

# Malaysia's palm oil industry



**ASSIGN  
BUSTER**

## **1. 0 Article Summary**

The article by The Star news, titled “ Labour woes hit palm oil” was posted on March 4, 2010. The article is about Malaysia’s palm oil industry will miss out its goal of millions tonnes because of the shortage of foreign labour.

## **2. 0 Introduction**

The star (March 11, 2010) reported Malaysia is the second largest producer and largest exporter of the world’s palm oil which exports to the country such a China, Egypt, European Union, Pakistan, India and some other country. Without the large volume exported by Malaysia, there would be a major problem in meeting global demand for vegetable oil which could be incorporated into a wide variety of food products.

This report aims to analyse the palm oil market in Malaysia with the aid of economic theories and models. This report will also examine its market in action, discussing law of demand and supply, shortage, elasticity and imports. In addition, a summary of all areas discussed will conclude this report.

## **3. 0 Analysis**

### **3. 1 Demand and Supply**

Demand is an amount of goods that consumer willing to buy for a given price. The law of demand claim that, other things remain constant (*ceteris paribus*) and the quantity demanded of a good rise when the price of the good decrease. (Hubbard et al. 2009)

It was proposed by Tan Sri Datuk Dr Yusof Basiron (2009, paragraph 4) that as Malaysia palm oil is consumed in over 150 countries and the demand of palm oil will increase by the growing population.

Most of the palm oil is end up in food which is a basic need for every human being. As shown in figure 3. 11, the world population is increasing every decade which means that the demand of the palm oil will increase as well.

The increase of the world population increases the number of consumer. Therefore, *ceteris paribus*, the demand of palm oil also increase. The increase in demand, due to population size - a non-price determinant, has shown a rightward shift of the demand curve from  $D_0$  to  $D_1$  in figure 3. 12. Hence, new equilibrium price and quantity increases from  $P_0$  to  $P_1$  and  $Q_0$  to  $Q_1$ , respectively.

Supply is an amount of goods and services that seller willing and able to supply for a given price. The law of supply claim that, other things remain constant (*ceteris paribus*) and the quantity supplied of a good rise when the price of the good increase. (Hubbard et al. 2009)

Sabri Ahmad, Malaysia Palm Oil Board (MPOB) chairman stated that the main issue now is the shortage of foreign labour who make up two-thirds of the half million estate workers in Malaysia on March 4, 2010. According to the immigration department, the number of registered foreign worker decrease 42% compare from last year. As a result, the supply of palm oil is predicted to be decreases.

The decrease in supply of palm oil, due to shortage of foreign labour (*ceteris paribus*) – a non-price determinant, has shown a leftward shift of the supply curve from  $S_0$  to  $S_1$  in figure 3. 13. Hence, new equilibrium price increases from  $P_0$  to  $P_1$  and equilibrium quantity decrease from  $Q_0$  to  $Q_1$ .

However, The Borneo Post (March 23, 2010) reported that Malaysia's government is working toward to increasing the land of forest plantation hectare from the current 270, 000 hectares to 500, 000 hectares. In figure 3. 14, the increase of the land forest by government, *ceteris paribus*, increase the supply of the palm oil is shown a rightward shift of the supply curve from  $S_1$  to  $S_2$  in figure 3. 14. Hence, new equilibrium price decreases from  $P_1$  to  $P_2$  and equilibrium quantity increase from  $Q_1$  to  $Q_2$ .

### **3. 2 Shortage**

Shortage is a situation which the quantity demanded is greater than the quantity supplied. (Hubbard et al. 2009) Dr Yusof Basiron (2008), the CEO of the Malaysian palm oil council stated that, when palm oil is already fulfilled and excess (price fall of palm oil) use as food, then the palm oil will available for biofuel which the price is cheap enough to exercise it. However, biodiesel is going to introduce by government at June next year. Thus, there will be a shortage of palm oil when biodiesel is introduced to the society. (Wani 2010)

The introduced of the biodiesel, *ceteris paribus*, will increase the demand of the palm oil. As demand shifts from  $D_0$  to  $D_1$  in Figure 3. 21, there is a resultant shortage, shown by the shaded region. In Figure 3. 21, quantity demanded  $Q_1$  exceeds quantity supplied  $Q_0$ . Due to the shortage, an upward pressure is applied on the price of palm oil, resulting in new equilibrium at

point E where price is  $P_e$  and quantity demanded is  $Q_e$ , as shown in Figures 3. 21.

