International Finance
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Lecture - 31
International Trade Theory

In number thirty one session, we will be discussing about international trade theory. You have to understand that trade is a part of international business, and international business is a part of international financial management. The earning, spending of foreign currency, significant part coming from the international trade side. And why a trade take place; what is the theory behind the international trade, how over the year the trade theory has changed should also be a part of international financial management. And we will be discussing about various theory of international trade starting with the classical theory, then we will migrate to what is called recent development in trade theory, that is, the new trade theory (( )). Then we will discuss about the relative Heckscher-Ohlin theorem. Then we will also discuss about the Porter's model of comparative advantage, and also we will be discussing about the trade barriers, which are the factors, which actually hamper the trade barrier, and how we can improve the international trade by removing the trade barriers.

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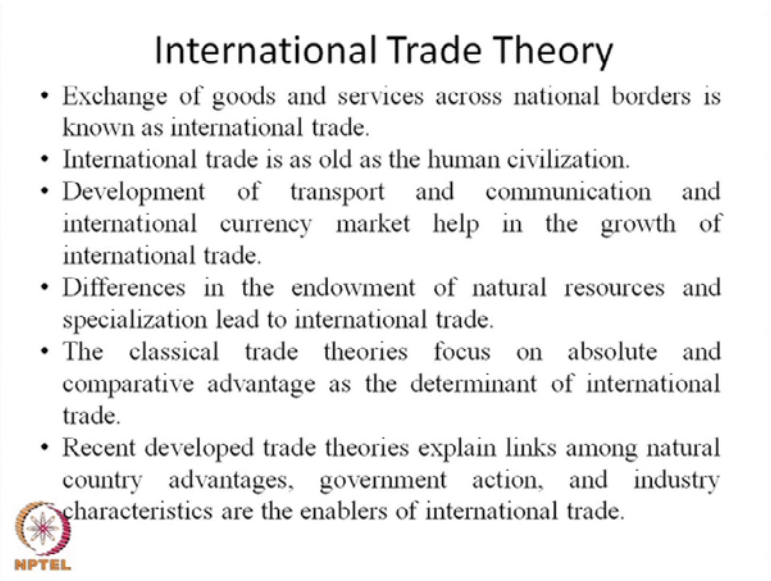

Let us start with the international trade theory. What is actually international trade? International trade is nothing but exchange of goods and services beyond the national boundary. And if you see, the international trade is as old as the human civilization itself. From the days of human civilization, there has been trade; trade may be exchange of goods and services in the barter system – one goods for another goods. After the development of monetary unit particularly the gold standard or the paper currency standard, the international trade further developed. Development of transport, communication and the international currency market help in growth of the international trade. Differences – why international trade will be there? That is because all countries – different countries (( )) endow with natural resources; equally endow with natural resources; they are not endow with specialization. So, the specialization differences – the differences in the endowment of natural resources, differences in the production process lead to development of international trade.

The classical trade theories focus on absolute cost advantage as the determinant of international trade, because two countries: one country produce particular commodity or goods as cheapest way; and another country cannot produce the same compared to other country; there will be exchange of goods. And this exchange of goods leads to international trade. Recent developments in trade theories explain the link among natural country advantage, government action, industry characteristics are the enablers of international trade. The enablers are not the only absolute cost advantage, but also the government policy, the subsidy, the government intervention international trade. The development of country's natural resources, the scientific R and D development, the innovation – all these contribute; all these are enablers of international trade.

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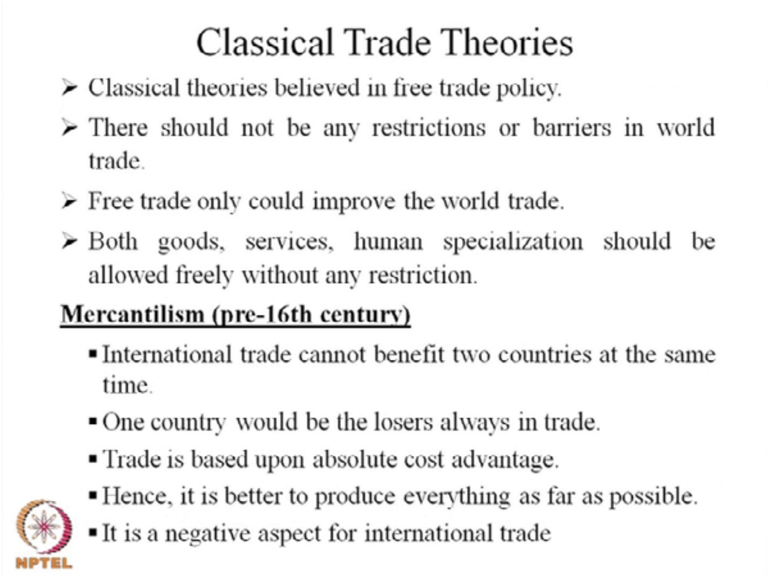

Let us start with the international trade theory, the classical trade theory. If you see the classical theory, classical believes in free trade policy. There should not be any kind of barriers in international trade. There should not be any kind of restriction in international trade. Free trade should be the best; should be the ideal policy to improve the international trade. When there is a free trade, it is the absolute cost advantage that actually designed them free trade policy. Both goods and services, human specialization should be allowed to move freely without any restriction. And on this basis, the classical theory developed the theories of international trade.

