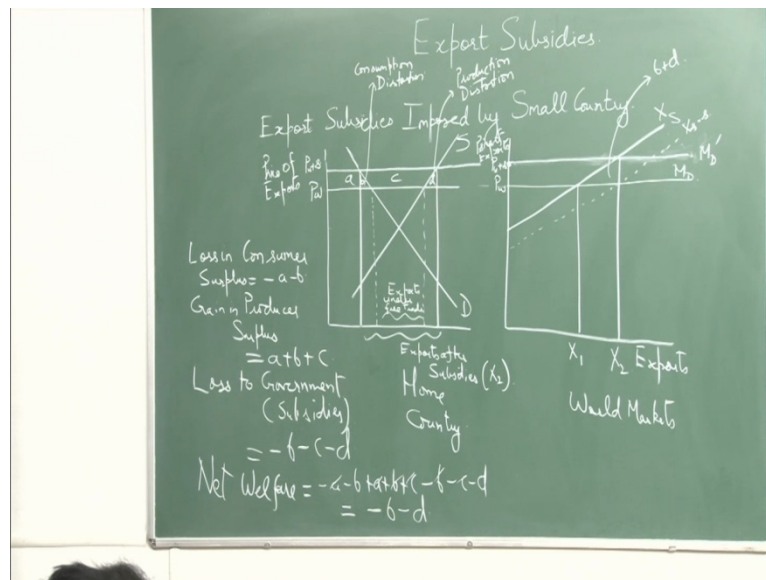


**International Economics**  
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**Lecture No. #23**

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Today, good afternoon. Today, we going to discuss about the export subsidies. In the 2005, Hong Kong ministerial meet, it was decided to dismantle all the export subsidies which are given by countries by 2013. So, in the next year, you would see there will be an attempt by all the countries to withdraw the export subsidies.

Now, there are heavy export subsidies which are given by the European Union, especially on products like sugar. US also gives heavy subsidies on its production of cotton. Now, what export subsidies do is that it depresses the world prices. Now countries like India, Brazil, Argentina, they are at loss. Because they lose **they lose** their competitiveness, specially the farmers here, because once the prices get depressed the farmers from these large developing countries are at a loss, because they are not able to sell their products in the international markets.

Now, see the mechanism, how export subsidies work? It is like the same when you impose tariffs on a product, which are which is coming in, it creates a wedge between the domestic, and the international prices. The domestic price of the imported good increases, here when export subsidies are given for a product the export price of the export good goes up. Why? Because say for example, if the government decides that I will give rupees  $s$ , rupees  $s$  for each unit exported.

So, every unit that you export, you will get rupees  $s$ . So, the exporters will get  $P_W$  plus  $s$ . Now what will happen is that? There are domestic producers also, there are domestic producers and there are exporters. So, domestic producers will also try to increase their prices to  $P_W$  plus  $s$ . Reason being that, if the prices were low, then you would have a situation, where there will be only foreign producers, only exporters, but the situation is that you have both exporters and you have domestic producers.

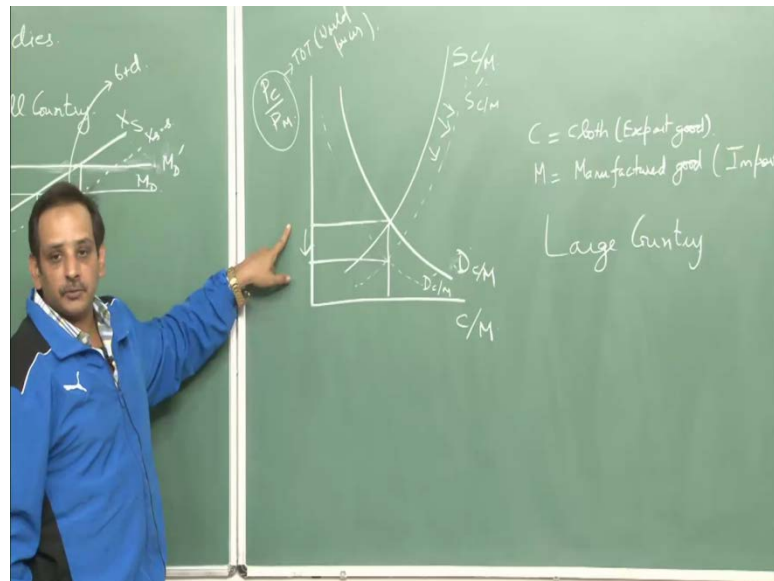
So, domestic producers will also charge a price which is  $P_W$  plus  $s$  and generally as we discussed, the other day some couple of students also asked, when exports subsidies are given at the same time governments imposes tariffs, on the export good. Because if you are giving subsidies to the toy, to a product, it is always possible that the consumers can import a product at  $P_W$ . See the producers are charging  $P_W$  plus  $s$ ; it is domestic producers or exporters. but consumers can always import a product at a lower price  $p_w$ . So, whenever governments impose export subsidies like the European Union and the U S they with the export subsidies they impose tariffs on the export good.

