



Palm Oil Futures

Overview

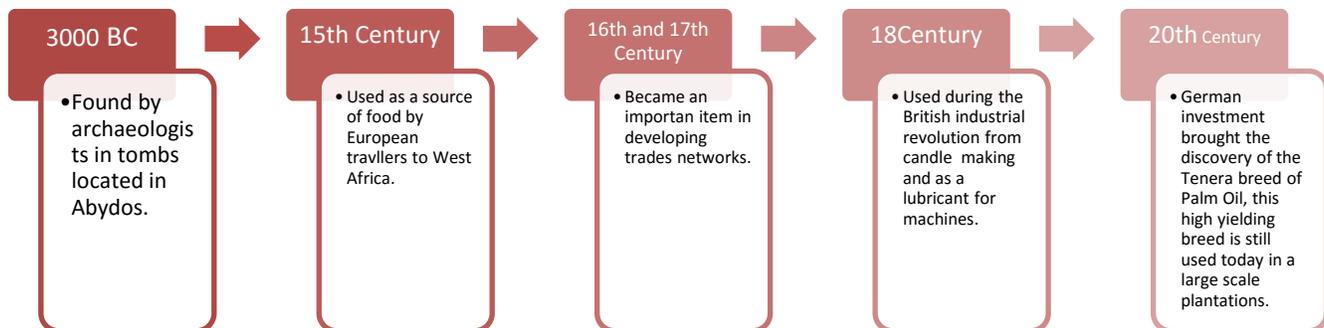
Palm Oil is one of the most commonly used edible vegetable oil due the versatile amount of products that are derived from it, as well as its a common ingredient in a wide range of modern products such as Biofuels, processed foods as it's a healthy substitute for saturated fats, detergents and cosmetics.

Palm Oil trees also known as *Elaeis Guineensis* grow 10 degrees near the equator in areas rich with rain forests and require ten times less land to produce oil making it the most efficient sources of vegetable oil.

The three major commodities that are made from Palm Oil trees are:

1. Crude Palm Oil, which is the extract from the flesh of the fresh fruit.
2. Palm Kernel Oil, which is the extract from crushed nut of the fresh fruit.
3. Palm Kernel Expeller, is the pulp left over from crushing the nut of the fresh fruit.

The use of Palm Oil can be dated back to 3000BC till the very present day.



Palm Oil Future Contract Details

- Futures symbol: **FCPO**.
- Exchange: **Bursa Malaysia Derivatives (BMD)**
- Contract size: **25 metric tons**.
- Tick size: **1RM per ton**.
- Tick Value: **25RM per contract**.
- Tradable months: **Spot month and the next 5 succeeding months, and thereafter, alternate months up to 24 months ahead.**
- Trading hours:
 - Frist trading session: 10:30 A.M to 12:30 P.M Malaysian time.**
 - Second trading session: 3:00 P.M to 6:00 P.M Malaysian time.**
- Price limit: **10% limit above or below the previous day settlement price.**
- Positions limit:
 - 800 contracts net long or short for the spot month.**
 - 10,000 contracts net long or short from any tradable month expect the spot month.**
 - 15,000 contracts net long or short for all months combined.**

Palm Oil Market Fundamentals

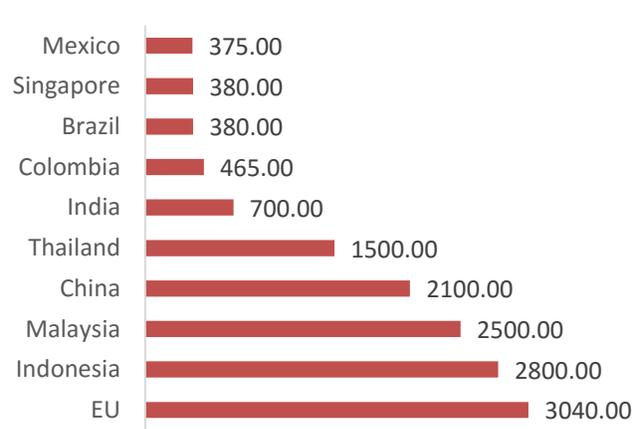
The Palm Oil market is dominated by to Indonesia and Malaysia which they make up about 85% of the Palm Oil market, Indonesia and Malaysia produces near ten times more than their nearest competitor however they also are the second and the third largest consumers for Palm Oil falling behind the European Union, they only consumer almost 15% of their consumption indicating that they have large surplus which supports their ability for exporting Palm Oil.

