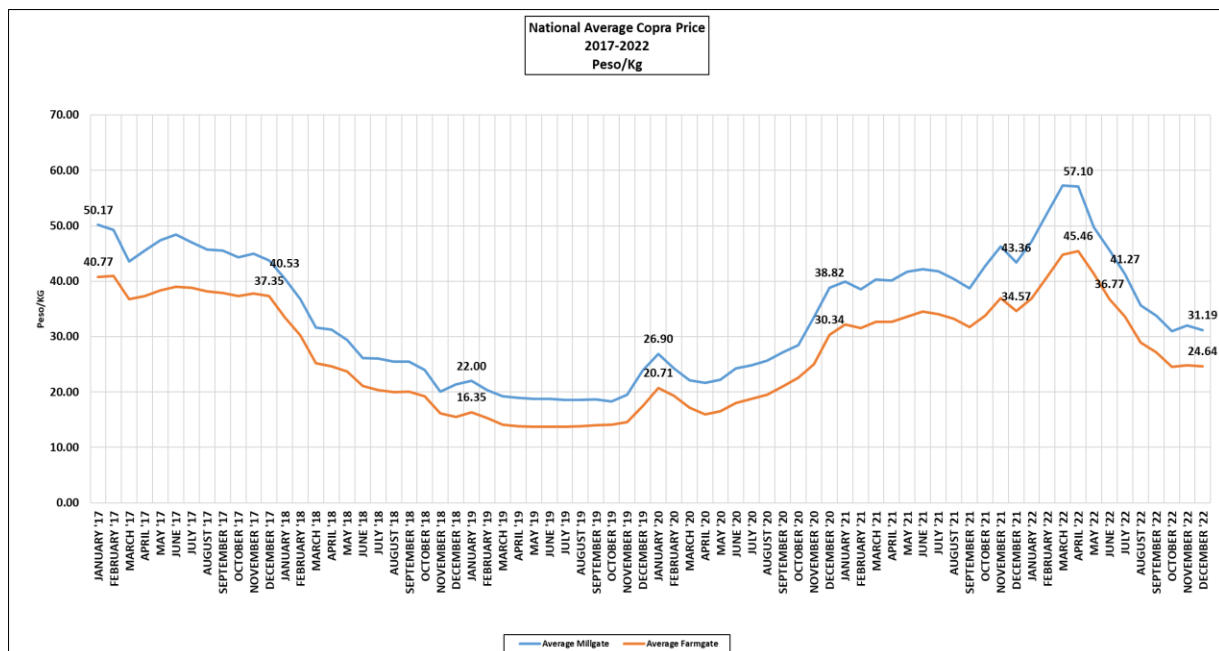
- In 2022, the global coconut oil market was estimated to be valued at USD 5.88 billion. It is projected to reach USD 7.4 billion by 2027, recording a CAGR of 5.5% during the forecast period.

- The US market is expected to continue to increase, being the top country by biofuels consumption in the world. The top 5 biofuel consuming countries include Brazil, Indonesia, China, and France.
- According to Global Trade, the Authority for US companies doing business globally, and the Globe Newswire, the **growing demand for plant-based food products** in developed and developing countries is the **primary growth driver** of the global market of coconut products. The increasing consumer spending on functional food and beverage as well as the rising health consciousness of people in terms of proper nourishment greatly contributed in the increase in demand for virgin coconut oil and other coconut products.
- For coconut food products, the COVID-19 pandemic has brought both positive and negative effects. Being natural products, the demand for coconut products had spiked up. However, the supply of raw materials, processing/manufacturing of products, and delivery of the final products to the market channels were very much affected with the border lockdowns and quarantine protocols due to the pandemic.
- For non-food products, the **biofuels sector** and **other non-food applications** of vegetable oils are the other major growth drivers of the plant-based oil industry.

2.4 Domestic Copra Price Trend

- The copra price trend in CY 2022 was extremely irregular. In the 1st quarter of the year, the copra price goes up to its highest in the last 5 years, it dropped abruptly in the 2nd quarter and continued to decline till the end of the year (Figure 5).

Figure 5. National Monthly Copra Price Average (CY 2017-2022)



- In March 2022, highest average prices were observed with farmgate price at P45.56/kg and millgate prices at P57.10/kg. This trend was supposed to be a good news for the coconut farmers. However, this increase in prices was triggered by the limited supply as an impact to the Russia-Ukraine conflict which started in February 2022 that caused supply disruption.
- In May 2022, farmgate price decreased to P36.77/kg and millgate price at 41.27/kg, and ended in December at P24.64/kg farmgate price and millgate price at P31.19/kg.
- The sharp decline in prices was due to the improved supply of vegetable oils in the global market which causes a domino effect to the domestic prices. The pressure was basically due to the **peak production season for palm oil** in Indonesia and Malaysia. Palm oil accounts 40% of the global vegetable oils supply, thus, it greatly affects the prices of other vegetable oils that likewise causes the decrease in domestic prices of copra and vegetable oils.
- The latest copra price in 2022 however is still higher as compared to the lowest copra prices experienced in December 2018 with farmgate price at P16.35/kg and millgate price at P22.0/kg.