If you see the earliest form of classical theory, which are mercantile theory of sixteenth century, the mercantile believes in what is called the trade between two countries, because when there is trade takes place between two countries, one country is a looser another country is a winner. So, the country, who exports, the country is a winner; the country, who pay for the export, that country is a looser. These are what is called the best line of trade as per the mercantile theory. They thought that, international trade cannot be mutually beneficial. Hence, there is the one country with the looser; another country with the winner international trade. It is better to produce everything as far as possible they thought that. And it is negative aspect of international trade. Mercantile theory is a negative aspect of international trade; only should import whenever you are not in a position to produce it. There has no linkage of cost here. You can produce something with highest possible cost, but the same goods are available in the international market at cheapest way; you should import that goods rather than producing it. But mercantile did not believe on that. They thought international trade is a negative aspect; and international trade only the country, who export is the winner. This is actually negative aspect of international trade.

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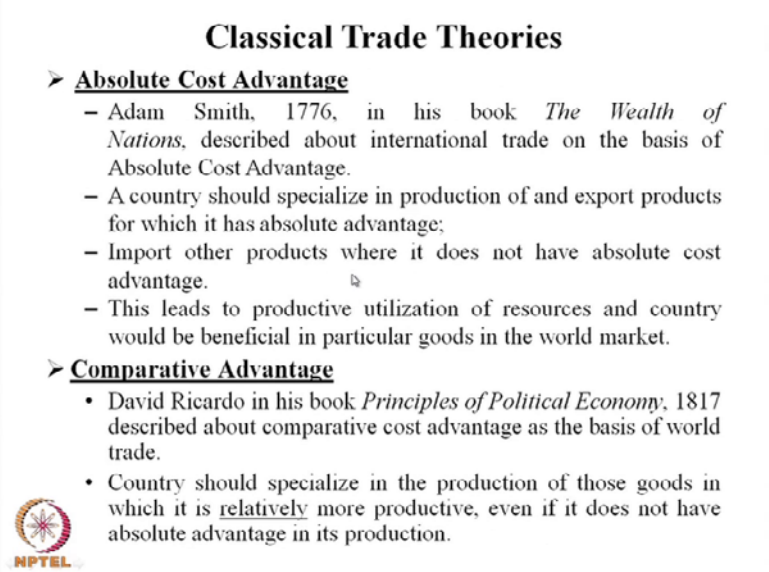

And, this has been corrected by other classical theory, that is, particularly that, the Adam Smith. Adam Smith in his book, what is called The Wealth of Nation in 1776, discussed about international trade. And he developed the policy, what is called absolute cost advantage. Absolute cost advantage is the primary determinant of international trade. A country should specialize in production and export product for which it has absolute cost advantage. The country should not produce a particular product in which the country does not have an absolute cost advantage. If some other country can produce the commodity at cheapest possible cost, the country should import that commodity rather than producing it, import of other (( )). They should export that commodity, where it has absolute cost advantage. And the import and export should be on the basis of absolute cost advantage. This leads to productive utilization of resources and country would be beneficial in particular goods in the world market. So, they thought a country should always be competitor in the international market by producing particular goods on the basis of absolute cost advantage. So, the country should produce the goods, where there is absolute cost advantage; import other goods, where he does not have absolute cost advantage. But this mercantile theory or the absolute cost advantage theory of Adam Smith forgot about what is called comparative cost advantage.

The principles of political economy – David Ricardo introduced the concept of what is called comparative cost advantage. A country should produce such goods and services, where it has comparatively cost advantage. The country may be in a position to produce comparatively lower cost of production all goods and services; that (( )) produce other goods; they should import. David Ricardo in his book, Principles of Political Economy in 1817, described about the comparative cost advantage as the basis of international trade. Country should specialize in production of those goods in which it has relatively more productive, even if it does not have absolute cost advantage in production. So, the production should take place or international trade should take place not on the basis of absolute cost advantage, but on the basis of comparative cost advantage.

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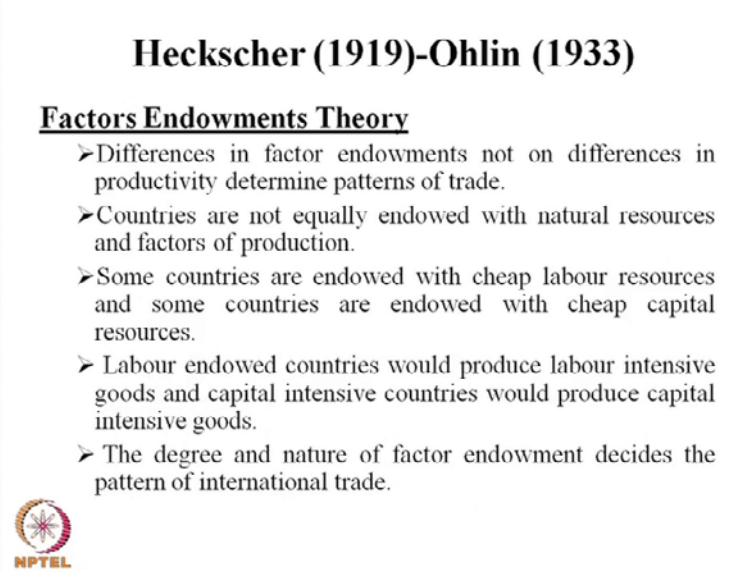

Similarly, the other theories here the Heckscher-Ohlin theory in 1913 (( )) in 1919 and 1933, Heckscher-Ohlin developed the principle, what is called factor endowment theory. If you see the world, different countries have different kind of factors of endowment. Here factors of endowment particularly natural resources; you can call factor of labour, capital, technology. These are the factor of production; land – the factor of production. Some country may be cheaply endowed with what is called capital. Some country may be cheaply endow with labour resources. So, country should focus on the utilization of factor of production and to produce that goods and commodities, where it has absolute cost advantage in production or factors allow them to produce it. So, differences in factor endowment, not on the difference in productivity; that determine the international trade.

