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

### Lecture – 02 Introduction to Protectionism and Strategic Trade

Once again welcome to this course on Strategic Trade and Protectionism Theories and Empirics. This is the second lecture, we specifically stretching to the introduction as discussed in the first lecture. The first lecture was purely on India's trade and protectionism, specifically the background to the protectionism issues.

Now we are stretching a bit to understand how Protectionism and Strategic Trade are connected as an introductory part of the total volume. Now myself Dr. Pratap Mohanty is a faculty in the Department of Humanities and Social Sciences. I have been covering strategic trade in different you know training module as well, while I was in Indian Institute of Foreign Trade.

So, I will talk about many aspects of strategic trade, but first your strategic trade is not understood correctly unless we emphasize the theory behind it. Without theory empirics is meaningless; the theory identifies various issues pertaining to various circumstances as observed by different experts. There are gamut of literature which has understood strategic trade.

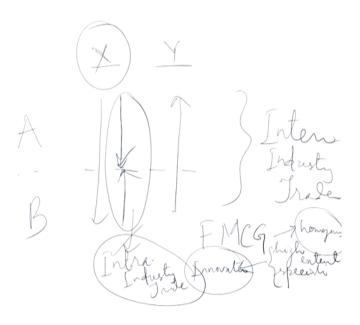
Now, let me have the you know privilege to go further to understand the background of strategic trade. Now especially after World War II, the international competition for manufacture you know products was actually improved tremendously; especially among the top most countries and especially the high growth and high tech economies. So, the focus was after World War II on producing as much as possible on the manufacturing goods.

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Now, manufacturing goods also created space for the understanding of intra industry trade instead of inter industry trade. What is the difference between these two? Intra industry trade emphasizes the trade within the industry instead of understanding X product exchange with X product, we are supposed to understand X within X.

So, suppose we are referring to two commodities X and Y, there are two countries A and B. Now we are supposed to explain two things; if you are explaining X against Y like these, this is purely called you know inter industry trade. Now, if I just go to a you know go to another slide here, I will explain these things in detail. (Refer Slide Time: 03:53)



Now, there are two countries, let us country A and country A they are in trade with each other. Now, this is the you know borderline by which the you know transact their products for commodity X is of one industry and commodity Y for another industry. Now, with you know the classical instruction to trade or classical suggestions, classical economies and they are suggestion to trade and we suggest that X is exchange with Y.

So, these purely called inter industry trade, inter industry trade. Now over the time what really happens; due to specialization and due to economies of scale products are generated with highly differentiated in nature. So, not necessarily products are different in nature, they are differentiated like you know FMCG variety it fast moving consumer goods; like detergent, like toothpaste, like you know even textile products as well although it is not part of FMCG.

So, products are slightly differentiated, they are usually homogeneous in nature. So, the homogeneity comes from not just due to you know trade rather it is due to high specialization, high extent of specialization. And this has given space for innovation and technical no house being accessed across the countries. So, the innovation actually gave birth the production which are varying slightly and they make very qualitative products.

So, now, the question comes, if the products even if X the same textile variety, same toothpaste varieties they are treated as X as the commodity. So, one country export X will leave, another country is actually is also exporting, the country B also exporting X to the country A. So, it is not just a one directional you know transaction, rather there are two directional transaction; this is one direction country A export X to B and another half is actually exported by B to A. So, there are both relational transactions, this is called intra industry trade.

And in the present days you know majority of the products are actually exchanged in this route, in intra industry transaction routes. So, now, this point is clarified to the extent of explaining how trade is taking place specially after World War II. And this has become the reality only because after World War II many countries has opened up their boundaries and they have been trying their best to minimize the extent of protections extent of tariffs, specifically tariffs; though non tariff barriers are rising over the time, we will be explaining in a short while.

Now, if I talk about the other details, now this intra industry trade is highly observed in European common market. Now again there are many concepts to it Union European Union as against to union common market or currency union or trade union; there are various other concept we will explain in that trade integration or trade blocks unit. But for our idea this is majorly referred to Euro Zones ok, where many countries are actually connected due to their intra industry trade setups and intra industry trade you know transactions.

Now we know they use various means such as export subsidies. Now, this is very important to discuss so far as trade strategies is concerned. And export subsidies are the means of making their products more competitive in the international market; their domestic countries try their best to promote their exporters in terms of subsidies in order to bargain in the international market.