The below data are the estimates of the US Department of agriculture for the year 2016.

■ Production Volume (1000 Metric Tons) 2016



■ Consumption Volume (1000 Metric Tons) 2016



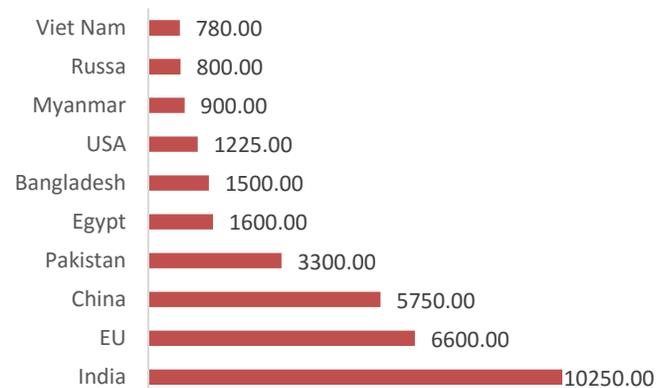
Exports from Indonesia and Malaysia are extremely higher than their closest competitor which is supported by their production surplus as we mentioned before, the largest Palm Oil imports are countries with largest population count.

Moreover the top ten Palm Oil importers are countries that are dependent on domestic consumption, as the Palm Oil is an efficient source of oil used in various types of industries including food industry.

■ Exports Volume (1000 Metric Tons) 2016

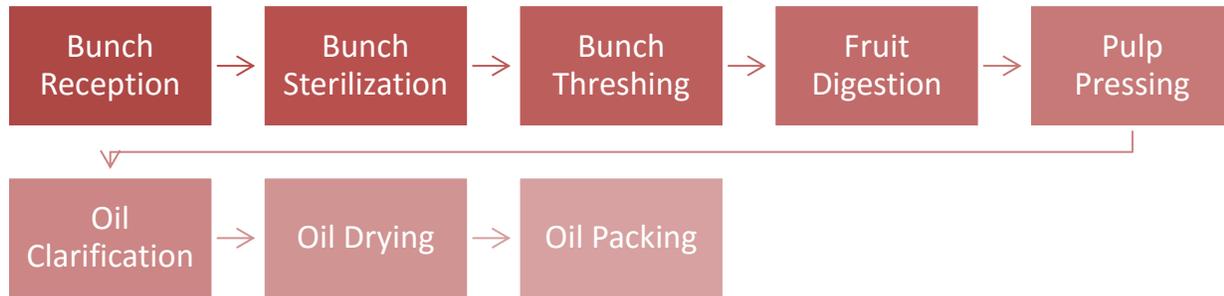


■ Imports Volume (1000 Metric Tons) 2016



Palm Oil Production Process

Generally the process for producing the Palm Oil goes through planning and development of plantations and harvesting before its main production stages which are:



- **Bunch Reception**
During the process this fruits are gathered either as bunches or loose fruit into wooden boxes then they are weighted.
- **Bunch Sterilization**
High temperature pressurized steam used to sterilize the loose fruits or sometimes it's called cooking when using hot water inserted of steam.
- **Bunch Threshing**
Fruits are removes for the fruit bunch either through a manual or mechanized system depending on the scale of the operations.
- **Fruit Digestion**
The oil is released from the fruit throughout breaking down the oil bearing cells by pounding the fruit itself at a high temperature.
- **Pulp Pressing**
However this process have multiple ways to implant it, it's simply a plunger applying pressure on the fruit in a cage to helping the oil to escape and to separate the nut from the fruit.
- **Oil Clarification**
Adding hot water to the pressing mixture generally at a ratio of 3:1 then it's boiled and settled causing the heavy solids to fall to the bottom and the oil clear oil till rise to the top.
- **Oil Drying**
Final the oil is left to in tanker to dry.