What are the factors? The factors of productions are the labour, capital, technology, land, resources. These are the factors of production. The factors of production are not uniformly distributed across the globe. Some countries are cheaply having labour resources; some countries are having more capital resources. A country should produce that commodity, which has their factor of production allow them to produce and exchange for other commodity. So, labour endowed country should produce labour intensive products, goods and services; and capital intensive country should produce capital intensive goods and services. The degree and nature of factor endowment decides the international trade or the pattern of the international trade. So, differences in the factor endowment...

Factor endowment is the policy on which international trade develop. And different countries have different kind of factor and different kind of trade pattern; like US having a capital intensive country; their country is producing the country should produce capital intensive good. Developing countries like India, China – they are labour intensive country; they should produce labour intensive goods and services; and they should... And there should be exchange of these kinds of goods and services in the international market. And international trade should generally develop on the basis of factor endowment theory. However, the Heckscher-Ohlin theorem when you actually utilize in recent days, some number of drawbacks are there.

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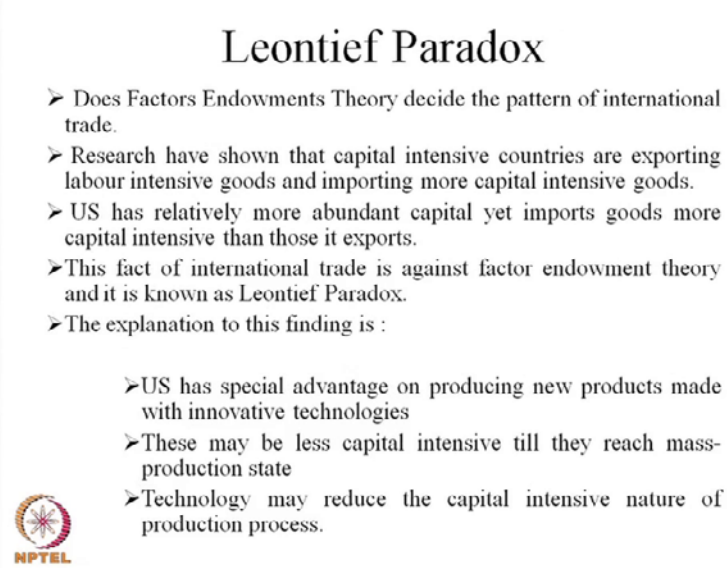

The drawback is here what is called Leontief Paradox. Leontief one economist in 1948; that time he used the actual data of US and tried to find out whether Heckscher-Ohlin theorem is the basis of international trade. Does factor endowment theory decide the pattern of international trade; or, there are some other factors; other theories are there. Research have shown that capital intensive country are exporting labour intensive product and they are importing capital intensive goods and services. So, this is a drawback of international trade as per the factor endowment theory. So, factor endowment, what actually mentioned, the capital intensive country should produce capital intensive goods and export it; labour intensive country should produce labour intensive goods and export it.

When actually found in the US contest in 1948, Leontief found that, despite being a labour capital intensive country, the US is importing labour intensive good, capital intensive good. So, what are the factors behind it? Why US as a capital intensive country is importing capital intensive goods and services? So, what is the reason behind it? The explanation may be different; this explanation leads to what is called Leontief Paradox. So, US has a special advantage on producing new product made with innovative technology. This may be less capital intensive till they reach the mass production state. Technology may reduce the capital intensive nature of production process. So, US is a innovative country. Innovation has been taking place in US in significant amount.

When initial phase of innovation with the production is capital intensive in nature; after the production process reached up to sufficient level, US did not produce the goods and services. Again, they transport the technology; transport the production process to other country particularly the developing country side. And US again import that goods and services, which may be capital intensive in nature. However, US gives more importance to more innovation and development of technology, development of R and D, development of innovative products, which are more capital intensive in nature; and import these goods and services after transferring the technology to developing country. So, US may be developing country, the US may be a capital intensive country; may be importing capital intensive good also.

If you see the computer sectors, the personal computer developed in US as an innovative product. Initially, US produced the computer and exported to the other country. After sometime, when US realized that, now time has come, this production has achieved the saturation level, US transport the technology to developing countries. Now, developing countries side particularly India, China. Other countries – they are producing; they are manufacturing computer and exporting to US. Despite US is a capital intensive country, importing computer, which is a capital intensive goods. So, because US has achieved the level of saturation and US after innovating the product, transport the technology to the developing countries, where mass production taking place at cheapest possible cost. So, production side, Leontief Paradox have mentioned that, despite it is not the factor of endowment theory, the capital intensive country only can produce capital intensive goods; and labour intensive country only can produce labour intensive goods. It is not the factor endowment theory, because it is the mass production facility, innovation of product, scientific development, R and D activity, productivity that decide the international trade.

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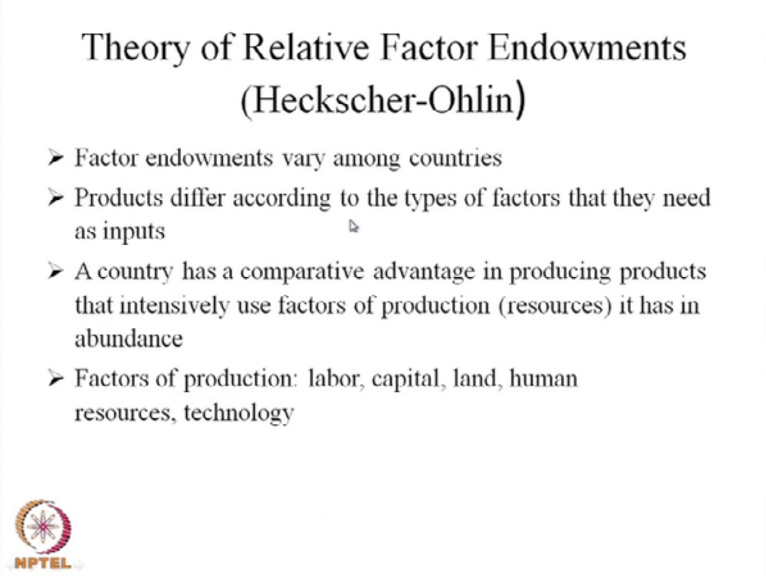