2.5 Coconut Product Imports

- In CY 2022, oleo chemical products such as shampoo, refined glycerin, toilet/bath soap, soap chips, laundry soap, industrial fatty alcohol, and coconut fatty acids were among the top coconut products being imported by the country. These make up about 64.29% of the total import volume. Other major coconut products imported were: (1) **copra**, (2) **activated carbon**, and (3) **coconut milk, in liquid form** (Table 7).
- **Imported copra** totaled to 50,829.71 MT, valued at 37.33 million USD. This total volume is about 30.57% of the total volume of imported coconut products by the Philippines in CY 2022. Major sources were Papua New Guinea, Vanuatu, Solomon Islands, and Indonesia. This recorded importation of copra is 72.27% higher than in 2021 (29,505.52 MT). In the last 5 years, the biggest importation of copra was observed in 2018 with a total volume of 105,006.10 MT valued at 60.90 million USD.
- The above volume of copra importation is not yet a threat to our local coconut industry as this augments the country's production of coconut oil. Our current level of coconut production only supplies 55% of the capacities of the existing oil mills. However, the industry should be alarmed by the unverified reports of illegal entry of copra through the country's backdoor as this will have an impact on the local copra prices as well as on copra production due to pest risks.
- **Activated Carbon (AC)** is another growing import of the country. Despite being known as the biggest exporter of activated carbon, the country is also importing AC from China, India,

Vietnam, Taiwan, and Netherlands. For CY 2022, the country has imported a total of 3,173.20 MT of AC valued at about 2.79 million USD.

- With the above trend, it is obvious that AC really has a market locally and abroad. The awkward scenario is that we import AC from non-coconut-producing countries such as China, Netherlands and Taiwan. It is important to note that the country is also supplying raw charcoal to China. The industry therefore needs to assess the overall utilization of coconut shell and if possible **regulate the exportation of raw charcoal**.
- **Coconut milk, in liquid form** is another new product that is creating a mark in the local market. However, available brands in the supermarkets are generally imported from Thailand, Singapore, Indonesia and Vietnam. For CY 2022, the volume of importation reached 2,722.94 MT, amounting to about 1.85 million USD. This is another area of concern that the industry should look into since the country has the capacity to produce this product.

Table 7. CY 2022 Top 10 Imported Coconut Products, in terms of volume (MT)

| COMMODITY | Volume (MT) | Market Share (%) <i>in terms of volume</i> | Rank <i>in terms of volume</i> |
|------------------------------|-------------|---|-----------------------------------|
| Copra | 50,829.71 | 30.57% | 1 |
| Shampoo | 47,501.63 | 28.57% | 2 |
| Glycerine, refined | 23,068.66 | 13.87% | 3 |
| Toilet/Bath soap | 13,515.87 | 8.13% | 4 |
| Soap Chips | 9,390.28 | 5.65% | 5 |
| Laundry Soap | 6,458.81 | 3.88% | 6 |
| Fatty Alcohol, Industrial | 5,309.06 | 3.19% | 7 |
| Activated Carbon | 3,173.20 | 1.91% | 8 |
| Coconut milk, in liquid form | 2,722.94 | 1.64% | 9 |
| Coconut Fatty acids | 1,651.51 | 0.99% | 10 |

III. Observation and Analysis:

In the period 2018- 2022, the Philippines continued to dominate the production and trade of coconut oil and other coconut products. Export volume of the majority of the coconut products maintained their market prominence, even the very common coconut vinegar and coconut milk. Coconut has definitely made its mark in the specialty food world. However, the global market for coconut, particularly the coconut oil, is vulnerable to industrial pressure due to the increased availability of other sources which are comparatively cheaper than coconut oil, namely: palm oil, soybean oil, sunflower oil, etc. As coconut oil is comprised of lauric acid

and myristic acid, it is inevitably considered as an important item for industrial applications and often sold with a huge margin.

The country's current position as the world's biggest exporter of coconut products is commendable. However, its vast potential to earn more from value-added coconut products has never been fully tapped. The country remained to be dependent in exporting raw materials particularly **crude coconut oil** instead of high value-added products. These made the industry vulnerable to global price shocks.

Furthermore, despite the long product strand of coconut, the country's commercial utilization of existing raw materials from coconut is still minimal because of the numerous issues bugging the full development of the industry. Apart from the sustained low production level and low product quality due to non-diligence to compliance to quality and food safety standards, the limited variety of value-added coconut products for marketing particularly at the village level, is also faced by the industry. This results to low market competitiveness of the industry and low income of farmers as a consequence.