### 3. 3 ELASTICITY

Elasticity is to measure responsiveness of the quantity demanded to one of its economic variable. The price elasticity of demand measures the responsiveness of quantity demanded to a change in price, *ceteris paribus*. (Hubbard et al. 2009)

The price elasticity demand of the palm oil is inelastic because palm oil is used in food which is a basic need of human being such as cooking oil and majerin. Other than that, use of palm oil is now expended into manufacturing soap, detergent cosmetic and so on. Thus, the change in price of palm oil will not affect much on the quantity consumed.

Inelastic demand for palm oil is represented by a steep downward-sloping demand curve  $D_0$  in Figure 3. 31. The quantity demanded is relatively inelastic, meaning that a price change from  $P_0$  to  $P_1$  and will cause less of a change in quantity demanded, which is from  $Q_0$  to  $Q_1$  in Figure 3. 31.

Total revenue is the sale of the good which is equal to the price of the good multiplied by the quantity sold. (Hubbard et al. 2009) Since the demand of palm oil is inelastic, so if the price increases, the total revenue will also increase which is shown in Figure 3. 32.

Price elasticity of supply measure the responsiveness of quantity supplied to a change in price, *ceteris paribus*. (Hubbard et al. 2009) As quantity supply of palm oil will not be affected by the change in price itself, the price

elasticity of supply of palm oil is perfectly inelastic. The reason is oil palm tree takes 30 months of planting to start bearing fruits and maintain to be fruitful for the subsequent 20 to 30 years to ensure the consistent of oil's supply. This is a long period which cannot easily change the quantity supply of the palm oil. (The Oil Palm Tree 2009) In figure 3. 33, any change in price of palm oil such as from P1 to P2, the quantity of palm oil supplied will remain at Q.

### **3. 4 EXPORT**

Consumer surplus is price different between consumer willing to pay and actually pay. Producer surplus is the price different between a firm willing to accept and actually received. (Hubbard et al. 2009)

Malaysia is the world's largest palm oil exporter. Logically, domestic price of palm oil is lower than the price of palm oil that exports to the other country. Thus, by exporting the palm oil to the other country, Malaysia's producer will earn a lot of profit.

In Figure 3. 41, before trade of palm oil, consumer surplus is region A, B and D while producer surplus is regions C and E. With the export of palm oil, consumer surplus decreases to just regions A while producer surplus increases to region B, C, D E and F. Thus, domestic consumer of palm oil will lose while domestic producer gain from increased producer surplus and higher price.

### **4. 0 CONCLUSION**

In conclude, the demand of palm oil is increasing due to the numbers of population in the world, shortage of foreign worker and introduce of bio fuel

is likely to cause shortage of the palm oil. There are many reasons that cause the supply and demand change in the market. The effective way to analysis the article is to use the economic concepts and theories. Although there is not exactly the same as the palm oil market in real world, the assumption helps to explain the concepts and the economic models help to anticipate the effects on the palm oil market which is depend on the factors involved.

### **5. 0 Reference**

Basiron, Y. 2008. The Science is on the Side of Palm Oil. <http://www.ceopalmoil.com/the-science-is-on-the-side-of-palm-oil/> (assessed March 30, 2010)

Hubbard R., Garnett A., Lewis P. & O'Brien A. 2009. Microeconomics, Pearson Australia, Frenchs Forest, NSW.

The Oil Palm Tree. 2009. [http://www.mpoc.org.my/The\\_Oil\\_Palm\\_Tree.aspx/](http://www.mpoc.org.my/The_Oil_Palm_Tree.aspx/) (assessed March 30, 2010)

US Census Bureau. 2009. World population: 1950-2050. <http://www.census.gov/>(accessed March 29, 2010)

Wani, M. 2010. Mandatory sale of bio fuel to start June next year. The Star, March 24.