On the basis of Leontief (( )) recent theory developed what is called the relative (( )) factor endowment theory. Relative factor endowment theory – particularly, the factor endowment vary among countries; products differ according to type of factor that they need as inputs. A country has a comparative advantage in producing product that intensively use factor of production, resources it has in abundance. Factors of production are the labour, capital, land, human beings, technology, everything. And these are the factor of production that technology and the risk capital decide the nature of the production process. And country despite being a labour intensive country, may export to capital intensive country. A capital intensive country despite capital intensive in nature, may import capital intensive goods also, because it is not the factor endowment only deicide the nature of production or international trade; there are many other factors, which decide the nature of international trade or pattern of the international trade.

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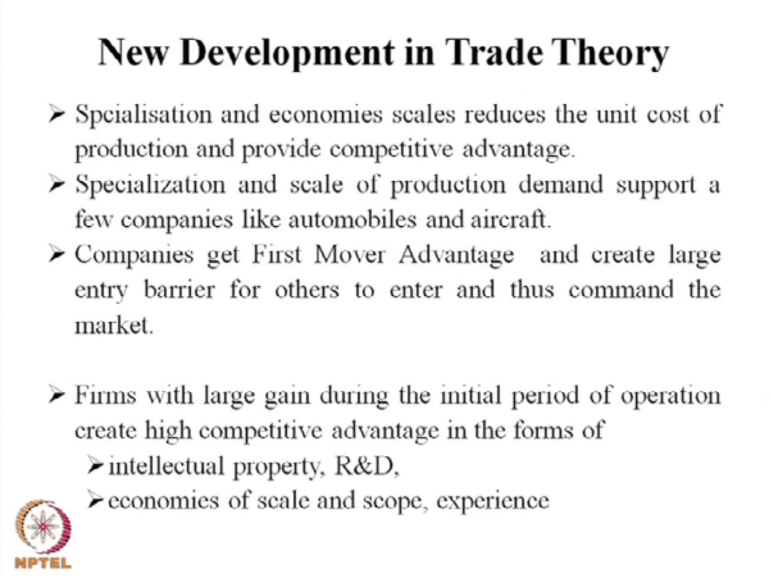

This leads to the development of what is called new trade theory. There are number of new trade theory. One such theory is the Vernon theory. New trade theory propounded by the Vernon product life cycle theory. And when you discuss about new trade theory, you should understand that, specialization and economics scale reduces the unit cost of production and provide comparative advantage. Specialization and scale of production demand support a few companies like automobile and aircraft. Industry – companies get first mover advantage and create large entry barrier for others to enter and thus command the market. The company when becomes an innovative company, the first mover company create excessive, what is called trade entry barrier. So, other country or other company cannot enter and they create a comparative advantage and command the market

Similarly, firm with large gain during the initial period of operation create high comparative advantage in the form of intellectual property right; in the form of R and D expenditure, economics of scale and scope, experiences; and create artificial barrier for other company to enter into the production process and compete with them. And they only can command in international trade market. So, international trade is not only depends upon the factor endowment, but also some other factor – the factor what is called intellectual property, R and D expenditure, economics of scale, scope, experience, technology, productivity, first mover advantage and entry barrier. These are the other variables, which also influence international trade and decide the pattern of the international trade whether a country is an export-oriented country or a country is an import-oriented country; that possibility not depends upon what is called factor of endowment only.

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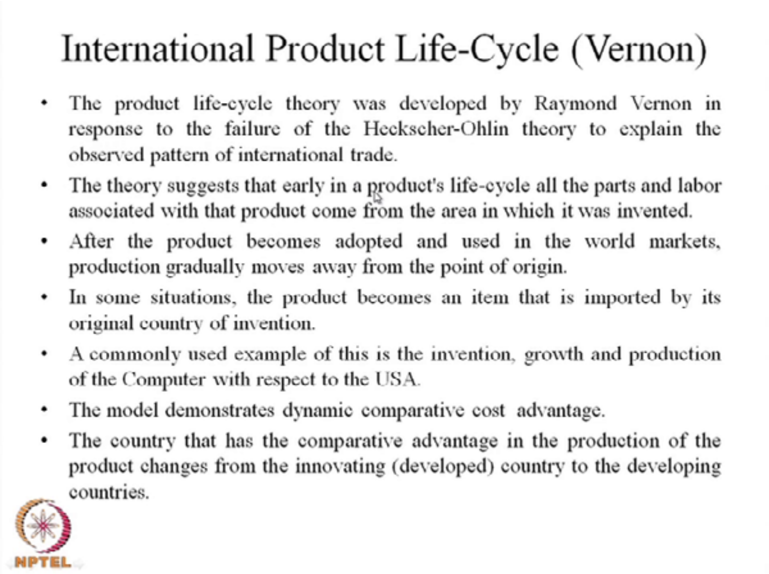

If you see the new trade theory, one part of the new trade theory is international product life cycle theory that developed by Vernon. The product life cycle theory was developed by Raymond in response to the failures of the Heckscher-Ohlin theorem been explaining, what actually observed in real life – a real life international trade pattern. The theory suggests that, early in a product life cycle, all the parts and labour associated with the product come from area in which it was invented. A country when invents a product, the capital, the labour come from that country only. And after the product becomes adopted and used in the world market, the production gradually moves away from the point of origin to other country. In some situations, the product becomes an item for the imported by the original country where it was invented. A commonly used example in this contest, we can say, if the invention, growth and production of the computer with respect of the USA.

