Strategic Trade and protectionism - Theories and Empirics Prof. Pratap Chandra Mohanty Department of Humanities and Social Sciences Indian Institute of Technology, Roorkee

Lecture – 35 Sanitary and Phytosanitary Measures (SPS)

Welcome, once again friends to the NPTEL MOOC module on Strategic Trade and protectionism. This is our 35th lecture on specifically on non-tariff measures non-tariff barriers which is very important in the present days WTO negotiations where the developing countries largely you know emphasizing or having you know large number of majors on this channel.

So, the present title is specifically meant for understanding the important aspect of non tariff measures is Sanitary and Phytosanitary Measures called SPS under WTO negotiation. Let us have a start like this.

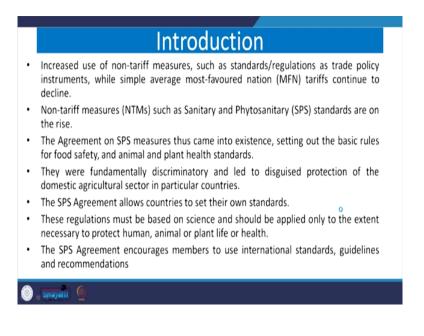
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Did you know?

 Agricultural products worth over US\$ 1,765 billion were traded in 2013.WTO rules help to ensure that these products are traded safely and that health protection measures are not used as an excuse for protecting domestic producers.

So, do you know that agriculture products having all you know 1765 US dollar US billion dollar million US dollar were traded in 2013. WTO rules actually helped help in ensuring this product being as being traded safely and that health protection measures are not used as an excuse for protecting domestic producers.

Usually know there are many instances where health related protections have been imposed by the importing country not to import their product. So, now the agricultural product actually went off with it is value on 1765 you know billion US dollar so, due to the protections.



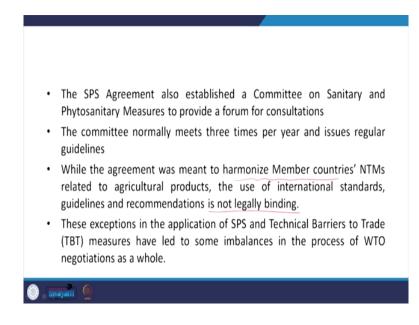
Now, let us start with the introduction on SPS as we already discussed non-tariff measures where standards or regulations are the are the required instruments which actually you knows with I mean instrument in protecting the products. This simply you know varies the simple average taxation called most favored nation tariff continues to decline whereas, these are the channels where the no restrictions are increasing.

Non-tariff measures such as SPS standards are on rise as I already mentioned. So, agreement specifically on these perspective SPS for measures came into existence setting out the basic rules for food safety, animal and plant health standards. We will discuss this what exactly on it sanitary and phytosanitary measures. These there they were fundamentally you know discriminatory because you know there is there used to be know standard you know coding standardization made. So, therefore, discrimination is observed.

Therefore, in different rounds of WTO discussion is useful on these. This has lead to disguised you know protection of domestic agricultural sector in particular countries. SPS agreement allows countries to set their own standards because of those agreements and to protect their country the sets.

This regulation must be these kind of regulation must be on science based on science and should be applied only to the extent necessary to protect human, animal or plant life or health related aspects. The agreement encourages members to use international standards, guidelines and recommendations.

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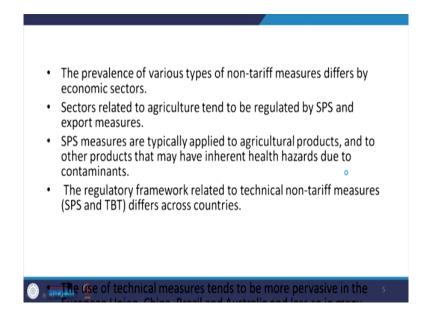


So, SPS agreement also establish a committee likewise in TBT we discussed called sanitary and phytosanitary measures committee to protect or to provide forum for consultations. These committee normally you know meets three times a year and issues regular guidelines for all the member countries.