Other major problems contributing to the stagnation of the industry are the **unorganized supply chain, fragmented efforts of the value chain actors** both in the government and private sector, **low domestic utilization**, investments & support programs are **not market-driven** or **demand-based, compliance to quality standards & market requirements** is not **strictly observed**, poor farm to market roads, low budget allocation and fragmented initiatives on research and development (R&D), and **weak extension services** particularly in the post-harvest and primary processing stages.

Another challenge is the **unregulated palm oil importation** that weakened the domestic market of coconut products.

As production of coconut oil and other coconut products are low in regions such as Europe and the Americas, with the increasing demand, prices are also expected to increase. However, as coconut oil occupies only 2% of the total vegetable oil supply in the world market, it is expected that coconut oil price will continuously be affected by the other vegetable oils and competing products, which will have a domino effect to the domestic prices of copra and other coconut products.

With the country's current utilization of coconut, there is still a big room for development to attain the full potential of the coconut industry. The country is producing an average of 14 billion nuts annually but the commercial utilization of other coconut water, shell and husks remains minimal. Commercial utilization of coconut water and husks only posted at 8.5% and 42% for coconut shell.

The increasing exports of **raw** and **agglomerated coconut shell charcoal** is supposed to be a good opportunity for the coconut farmers. But considering that activated carbon is one of the country's top traditional exports, the rising exportation of raw charcoal needs to be studied. Looking at the increasing volume of export of raw coconut shell charcoal and comparing the average price of **activated carbon** at **1,625.89 USD/MT** with **coconut shell charcoal** at **449.27**

USD/MT, regulating the export of raw charcoal may be considered and the manufacturing of activated carbon for export and domestic utilization shall be supported.

The global demand for activated carbon has been steadily growing. This is due to the fact that governments of different countries have imposed **stringent air & water pollution and waste treatment norms** due to the increasing levels of pollution across the globe. This boosted the demand for air and water purification plants, which in turn, drive the coconut activated carbon market to increase because of its efficient performance and its renewable source of raw material i.e. coconut shell. In the domestic front, the coconut oil refining sector and the mining sector are among the good markets for activated carbon.

Activated Carbon is one of the country's top traditional coconut exports. Major market destinations are: Japan, United States of America, Sri Lanka, Germany, and China. In 2022, total AC exports volume amounted to 79,726.59 MT with an equivalent value of USD 154,880,321. But despite these export receipts, activated carbon remains an unknown coconut product to many coconut farmers, development planners and even the policy makers.

The rising coco sap-based industry is another growth area of the coconut industry. However, as this is generally a smallholder-based industry, proper planning in locating the processing facilities should be done to minimize the cost of consolidation and other production costs to make the industry price competitive.

8. RECOMMENDATIONS:

Looking at the market trend in the global market that makes the coconut industry vulnerable to changes, there is a need to shield the industry from its vulnerability to global price shocks. This is also to shield our farmers from the impact of the low copra prices if prices of vegetable oils in the global market go down. **Intensifying value-addition** and **improving material balance utilization** of available resources as well as **expanding domestic utilization** of coconut products should be promoted and supported with policies and development programs. Expanding domestic utilization will strengthen the market base of the industry. As the Philippines is the biggest supplier of coconut products in the global market, lowering the supply of major coconut products in the global market will trigger the increase of prices of coconut products in the export market.

8.1 Intensify value-addition of coconut products

- Conduct complete inventory of the existing business enterprises and government funded projects on VCO, coco sugar and coco coir processing to know their location, status of operation and production capacities. With the right information, development strategies and technical assistance can be provided to intensify the production of value-added products in the short term, monitor the product quality, consolidate and link the products to relevant markets.

- Identify the existing non-operational projects of PCA (e.g. big coir processing facilities, tufting facility in Javier, Leyte) and offer the operation and management of the facility to interested private entities while developing the capacity of the cooperative/farmers association who will eventually manage the operation of the facility.
- Maximize the utilization of the waste products in copra production such as coconut water, husk and shell and convert them into marketable products.
- Available proven technologies and researches on coconut water utilization should be gathered and put into commercialization to utilize the coconut water that are wasted during copra production. With the Memorandum Circular issued by the Department of Education (DepED) banning soft drinks and sugar-loaded artificial juices in school canteens and nearby food establishments, coconut water either plain or flavored, can be a good substitute. Considering the number of schools nationwide, where almost every barangay has at least one elementary school, capturing this market alone is already a big leap to the income level of the coconut farmers.
- Utilization of coconut shell for charcoal or activated carbon should be promoted as demand for these two products is increasing. With the increasing prices of liquefied petroleum gas (LPG), and the campaign of the government to use renewable energies, utilization of coconut shell has a big potential.
- Promote the **manufacturing of coconut milk in liquid form**. Local demand is increasing hence **importation** of this product is now **increasing**. The country has the capacity to produce this product, why import coconut milk when this can be easily produced in the country? The PCA-Food Product Development Division should work closely with the Food and Nutrition Research Institute (FNRI) and other units of DOST to fast track the commercial production of coconut milk for cooking and as beverage to be available for village level production.
- Promote the processing of crude coconut oil into coconut methyl ester (CME) and other oleochemicals. Based on the export data, CME and refined glycerin are among the promising products in the export market which are both high-value products. Glycerin is a by-product in the production of CME. Based on the import data, glycerin is among the major items imported by the country. If the Philippines will not use CME for biofuels, then let us develop our CME industry for the export market. As glycerin is a twin product of CME, in the process, we can also reduce our importation of refined glycerin from Indonesia, Malaysia and China.