The computer developed in USA with the labour forces of USA, with the capital intensive capital of the US. When the US developed the computer produced in mass and consumes it; after that, it passes the technology to the other countries. The developing countries were labour intensive country; they produce computer; they manufacture computer using the innovative idea of USA and exported their product to US itself.

Despite a computer is capital intensive goods developed by USA initially, US has become an imported country for that goods. This is actually called the international product life cycle theory.

The product life cycle theories here the model demonstrates dynamic comparative cost advantage, because initially, it was the comparative cost advantage; initially, innovation failed. The US developed the computer; the mass production allows them to be a comparative cost, because other country imported from that. USA was the only country command in the world. However, after sometime, the comparative cost advantage was not there with the USA for production of computer. So, computer has the technology shifted to developing country, emerging market economy; they developed computer, manufactured computer. Hence, (( )) USA was import country.

The country has the comparative advantage in production of the product; changes from the innovating country to the developing country, what is called the international product life cycle a dynamic comparative cost advantage. So, US as an innovating country, enjoyed from the initial product life cycle; after the product life cycle achieved the maturity, it is a developing country; they get the benefit. And US become an imported country for the production of for the computer side. So, the international product life cycle theory developed what is called the dynamism of the comparative cost advantage. And the innovating country become an imported country later part of the product life cycle.

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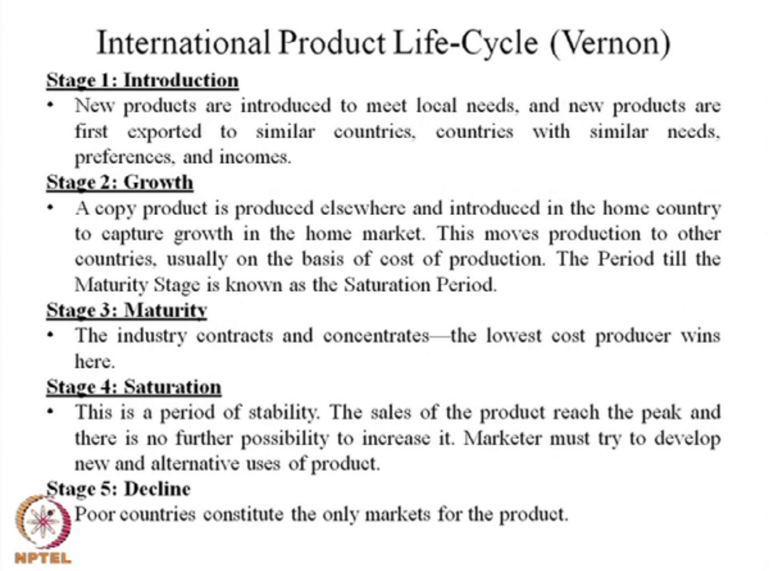

Here you have to understand that stages of the product life cycle. The international product life cycle pass through different phases. To understand the phases, here the phase is here; first phase – what is called introduction phase. The introduction phase – the new products are produced to meet needs and new products are first exported to similar countries, countries similar needs, preferences and income level. Second stage is the growth phase. The growth phase a copy of the product is produced elsewhere and introduced home country to capture the growth in the home market. This moves production to other countries and usually on the basis of cost of production. The period till the maturity stage is known as the saturation model. Now, because of the cost of production needs to be reduced, the developing countries with lowest country, they produce that particular goods, limited products at cheapest possible cost; and the maturity stage or saturation stage of product life cycle, the product transfer from the innovative country to other country. And the other countries now are the major players and produce the product at cheapest possible way than the countries, which actually produced or innovated the product in the earlier stages.

The industry, the second stage. The third stage is the maturity stage. The industry contracts and concentrates – lowest cost producers win the race, because lowest cost producers only can, because market is now reduced. In a reduced market, you have to produce at cheapest possible cost, the cost of production needs to be reduced further. So, the market here with the contraction of the industry, the market becomes lowest cost producer win the race. And fourth stage is the saturation point. This is a period of stability. The sale of the product reaches the peak and there is no further possibility to increase. Marketer must try to develop a new and alternative use of product. Here the saturation (( )) needs; you have to develop the new usage of the product, so that the market can further sale can be produced, can be possible in the same market.

Stage five is the declining phase. Poorer countries constitute the only market for the product and the new countries actually innovate the product; it has to start a new product to develop a new market for it. So, innovation is a continuous phenomenon. Only innovation can provide a command over the market and an innovative country only command in the international trade setup. So, the international product life cycle theory explains that production process and the product has a own life; the life of the product decides on the basis of the usage of the product; the product on the basis of the cost of production of the product; and initial phase (( )) despite it is a capital intensive product, the country which innovates the product, enjoy for a few years of the product life cycle; later part of the product life cycle is enjoyed by the poorer country or the country which has a lowest cost advantage. So, this is the product life cycle theory. And product life cycle theory always try to explain that, innovation only provides a first mover advantage in the international trade pattern.

