

Lecture 05: Introduction to World Agriculture Trade

Dear students and this week we are going to discuss about the WTO Agreement on Agriculture. And one of the very important Agreement in WTO. And today we are specifically going to discuss the world trade on agriculture. Mostly we are going to look into the producers of agriculture all over the world through the Food and Agriculture Organization data which is compiled very recently. So, the objective of today's class is to find out who is the largest producers of agriculture products and traders of the product. So, that from next class onwards we will be able to understand the dynamics of agricultural trade all over the world. So, the introductory classes which we have already explained the agriculture agreement was one of the highly controversial agreement as well as there is stiff opposition from developing countries to conclude this particular agreement. So, still the negotiations are going on the WTO agreement on agriculture and from every ministerial conferences this is a conflicting issue. Especially, some of the ministerial conferences like Cancun ministerial conference. So, let us see that what is the world agriculture scenario and then and next class onwards we will discuss about the agreement.

CONCEPTS COVERED

- World Agriculture Production and Scenario
- World Subsidy to Agriculture
- Indian Agriculture sector
- Subsidies
- Subsidies in GATT

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So, it is very necessary to understand the world agriculture production and also what is the subsidies provided by the countries. Then definitely Indian agriculture sector also we will have a look at and in when compared to the other nations.

Agriculture

- For centuries, countries have relied on trade in agricultural and food commodities to supplement and complement their domestic production.
- The uneven distribution of land resources and the influence of climatic zones on the ability to raise plants and animals have led to trade between and within continents.
- Historical patterns of settlement and colonization contributed to the definition of trade patterns and to the emergence of an infrastructure to support such trade.
- More recently, transnational firms with global production and distribution systems have taken over post-colonial trade structures as a paradigm for the organization of world agricultural trade.
- Changes in consumer taste have encouraged the emergence of global markets and added to the significance of trade.
- Few countries could survive the elimination of agricultural trade without a considerable drop in national income, and none could do so without considerable reduction in consumer choice and well-being.



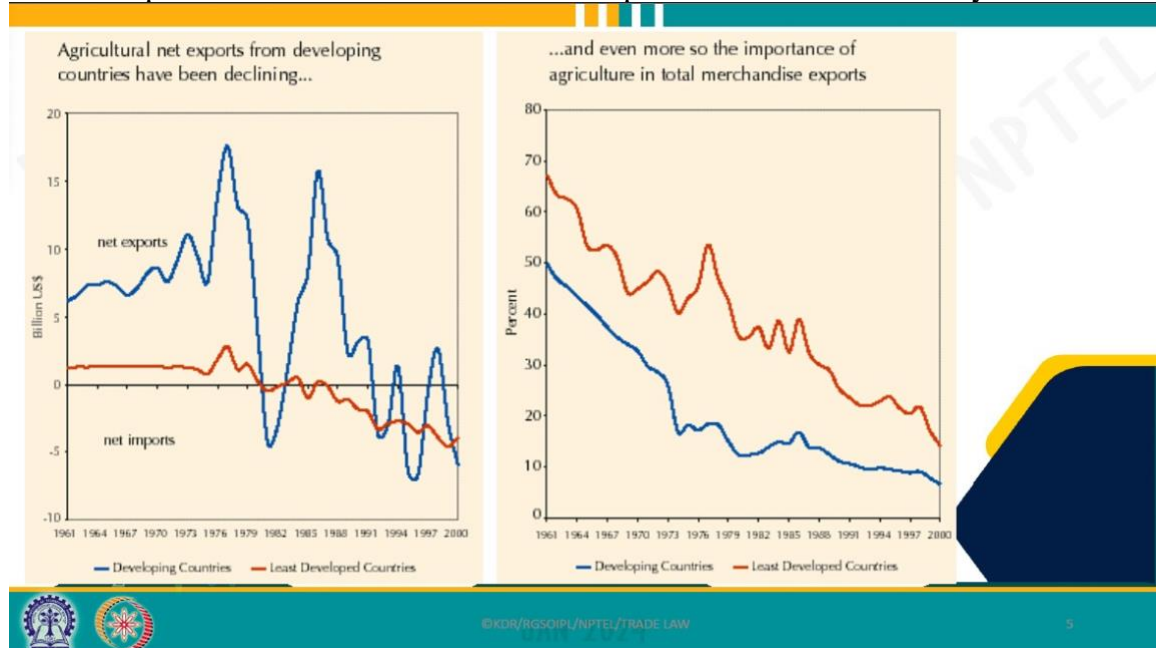
And agriculture as everybody knows that it is from time immemorial period it is produced locally at the same time the distribution of resources to other parts of the world are very important because it is the historic patterns of settlements, colonialization and also the infrastructure and the most importantly the transport of food materials from one continent to other continent which contributed to the international trade. Presently the food production is a global issue or it is you can say that it is a global market and global production and distribution systems. So, this is mostly happened in the post colonial period. So, most importantly from 1950 onwards, but if you see in the 20th century starting from 1900 to 1914 or 1914 to 1938 we can see that most of the countries are protected highly I would say that highly protected their markets. This is mainly to preserve the food security of their own people and their own country. And also the agricultural trade happens because of consumer preferences. These consumer preferences emerge as the global markets and significantly added to the international trade. So, you can see that some of the countries and their entire economy is dependent on agriculture production and export. Some of the countries like India the largest employment sector is the agricultural sector even though it contributes lowest to the GDP of the country. So, in the nutshell we can see that the agriculture plays a crucial role in every country's economy.

