J1 June Intensive Revision

**CSQ – Lesson 1 – Demand and Supply / Elasticity of Demand and Supply / Government Regulation – Q1**

**Durian frenzy spreads to China**

In the recent months, the price of durian in Singapore has increased. Generally, the durians are imported from Malaysian farmers. However, there has been a growing trend of Malaysian suppliers exporting durians to China.

**(development of new market demand – increase in demand for durians)**

**Hail the king of all fruits**

Mao Shan Wang (also known as *Rajah Kunyit* or *Musang King*) durians are popular amongst many durian lovers, given its creamy texture, bittersweet taste, and small seeds. However, due to an increase in demand of the ‘King of fruits’, prices of durians have followed suit. In 2012, Mao Shan Wang durians were priced at $8/kg while In 2016, the same durians were almost twice as expensive, at $15/kg. (**sharp increase in price) increase in price – rise sharply – PED is price-inelastic**

**Shrinking supply of durians**

Malaysian farmers are shifting their export focus to China which has led to a subsequent decline in durian export to Singapore. As a result, supply of durian in Singapore has shrunk substantially. **(competitive supply – increase in supply to China – decrease in supply to Singapore)**

Furthermore, recent shifts in weather patterns in Malaysian states, such as Penang and Johor Bahru (JB), have disrupted the harvest cycles in durian plantations, leading to a decline in supply of durians. Founder of Tasty Durian Pte Ltd, Mr. Liam, complained that peak durian seasons have been in a disarray.

“Usually, the peak season starts from May to August. This year, the cycle began much earlier, from February. This shift is possibly due to the weather changes in JB.”, lamented Liam. (**change in supply / why PES is price-inelastic?)**

**The durian craze continues**

There is an upward trend in number of Chinese tourists who patronise the durian farms in Malaysia. From 2006 to 2016, the number has increased from hundreds to thousands.

 Experts have pointed that the rising affluence of the Chinese have led to an increase in tourism, especially in neighbouring countries, particularly Malaysia. From 2014 to 2017, the sales from Chinese tourists spending has risen from 10% to 35%. Given the growing spending power of the Chinese, durian sellers have observed that these tourists buy the ‘king of fruit’ in bulk. (sales = PX Q)

Nevertheless, the rising price of durians has not deterred durian lovers in Singapore from enjoying their annual gatherings. Lee Xuan Hui, 25, said: “My family and I have been holding durian gatherings for eight years. We will still eat them even though the price has increased.”

**sales increases due increase in price \_ demand for durians is price inelastic**

**Questions:**

(a) (i) Using demand analysis, identify and explain the factors that led to the surge in price of durians. (2)

(ii) Using supply analysis, identify and explain the factors that led to the surge in price of durians. (2)

(b) With the aid of an economic diagram, illustrate the increase in price of durians. (3)

(c) Using the elasticity of demand concepts, give possible reasons why Chinese tourists increase their purchase of durians despite the price of durians increased. (3)

(d) Discuss whether the demand or supply factors are more important in determining the price of durians. (4)

(e) Using the theory of price elasticity of demand, suggest how durian sellers can increase their total revenue. (6)

Total = (20 marks)

**Suggested Answers**

**(a) (i) Using demand analysis, identify and explain the factors that led to the surge in price of durians. (2)**

One possible reason is the **change in taste and preferences of Chinese consumers** that led to the increase in demand for durians. Another reason is the **increase in consumer income**, which enabled consumers to spend more on durians. (it is normal good)

As a result, holding supply of durians constant, the increase in demand for durians gives rise to an excess demand condition, thus causing an increase in price of durians. (increase in supply of durian is unable to match the increase in demand for durian) Increase in supply durian is unable to match the increase in demand for durian (increase in demand is very huge in china)

(increase in demand is greater than the increase insupply)

**(a) (ii) Using supply analysis, identify and explain the factors that led to the surge in price of durians. (2)**

One possible reason is **unfavourable weather conditions**, which led to poor harvest and a subsequent decline in supply of durians. Another reason is **shift in exports for durians from Singapore to China**, which led to the fall in supply of durians in Singapore. (competitive supply)

As a result, holding demand for durians constant, the decline in demand for durians gives rise to a shortage condition, resulting in the increase in price of durians.

**(b) With the aid of an economic diagram, illustrate the increase in price of durians. (3)**

Price of Durians

Qty of Durians

D0

S0

S1

D1

P1

P0

Q0

Q1

As seen from the diagram, the demand for durians increase from D0 to D1 and the supply of durians decrease from S0 to S1. As the increase in demand is larger than the fall in supply of durians, this gives rise to an excess demand condition. Hence, the equilibrium price of durians increased from P0 to P1 and the equilibrium quantity of durians increased from Q0 to Q1.

**(c) Using the elasticity of demand concepts, give possible reasons why Chinese tourists increase their purchase of durians despite the price of durians increased. (3)**

First, we can examine the change in demand for durians from the price elasticity of demand concept. It is observed that the demand for durians is price-inelastic due to the following reasons. (determinants of PED)

One reason is the **small proportion of income spent on the good**. This means that the Chinese tourists are less price-sensitive, such that an increase in price of durians will lead to a less than proportionate decrease in demand for durians.

Another reason is **low degree of availability of substitutes for the good**. As it is difficult to find alternatives for these unique fruit, the demand for durians remains strong, even if its price has increased.

Besides these, there is also a high degree of necessity of demand as **some consumers have developed a strong preference for the fruit and find it addictive**. Due to this strong preference, there is a high degree of necessity of demand that will lead to a price-inelastic demand.

As the price has increased to $15per kg, the total sale has increased from 10% to 35% and this will imply that the price elasticity of demand for durian is price-inelastic. The gain in revenue due to increase in the price of durian is greater than the loss in revenue due to the decrease in qty demanded when the price of durians rises.

**(d) Discuss whether the demand or supply factors are more important in determining the price of durians.**

Part 1: Explain why demand factors are more important in determining the price of durians

the size of the increase in market demand is huge as the population of the market is large while the supply of durian is at the sizeable level but yet unable to match the increase in market demand from China.

Part 2: Explain why supply factors are more important in determining the price of durians

The supply of durian is the critical factor as the durian is an agricultural product that will be affected by the weather condition. Its supply will be limited when there is bad weather which will affect the harvest of durian. Given that this is dependent on the weather condition and the supply cannot be adjusted even when there is increase in demand, the supply factor will be a significant concern.

**part 3 – predict**

**= this is a agricultural product that is limited by the gestation of production**

**(e) Using the theory of price elasticity of demand, suggest how durian sellers can increase their total revenue.**

**structure:**

1. **state that price strategy is used to increase the total revenue**
2. **increase the price will increase total revenue as demand is price inelastic**
3. **explain how the total revenue will increase (**gain in revenue due to increase in price is greater than greater than loss in revenue due to decrease in quantity demanded)
4. **why dd is piece-inelastic – increase in price of the goods concerned leads to a less than proportionate decrease in quantity demanded**
5. **draw diagram and description of diagram**

Assuming that the demand for durians is price-inelastic, durian sellers can increase price of durians to increase total revenue.

Price of Durians

Qty of Durians

D0

P1

P0

Q0

Q1

As seen from the diagram, the gain in revenue (shaded in red) due to the increase in price of durians from P0 to P1 is greater than the loss in revenue (shaded in blue) due to the fall in quantity demanded for durians from Q0 to Q1. Hence, the increase in price of durians has led to the increase in total revenue.