Now this is primarily suggested as one of the most important instrument of strategic trade as against optimum tariff; only because tariff, if one country tries to you know imposed tariff or to have an optimum tariff for another countries products to divert their you know market within the country that has been observed that you know countries retaliate very quickly. But in case I export subsidies, the retaliation has been observed very very less; because it creates expenditure to the domestic country as well.

So, this is the phenomenon observed for the specially for the developed countries, because they have enough you know expenditure to be borne for the export subsidies. Now export subsidies has been seen especially in high tech and high investment and high growth countries ok; high tech industries, high investment related sectors, and specially in high growth sectors and countries as well.

Now let us understand why we should have a theory on it. What the theory in totality talks about? Broadly you know theory conceptualizes various circumstances into a simplified version of understanding to the common people. Now theory puts various situation into different set of equations or different set of you know arguments to understand or to project for a near future or for a long future.

Now, the classical theories broadly talks about the supply side of the story that, the supply creates it is own demand. The classical therefore, propagated for as less as possible interventions and we are referring to the context in the you know early you know 18th century or the late 17 century, where those economy were actually driven by supply side of the economy. But the over the time since you know problems are actually aggravated and you know there have been you know shortfall of demand to catch up this supply.

So, many other economist seriously captured the other issues in the market. Now in this connection, we are supposed to understand why new theories are important; over the time you

know after classical's I think it is always important, always very important to know the that the new classical suggested for not just you know not just the labor as the factor behind you know production or the competitive. You know structure between the industries or the fast you know guides the production function.

In otherwise I just wanted to say that, it is not the perfect equilibrium that guides or not just the perfect market that guides the trade; rather than imperfection in the market actually derives lots of possibility of trade. The imperfections in the market actually derives possibility of trade which was emphasized by the new trade theory. The classical broadly you know confined their direction in the you know no public policy, no government interventions, you know supply resources available and these are optimize in the production function.

So, therefore, only you know one varieties of production or produce an excess within other commodities with another country. Wherein the new classical suggests that it is not the case; it is not the factor that guides, it is I mean factor you know labor is not everything rather more than other than labor are also important. Like you know the availability at the endowment is mentioned by the you know Heckscher Ohlin model.

And also that the standard theory talks about some aspects of you know in perfect competitive structure, who is late to introduction trade; and they also suggested to the fact that there is no perfection in the equilibrium. So, there is no question of corner solution, we will discuss in detail in it is respective module.

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Now we know European common market as a whole viewed the US as a competitor. And you know accordingly they strategize very differently. After some time it was observed they are Japan has successfully shifted from developing strategies to a developed country status. Now, with the success of Japan and international you know industry competition between the European common market us needed an explanation from international trade.

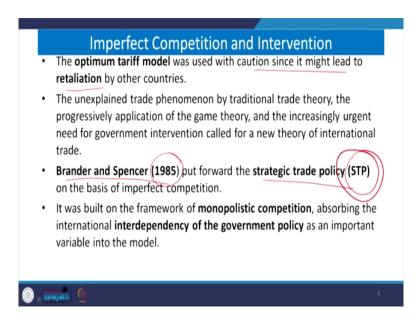
So, let me also point out some other periods which are also important in this connection. Before 1980s internal trade theory did not expect that, national competitive advantage would change with the function of private activity or the government policy. So, basically after 1980 is the period where the new classical or the I mean new classical theory; specially the modern trade theories emphasize the role of government policy. And, government policy in strategizing their products in facilitating their products to make their products more competitive; competitive in the international market.

Now why this is the phenomenon? Because usually we have seen in micro economic theory that you know, there are broadly the markets are divided into two structure; perfect and imperfect. Perfect have market you know has you know various classy you know assumptions, which are not valid in many context; where is in imperfect competitive structure, product differentiations is one of the important features.

So, product differentiation actually emerges, because of scale economies. A scale economies are the product of many other factors; one of the factor may be government policies which facilitates product differentiation. Now in this context the mainstream models except; even during the mainstream models basically we are trying to talk about the classical models, except the optimum tariff, did not leave enough space for trade policy to promote national welfare.

And now another aspect is also emphasize; how the new trade theory also talks about the implications on national welfare through non tariff measures or tariff measures. Specially here they talk about subsidies as against optimum tariff, because as I already mentioned tariff has a chance of retaliation; but whereas, subsidy has been observed that it has been observed their subsidy as little as retaliation, because it incurs cost to the government.

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Now, if you look at you know optimum tariff model, as I already mentioned it might lead to retaliation by other countries. Again there are on explained trade phenomenon by traditional trade theory; specially you know they are you know cases of game theoretic strategy by different you know farms. And it is the origin need of the government to intervene in the internal trade; on otherwise it might divert trade massively.