Agri Exports

- The last 50 years have witnessed an impressive growth in international trade.
- The volume of global merchandise trade has increased 17-fold, more than three times faster than the growth in world economic output.



So, and for the last 50 years at least shown an impressive I would exactly say that it is more than 50 years especially from the event of the conclusion of the GATT in 1947. The international trade has witnessed or the merchandise trade has increased 17 fold. This is the FABO report Food and Agriculture Organization report says. So, that is more than three times faster than the growth of world economic output. So, the preferences, trade preferences protectionism and everything has overturned in the advent of world trade within the period of GATT as well as the WTO period for the last 26 or 27 years.



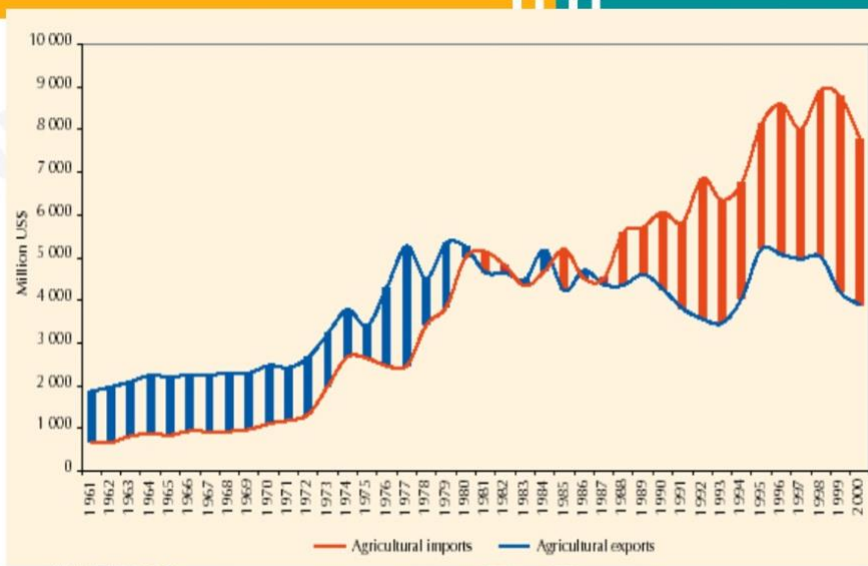
So, if you look into this particular the figure we can see that agriculture whether what is the situation of agricultural imports and exports. You can see that in terms of developing countries and least developed countries, in terms of developing countries exports it has declining substantially from the 1960s. So, this data is up to 2000. So, it means pre-WTO

period, the substantially GATT period and from 1995 to 2000, five year data. So, you can see that the net exports of developing countries are substantially decreased. This exports are specific to agricultural exports. At the same time net imports for least developed countries is completely decreasing. And it means that agricultural net exports from developing countries are decreasing and also the local merchandise trade. So, again you can see the merchandise trade from 1961 to 2000 there is a steep declining from developing countries and least developed countries. So, who are the producers? So, you can very well you know understood from this figure that exports are decreasing. At the same time the local merchandise exports are also decreasing in developing and least developed countries or less developed countries. So, it means that we have to explore who is the producer of agricultural merchandise.

Net Exporters to Net Importers

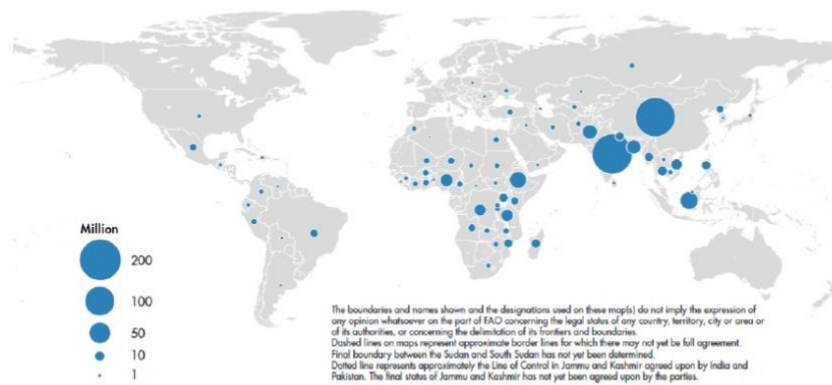
- **Together with the overall decline in the share of agriculture in international trade, the structure of agricultural trade has changed markedly. One manifestation of this change is the balance in food trade between developed and developing countries.**
- **In 1961/63 developing countries as a whole had an overall agricultural trade surplus of US\$6.7 billion, but this gradually disappeared so that by the end of the 1990s trade was broadly in balance, with periodic minor surpluses and deficits.**
- **The outlook to 2030 suggests that the agricultural trade deficit of developing countries will widen markedly, reaching an overall net import level of US\$31 billion. Net imports of food will increase to about US\$50 billion (in US\$ of 1997/99, for details see Table 9.1).**

So, some of the countries become net exporters to net importers in a period of time. So, we are talking about this GATT period. So, this is mainly happened due to the changes in the markets and the preferences of countries in importing the goods which we already saw that the quantity of imports are increasing. And at the same time you can see that during the 1960s developing countries were doing better and there was a trade surplus of 6.7 US billion. And when it comes to the 90s there was instead of trade surpluses there were deficits. So, it means net exporters become net importers. And the outlook or output or the projection to 2030 says that there will be a trade deficit in all the developing countries or the trade deficit is going to increase, widen and that is the overall net import level is going to the tune of the USD 31 billion. At the same time the imports so, the exports are going to decrease, the imports of food will increase to around 50 billion USD. So, you can see that there is a substantial change in the preferences of exports and imports and some of the countries become exporters become importers, net importers. So, this is changed in a period of maybe last 50 years this happened from 1960s onwards. So, net exporters become net importers.