As well as there is one more process which is derived from the main process that is used in extracting of the Palm Oil Kernel



Palm Oil Biofuels

As the world continues to follow a trend of converting towards alternative energy, Palm Oil has attracted researchers and scientist attention as its cost efficient and easy to work with source for Biodiesel and biogas, however Palm Oil Biofuels take a small fraction of the Biofuels market.



Despite the Palm Oil Biofuels makes only a small fraction of the biofuels market, their prices are well correlated and move in tandem as shown in the previous charts.

Major Factors That Affect the Production of Palm Oil

However the Palm Oil market is dominated by two key producers which they have a strong impact on the Palm Oil prices, there are still various factors that affect the prices of Palm Oil futures.

- **Supply and Demand**

As we shown above in the graphs that the European Union, China and India are among the largest importer of Palm Oil thus any issue in their supply would lead to an oversupply which will pressure the Palm Oil price down, on the other hand any issue related to the production of the two largest Palm Oil exporters Malaysia and Thailand would lead to supply shortage putting and upward pressure on the Palm Oil prices.
- **Price and availability of Competing Vegetable Oils**

Prices and availability of substitute vegetable oils such as Soymeal Oil, Corn Oil and Sunflower Oil all play as an important factor in piercing of Palm Oil, as any mispricing or lack of availability will of substitute vegetable oils steer the demand towards the Palm Oil pushing up its prices.
- **Weather Patterns**

Weather in an important factor of the supply of the Palm Oil, Palm trees grow under heavy rain in topical countries near the equator, thus dry weather will impact the Palm Oil production decreasing its supply and affecting its prices upward.
- **Import Policies of Importing Countries**

More... laws in regards of importing Palm Oil from regulating authorities making the process of importing Palm Oil smother will increase the demand and the price upwards, on the other hand stricter law in regards of importing Palm Oil will make the importing process more difficult thus cutting down demand and pushing the price downward.
- **Taxation and Import Customs**

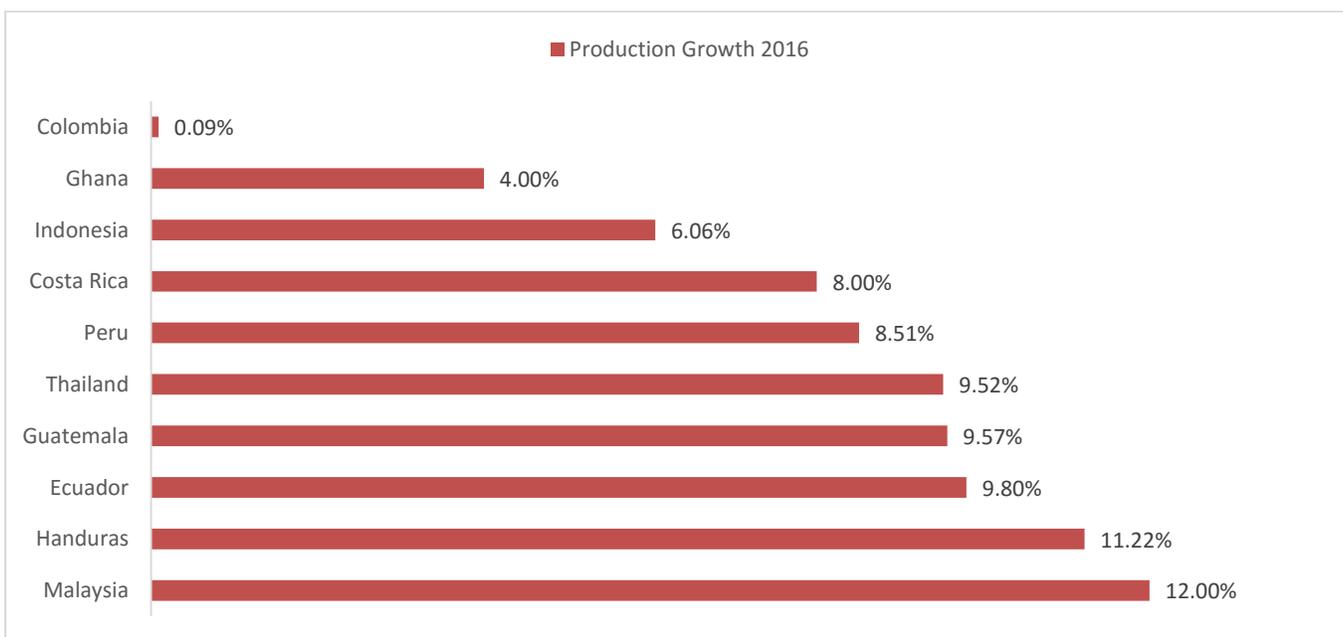
As Importing countries impose low taxes and customs on Palm Oil imports making it more cost efficient to import rather than domestic production, will raise the demand thus pressuring the prices higher.