Now the first and foremost importance in this context was emphasized by Brander and Spencer in 1985, they talked about strategic trade policy in many documents are available which identifies STPs, strategic trade policy on the basis of imperfect competition in the market.

Now it was built as a framework because of monopolistic competition prevailed in the market. So, absorbing international dependency of government policy is very important;

because if one government adopts certain kind of policies, so another government must observe that in order to retaliate it or take the advantage differently. But if I just try to talk about you know different models, specially let me go quickly to the understanding of Stackelberg model, where we usually emphasize leader follower proposition, leader follower position.

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<ul> <li>It emphasized how the government intervenes to create some benefit to its own country and what was the optimum timing of such intervention.</li> </ul>
<ul> <li>Brander and Spencer (1985) concluded that an increase in the domestic subsidy would make the world price of the product go down, the domestic profit would increase, but the foreign profit would decrease.</li> </ul>
<ul> <li>Without the subsidy, the optimal tariff makes the equilibrium of industry be in the Stackelberg leader-follower position and the domestic firm as the leader.</li> </ul>
<ul> <li>Brander and Spencer (1985) held that when domestic firms competed with foreign firms and the market was an oligopoly, the export subsidy could be an effective government instrument.</li> </ul>
<ul> <li>By increasing the production of tradable goods domestically and increasing the market share of monopoly rent, strategic trade policy can be called the profit-shifting policy.</li> </ul>
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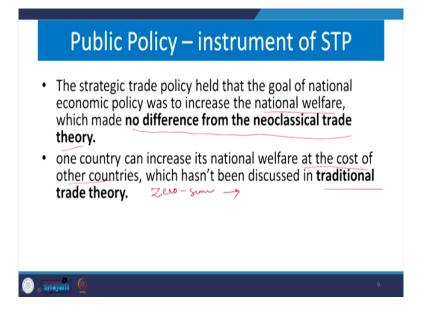
Where the leader, if leader is the country which adopts a new policy; this specially this is discussed in the context of optimum tariff. Once one country adopts optimum tariff, another country also will retaliate; so therefore, ultimately in the long run that leads to you know reduction of welfare in both the countries.

So, usually it has been observed that price there has been a price work, price reduced you know dramatically; though in the initial phases the leader captures the market, but long run it

was not you know sustainable. Whereas, it against to this model, Branders Spencer suggested for domestic subsidies I already said several times, which make price of the product go down because of subsidy in the international market. But the domestic product profit would actually increase; but the foreign profit decreases because of strategies in the you know way of giving subsidies to the you know exporters.

Branders and Spencer in their 1985 paper, again emphasize domestic farms computed with forum farms and market was an oligopolistic structure or even monopolistic structure; export subsidies could be an effective government instrument, this is similar to the views I have mentioned in the earlier slide. So, therefore, the policy as a strategy now moving towards profit shifting policy; not just trade policy rather profit seeking policy, profit shifting policy with the intervention of government.

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Now, in order to have you know better instrument of strategic trade policy, we may say that there is no such difference between neoclassical trade theory as compared to the modern or the new neoclassical trade policy. So, far as understanding the national welfare is concerned, because both the theory talked about national welfare; if tariff is imposed farmers is a distortion in terms of national welfare will be discussed in our succeeding you know week of our lecture.

But whereas, it against a traditional one; one country can increases national welfare at the cost of you know other countries, which has not been discussed in the traditional trade theory. So, basically there is a you know cut of bargaining and that emphasizes zero sum game or though zero sum game; specially in the mercantilism sum market mercantilism propositions. In mercantilism school they talked about zero sum you know game; one is better up at the cost of another one.

But in the new classy I mean in the traditional you know theory, they said that both will actually grow while trade. But in case of modern theory or the neoclassical theory they said that there are possibility of again the case of zero sum game. And now, so therefore, is as we have emphasized several times that the importance of public policy is the call for today's monopolistic competition.