If you see this particular data of agricultural imports and agricultural exports. So, we can see that agricultural imports are substantially increasing from 1980s, especially agricultural imports are increasing through out and agricultural exports are, there the line is not very prospective, there was some up and down up to 1980s, exports were going up and then it is going down. So, there is fluctuations in exports, at the same time the imports are steadily increasing.

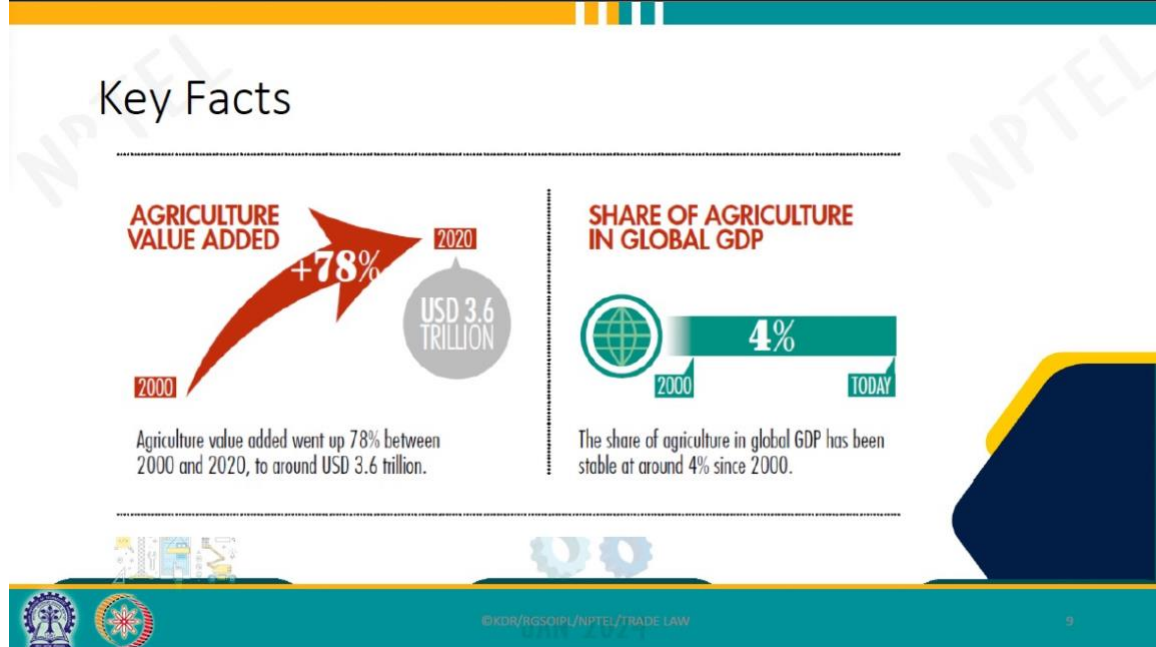
MAP 3. EMPLOYMENT IN AGRICULTURE, FORESTRY AND FISHING (2021)



Sources: FAO, 2022. FAOSTAT Employment Indicators: Agriculture. In: FAO, Rome. Cited October 2022. <http://www.fao.org/faostat/en/#data/OEA> based on UN Geospatial, 2020. Map geodata [shopellies]. New York, USA, UN.

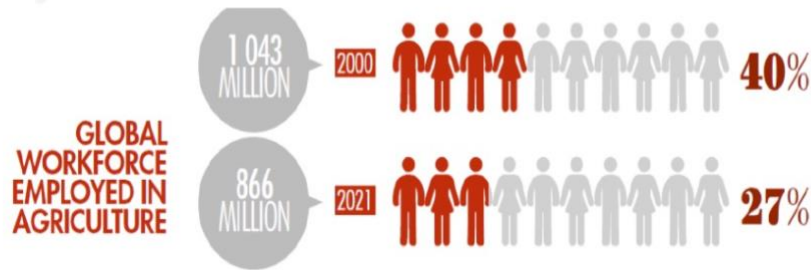
So, if you look into the employment scenario, agricultural employment in agriculture and forestry and fishing. So, this is a very recent data up to 2021. So, the Food and Agriculture Organization says so, you can see that more than 200 million people, those who work and the 200 million people work in only two continents that is only two

countries which you can see that maybe in India and China and all other countries the numbers are very less, the numbers even 100. So, you can see some of the countries in other continent, the Asian continent and the African continent which you can find and others are less than 50 million employment. So, we have huge employment in the Asian countries, the agricultural sector is providing employment in Asian countries especially India and China and India 60 percent of the employment is in agricultural sector everybody knows that India one of the largest population in the world and largest producer of agricultural goods, yes India requires the huge quantity of agricultural food items and agriculture sector is the largest employment provider and this is the scenario all over the world. So, agriculture sector in other countries for example, in America, you know very small contribution to the employment, but Asia substantially they contributed to the employment.



So, if we look into some of the key facts, the value addition from if you take from 2000 to 2020, the 20 year span there is value addition of 78 percent to the agricultural goods which contributes trillions to the economy 3.6 trillion within a period of 20 years. So, innovations are happening in the agricultural field. If you look into the global GDP, the share of agriculture in the global GDP it is up to 4 percent and it has been stable at 4 percent since 2000. What does it mean? For a period of 20 years it is consistently at 4 percent. So, it means that the contribution to the world GDP is constant, but value addition in agricultural sector is going on very fast. More and more trillions are adding to the value addition to the agricultural products.