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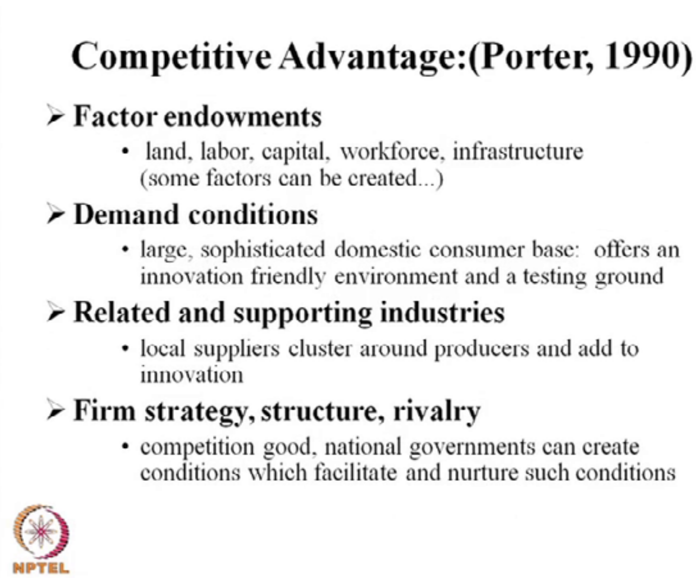

If you go through the international trade, there are different cost advantage processes. Porter in 1990 developed what is called competitive advantage. And competitive advantage is a factor of endowment. Here land, labour, capital, workforce, infrastructure – all these are factors that, when country which endow with all these factors get the competitive advantage. Second part – demand condition; like the demand condition like sophisticated large market, sophisticated domestic consumer base offers innovative friendly products, environment, testing ground. These are the demand conditions. The demand condition also provides first mover advantage or comparative cost advantage.

The third more important related, and supporting industry local suppliers, cluster of production process and also help in innovation process. The most important is a firm strategy, structure and rivalry competition, national government subsidy activities, government condition, government helping nature, lower tax, matured condition also provide some kind of firm strategy for the company to beat the market. So, factor endowment, demand condition, supporting strategy, supporting industry, cluster of production process, firm strategy – these are the Porter advantages.

Porter in 1990 provided some these are advantage for competitive cost and this advantage provides some kind of some kind of benefit to the industry, which has this kind of endowment facility. And they only command over international trade and decide. They decide the trade pattern in actual international market. If you see the factor endowment side, land, labour, some extent workforce – these are the developing countries having large market, sophisticated consumer base. The developed countries are having local supplier, cluster production. These are decided by the market forces. Similarly, government, liberalization measure, government control – these are the decided by the government policy. All these together decide the competitive advantage in international trade setup.

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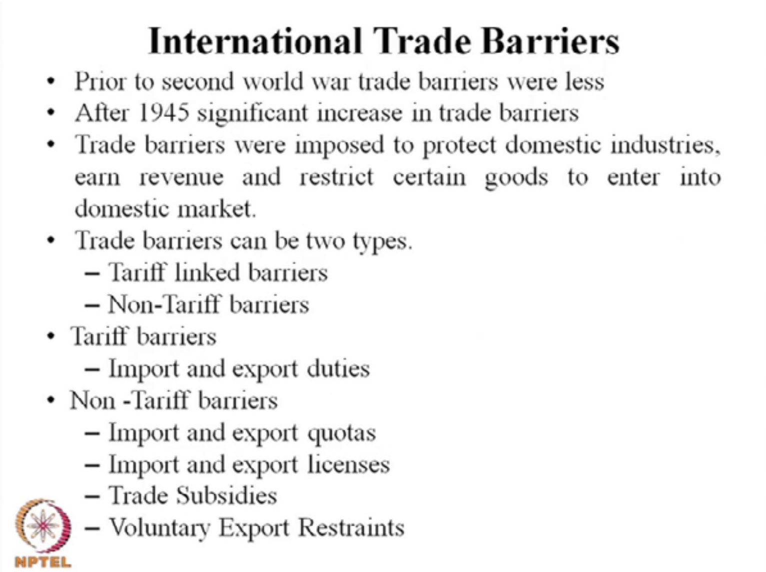

If you go beyond that, there are many kind of trade barriers are there, which also influence the international trade. When we discuss about trade barrier, you have to understand that, international trade has own development process. Prior to (( )) during the first or second world war time – we can call up to first world war time, international trade was free in nature; there was no significant trade barrier. After second world war, many countries got their independence; they started developing their own countries as per the development of the socialist idea, the communist idea. They thought it is better for the country to produce everything; it is better for the country to provide more imports (( )) to domestic industry. So, in this line, they created what is called artificial trade barrier. The trade barriers are in the form of high trade, high tariff, high custom duty also not (( )) international trade in a large scale.

The trade barriers have more own economic reason, because they wanted that, the own domestic industry should not suffer because of international trade; the domestic industry may be infant in nature and they need protection just like a child need a protection. So, after maturity, they should be allowed to trade in international level. So, to protect the domestic industry, to protect the domestic labour forces, to protect the domestic resources, many countries practice what is called international trade in a high tariff barriers environment. This high tariff barriers environment or international trade barrier destroyed the international trade particularly in early at 1950 or 1960. And realizing this at general international level, international economist decided that there should be a forum to reduce this trade barrier through negotiation process. And this negotiation started in the form of what is called international institution; the institution known as, as you discussed earlier, GATT – general agreement on trade and tariff.

The GATT was established in 1948 and tried to negotiate among the countries to reduce that trade barrier. And this GATT continued till early 90s. And over the period, many countries reduced their trade barriers. However, trade barriers were significant till 90. And it was in the form of what is called custom duty – high custom duty in the form of (( )) quota system. And this trade barrier affected the smooth progress of the world trade. And after 1990s, WTO was established and WTO addressed the issue of tariff, trade and trade negotiation process.

When we discuss about international trade and international trade barrier, you have to understand, there are two different kinds of trade barrier: one barrier is called linked to tariff; another barrier what is called non-tariff barrier. When tariff barrier in the form of import-export; non-tariff barriers are... Tariff barriers may be in the form of what is called custom duty on import-export; non-tariff barriers may be many things – may be in the form of quota system for import-export, may be in the form of licence for export–import, may be in the form of trade subsidy, may be in the form of voluntary export restriction. So, these are the artificial trade barrier to reduce the international trade and provide some kind of revenue earning sources. When international trade was linked to a revenue earning, it was the tariff barrier that was providing revenue in the form of export-import duty. But revenue is not the only source of international trade; revenue was behind that; to restrict the international trade, the tariff was imposed.