8.2 Intensify information campaign on the health and wellness benefits of coconut to increase domestic utilization of coconut food products.

- Advertise in TV, airport and seaport terminals to promote the health benefits of coconut oil versus other vegetable oils. Tap popular personalities like multi-awarded athletes, beauty queens or popular actors/actresses as product endorsers.
- Prepare and disseminate simple and localized information materials on the different coconut products and their health benefits.
- Identify model farms/village-level processing centers for cross visits and learning sites.

8.3 Arrest the volatility of copra prices through consolidation & clustering

- Intensify farm consolidation/clustering – PCA has to balance its focus and give greater attention in intensifying the implementation of the Direct Copra Marketing (DCM) system first instead of solely focusing on basic production programs/activities like coconut planting and replanting. PCA field personnel should closely monitor the DCM implementation and give due attention to clustering of farmers so that harvesting can be programmed. Along the process, **copra quality improvement** should also be managed and monitored to be compliant to the EU regulation on MOSH-MOAH and aflatoxin limits to sustain our biggest market of coconut oil.
- PCA to provide assistance in establishing standard copra drying facilities through the CFIDP Shared Facility Component. Field offices should also be provided with the appropriate copra moisture tester as provided under PCA Administrative Order No. 02 s. 2003 to protect the farmers from unsupported price discounting based on moisture content.
- PCA to regulate and set the floor price using its regulatory powers as provided under Section 2 of PD 1644 s. 1979 for the oil mills to buy the copra to at least P25-30/kilo.
- Other option is for the oil mills to buy the copra at current market price and PCA to subsidize the cost of production of at least P15-18/kg through the “Cash for Work Program” instead of directly providing social amelioration.

8.4 PCA to work with private investors on the following:

- PCA to work on the establishment of **oil depot** in the country through the Public-Private Partnership Scheme so that the country can do market positioning of products and promote value-adding based on market demand.
- Promote and support the commercial production of **cocoboards** (like the hardiflex) for housing materials & furniture making, **coco pallets** for shipping of goods, and **coco coolers** as alternative to styro boxes from coconut husks.

- Promote the production of activated carbon for “shisha” and export of coconets and other bio-engineering materials to Saudi Arabia and other Middle East countries.
- Support the research on the utilization of coconut water as **cellulosic materials** for the production of **medical gloves** and **microbial cellulose wound dressing** to minimize the excruciating *pain* suffered by *burn patients*.

8.5 Pro-active engagement in the oil palm industry

- As palm oil is the strongest competitor and dominating the global market of vegetable oils, PCA needs to be pro-active in managing the oil palm industry as both import and export of palm oil products has an impact to the local coconut industry.
- Based on data, the country is importing RBD palm kernel oil (PKO) and exporting crude palm oil. Why we need to import PKO when we have a lot of coconut oil? PKO and CNO have almost the same price and lauric oil content. This has to be carefully looked into to sustain both the coconut and local oil palm industry.

8.6 Intensify enforcement and strictly monitor the compliance to regulatory policies, food safety standards, and non-tariff trade measures

- As coconut is an internationally-traded commodity and the Philippine coconut industry is an export-oriented industry, our coconut products are subject to the regulatory policies, quality standards, and non-tariff measures imposed by our trading partner countries. As such, **compliance to market standards** should be enforced to sustain the market of our products.
- **Compliance to required quality and sustainability certifications** such as Good Agricultural Practice (GAP), Good Manufacturing Practice (GMP), Good Warehousing Practice (GWP), Organic, Global Standards Sustainability Certification, etc. should be supported.
- **Improvement of copra quality** to address the MOSH-MOAH contamination should also be prioritized and given due attention. White copra production should be promoted and necessary policy support should be provided.
- **Traceability system** should be established in all aspects of the coconut value chain. The use of available technologies like Blockchain Technology and others should be adopted.