Workforce

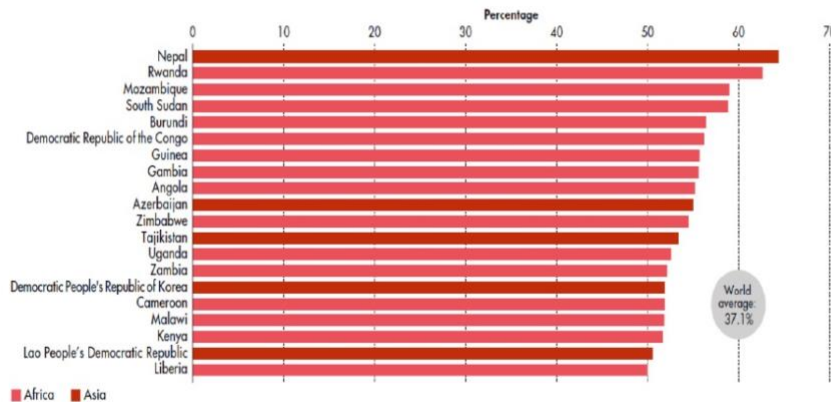


Agriculture employed 866 million people in 2021, or 27% of the global workforce, compared with 1 043 million (or 40%) in 2000.



If you look into the workforce unfortunately if you take the same time, same span of around 20, 21 years it is declined from 40 percent to 27 percent. So, it means that the global workforce in the agriculture is declining. So, it has reached 27 percent so that means, you know it was more than 40 percent in 2000 and it became 27 percent. So, it is a huge decline from 1043 million to 866 million. This is a huge decline in people those who are employed in the global workforce. So, why it is happened? In many of the countries the employment sector this agriculture is not seen as an employment sector other than the Asian countries that is the workforce in the agriculture sector is declining.

FIGURE 12.
SHARE OF WOMEN IN AGRICULTURE, FORESTRY AND FISHING EMPLOYMENT, TOP COUNTRIES (2021)

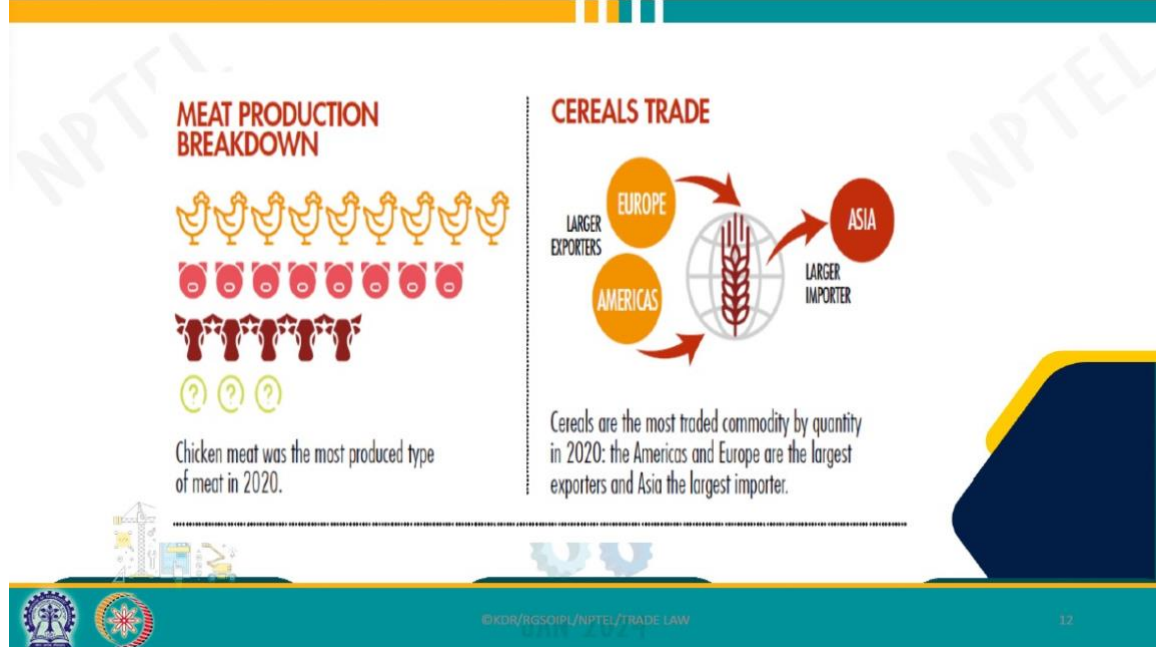


Source: Based on FAO, 2022. FAOSTAT. Employment Indicators: Agriculture. In: FAO, Rome. Cited October 2022. <http://www.fao.org/faostat/en/#data/OEA>
<https://doi.org/10.4060/cc2211-en-fig12>