While the agreement was meant to have harmonized you know codes or harmonizing member countries NTM related to agriculture products, the use of international standards, guidelines and recommendations not legally binding, it is clearly written. Wherein the earlier case in the case of TBT it was binding, but here it is these are the attempt in harmonizing the member countries relating to those NTM measures, but not legally binding.

So, there are many diversion expected. These exceptions in the application of SPS I mean these exceptions in the application SPS and TBTs measures have led to some imbalance in the process of WTO negations as a whole because of the non binding know principle.

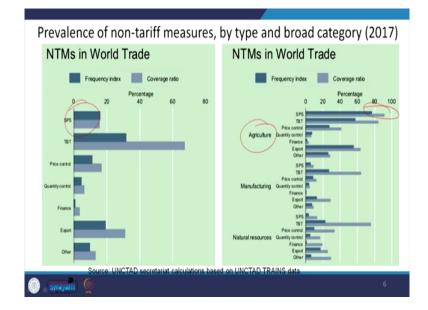
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Therefore, the prevalence of non trabojos effect I mean majors differs by economic sectors. And, sector related to agriculture tend to be regulated by SPS more where and as compared to export measures. SPS measures are typically applied to the agriculture products, and to other products that have been inherent health's hazards that have inherent health hazards due to contaminants contaminant due to you know possibility of contamination or containing with contaminants.

So, the regulatory framework those are relating to the NTF NTM SPS and TBTs differ across countries as we mentioned earlier and those are very pervasive in European Union, China, Australia and less used to be in low income countries.

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Now, let us count down the prevalence of those measures this is the you know diagram we have already explained in our previous lectures. Again, we emphasizing because the topic is on

SPS will emphasize the extent of SPS over time and so far as an NTM in the world trade is concerned by its frequency, by its coverage ratio, by you know by sectors specifically by sector category.

So, I start with here SPS here is I mean coverage ratio is around 20 percent less than 20 percent TBT is much higher and space for sector wise composition now look at it is the highest. So far as the agriculture sector is concerned, the protection is even higher than that of the TBTs where it is much lower in manufacturing sector and in natural resource component. Now, digging further to the explanation we can understand even better.

So, now, 30 percent are on the product line. So far as, you note TBTs are concerned and 70 percent by which 70 percent world is actually affected. Now, price control measures affect about 50 percent of the world trade where as SPS affect around 20 percent of the world trade.

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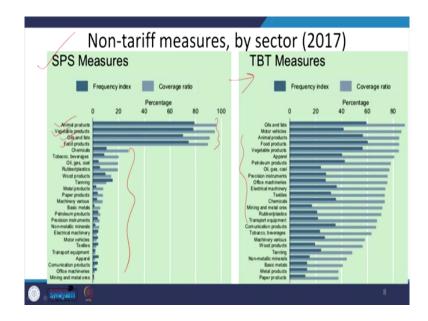
- International trade is highly regulated through the imposition of Technical barriers to Trade (TBT) with more than 30 per cent of product lines and almost 70 per cent of world trade affected.
- Price control measures affect about 15 per cent of world trade.
- SPS affect almost 20 per cent of world trade.

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- Export measures are also frequently applied to international trade, still their use is largely related to agriculture.
- Most of world agricultural trade subject to forms of SPS and TBT.

So, therefore, here 70 percent by TBT which impact SPS still you know and it is composition is lower than that of other component. So, export measures are frequently applied to international trade still their use is largely related to agriculture sector. Most of the world agriculture trade subject to the forms of TBT and SPS.

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Now, understanding by sector and in detail of SPS. Here we are mentioning SPS it is compared to TBTs SPS the sectors which attract highest measures are animal products, vegetable products, oil and fats, food and food products. Rest of the products as we have already mentioned attach is very very less component and these are largely agriculture products and near about you know 90 percent to 100 percent percentage point because and largely emphasized by the developing countries.