So, as a result, the domestic price of that export good also goes up. So, the consumers cannot undercut any of the producers. Now, see what happens when the exporter start receiving  $P_W$  plus  $s$ , there is a loss in consumer surplus of minus  $a$  minus  $b$ . The producers gain  $a$  plus  $b$  plus  $c$  government's subsidy of the form of  $b$   $c$   $d$ . Because these are the exports after subsidies. So,  $b$   $c$   $d$  this is the subsidy into this much of exports.

So, this is the loss to the government. So, the net welfare works out to be minus  $b$  minus  $d$ . So, as in the case of tariffs, it is imposing the tariffs which are imposed by small countries is always bad for it, similarly, subsidies are also bad for the small country. because there are artificial production and consumption, distortions which are created in the economy.



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Now, for a large country as I said you can, we will also make a diagram similar to that, but quickly if you wish to know what happens? When export subsidies are given. Now come back to this diagram, where you have price of cloth. By price of manufacturing, this is the terms of the trade, the world prices. You have cloth by manufacturing on the x axis. So, you have demand for cloth by manufacturing and you have supply of cloth by manufacturing.

Now, when export subsidies are given, the price that exporters receive is say  $P_W$  plus  $s$ . So, the price of export good goes up, as the price of export good goes up, the supply goes up. So, when the supply goes up, the supply curve shifts to the right  $s_c$  by  $m$ , this is the new supply curve. but because the price of  $c$  by  $m$ , the price of cloth has gone up producers gain consumers lose. So, the demand for cloth by manufacturing it comes down.

So,  $(s)$  is the government is giving subsidy to the producers then that amount of subsidy  $(s)$  market?

No, see, you should understand how these subsidies are given? It is like rupees  $s$  for each unit of goods that you export. So, if you are exporting say twenty units, twenty into  $s$ , will be the subsidies which are given to you.

(( )) this amount the d if the producer can charge from the consumers. And the government or is the government paying that amount?

No, this is the price which is received by the producers. So, it is like an incentive for them that the more that they export. Now for the consumers the price is still at  $P_W$ , domestic producers also want to charge the same price  $P_W$  plus  $s$ . but for consumers they can always get a that same product from the international markets at  $P_W$ . Is not it? why would they buy it from the exporters or domestic producers?

So, that is the reason, that when export subsidies are given, at the same time import tariffs are imposed on the same export good, which is coming in. Because the you have to think it in such in a manner, if that there is something like an intra industry trade going on. You are exporting, you are giving subsidies, but you are importing that product also. So, that is the reason that the domestic prices of that export good goes up. So, that the consumers cannot undercut the producers or the exporter that is what happens?

So, then this revenue, this is a loss for the government. So, you are creating distortions in the economy, production and consumption distortion and at the same time government is losing. So, that is the reason that export subsidies are always welfare reducing and even for a large country like this you see a decline in the world prices. So, when they say that export subsidies depresses the world prices  $p_c$  by  $p_m$  goes down. So, the world prices go down. And so, the terms of trade goes down, and then there are artificial production and consumption distortions. So, if you work out the net welfare for the large country, for a large country also you will see that the net welfare goes down. Because the terms of trade fall and there are production and consumption distortion.

So, but the common mans understanding is that export subsidies are good; they are good for the producers. but at the end the nation at as an entity or the world welfare also goes down. So, this debate which goes on in the parliament that at the time of the recession, we should be helping the exporters, the producers, it is good it is a good, viable short term solution. but in the long run, what you would see is depression of the world prices? and artificial creation or distortions in the economy.