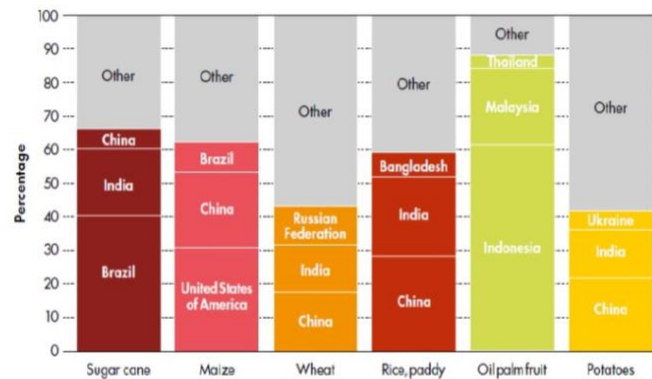
Most importantly and interestingly you can see that the women participation in agriculture sector is I would say that highly confined to developing and especially least developed countries, mostly least developed countries. For example, the highest women

participation in agriculture is from Nepal and then it is directly going to Rwanda, Mozambique, Sudan, Burundi, Congo, all African countries and you can find only one maybe you can say that highly developed country or a developed country that is, only South Korea. So, otherwise 99 percent are African countries and the top contributor is Nepal from Asia. Even India is not coming in this particular list. So, world coverage is you know totally coming to average 37 percent of women employment or women participation, share of women. So, the top countries so, you can see that none of the developed countries and surprisingly I would say that, not surprisingly, not even developing countries, only least developed countries are in this list. So, what is the production? What you produce and what you export?



So, if you look into the production so, the FAO says that chicken, chicken is the largest meat produced in 2020. And what is in trade? Cereals, cereals are the important product of export from America, from Europe and the largest importer is Asia. So, cereals are the most traded commodity and the largest exporters are Europe and America and the largest importer are Asia. So, it means that Asia is going to be an agricultural market and most of them are developing countries and who is the exporter? It is the America and Europe. So, when we discuss about the agriculture agreement definitely we will discuss about these countries' interest in WTO. What is their arguments on WTO and what should be the agriculture agreement? It is very clear that it is America and Europe together are the largest exporters of agriculture in the world and the recipient, the importer is Asia. And if you look into the primary production, production of crops by the main producers.

FIGURE 22.
WORLD PRODUCTION OF MAIN PRIMARY CROPS BY MAIN PRODUCERS (2020)

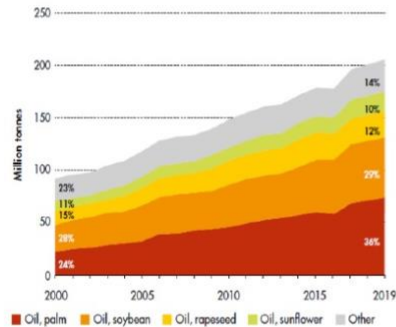


Source: FAO, 2022. FAOSTAT. Production: Crops and livestock products. In: FAO, Rome. Cited October 2022.
<https://www.fao.org/faostat/en/#data/QCL>
<https://doi.org/10.4060/cc2211en-fig22>

So, the largest producer of sugar, largest producer of sugar is Brazil around 40 percent and then another 20 percent is produced by India and around 5 percent is produced by China and then you can see 35 percent around is produced by all others. So, sugar alone 40 percent of the world production of sugar is by one country that is Brazil a developing country and it is not the developed countries those who produce sugar. And then it comes to the other for example, maize and the number one producer is United States, then China, then Brazil, then others constitute around 40 percent. So, these three countries together constitute around 60 percent of the maize produced and most importantly you can see that around 60 percent of wheat is produced by you know all the countries together 60 percent and three countries only three countries produce 40 percent of the wheat that is China, India and Russia. So, the largest producer of wheat in the world is China, India and Russia, that is why we recently heard about the problem of export of wheat from Russia because of the Ukraine-Russia conflict. So, then it comes to the rice paddy, mostly the Asian countries, the rice eaters are the Asian countries and the largest producer is again China, it is not India, India is only second and interestingly you can see that the third largest producer of rice is Bangladesh. So, these three countries produce around 60 percent. So, and China alone produces around 30 percent of the total rice all over the world. Then it comes to another product that is oil palm. So, the oil palm industry is absolutely confined to probably one country that is Indonesia. Around 60 percent of the palm oil or oil palm, I would say that oil palm is produced by Indonesia then maybe another you know 30 percent is produced by Malaysia then a small percentage is produced by Thailand then hardly 10 percent is produced by all others. So, if we take potato again the producer is China, India and Ukraine. So, now, that export is also severely affected and all others constitute 60 percent of potatoes. So, what is the commonality in this particular figure? The commonality in this particular figure is you can see that sugarcane, maize, wheat, rice, oil palm, potatoes all most of the countries it is produced by Asian countries other than Brazil or you can see that even Russia also. I would say that developing countries and other than United States in maize you can find

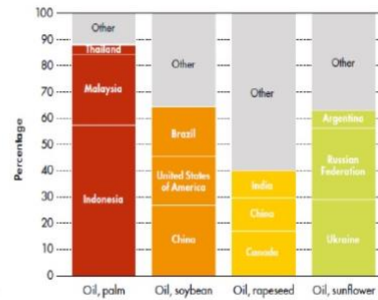
you cannot find even a single developed country producing majority of this particular product, but still why Asia is the largest importer? Because in Asia you take the first two countries China and India the largest population in the world India and now India has taken over China, the second largest population and these people consume these commodities, agricultural production and also that is why they are the largest importer, that is the logic says.