Whereas in case of TBT by sector these are they are in many of the sector where TBTs are extremely imposed. So, agriculture sector attaches highest amount of SPS over time.

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 contaminants, toxins or disease- causing organisms in their food, beverages, feedstuffs? human life from plant- or animal- carried diseases (zoonoses)? animal or plant life from pests, diseases, or disease-causing organisms? a country from damage caused by the entry, establishment or characteristics or their related processes and production methods, including the applicable administrative products or related processes and production methods, including the applicable administrative products or related processes and production methods, with which compliance is mandatory? with which compliance is not 	Jamp SPS	TBT (Technical regulation)	TBT (Standard)	TBT (Conformity assessment procedures)
spread of pests? mandatory?	 arising from additives, contaminants, toxins or disease- causing organisms in their food, beverages, feedstuffs? human life from plant- or animal- carried diseases (zoonoses)? animal or plant life from pests, diseases, or disease-causing organisms? a country from damage caused 	down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is	by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which	procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are

Now, we have already opened this particular page in our previous lecture, but we did not emphasize on SPS. Now, let us look at SPS in detail. So, it is certainly SPS related to not related to technical regulation standards, it is particularly on a aspect called human or animal life from risk and arising from the additives, contaminants, toxins or disease causing organism in their food beverages and feedstuffs. So, these are the areas where it is applied.

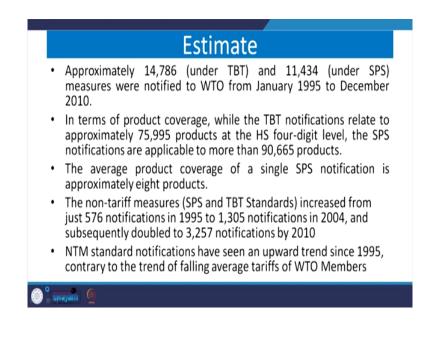
Human life from a plant or animal carried diseases is also looked at. Animal or plant life from pests, diseases, disease causing organism etcetera. A country from damaged from damage

caused by the entry, establishment or spread of pests these are all traced by which SPS is applied.

If a country if I mean or damage caused by the country by the entry like you know you might have heard you know in the announcement at the time of immigration checks to the other European countries or Western countries they specifically announced any kind of entry with your product, with your plants should not contaminate our country's plants or health.

So, this use is actually some of the products where some kind of expectations related to these segments are observed, they raise complaints.

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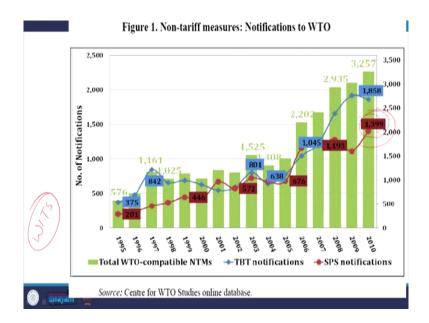


So, we have already discussed that now looking at the latest estimates of you know SPS you know measures. Approximately 14,786 under TBTs whereas 11434 under SPS measures were

notified to WTO till December, 2010. But that number is actually manifold till 2014. We have the number, we will discuss in terms of further coverage.

TBT notifications related to approximately 75995 products at the HS level four-digit and the SPS notifications are applicable only to I mean applicable to more than 95 90,665 products. So, the average product coverage of a single SPS notification is eight approximately eight products. Now, the non-tariff measures increase actually from 576 notifications in 1995 to 1,305 in 2004 and subsequently doubled to you by 2010. These NTM standard notification have seen an upward rise since 1995 so, contrary to the trend of falling average tariffs of the WTO members.