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If you discuss about the different kinds of tariff barriers, you have to understand that, there are many tariff barriers were primarily imposed by the developing country for revenue reason; many tariff barriers primarily imposed by the developed country to protect their own industries. But after WTO agreement in early 90s, developed and developing countries together, they decided that in a phase manner, the tariff barrier should be reduced to minimum level. Initially, it was nearly 300 percent tariff barrier; it has been reduced to nearly 30 percent (( )) days. And over the period, negotiations have been taking place in goods, services both agriculture, non-agriculture, manufacturing, mineral resources, other goods and services, technology export, capital export, investment, R and D activities. All these are part of the negotiation process to reduce the tariff barrier.

However, after the WTO agreement, tariff barrier has reduced significantly. However, non-tariff barrier has increased significantly in recent days. The non-tariff barriers have the major issues and WTO negotiation process at present. You have to understand that, which are the non-tariff barriers? Non-tariff barriers in the form of developing countries are having child labour; the child labours are working in developing country; they are producing goods and services for export purpose; the child labours are paid very low wage. So, developed countries are using the name of child labour; they are creating obstacle for the developing countries exports. Similarly, labour issue – developing countries cheap labour resources are available; they are paying less labour wages;

labours are less costly; they are producing goods and services for export at a cheapest possible way. But this is not available in developed countries – developed countries using the policy of protection of their own labour, protection of their own industry; labour wage policy they are using in the context of creating non-tariff barriers for export of developing countries.

Similarly, outsourcing protection – developing countries are labour intensive countries; they are having cheap surplus labour; they can outsource; they are using the outsource activity of developed countries and providing the services of outsourcing services; they are getting good amount of export through their labour policy. However, developed countries are criticizing the outsourcing policy and cheap labour policy of developing countries and creating artificial barrier for export of labour human resources. Similarly, in the name of the climate, in the name of chemical, in the name of environment, the artificial trade barriers are being created by the developed countries.

Similarly, national security is another reason. They are also imposing trade barrier on this issue. These are the non-tariff barriers, has increased recently very heavily. And these non-tariff barriers are creating conflicts in WTO agreement process. And WTO as a forum of negotiation of non-tariff barrier, are not in a position to address this issue. Developed countries through their excessive imports, excessive exports and muscles power, they are ruling in WTO forum; and they are creating artificial barriers in the non-tariff issues and creating some kind of obstacles in the smooth process of international trade.

If you see, what is the requirement for the economic effect of the non-tariff barriers? Why there should be tariff or non-tariff barriers? Any economic reasons are there for tariff and non-tariff barriers? Primarily if you see, in a developing country side, the non-tariff barrier is an artificial barrier, which affect their export-import. And these are affecting their economic progress; or, from the developed country side, the non-tariff barrier is a major issues to protect their own industry, create jobs for their own people. This non-tariff barriers is essential for them to protect their own industry, own labour policy, national security, their exports. These are the non-tariff barriers for them to protect their industries. However, non-tariff barriers...

The developed countries are complaining that jobs are destroyed, because of trade; workers wages are hurt by because of trade. Special industry with unique substantial economic activity should be protected. Potential will not mature without protection of industry. Unfair competition undermines the benefit of trade. These are the economic reason. Jobs are destroyed by trade. Whether jobs are being destroyed by trade? You have to analyze this concept. Developed country is using the non-tariff barrier, because they cannot use... As an agreement upon WTO, they cannot use the tariff barrier; they are using non-tariff barrier, because they want to protect the jobs of their own people. Worker wages are hurt because of trade. Developing countries cheap labour policy – they are producing goods and services at cheapest possible costs. They are exporting the world market; they are commanding the world market. For same kinds of goods and services, developed countries are not getting the benefit, because their workers are highly paid wage. So, they are complaining that worker's wages need to be protected and these trades are being...

International trade is destroying the workers benefits. National security is threatened because of international trade. They are also because goods and services... Those are IPR regime – intellectual property regime – they are also affecting because of international trade. These are unfair non-tariff barriers and these are non-competitive in nature. In long run, these are not going to help the world trade. And this non-tariff barrier should be discussed in WTO environment and try to reduce this non-tariff barrier, try to remove this non-tariff barrier for the smooth progress of the world trade. These are the primary issues WTO should discuss, because non-tariff barrier – there is no economic reason for non-tariff barrier. However, developing countries should get the protection in the WTO side, because the non-tariff barrier is destroying their export side.

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References

International Economics: Theory and Policy (6th Edition), Paul R. Krugman & Maurice Obstfeld
Addison Wesley; 6 edition

When you discuss the tariff, non-tariff barrier and world trade pattern theory, these are the ideal side for discussion. And you can go through the book – International Economics: Theory and Policy by Paul Krugman and Obstfeld. They discussed the recent development in trade theory and discussed the international trade as a policy for the smooth progress of world trade. And these books nicely discussed about the recent development in trade theory. You can go through the book and try to understand that, the international trade part, the development of international trade theory and also tariff, non-tariff barrier; how it is affecting the international trade discussed in this theory.

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Model Questions

- Describe the importance of classical trade theory and bring out its irrelevance in the present day practice.
- Outlines the importance of modern trade theory.
- Competitive advantage, specialization, intellectual property rights and economics of scale and scope decide the pattern of modern trade. Articulate the statement.

Second – some model questions I have developed for you. A model question is here – describe the importance of classical trade theory and bring out it irrelevance in present day practice. Here you discuss about the classical theory. The classical theory starts with why... The classical theory believes in what is called free trade policy. The classical theory is a theory of absolute cost advantage, theory of comparative cost advantage, absolute cost advantage of Adam Smith. Adam Smith – he mentioned that the country should produce goods and services, where it is absolute cost advantage; and imports goods and services (( )) they does not have absolute cost advantage. Absolute cost advantage is the primary determinant of world trade as per the Adam Smith theory of absolute cost advantage.