FIGURE 23.
WORLD PRODUCTION OF VEGETABLE OILS, MAIN COMMODITIES



Note: Percentages on the figure indicate the shares in the total; they may not tally due to rounding.
Source: FAO, 2022. FAOSTAT. Production: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/QCL>.
<https://doi.org/10.4060/cc2211en-fig23>

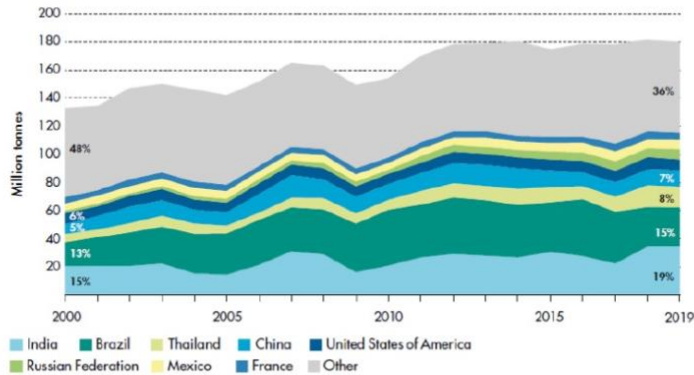
FIGURE 24.
WORLD PRODUCTION OF MAIN VEGETABLE OILS
BY MAIN PRODUCERS (2019)



Source: FAO, 2022. FAOSTAT. Production: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/QCL>.
<https://doi.org/10.4060/cc2211en-fig24>

And it comes to the vegetable oils, vegetable oil production and palm oil which we already said that Indonesia and Malaysia is the largest producer of oil palm. Then you can see that within the oil palm, the largest production is of oil palm and the second largest is soybean and the third is rapeseed, then sunflower and others. So, if you look into the production of vegetable oils who is the producer again it is Indonesia oil palm, Malaysia and then Thailand which we already saw. Then soybean again you can see that China, US and Brazil and rapeseed countries like Canada, China, India and you know that the Asian countries mostly use oil palm and then soybean and rapeseeds and sunflower and for example, the oils like canola and others are used by the developed countries and are costly as well. So, the oil palm so, you can see that the oil production vegetable oil, specifically, you can see that these are the countries which produces oil for the world.

FIGURE 25.
WORLD PRODUCTION OF RAW SUGAR, MAIN PRODUCERS

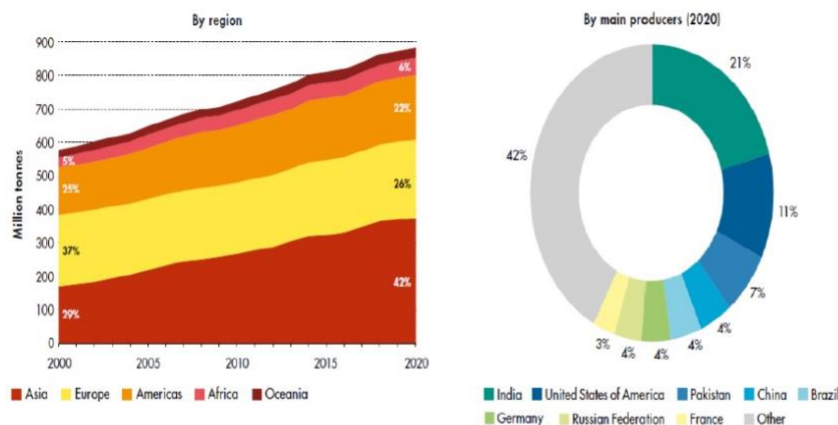


Note: Percentages on the figure indicate the shares in the total; they may not tally due to rounding.

Source: FAO, 2022. FAOSTAT: Production: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/QCL>
<https://doi.org/10.4060/cc2211en-fig25>

Then so, sugar which we already saw that Brazil is the largest producer, India is also one of the largest producers of raw sugar. Then some of the countries like Thailand we can find China, US, Russian Federation, Mexico, France and others. So, around 70 percent of the sugar is produced by maybe five or six countries. So, this is very important because the sugar prices are controlled by these particular countries especially I would say that India and Brazil. So, subsidies to agriculture, that is one of the contentious, highly contentious point in WTO. And subsidy to oil production, vegetable oil production and subsidies to sugar is also one of the heated discussion topic in WTO because these countries cannot stop subsidies to these particular products because they are the largest producers of these commodities as well.

FIGURE 28.
WORLD PRODUCTION OF MILK

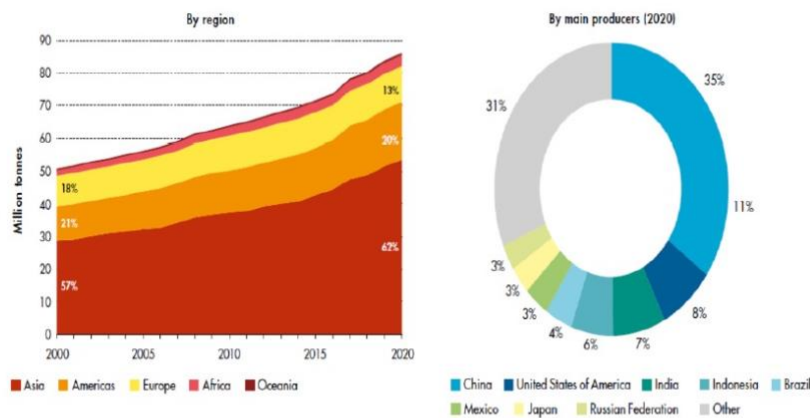


Note: Percentages on the figure indicate the shares in the total; they may not tally due to rounding.

Source: FAO, 2022. FAOSTAT: Production: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/OCL>
<https://doi.org/10.4060/cc2211en-fig28>

And then we can see that when it comes to the milk you can see Asia is the largest producer of milk at the same time within Asia you can see that India is largest producer of milk 21 percent of the world production the largest producer of milk is India. But the problem is India is also the largest consumer of milk. So, we are not exporting milk. Then you see the United States, Pakistan, China, Brazil, Germany, Russian Federation, France and others. So, if you take as a whole Asia is the largest producer of milk then Europe, America, Africa and Oceania. So, India and US constitute almost more than 30 percent. Then if you take India, US and Pakistan, they constitute almost 40 percent of the milk production. So, milk is produced in these countries and also you can see that it is not Europe.