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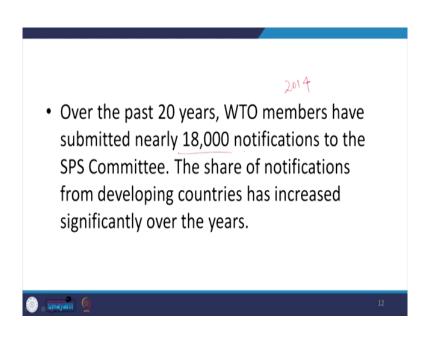


Now, looking at different tariff lines and here tariff lines, we can understand this is the source from WTO center for WTO studies database. You are referring this document and these are as

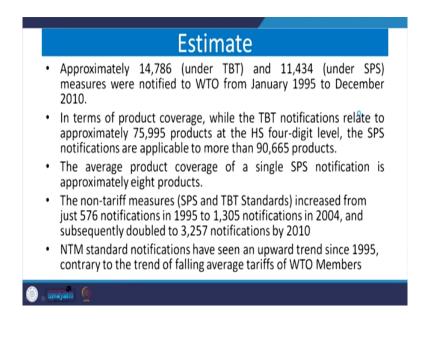
per the database they calculate it by using the you know the intellectual I mean intellectual trade solution WITS database world intellectual trade and trade solutions. So, from there they calculate the details.

Now, SPS notifications now you can see this has been rising these are highlighted in red color, where as the TBT notification is also rising in multiple you know percentage now over the past 20 years.

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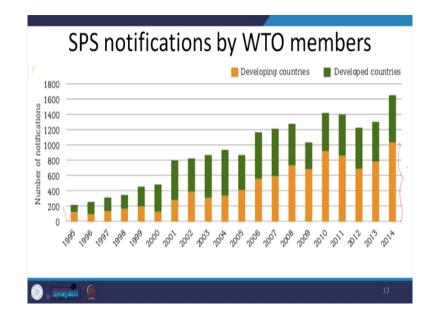
Now, looking at till 2014, we are now referring to 2014 data from since 1995, WTO members have submitted nearly 18000 notifications. So, till 2010, the notifications are 1399 by I mean SPS notifications.



Now, here I think I have already mentioned 11,434 where as till I mean in total it is 2014, but in only one year it is of 13 1399 only in 2010 if you add it all those years since 1995 it is 11,334 till 2010. Now, till 2014 this number went to 18,000 notifications as identified by the SPS committee.

The share of notifications from developing countries actually has gone off significantly over the years.

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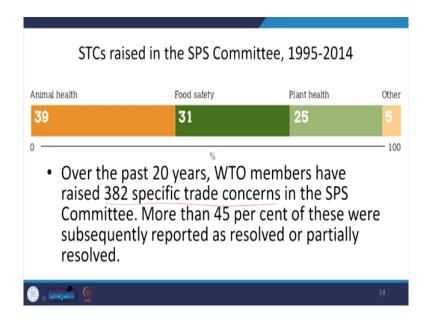


Now, SPS notification by w WTO members till 2014 as I just said so, it is rising. Now, this diagram you also dividing developed as well as developing countries you know notifications. So, number of notifications are mentioned on left panel whereas it is in the years the time over the time is mentioned on the horizontal axis. Now, look at here the developed countries is in green color and developing countries in another color.

Where over the time for through far so far as SPS notifications are concerned, developing country used to be you know raising number of notifications. Since there is no binding clauses, raised by the member countries and as per the agreement it is not binding. So, developed countries developing countries used to have higher notifications over the time.

Now, in the recent time look at 2014 data more than over 1000 notification out of 1600 plots notifications 1600 I mean more than 1000 notifications are actually raised by developing countries.

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Now, so far as STCs is I already wrote special technical you know concerns are raised in the SPS committee from 1995 to 2014 over the last 20 years as we have you know counted in the last data, there are around 39 percent you know notifications are raised related to animal health. The food which are actually imported by the member countries they raise that this is certain hazardous to the animal health.

