

# Economic welfare analysis in india rubber

[Countries](#), [India](#)



However, the seller or buyer may be damaged from international trade because the world price may higher or lower than domestic balancing price, then it may impact on producer or consumer's surplus and continue to change the countries' economic welfare for this import or export market

Before international trade, the participator of Indian's natural rubber market only include domestic buyers and sellers, as the Figure a-1 shows, the domestic price is balancing between quantity supplied by domestic seller and the quantity demanded y domestic buyers, hence, the sum of the consumer and producer surplus which also called economic welfare in the equilibrium point measures the total benefits received by Indian's rubber market from domestic consumer and domestic producer. In Figure a-1, without international trade, the sum of Indian's economic welfare are the area A plus area B changes. Within the scenario, India is either an importing country or an exporting country, it import large amount of rubber and export were insignificant. Figure a-2 shows that India as an importing country of natural rubber. The diagram resents that Indian's domestic equilibrium price of natural rubber, also named price before trade is above the world price.

Trade force the domestic price fall and equal to the world price, due to the lower new price (world price), the quantity of consumed domestically higher than the quantity of produced domestically and the import b India equal to the difference between the domestic quantity supplied and the domestic quantity demanded at the world price. In this situation, domestic buyers are better off due to them now can buy rubber in lower price. However, domestic producer are damaged because they sell the rubber owe in lower price.

Moreover, consumer surplus and producer surplus also change and the

change size also measure the amount of gain or loss. Combine Figure a-1 and Figure a-2 to Table a-3 shows that before trade, consumer surplus is area A, producer surplus is area B and total surplus is area  $A+B+C$ .

After trade, the consumer surplus becomes area  $A+B+D$  and producer surplus only in area C and total surplus is area  $A+B+C+D$ . The calculation illustrate above show that, Indian's buyers gain from trade in an importing country because consumer surplus area enlarged  $B+C$ . In spite of this, Indian's sellers suffer loss because the producer surplus area decrease by area B. In any event, the gains of buyer exceed the losses of sellers, and total surplus grow by the area D natural rubber, the consumer welfare, producer welfare and total economic welfare of natural rubber market changes respectively. However, the gains from international trade exceed the losses which means the increases could compensate the decreases and still be better off.

As Table a-3 shows, the total surplus also can treat as total economic welfare rises in area D and it represents the gain from the trade. In other words, trade internationally make India better off no matter India is deemed to be the importing country or exporting country. (b) Illustrate on your diagram the effect of a 10% decrease in rubber in rubber production Price of natural rubber Quantity of natural rubber With the case scenario, in 2013-14, the output of India rubber decrease 10% over a year before, on an average but consumer power was almost steady during this period. It means that, the quantity of rubber demanded is stable however the and demand curve stay the same.

Within Figure b-I, in FYI 2012, the Demand curve and Supply curve move together and adjusted to the balance under market organization, the equilibrium on PAYOFF as the diagram show was the initial balancing point. Furthermore, at initial equilibrium, the IQ represents the price that these two curves cross and named as the initial equilibrium price, additionally, PI called the initial equilibrium quantity. In the year 2013-14(PAYOFF), due to the decline quantity of rubber production, the supply curve moves and shifts to the left from Supply-I to Supply-II as Figure b-I illustrated, it also means that at every price, the total amount of natural rubber that rubber producer are able to sell is decreased. Accordingly, Supply-II curve and demand curves intersect in the point of New equilibrium.

UP and SQ represent the new equilibrium price and new equilibrium quantity respectively. Consequently, as Figure b-I shows, the shift in the supply curve lead to the equilibrium price raises from PI to UP and lowers the equilibrium quantity from IQ to SQ. In conclusion, as the result of 10% decrease in rubber production, the price of domestic rubber increases and the quantity of rubber sold decreases, moreover the equilibrium point also shift up and left.