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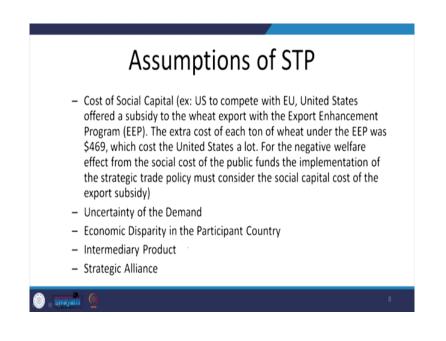


Now, the development strategy trade policy development of the trade strategic trade policy are actually based on various assumptions, strict assumptions. Strategic trade policy are possible if and only if some of these assumptions are followed. Like commitment ability of the government, if the government is very very committed to our states you know citizens or the development of their domestic sector; then there are high possibility of you know benevolent government and can able to go for having you know better facilitations.

So, another aspect assumption is called asymmetry information; when the information is not correctly diffused to all the you know countries, so there are possibility of you know different strategies. Nonlinearity on in the policy instrument as well, because you know in the policy instruments are not fixed; they are very often the time overlapping and even there are various forms of policy instruments. So, therefore, when they are not clearly defined, countries can

take advantage out of it. So, these are very realistic assumptions and are very required while having any kind of strategic trade policy.

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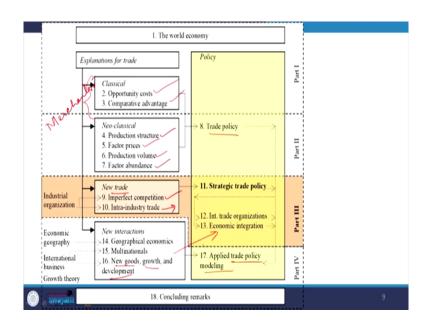
Some other assumptions are like cost of social capital; we suggest that, the society as a whole bear the brunt of the taxes, bear the brunt of you know of the strategic trade policy to some extent. If they retaliate and then and do not you know accept the changes, then it will be very problematic. So, there are possibility of you know negative welfare to their society. So, there are high chances of social capital as well. So, that has to be minimized.

So, similarly uncertainty of demand across the countries, and economic disparities of in the participant country and intermediate product; if intermediate product are very competitive in nature and does not have imperfections, may not differentiate the product actually differentiate the final product. Similarly strategic alliance you know, they have you know

coalition with the some of the partners to minimize their expenditure and to differentiate their product.

So, trading trade blocks are referred in this context highly. So, these are various aspects of you know strategic trade policy.

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Now if you look at in short, what is going to be discussed at strategic trade policy and in all other succeeding classes; we are supposed to discuss broadly classical economies, where we will discuss the opportunity cost of production and the comparative cost advantage derived out of it.

In the new classical you know school of explanation for internal trade, we will talk about product structure in factor prices; how these determine international trade, product volume

does it matter by scale or by abundance, by intensity those things will also be you know covered, factor abundance will be covered.

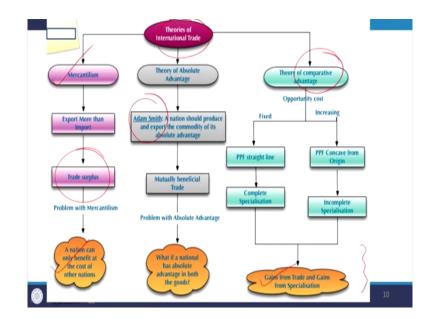
Now, when we talk about these two theories; we will certainly have certain aspects of trade policy based on the availability of resources. So, trade policy will actually talk are very very essential for various trade modeling's. So, therefore, those classical theories are also important. In addition to that we are supposed to add mercantilism theory as well, mercantilism theory as well in detail.

So, now, the major nitty-gritty and the you know strategic trade are actually discussed in the context of IO industrial organizations; where we referred to new trade or the new neoclassical trade theories. Imperfection in the trade market specially oligopolistic structure on the monopolistic structure are referred and where we will be explaining in detail how intra industry trade is conducted. And majority of the trade in the present days are in the form of intra industry trade. I have already explained the diagram of intra industry trade before.

Similarly, the new trade theory also emphasize geographic economies boundaries if are less and these economies are actually also important, specially European Union if you are referring to; they have huge economies in terms of their geographic boundaries. And similarly if you refer to SAARC countries, Asian countries you know, India has you know attached its benefits to its neighboring countries and that massively reduces the total you know expenditure for transportation.

And the internal economies are also highly internalized due to the integration of those border economies. Now similarly malt nationalism or multilateralism with the help of multi nationals; new goods growth and development are also discussed in the context of international you know trade policies. Tjis also discuss in the context of economic integration as well.