Also around 31 percent highest is with animal related health complaints and 31 percent related to food safety and the plant related health related to 25 percent out of the all complaints only 5 percent related to other type of complaints. So, the member countries have actually raised 384

specific trade concerns special trade concerns these are exactly called specific trade concerns STC in the SPS committee. Out of 382 specific complaints have been recognized 39 are related to animal health.

More than 45 portion of these were subsequently reported as resolved or partially resolved. So, 45 percent have been you know resolved another you know 60 I mean 55 percent have not yet been are yet disputed or are not yet been solved. So, what is important here is due to the fact that you know out of 18000 complaints where the notifications raised only 382 have been recognized or a raises the specific trade concerns.

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\sim	\sim	Exp. growth, 1995-2010
	21.6 -	9.2
s 16.7	12.5	13.2
9.4	17.4	10.7
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ivided into two phas	ses: (a) the pre-Doha	Round
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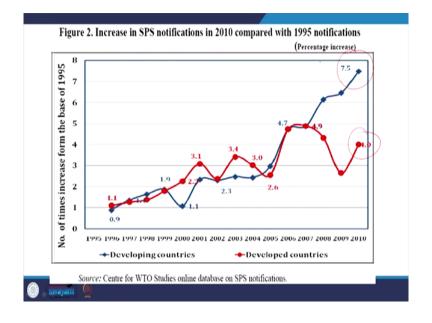
Now, counting different you know time period by pre-Doha and post-Doha deadlines we could see here that TBT notifications the pre-Doha round Doha you know pre-Doha deadline

where 4.6 whereas post-Doha it is actually you know multiple times at least you know more than 5 I mean at least 5 times higher than at the pre-Doha round.

Similarly, SPS notifications where higher actually the pre-Doha around and comparative lower in the you know post-Doha round. It has you know export growth relationship from 1995 to 2010; export growth was actually 9.2 percent. So, here SPS notification in this it has you know you know export growth of 13.2 percent in this connection; nearly NTM was 9.4 percent in the pre-Doha round where it is 17.4 percent in the post-Doha round.

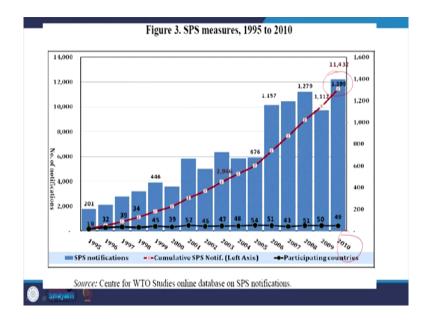
Now, increasing the trend of SPS related standards can be divided into two phases as you have already said and accordingly you can divide the two time periods and interpretation can be made and we have already discussed this.

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Increase in the SPS notification 2010 compared to 1995 notifications. Now, this is red one is developed countries and the blue one is for the developing countries. Now, here the number of times increase from the base of 1995 number of times increases compared to the 1995 is of 7.5, 5 percentage increase for the developing countries and for the developed it is only 4 percentage point.

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Now, looking at the SPS measures during the same period 95 to 1995 to 2010 where number of notifications we have already emphasized 13.99 in this particular year. This has gone up to you know gone up to I mean in total it is 11000 plus notifications over the years till 2010 what these data rate has gone again increase to you know we have already said 18,000 so, in 2014.

Look at the SPS notifications the highlight highlighted in the box I mean in the bar diagram whereas the cumulative SPS notifications are explained in the line diagram. Whereas, the

participating countries when they are participating countries you know other participating countries are also mentioned their rate is not rising.

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SPS measures: Trends in developed and developing countries

- In 1995 developed WTO Members made 79 of the SPS notifications, while developing WTO Members made 122 notifications. By 2000, this trend had reversed, with developing WTO Member countries showing a decrease in notifications. In 2001, notifications by developing Member countries started to increase again, and continued to rise until 2005,
- One significant reason for this increase in developing country participation in this phase was notifications by China following its accession to WTO.
- In 2006, there was a sudden increase in the notifications by both developed and developing WTO Members, which led to near-doubling of the annual notifications.
- The rising trend during 2006-2009 was dominated by developing countries.