So, U S, which provides heavy subsidies on cotton. European Union which provides heavy subsidies for sugar under the common agricultural policies. They are the ones who have depressed these prices the world prices of sugar and cotton. So, the losers are the

developing countries like us, but the gainers are the small Caribbean's. The Caribbean nation and the African nations, because at the end if the world price goes down, the net food importers, they are the one who will gain.

So, look in the W T O, when you go into W T O and you negotiate on reducing the export subsidies. There will be one set of developing countries like India, Argentina and Brazil which will argue that, we should dismantle like export subsidies. but there will be another lot the small nations the food importing nations which would argue that, we are against dismantling of export subsidies.

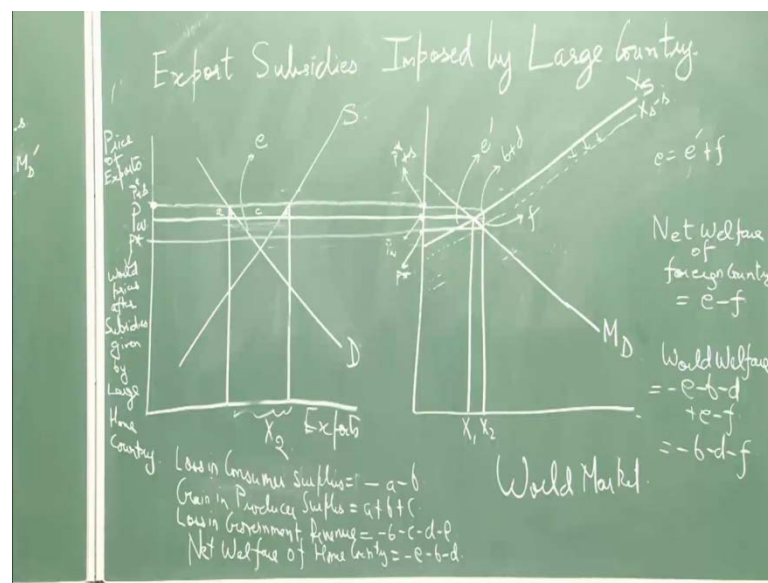
So, this crucial decision which was made in 2005, that is probably, that is one success that we got one of the successes that we got in the W T O. That we were able to decide that, we will dismantle export subsidies by 2013. So, what will happen by 2013, the prices of these agricultural products may increase by next year. Because as the exports subsidies will get dismantle, you will see what will happen to the world prices?

When export subsidies are given? The world prices go down. When they dismantle? You will see a rise or in the prices. So, let me now discuss the case, when export subsidies are imposed by a large country. So, the only difference would be that instead of this perfectly elastic import demand curve, you would have a downward sloping import demand curve. So, you can also think of making it on your own, but let us now, another thing which follows from here. When we discuss the large country case as I said, the net result is that the terms of trade fall for the home country. And there are distortions which are created production and consumption distortions.

So, these large countries which are able to give these export subsidies they are able to produce more. When they are able to produce more, they can give aid in the form of food, like India in the 1960 borrowed food from the U S under the P L 480 program. And throughout the histories, throughout the a seventies and eighties, these developed countries which had given heavy subsidies, which were able to produce more, gave aid in the form of food. That is, but then these are the things which will happen the world prices will go down, there are artificial distortions which will come in. The argument is that, instead of giving food aid, it is always better to identify the problem and give cash aid instead of food aid.

So, now, you see that, this even in the W T O they have been people have been arguing that dismantle the export subsidies. And if you have to give the aid, just give the cash transfers are better than the food aid. Because at the end it creates distortions and the world welfare goes down. When you give the export subsidies, but it is very easy to get effected by the argument that goes on in newspapers and parliament that export subsidies, probably it is good. but it is good in the short run, because in the long run you will see that the terms of trade falls, world prices fall and their distortions which are created in the economy.

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So, this is export subsidies. (No audio from from 16:39 to 16:52)and once we discuss this, then I will come to the other type of support that the farm gets. That is called domestic farm support, because subsidies, these are export subsidies. but you can always give production subsidies also instead of export subsidies .You can give production subsidies, whatever they do with the producers? Whether, they want to sell it domestically or in the foreign markets, that is separate.