FIGURE 29
WORLD PRODUCTION OF HEN EGGS



Note: Percentages on the figure indicate the shares in the total; they may not tally due to rounding.
Source: FAO, 2022. FAOSTAT. Production: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/OCL>
<https://doi.org/10.4060/cc2211en-fig29>

At the same time for important content of proteins-egg, again the largest producers are Asia, then again America, then Europe, Africa and Oceania, the same pattern and the the largest producer is China, then the US, and then India. Then you can see Indonesia is a big player and then it goes to Brazil. So, you can see these names in agricultural production, the common names in Asia and America, common names and the European countries come at the very late. They are nowhere in the largest producers.



FIGURE 36.
VALUE OF WORLD FOOD EXPORTS BY GROUP

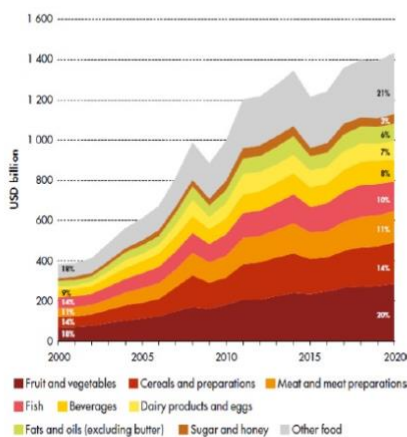
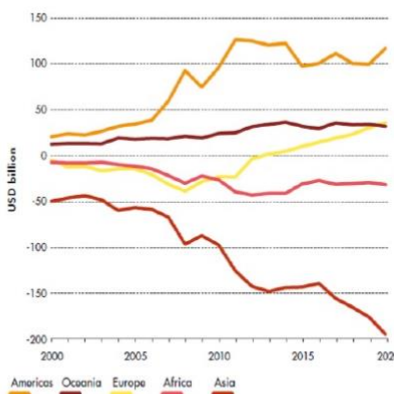
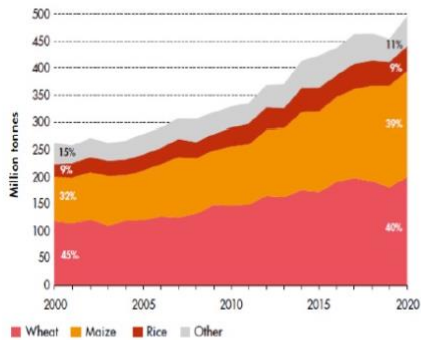


FIGURE 37.
FOOD NET TRADE BY REGION



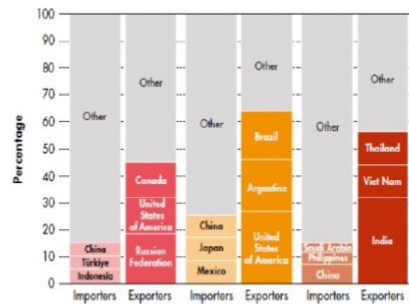
When it comes to the world exports of food and the food trade by value chain. So, you can see the largest in the value of food is the fruits and vegetables, the largest exporting items. Then cereals, then meat and meat products, then fish, beverages, dairy products, then other products. So, fruits and vegetables or cereals are the largest traded agricultural products in the world. So, who are the producers, we have to look into fruits and vegetables then cereals. We saw that US and Europe are the largest producers of cereals and the Asia is the largest importer of cereals. And if you look into the food net trade, region wise. So, the largest is the United States then comes Oceania and then comes the Europe. So, in Europe the food net trade is going up and then in Africa and Asia it is highly going down. You can see the Asia it is high drop for the last 20 years. The food net trade is going down, it is not going up only in America, Oceania and Europe, it is going up. It means that only in developing countries the food trade is going up and in the developing countries it is going down. It has lot of implications.

FIGURE 39.
WORLD EXPORTS OF CEREALS BY MAIN COMMODITIES



Note: Percentages on the figure indicate the shares in the total; they may not tally due to rounding.
Source: FAO, 2022. FAOSTAT. Trade: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/TCL>
<https://doi.org/10.4060/cc2211en-fig39>

FIGURE 40.
MAIN TRADED CEREALS, TOP IMPORTERS AND EXPORTERS
(QUANTITIES, 2020)