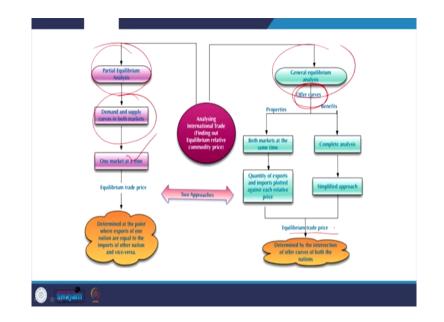
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Now couple of other details to be guided, since this is the introduction, it is always important to understand the whole structure of the other classes or other week lectures. So, we will be discussing theories of international trade in detail, we will emphasize mercantilism which you know talks about trade surpluses.

And nation can only benefit at the cost of other nation, which I have already said zero sum game is emphasized by the mercantilism. Then we will also discuss costs advantageous theory, opportunity cost advantage theory, emphasizing Adam Smith theory to you know the comparative cost advantage theory by David Ricardo; where we will talk about gains from trade and or gains for specialization. These theories are not emphasizing on the zero sum game aspects.

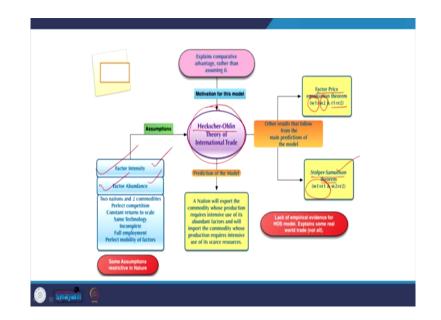
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Some other modules will guide us in two directions; partial equilibrium as against general equilibrium analysis. Partial equilibrium analysis where we will be you know discussing about demand and supply of the market yet ago for a specific product, for a specific industry at a time; whereas, in the general equilibrium analysis we will emphasize offer curve, where all markets are collected simultaneously, factor market you know, product market service market or markets are connects simultaneously to derive it equilibrium trade prices.

How these prices actually strategized across the globe through this theories. Now, after explaining these two connections, we will also talk about availability of resources called factor intensity and factor in abundance. Factor in abundance with the availability of resources within the country that differ trade and based on the abundance of the factors, specialization is also expected.

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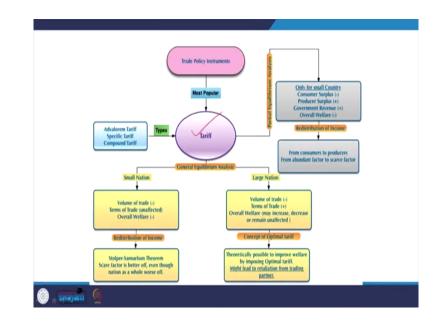


Though you know these theory Heckscher Ohlin theory did not explain so much on this; they try to only emphasize this abundance and intensity accordingly. But later on some other you know important results are derived, who is led to factor price equalization; factor in one country actually equalize with factor in another country. So, w 1 wage rate in one country equalized with w 2 in another country, similarly interest rate are also expected to be equalize.

So, strategies of trade is also connected in this context, because when there are trade taking place spatially based on factor abundance; the factor prices are also expected to be equalized. So, when factor prices are equalize, the country might tap the benefits out of it; the third country also might derive you know maximum benefit out of it.

Now where a Stolper Samuelson theory, Samuelson received Nobel prize already on his contribution to you know many developmental theory, specially in trade theory. Now it says

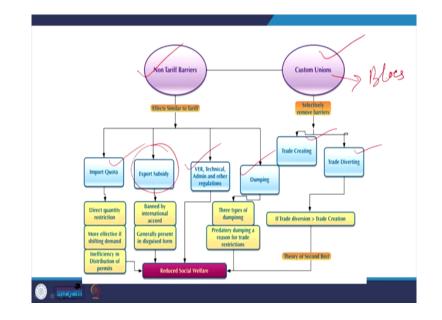
that factor prices are equalized; that is true it also equalized across the sectors, not just wage is equalized with wage, wage is also equalize with order set interest rate, cost of the capital as well. So, those things also be explained.



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Now, after having discussed with these you know neoclassical theory and classical theories; the modern theories actually emphasize on policy instruments by talking about tariff as I discussed, where we will be emphasizing again Stolper Samuelson theory a bit and the different types of tariffs.

We also talk about small nation argument versus larger argument; for example, know if China and Nepal is in trade, then in which context Nepal is going to take benefit out of it. And if China and US is in having trade our trade war, then is it naturally effect that you know US is having you know win-win situation in all the context. Then what really you know undermines US not to take advantages, will be explained with the help of theories.