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Now, so far as SPS measures for develop and developed and developing countries are concerned already we have discussed some of the facts. Now, we may also talk about some other facts based on the results derived by different experts in 1995 they have developed WTO members made 1779 SPS notifications while the developing WTO members made 122 or and 122 notifications.

By 2000 this trend has reversed while the developing or the WTO member countries showing a decrease in the notification. In 2001, notifications are actually you know by developing member countries started to increase again and continue to rise until 2005. It is clearly you know highlighted from the diagram.

Now, one significant reason of this increase in developing countries participation in this phase was notifications by China following its accession to WTO since 2001. So, China has started raising huge number of notification. In 2006, particularly there was a sudden increase; increase in notification by both developed and developing WTO members which has led to nearing doubling of the annual notifications.

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The rising trend during 2006 to 2009 was dominated by developing countries particularly as we have already discussed. Here is the difference it is rising specially from 2006 to 2009 - 10. And, of the 20 members among the developed category largest notifier of SPS measures were United States followed by China followed by Canada, European Union, New Zealand, Australia and Japan.

With regard to a SPS measures some of the developing members with significant high notifications were Brazil, Republic of Korea, China Peru, Brazil has I mean 185 notifications followed by Republic of Korea of half of that, then Taiwan, Province of China and then Mexico, Thailand etcetera. This is the highest presence of standards was among the Asian and Latin American countries we have already discussed.

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- Studies concluded that these SPS and TBT standards have, on the whole, had a negative impact on trade.
- What is interesting is the fact that the measures do not deter exports/imports between Organisation for Economic Co-operation and Development (OECD) members. However, they do constrain exports from developing and least-developed countries.
- Therefore, it is evident that these standards do have an impact on the overall market access scenario in the developed countries.
- Approximately 90 per cent of the SPS notifications submitted to the WTO Secretariat (1995 onwards) does not contain HS code details. Therefore, it is left to the discretionary powers vested in customs authority at the border of the importing country.

So, studied concluded that and based on this concluded that this SPS and TBT standard have on the whole have a had a negative impact on trade the large number of study actually observe this. Which is I mean what is interesting here in this fact is that the measures do not deter exports and imports between OECD member countries Organization of Economic Cooperation and Developing members. So, between the OECD countries this has not iterated I mean this has not you know undermine that trade. However, they do constraint exports from developing and least developed countries that is a matter of concern. Therefore, it is a evidential to the fact that these standards do not do have a an impact on the overall market access scenario in developed country countries because developing countries are actually concerned highly on those aspects. Approximately 90 percent of the SPS notifications submitted to WTO secretariat does not contain HS code details.

Therefore, those are left to the discretionary powers of the powers vested in custom authority at the borders of the implementing country. Since HS leveling are not mentioned. So, those a customs may take advantage in and they are the distance in power to receive or not to receive.

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Trends in the use of SPS objectives

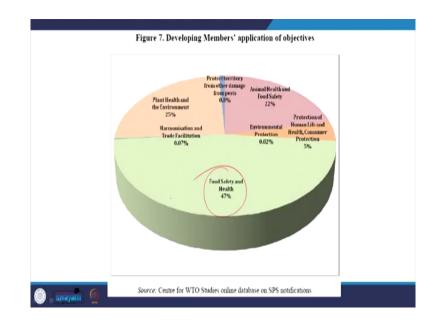
 largest number of notifications by developed Members have been on food safety and human health (66%) followed by animal health (15 per cent), plant protection (12 per cent), human health (5 per cent), and consumer protection and animal and human health (1 per cent each). So, trends in the use of SPS objectives so far – a large number of notifications by developed members have been on food safety and human health. Whereas I mean this is followed by animal health which is or which was of only 15 percent and you know plant protection was of 12 percent, human health of 5 percent consumer protection and animal and human health is only of 1 percent each. So, these are the trend of protection to different extent.