(c) Describe fully the economic welfare effects of a significant import tariff in India mystically. When illustrate Figure c-1 shows that, as an importing country, before import tariff, India domestic price falls and equals the world price.

The consumer surplus was area A+B+D+E+F+G, and producer surplus refer to area C, at world price, the tax revenue that government earn is nothing. Furthermore, as indicated earlier, when India assess trade internationally,

domestic sellers are suffer loss by world price and contrastingly, domestic buyer gain from global trade. Moreover, without tariff, the tax revenue government earned nothing and total economic welfare increased. However, when government concentrating attention on import tariff, the economic welfare changes. As Figure c-1 shows that, a tariff make the price of import rubber above the world price by amount of the tariff. When compete with suppliers of rubber imported, domestic producer now can sell their natural rubber for world price plus tariff.

Hence, either domestic suppliers or imported suppliers increase the rubber price by the amount of tariff. Domestic seller and domestic buyer also change their surplus because import tariff raise the price of rubber, with figure c-1, the tariff reduce the domestic quantity emended from SQL to Qua and increase the domestic quantity demanded from SSL to Sq. It means import tariff decrease the quantity of imports and make rubber market closer to its initial equilibrium before trade internationally. Additionally, import tariff make domestic producer in better situation but domestic buyers suffer loss, and government earn tax revenue from tariff. When consider table consumer surplus reduce the area of B+F+D+G, and producer surplus growth by area B.

Furthermore, the government revenue equal to area F which is the quantity of after-tariff imports multiply by the size of tariff. Moreover, total surplus fall in area D +F that represents the deadweight loss of the tariff. Due to the tariff is a kind of tax, thus, it's no doubtful that the tariff caused a deadweight loss. Because under the free trade, market power will make the

resource disposition optimization, however, tariff will distort market incentives and continue to affect market to allocate the resources inefficiently. In other words, trade internationally with tariff make India domestic price higher than before, hence, it gives producers an incentive to produce more and intensive buyers to consumer less.

With Figure c-1, area D and G represents the deadweight loss from overproduction of rubbers and underestimation respectively. Furthermore, tariff make the market shrink below optimum. In conclusion, trade internationally with import tariff in India natural market damage the buyers' benefit and decrease the consumer surplus. On contrast, compare to world price, domestic suppliers gain from import tariff because they can charge rubber now in higher price, and the producer surplus raise up. Moreover, import tax revenue achieved by government. And, total economic welfare falls because market buffer deadweight loss caused by import tariff, in fact, due to tariff, India rubber market is distorted and smaller than before.

Additionally, small market of import and large market of import may suffer different total surplus. 1) Assuming India to be a small part of the global market for natural rubber power in import and the exporting suppliers are not pay more attention in India rubber market, hence, India only can accept the world price as given but hardly to bargain the price of import, thus when a tariff is implemented by India, there no effect on world price, also as the exporting price. When analysis the effect on India rubber market if India as a small part of global rubber market, the supply curve of natural rubber in

India can be treated as perfectly elastic supply and the supply curve is horizontal at the level of world price as Figure c-3 shows.

With this circumstance, exporter want to export as much of the product to India in given world price. Now, when India take a tariff on imports, from table c-4 shows that, after tariff, the consumer surplus fall in area B&C and the producer surplus no changes. Government received tariff increases in area B and total surplus falls as indicated earlier, the loss part in table c-4 refer to area C which represent the underestimation of domestic buyers. Hence, if India as a small part of global market for natural rubber, whenever it implements an import tariff, national welfare falls. And the higher tariff India sets, the large loss to Indian national economic welfare.

Furthermore, domestic buyers may be the only part hurt by import tariff, because exporting rubber may be the only way they can buy for, and compare to producers oversea, domestic demand is more inelastic, thus, domestic buyer pay all the market loss caused by tariff. T) Assuming India to be a large part of the global market for natural rubber

	Before tariff	After tariff
Change Consumer surplus	$A+B+L+E+F+I$	$-(B+F+L+I)$
Producer surplus	$C+D$	$B+C+D$
NONE		
Total surplus	$G-(L+I)$	

Assuming India as a large part of global market for natural rubber means that, Indian's imports a very large share of the world market. Large part of imports also means India has tremendous effect on world rubber demand, hence India may affect the world price.