So, there are different types of subsidies, there is a production subsidy, that is domestic farm support. W T O is relatively silent on domestic farm subsidies. And I will tell you why? Export subsidies are more pernicious, than production subsidies. So, all countries have domestic farm support. There in W T O s parlance there is some economists, they distinguish the subsidies in the form of red subsidies, blue subsidies, and yellow

subsidies. Red subsidies are those which are not allowed at all, yellow subsidies where you can impose tariffs, because the countries have imposed, have given subsidies and there are blue or amber subsidies which are also trade distorting. but they are allowed under certain circumstances. So, I will come back to the other types of subsidies which are given, I am only talking of export subsidies. There are production subsidies, but they are less pernicious than export subsidies. That is the reason that every country maintains this domestic farm support, even India has support production subsidies which are given for certain products especially agricultural products.

(( )) world prices.

That also depresses the world prices, but the difference is, remember when you have the export subsidies, the domestic producers also charge a price which is  $P_W$  plus  $s$ . Reason being, that if they had charged a price lower than this then there will be only one set of people. There will be only exporters. Now, here when you give production a subsidy, the difference is that they will get the price that they will receive is  $P_W$  plus  $s$ .

But, the price that they will charge to the consumers will only be  $P_W$ , because whatever is their produce they can either sell it domestically or they can export it. Is it not? The case of the export subsidies, where they receive  $s$  for each unit exported, they receive  $s$  for each unit produced. So, if they are producing, they can either sell it domestically or outside. So, the charge, the price that they will charge for the consumers will be  $P_W$ .

So, then. (( )) supply (( )).

So, the supply curve will change, because what they will see is? What they will receive is?  $P_W$  plus  $s$ . These are the producers, the price that they will charge to the consumers will remain  $P_W$ , and there will be no change in demand. Only the supply curve will shift to the right. So, the exports, whatever it will be, will be smaller than the case when you have export subsidies.

So, the export supply curve will shift to the right, but not by the amount of the export subsidies. So, then prices will be depressed, but not by the amount when you give the export subsidies. So, that is the argument? I will make a diagram for that also, and that is the reason that WTO is relatively silent on. The fact that countries give production subsidies, but this will be dismantled by two thousand thirteen export subsidies.



So, the diagram in the exam, you have to be careful in making the diagram. So, this is the large country. So, you have the home market and you have the world market. So, you make the demand curve, you have the supply curve. This is will be price of exports; this will be the export supply curve. This will be the import demand curve, wherever this will be the world prices. So, when subsidies are given.

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(()).

So, this diagram. So, you start by making this demand curve and you have the supply curve. Look at the export supply curve it starts from here, as the price of exports go up, the exports supply goes up.

So, this is an upward sloping export supply curve, it is a large country. Whatever it transacts, it is it has an impact on the world prices. It cannot take the world a price has given. So, the import demand curve is downward sloping, wherever the import demand and the export supply curve intersect, that is the world prices. So,  $P_W$  is the world prices in the free trade, now this country decides to give subsidies, export subsidies.

So, what it does is that? The exporter start receiving something extra for whatever they are exporting? That gives the boost, they start producing more, and exporting more. When they start exporting more the export supply curve shifts to the right. That is what happened? The export supply curve shifts to the right, this is the export supply curve, it shifts to the right.

This is the import demand curve. So, the new world prices are lower than, what it were before? That is what? That is how it depresses the world prices? You are producing more; there are distortions which are created? You are given a subsidy. So, you produce more. So, the export supply curve shifts down these are the world prices. So,  $p^*$  is lower than  $p_w$ . So, price of exports go down. So, the terms of trade goes down.

So, terms of. So, then your net welfare is minus e, this is the terms of trade loss and b and d are production and consumption distortions which are created. When the large country impose tariffs, the net welfare was e minus b minus d. Remember, because there

is a terms of trade gain, when you impose tariffs. When you impose tariffs, when you give subsidies, this is the net welfare minus e minus b minus d.

What about the people who are buying products from you? Because the world prices go down, there is a loss, which is this entire area. You see this rectangle, because now the world prices are lower  $P_W$  instead of  $p^*$ . These are the world prices which prevail. So, if I am an agricultural producer from India and I am producing the same product, if I find that the world prices have gone down, I will be at loss.

Because I am a producer, I will get less price for my exports, and if my cost of production which is increasing after liberalization, because of various increase in input cost I will be at loss. So, producers in Brazil large developing country, they are at loss. This is, this rectangle do you see this rectangle, this till here, till here, till here. This I have divided into this portion which I call as e dash and f which is the distortions which are created, because the world prices go down.