Future Forecast for Palm Oil Market

Palm Oil prices are expected to continue its down trend after a slight recovery during the years 2016 and 2018 based on the Economist Intelligence unit.



Global production will also continue to grow, with the second largest Palm Oil producer Malaysia is being in the lead in regards of growth in production and the world’s largest producer Thailand fell in the fifth place in regards of growth, however Thailand is still the largest single producer for Palm Oil in the World.



Global Concerns about Palm Oil Production

As we mention before that Palm Oil is a healthy substitute for saturated fats and an efficient source for vegetable oil, there are many claims from researchers and activists that Palm Oil production has negative effects on the environment, society, economy and health.

- Environmental effects:

As the demand for Palm Oil is on constant growth there is an increasing need for land to construct more plantations, which is supplied by cutting down forests or deforestation that are the natural habitat for wildlife species endangering their lives.

Moreover the use of fertilizers and pesticides in the production processes pollutes the ground water and the soil, lastly the release of the greenhouse gases and carbon dioxide contributed to the climate change.

- Social effects:

Some conflict arise over the right for the land as the government give the right for the Palm Oil companies without the owner's consent, others arise with foreign workers or labor right as workers are poorly paid and don't have accesses for basic utilities.

- Economic effects:

Palm Oil is one of the most profitable uses of land thus Palm Oil industry count for a major part of the economies for each of the major exporters and importers tying good amount of labor and income to it, by that any issue over Palm Oil industry will have severe effect on the labor market, personal income and the trade balance.

- Health effects:

The main point here is to distinguish between Palm Oil and Palm Kernel Oil and as they have very different health properties.

Palm kernel Oil contains 80% saturated fats which is considered a lot more than Palm Oil and believed to raise cholesterol levels increasing the risk of heart disease.

Conclusion

Palm Oil is a popular choice among producers and manufacture, as it requires less land for growth and its highly profitable for producers and cost efficient and healthy substitute for other sources of saturated fats for manufactures, moreover the Palm Oil trees is the source of multiple products such as Palm Crude Oil, Palm Kernel Oil and Palm Kernel Expeller.

The Palm Oil market is dominated by to main producers Malaysia and Indonesia which they count for nearly 85% of the market, supported conditions that the Palm Trees grows under as it grows near the equator in areas rich with rain forests.

Trading Palm Oil can be done for either speculation or aculeate use as its futures are available for trade under Bursa Malaysia Derivatives (BMD) and the future expectations on Palm Oil prices are to remain stable during the coming two year and to decline afterwards, on the other hand Palm Oil Production is projected to grow during the current year.

Despite that Palm Oil biofuels makes only a small part of the biofuels market, the correlation between the Palm Oil and biofuels is fairly positive as they most likely to move in tandem.

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