Furthermore, when a significant import tariff executed by Indian government, there will affect upon exporting price due to India has higher

bargain power to its exporting countries, and India can ask the exporting countries to offer a price lower than world price of natural rubber to India, With the Figure c-5, assume that the  $P^*$  is the price that exporting countries agreed export price and it lower than world price. Hence when illustrate Figure c-5 and summarized in table c-6 shows that, when India import large amount of rubber, the price of rubber import lower than world price, however, when an import tariff implemented, the domestic rubber price goes up and economic welfare changes.

At the price of  $P^*$ , the amount of rubber import equal to  $Q_{ua}$  minus  $S_q$ , and with ruff, the rubber price rise up and the quantity demand reduce from  $Q_{ua}$  to  $Q_{ua}$ , the quantity supplied grow from  $S_q$  to  $S_q$ , moreover, the amount of import equal to  $Q_{ua}$  minus  $S_q$ . Although the tax revenue still equal to the quantity rubber of imports times the size of the tariff, compare to small quantity of import, the tax revenue had been enlarged. Refer to Figure c-5, area G represent the tax revenue enlargement. Obviously, when compare Indian economic welfare on world price and with import tariff, there is no doubt that, the consumer surplus fall and producer surplus increase, area L and I represent the deadweight loss from overproduction and underproduction of Indian natural rubber.

Noteworthy that, government gain tax revenue by area G and F, and total surplus change by  $G-(L+I)$ , it means that, if India implement a significant import tariff and make the area G big enough to exceed area  $L+I$ , Indian total economic welfare increased. In conclusion, if India as a large part of the global market for natural rubber, compare total economic welfare on world



price and with the import tariff, the domestic consumer surplus decreased and producer surplus increase, it means domestic overspent tax revenue enlarged when compared to small part of importing market and it worth noticed that, the total surplus different than normal and small market before, the figure equal to the tax enlargement minus the deadweight loss caused by tariff.

As we have seen, if the tax enlargement part large than the deadweight loss area, India as a large importing country will increase its economic welfare. Additionally, domestic buyer undertake large part of import tariff because they pay higher price on importing rubber and other part of tariff beard by foreign supplier, cause they reduce the exporting price which means they earn less by each production. Hence, if the demand curve and supply curve more elastic or more flat, the domestic consumer for lesser in tariff. (d)

Suppose the Minister for Trade has recently been requested to consider an import tariff, or quota, or other assistance to the domestic rubber industry. Provide the Minister with appropriate advice, based on your analysis.

Dear Minister: Due to the annual statement of India domestic natural rubber market, the gap between domestic production and consumption of natural rubber increasing from FYI 2012 to FYI 2013. The growing gap fills by importing, and the price of world for natural rubber lower than at home which strike India domestic suppliers too. Hence, according to India domestic rubberdepression, some tax policy should issue in order to stimulate domestic supply. You mention that now you consider an import tariff or quota to assistant to domestic rubber industry, please allow me to explain

these different type of tax and wish I could help you to do the decision-making.

First of all, as one part of global market, India as an importing country and accept the world price of natural rubber, in this circumstance, although domestic producer buffer loss, the domestic demander gain from global trade, furthermore, India total surplus increased which means trade globally enhance Indian's total economic welfare. Then we talk about the changes when India take an import tariff or quota in international trade. Import tariff is a type of tax issued by government, however, tax increase the domestic price and continue to affect the supply-demand mechanism. Before tax, market allocates the scared resource optimization and impose an import tariff makes market distortion and away from utilize resource optimum. Nevertheless, implement an import tariff may stimulate domestic producer, because