Figure 6. Developed Members' application of objectives

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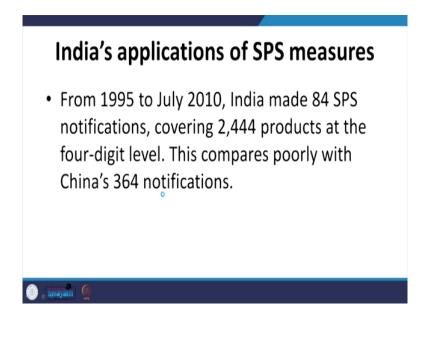
Now, that could be explained here food safety 66 percent larger segments followed by you know I mean here it is mentioned 11 percent plant health protection, human health of 6 percent, then I mean here another 60 percent followed by animal and human health of 16 percent, then plant and health protection of 11 percent like this as per the calculation made by at the center for WTO studies you know New Delhi.

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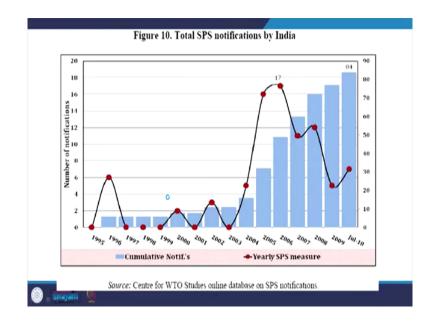
So, developing members application of objectives – 47 percent towards food safety and health, then around 22 percent or 25 percent on plant health and the environment, 22 percent on animal health and food safety.

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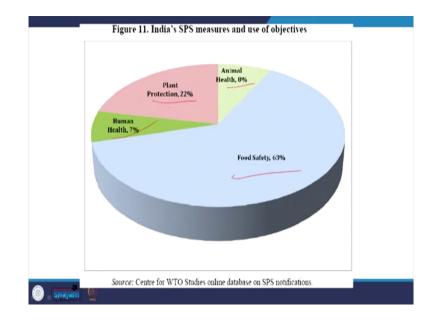
So, regarding India's context from 1995 till the period July 2010 India made 84 SPS notifications only as against 364 notifications China made even if China joins in 2001. So, covering out of 2440 products at the four-digit product level India only could able to highlight 84 SPS notifications. So, these are mentioned here.

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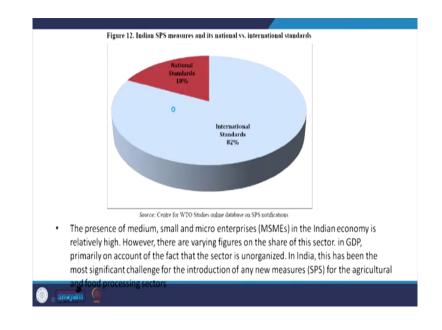
Now, here is the 84 notifications, cumulatively you know it is also given yearly SPS measures also given in the line diagram. So, the major rise of those are from 2005 - 6 onwards there has been a huge rise in the notifications.

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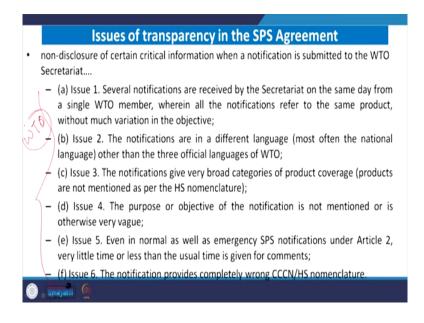
Now, India's SPS measures and use of their objectives or 63 percent on foods food safety followed by 22 percent on plant protections, 8 percent on animal health, human health is of 7 percent.