David Ricardo mentioned the comparative cost advantage. The country should produce goods and services, where it has comparative cost advantage. You can produce goods and services which are cheaply... possibilities are there – cheap production process; and export goods and services, where it has comparative cost advantage; and import goods and services, where it is comparative cost disadvantage. And comparative cost advantage and disadvantage is the primary variable determinant of international trade as per the Ricardo.

Then, they also discussed about the theory of Heckscher-Ohlin. He has mentioned that about what is called the factor endowment theory. A factor of production, that is, land, labour, technology, resources, specializations decide the international trade. Here the Heckscher-Ohlin mentioned about what is called factor endowment. The countries which are labour intensive country should produce labour intensive goods and services. Those countries, which are capital abundant countries should produce capital intensive goods and services and try to exchange these goods in international trade. It is the factor endowment that decides the international trade rather than the absolute cost or comparative cost advantage.

However, factor endowment theory is not practiced in the real world if you analyze the real world theory. The real world – it is what is called the specialization, the productivity, technology, R and D activity, comparative cost advantage and what is called scientific development. That decides the first mover advantage and that decides the international trade. You can discuss the irrelevance of this present day practice. Present day practice – the classical theory is irrelevant, because real world – it is not the cost advantage; and factor endowment – it is not the absolute cost advantage; it is not the comparative cost advantage that decide the international trade. There are many other factors that decide the international trade.

Outline the importance of modern trade theory. Here we described the international product life cycle theory; that comparative advantage theory of Porter. Here we described the international trade theory – international product life cycle theory despite the innovation, R and D activity, scientific development, technological advantage that decide the international trade theory. And initial phase of innovation – the innovating country get the benefit; later part of the innovation; later part of the product development; after the product developed, the later part, the country may not get the cost advantage, because some other countries produces produce the same product at the cheapest possible cost. And only innovation decides the modern theory of international trade. We also discussed here the modern theory of competitive advantage of Porter; the Porter of endowment, resources of endowment, technological endowment, the endowment of strategic principle. You can also discuss about the Porter's guidelines on the government policy that decide the international trade in real life.

The third question is here. Competitive advantage, specialization, intellectual property right and economics of scales and scope decide the pattern of modern trade. Articulate the statement. We have discussed that the trade theory developed from the absolute cost advantage to comparative cost advantage to specialization, intellectual property, economics of scale and scope. And all these factors contribute the modern trade theory. You have to identify each factor has its own advantage, because trade is not the country may not be in a position to produce everything; a country may not be in a position to produce everything at cheap possible; cost country should not only endow with all kinds of resources, but they should go for the international trade. The pattern of international trade decides on the basis of capability, on the basis of fast mover, on the basis of advantage of specialization, on the basis intellectual R and D activity, on the basis of economics of scale and scope. Large base production, the high scale of production may reduce the unit cost of production. That provides cost advantage in the real life. So, all these factors decide the international trade.

At the same time, innovating company or a country always get the first mover and this first mover allow them to create what is called a high tariff barrier, high entry barrier for other company to enter, other country to enter. In this process, they command the international trade. All these factors decide the international trade. And trade pattern not only decided by the absolute cost advantage or comparative cost advantage, but also decided by the government policy, because government policy primarily, the government taxation policy, government subsidy policy, government policy for infrastructure facility. These also decide the international trade. Many countries have natural resources; many countries have endowed with different kinds of specialization. But they are not the winner in a real world. The real world depends upon the activity of government, activity of control regime; the government is controlling the trade; then with high trade barrier, then government may not decide high tariff barrier to protect their own industries. This also affects the smooth progress of the world trade. So, when you discuss about modern form of world trade, the competitive advantage, the specialization, intellectual property and economics of scale and scope decide the modern trade. You have to justify this statement with the real example of Japanese company, with the real example of Chinese company.

How they have competitive cost advantage through the process of large scale production? They have enjoyed. The Japanese company, the Chinese company through the large scale manufacturing, they have reduce the unit cost of production so low; they create artificial entry barriers for other countries to produce their commodities at that particular level of price, because it is not possible for them to produce with the cost of production or price of the goods, so that they compete with the Japanese company or Chinese company. So, artificially, the scope... The large economics of scale, large economics of scope – they created artificial barrier for other company to enter. Similarly, we can discuss intellectual properties of US. How through the innovation process, they got the intellectual property in pharmaceutical sector, many goods and services sector and then now commanding the world trade. Similarly, you can discuss about the specialization – the specialization developing and the specialization... Specialization also influence the world trade. You can discuss here the many emerging countries. Emerging countries through their labour forces, high specialization they created, they are exporting the labour forces; they are creating the specialized labour market and commanding the world resources, commanding the international trade. Here you can discuss about the specialization process.

You can also discuss about competitive advantage in natural resources. South Africa, many African countries, many emerging countries like India, China because of the natural resources, they also command competitive advantage. However, natural resources need to be productively utilized; the production process needs to be started from there itself. However, through the exporting the natural resources, they cannot get the competitive advantage. You discuss about the competitive advantage side of natural resources and factor endowment.

Similarly, you can discuss about the pattern of trade depends upon the contribution of the government in the form of low, in the form of an environment for industry to develop; in the form of a reform measures that through taxation principle, through the principle of subsidy, through the providing infrastructure facility. All these things influence the international trade and modern trade side. All these things you have to discuss in this third question, because particular theory has not developed to describe everything about international trade. All theories combined together can only justify what actually behind the international trade.

Thank you.