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So, now the most important emphasis will be given, a major emphasis will be given on non tariff barriers; where will be discussing export subsidies which are emphasized by Brander and Spencer's model, import quota voluntary export restraint or the technical barriers to trade, dumping, trade creation, trade diversion through customs union are also be emphasized; basically I am referring to blocks, blocks multilateral regimen you know regionalism aspects will also be discussed.

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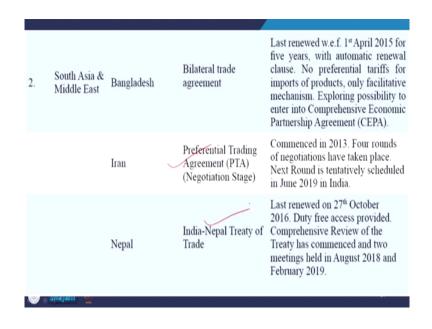
So, therefore, India has bilateral trade agreements with all major regional groupings. We have already you know explained in our previous lecture that, India has agreement with 28 forms of forms in the year 2018. So, India has been trying it is best to top all possible strategic trade through various agreements.

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PROGRESS ON BILATERAL TRADE ARRANGEMENTS						
S. No.	Regional Grouping	Country/ ies	Agreement Name	Salient Features		
1.	Europe	EU countries	INDIA-EU BTIA (Negotiation Stage)	Commenced in the year 2007. Sixteen rounds of negotiations till 2013		
		Consists of Switzerland, Norway, Iceland and Liechtenstein.	European Free Trade Association (EFTA)	Total bilateral trade US\$19.9 billion during 2018-19.		
		Consists of Switzerland, Norway, Iceland and Liechtenstein	INDIA – EFTA TEPA (Negotiation Stage)	Trade and Economic Partnership Agreement (TEPA) initiated in October, 2008. Seventeen rounds of negotiations have been held. Last round of negotiation was held from 18-21 September, 2017.		

Now, that the progress of those bilateral agreements of India are discussed here in detail.

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We will carry forward all those details with India EU BTIA, EFTA, CEPTA, preferential trading agreements, then you know India-Nepal Treaty.

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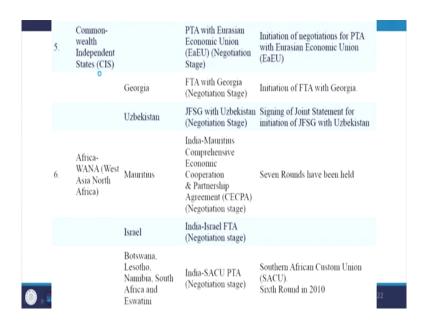
3.	ASEAN	India, Malaysia, Singapore and Thailand.	ASEAN India Trade in Goods Agreement (AITIGA)	Came into force on 1 <sup>st</sup> January, 2010. All ASEAN members signatory to FTA. Review of AITIGA on hold until conclusion of RCEP negotiations.
		Singapore	India-Singapore Comprehensive Economic Cooperation Agreement (CECÅ)	Signed on 29th June, 2005, covering goods, services and investment. First review in 2006. Second review in 2010.
		Singapore	Mutual Recognition Agreement (MRA) in Nursing with Singapore	Singapore agreed to expand coverage of Indian nursing institutions by recognizing seven nursing institutions.
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There are actually various forms, ASEAN will discuss in the trade block chapter.

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4.	Latin American	Argentina, Brazil, Paraguay and Uruguay	India- MERCOSUR Preferential Trade Agreement (PTA)	Came into operation in 2009. Margin of Preference (MoP) is offered on tariff lines.
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		Chile	India-Chile Preferential Trade Agreement (PTA)	Came into effect in 2007. Margin of Preference (MoP) is offered on tariff lines.
		Репі	India Peru Trade Agreement (Negotiation stage)	Four rounds of negotiations held. Last negotiation held in March 2019. Next is proposed in August 2019.
		Ecuador	India-Ecuador Trade Agreement (Negotiation stage)	Exploring feasibility of Trade Agreement.
		Colombia	India-Colombia Trade Agreement (Negotiation stage)	Exploring feasibility of Trade Agreement.

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Because the know there is the introduction, I just have the glimpse of all those things; here will carry forward all those discussion in detail, specially in the trade blocks chapter. Now having said this, in short trade strategies are important not just tariff that is proposed by the neoclassical economist is important, non-tariff barriers are very important and strategic trade also defined by in the present days through differentiated products and through various forms of regionalism, multi nationalism.

With this thank you so much, we will carry forward to the next class.