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Now, looking at Indian SPS measures in a national international standards, international standards of 82 percent, national standards of 18 percent. They are overlapping with national international standards. The presence of SMEs, MSMEs in the Indian economy is relatively high. However, there are varying figures on the share of the sector. The GDP primarily on account of the fact that the sector is unorganized. India therefore, has been the most significant having an having I mean, in India, this has been this most significant challenge for the introduction of new SPS measures to protect its agriculture sector especially for the food processing sectors.

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Now, there are certain transparency clauses attached likewise in TBT technical barriers to trade we discussed. You can follow this slide or better to follow from the WTO you know website on transparency clauses we have already discussed some extent.

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Now, we are discussing a case which is very interesting so far as WTO and SPS measures are concerned. One case is very interesting to note here resolving a trade concerns cinnamon exports from Sri Lanka. Now, look at I mean in 2005 and early 2006 Sri Lanka raises specific trade concerns especially in the you know SPS you know committee about the European Union's import restrictions on it is cinnamon exports ok.

So, the concern was actually in the early 2006. So, the issue was actually Sri Lanka's traditional practice issue was here mentioned as practice of burning sulfur is the way of protecting cinnamon from possible fungi and insects. So, that was the concern raised by European Union to restrict this product.

While this practice does not require direct application of sulfur on the cinnamon, it does leave some residue. And, and European Union specially you know its directive setting maximize residue levels for sulfur dioxide prevented Sri Lanka's you know cinnamon exports from entering the European union market.

So, they have the standard where as the WTO negotiations I mean in the SPS standard this was not set we will just mention. In raising the trade concern, Sri Lanka said there was no international standard for sulfur levels in cinnamon. Though European Union has already set a standard by which the restrict, but in the WTO negotiations this was not mentioned. So, which has lead to I mean raising the complaints in SPS agreements.

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Resolving a trade concern: Cinnamon exports from Sri Lanka Codex Alimentarius Commission was at that time in the process of considering the use of SO2 as an additive but had not developed maximum permitted residue levels for SO2 in cinnamon. Following discussion in the SPS Committee, the Chair drew the matter to the attention of the Codex Commission, which subsequently adopted a standard establishing a maximum residue level for SO2 in cinnamon. As a result, the EU decided to base its requirements on the Codex standard and by the end of 2006, Sri Lanka reported to the SPS Committee that this issue had been satisfactorily resolved. - swayani 🤅

Now, Codex Alimentarius Commission was at that time in the process of considering the use of sulfur dioxide as the additive, but not developed maximum permitted residue levels in for the cinnamon. So, following discussion in the SPS committee the chair drew the matter to the attention of the Codex Commission which subsequently adopted a standard establishing a maximum residue level for SO2 in cinnamon. So, therefore, I mean this the committee said and negotiated among the complaint raised by another I mean union European Union. So, they discussed each other and it is and the chair in the committee paid the attention on it and set the standards.

So, as a result what really happen you decided to base it is requirements to the Codex standard and by the end of 2006 Sri Lanka reported to the SPS committee that this issue had been satisfactorily resolved in their you know cinnamon production and export. And, and that is all about one of the SPS agreement which has actually helped the member countries to solve the dispute related to trade moment from one country to another country.

So, we have discussed in short what kind of what are the number of SPS restrictions, how it is different and out of that TBTs and under which segment SPS is more prevalent, and how developed countries and developing countries actually practicing SPS, and we have seen that specially it is for agricultural sector and in developing country used to you know apply this over time. So, and lastly we said we observe that cinnamon case of Sri Lanka where the dispute have been successfully resolved.

So, I think we have completed our non-tariff you know major section with this week and we have discussed so many aspects tariff, non-tariff, number of protection in detail. Now, we are now unfold going to talk about agreements related you know multilateralism regionalism in the next week and the next class, we will be starting with WTO and its function. With this, I think I should stop here.

Thank you so much.