

Student Scenario Template

Given your understanding of market demand and supply models, elasticity, government intervention, and its impacts on the market, answer the following question using **detailed explanation** and **sketches**.

Scenario

Vanilla is used by bakers, creamers, baristas, perfumers, and chefs all around Canada. It is the second most expensive spice in the world and also one of the most commonly used. Vanilla is a product that is cultivated from orchids and grows in humid and hot climates. It is a spice that requires high labour to extract, and Madagascar is a dominant producer in this market, ahead of Mexico. By supplying 80% of the world's vanilla, importers around the globe have developed a reliance on this country, for its increasing love for the spice. From the high demand for vanilla and the high dependency, an underground market has been created. Vanilla farmers wake up to find product stolen off of their trees to be sold in the underground market. In 2011, the price of vanilla was \$40 per kilogram in Canada, making it more affordable for consumers. But in the last couple of years, the price trends are beginning to soar.

In March of 2017, a cyclone hit Sava, located in northern Madagascar, killing 30% of their vanilla bean crops. The cyclone was named Cyclone Enawo and had a major impact on the Madagascan economy. Families in Madagascar depend on the production of vanilla and focus their lives on maintaining their crops. The cyclone happened in a time where the demand for vanilla was increasing and the Canadian economy is now trying to cope with this significant loss. In recent years, consumers have been demanding for natural ingredients in their products. So for bakers who utilize vanilla in their desserts, it provides a competitive advantage in today's market.

From the effects of the cyclone, vanilla prices soared trying to compensate for the loss of the product. The price of vanilla rose almost 20 times more than its original price in the market, now costing \$700 per kilogram. There is now a smaller supply of vanilla, Madagascar cannot export as much and consumers are trying to adapt to the price change. Due to the extreme price increase, vanilla consumers have turned to artificial vanilla as a substitute as well as Mexican vanilla. Many ice cream shops have now removed the ice cream flavour "vanilla" because the company cannot afford it, even though it is the most popular ice cream flavour around the world. Vanilla storage has now become a lot more secure, certain retailers feeling the need to lock it up because of the increase in price and demand. As a result of the cyclone, the prices soared and now consumers are feeling the effect in terms of lacking the commonly used spice. Whether it is the food industry, or in the fragrance industry there needs to be a solution.

Bartko, Karen. "Global Butter Shortage, Steep Vanilla Prices Hurting Canadian Bakeries." Global News, 10 May 2018, globalnews.ca/news/4200276/butter-shortage-vanilla-prices-hurt-bakeries/.

Hachmann. "Vanilla Valuation: Food Industry Scrambles to Find Affordable Solutions as Price of the Baking Staple Skyrockets." The Globe and Mail, 28 June 2018, www.theglobeandmail.com/life/food-and-wine/market-forces-buffet-plain-vanilla-as-global-dearth-drives-skyrocketing-prices/article38268619/.

"Madagascar Cyclone Kills 29, Displaces Thousands." Reuters, Thomson Reuters, 10 Jan. 2018, www.reuters.com/article/us-madagascar-cyclone/madagascar-cyclone-kills-29-displaces-t-housands-idUSKBN1EX148.

Pilling, David. "The Real Price of Madagascar's Vanilla Boom." Financial Times, Financial Times, 5 June 2018, www.ft.com/content/02042190-65bc-11e8-90c2-9563a0613e56.

"Why Vanilla Prices Are Skyrocketing (and Will Continue to Rise)." Wide Open Eats, 19 May 2018, www.wideopeneats.com/vanilla-prices-on-the-rise/.

Task

The Canadian Government is developing new economic policy in response to the increase in Madagascan vanilla prices. Using your understanding of elasticity and the different types of intervention, suggest **one** primary intervention (either price floor **or** price ceiling) suitable to this situation, **one** secondary intervention (excise taxes, subsidies, quotas, or demand NPFs), and outline the market impacts.

Mark Breakdown

In short, set out the theory of a price ceiling OR a price floor by explaining –

1. describe the reason for the intervention (^{1/2} mark),
2. directly reference 2,ario itself that support your conclusions about elasticity and the original position of the market (2 marks),
3. what it is (i.e, define it) (^{1/2} mark),

Jack and Georgia

4. how it occurs (i.e., in the market model) (1 mark),
5. how it impacts demand and supply in the market (i.e., describe the type of disequilibrium) (1 mark),
6. a secondary intervention necessary to correct the effect of the primary intervention and 1 specific detail from the scenario itself that supports your intervention (2 marks),
7. potential problems and/or criticisms of such an intervention (2 marks), and
8. a sketch to animate your intervention and illustrate your explanation (3 marks).