So, this e is this area e is e dash plus f. So, whatever are my terms of trade loss is the terms of trade gain for the other partner, the buyer. But then this e is the terms of trade gain. So, the terms of trade loss for me is terms of trade gain for the foreigner plus something which is lost. Because now, you are getting the prices have gone down. So, then the net welfare of the foreign countries e minus f, why e because? e is the terms of trade loss for me, it is a terms of trade gain for the people who are buying products from me. And f is a distortion which is created because; the world prices have gone down. So, the net welfare works out to be minus e minus b minus d plus e minus f minus b minus d minus f.

So, the world welfare goes down, your welfare goes down. So, export subsidies are always welfare reducer, now if you have to consider the case of production subsidies. And if you are considering small country, the only difference in this diagram and that diagram would be that there will be the shift of this supply curve, but it will not be by this amount it will be like this. So, therefore, the export supply curve will not be here, it will be, it will be here. So, then the fact is that the exports do not increase by  $\times 2$  they are not  $\times 2$ , but they are less than  $\times 2$ .

So, production subsidies also tend to have an impact on the exports, but it the exports do not increase by that amount. Because remember the prices that the producers charge are

still  $P W$  no  $P W$  plus  $s$  that is what they will receive they will produce more, but what they will charge to the domestic producer is  $P W$ . Reason that they can do anything with their produce, they can either sell it domestically or they can sell it in the international markets.

So, they will keep charging  $P W$  and what they will receive is  $P W$  plus  $s$ . So, there will be a shift in export supply curve, no change in the demand. Because what consumers will give will only be  $p w$ . So, small change in export supplies the export supply and therefore, less change in the exports.

Now, you can visualize, what happens if there is a large country? There will be a depression in prices, but it will be lower than, what will happen when export subsidies are given? So, that is the reason in the W T O they are relatively silent on domestic farm support. but it is the Indians and the Brazilians who are saying that, whatever it is whether you are giving export subsidies or production subsidies? You are distorting you are depressing the prices.

So, the negotiations are still going on the do ha development round is yet to be concluded. These are the things that they will discuss to dismantle all sort of export, all sort of subsidies .why do you have to think about export subsidies? Any subsidy, you will give it will distort the production structure. It will depress the prices and remember for the large developing countries around 65 percent of the work force is still in the agricultural sector. And, for the developed nations, may be only 3 to 4 percent of the work force is in the agricultural sector. And the value added the agricultural contribution of towards G D P unfortunately it is coming down for at least for India.

So, you have the same set of work force in the agricultural sector, but what they are getting? is shrinking. So, for each person in the agricultural sector what they are getting? Is going down. So, something needs to be done and that something is that at least you have to take care of these world prices, which are getting artificially depressed. Because you are giving subsidies, but as you say in the W T O, it is like a mercantilist organization. If you say that you dismantle the subsidies, they would ask you to reduce subsidies on the industrial goods.

So, it is not very simple or they will say that we want to promote our service sector. So, you open your markets. Let our banks also come in; let our insurance companies also

come in India. So, it is like give and take. So, it is up to the negotiators to do a good homework back it up by some empirical studies which are not very easy in when you are analyzing trade policy. So, once you do that then I think you will be in a better position to argue your case for dismantling all type of subsidies.

I will end up here; we will have some new issues on regional trade agreements specially trade creation and trade diversion. And why r t a s are becoming a bone of contention? Because there is one article in the W T O which says that r t a s are allowed. So, on the one hand they say that you liberalize all country should liberalize. And at the same time W T O also says that four people can come together four countries can come together and then liberalize.

So, whether regional trading organizations are a stepping stone towards multilateral liberalization, these are the issues that we will be discussing in the next few lectures.

Sir, this production subsidy that domestic price should decrease? Why it remains as t w? If there is competition in the domestic market (( )) producers can even charge less and still be in profit.

That is so, this is a case of a small country, if it were a large country the supply curve shifts, and the export supply curve shifts downwards, and if you have a downward sloping import demand curve. So, the, so there is a the world prices will come down, only thing I am saying is that world prices will not come down to the level, when export subsidies are given. Because when you are a small country you keep charging P W, for a large country, the export supply curve will shift down, there will be a reduction, but smaller reduction. Then, when the case of, when you have the case, where export subsidies are imposed by small country. Thank you so much.