* "it" being either a ceiling OR floor.

Who:

- Madagascar effect the global vanilla market.
- The figures we provided for vanilla prices in 2015 came from an article by Eater. In that piece, Craig Nielsen, a man who knows his vanilla, cites some other reasons, too.
- Nielsen is the VP of Sustainability for Nielsen-Massey, a company that has been working in vanilla since 1907.
 - It takes about three years for the vanilla plant to reach maturity and produce beans.
- So what does this mean for the future? Will coffee prices and cake prices and everything else increases alongside with raw vanilla? Nielsen thinks not. He believes that prices needed to increase, a bit, to keep the farmers willing to, well, farm. Eventually, as things even out, he hopes to prices return to "normalcy," whatever that may be.

What:

- A Kilo is \$700, was \$40 in 2011
- Price of vanilla rising to almost 20 times its original price from a few years ago.
- Second most expensive spice in the world, commonly used in many desserts such as blah blah blah
- Emerging underground market.
- High risk, labour intensive product
- Madagascar is a dominant vanilla bean exporter - 80% of the market comes from them and the surrounding islands.

Where

- North America impact

When

- 2017 to now

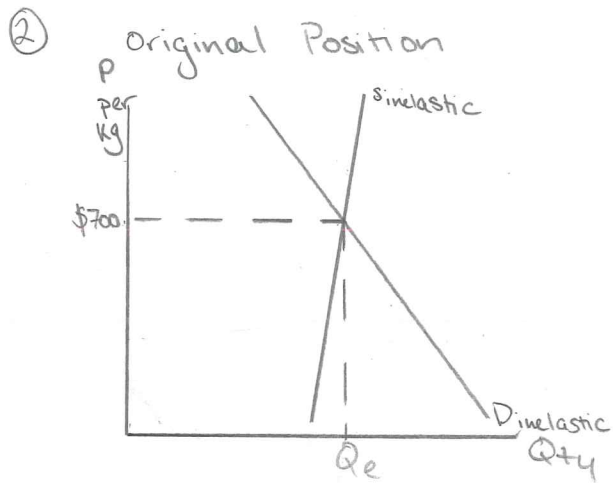
Why

- That said, back in 2007, vanilla wasn't as hot of a commodity as it is now. Farmers had no interest in spending literal years producing a crop that no one wanted. Thus, producers outside of Madagascar started stepping away from vanilla production.
- Fast forward to 2015, and vanilla was back "in" again. By that year, though, people wanted natural ingredients. With demand increasing alongside a cry for pure, natural products, vanilla prices began to rise again. Pair those items with the cyclone and, well, yeah. You get it now.

MOA = Canadian Vanilla Market

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- ① The price of vanilla has skyrocketed after Cyclone Enawo hit Madagascar, who supplies 80% of the world's vanilla. There is high demand for the product and low supply, causing market failure and underperformance.



D Factors:

- ↳ Used in many industries
 - bakers
 - cooks
 - perfume
- ↳ Popular in the Canadian economy
- ↳ Second most expensive spice — portion of consumer incomes
- ↳ Demand has been increasing, even before the crisis.
- ↳ Substitutes: Artificial vanilla, Vanilla from Mexico (don't supply as much)
- ↳ People have stopped using it because of the price

S Factors:

- ↳ Immediate — inelastic
- ↳ Short run — inelastic (still regaining)
 - ↳ grows in hot climates
- ↳ Long run — elastic
- ↳ Labour intensive spice
- ↳ Madagascar supplied 80% of the world's vanilla
- ↳ High demand for the natural product.

- ③ Govt intervention:
a price floor set above equilibrium, creating a price minimum.

- ④ Minimum price set above equilibrium, price floor.

- ⑤ Price floor is set above equilibrium, it creates a surplus (temporary surplus).

- ⑥ Secondary Intervention: Quota

In this market, a quota will restrict the amount of people in the market who consume vanilla. Madagascar supplies 80% of the market's vanilla, and because demand is high the quota allows for more oversight and time for the vanilla supply to increase.

- ⑦ — restricts amount of participants (only wealthy people)
- in the short term people are forced towards the lower quality substitutes if they are not wealthy enough to access the market
 - Pressure on substitute markets to supply the increasing demand.
 - Price 89.
 - Encourages development of illegal mkt.

⑧

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