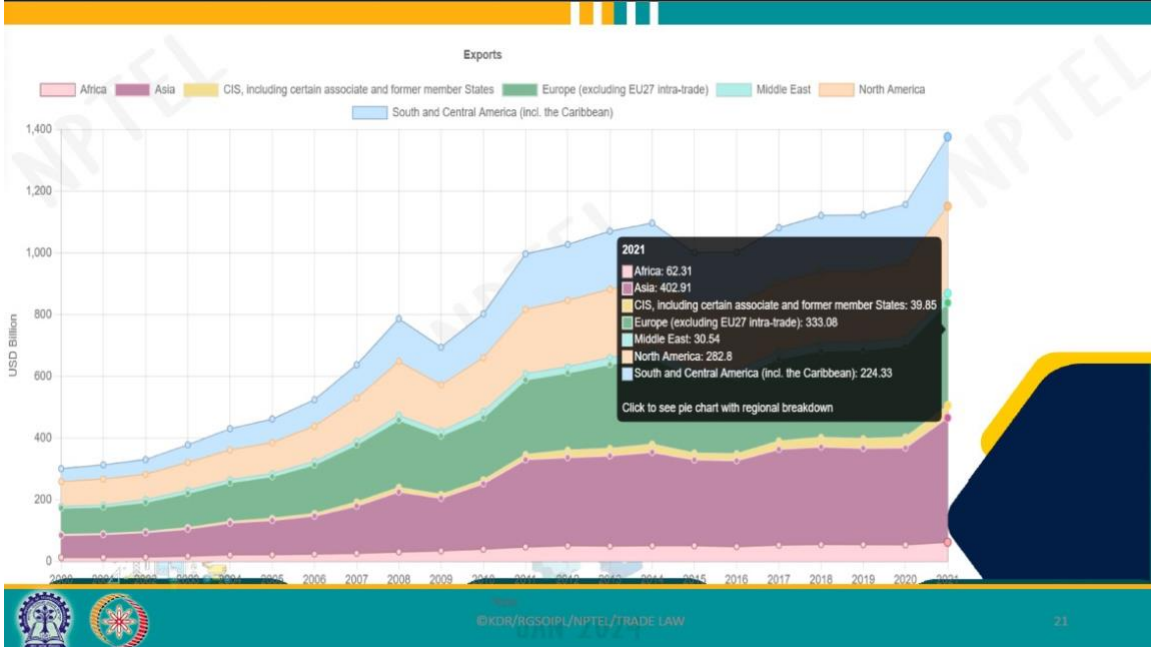


Source: FAO, 2022. FAOSTAT. Trade: Crops and livestock products. In: FAO. Rome. Cited October 2022. <https://www.fao.org/faostat/en/#data/TCL>
<https://doi.org/10.4060/cc2211en-fig40>

So, we saw that within cereals, it is divided between wheat, maize, rice and others. So, wheat and maize constitute almost 70 percent, more than 80 percent. It is almost 80 percent only two items wheat and maize. These are the exporting items, the main traded items. The main importers wheat are China then Turkey, Indonesia these are the importers and also you can see a sizable number of other countries as well. At same time see the exporters, it is Russia, US and Canada are the largest exporters of wheat and maize you take importers are China, Japan and Mexico and largest exporters are US, Argentina, Brazil. When it comes to rice, the largest importers are you can see largest importers are Saudi Arabia, Philippines, China and exporters are India. Remember the two largest producer countries of rice is India and China at the same time China is the largest importer. So, India is one of the largest producer as well as the exporter of rice, but very recently the government of India came out with an order banning all exports. There is a reason. So, the government is expecting a decline in production. It is going to affect the world market, the prices will go up. Secondly, exporter Vietnam, Thailand and all others constitute almost 50 percent. So, almost 35 percent of the rice exports are from India. So, India has a major role in the agricultural sector.

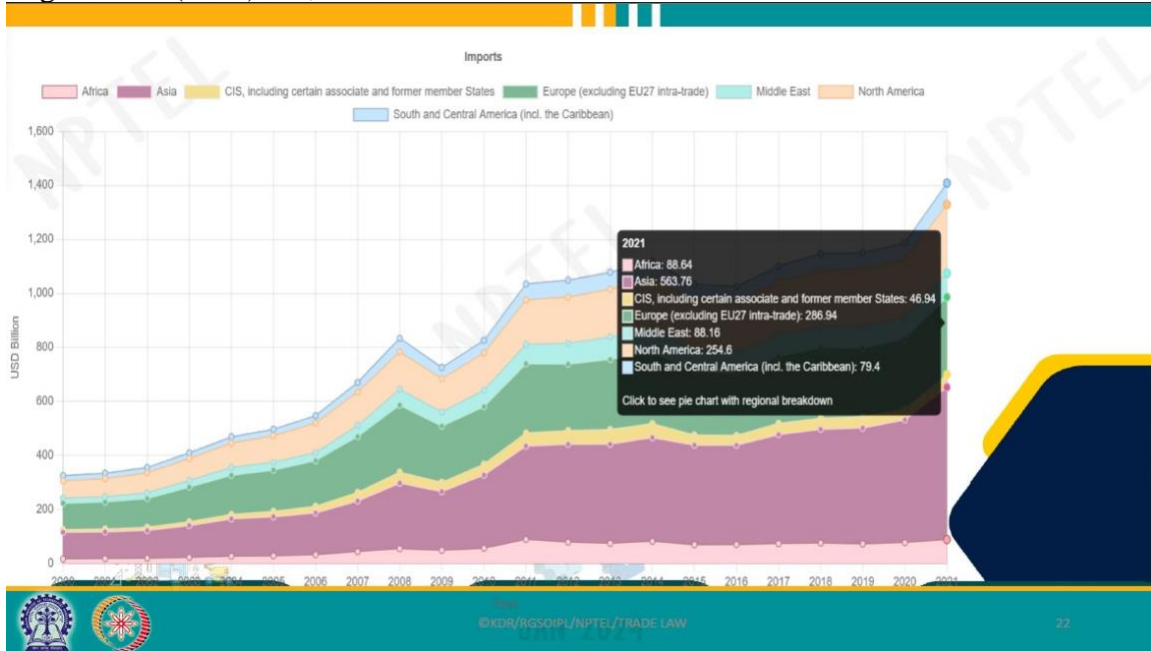


So, we can see the high prevalence of food insecurity all over the world. So, we will see that India has passed a food security law in response to the agricultural agreement and we will see it later. And also in every continent there is food insecurity, there is severe food insecurity, I would say that food availability is very less. And also you can see that especially the largest differences it shows from men and women is in America and Caribbean. So, still the food insecurity is prevalent in some of the parts of the world.

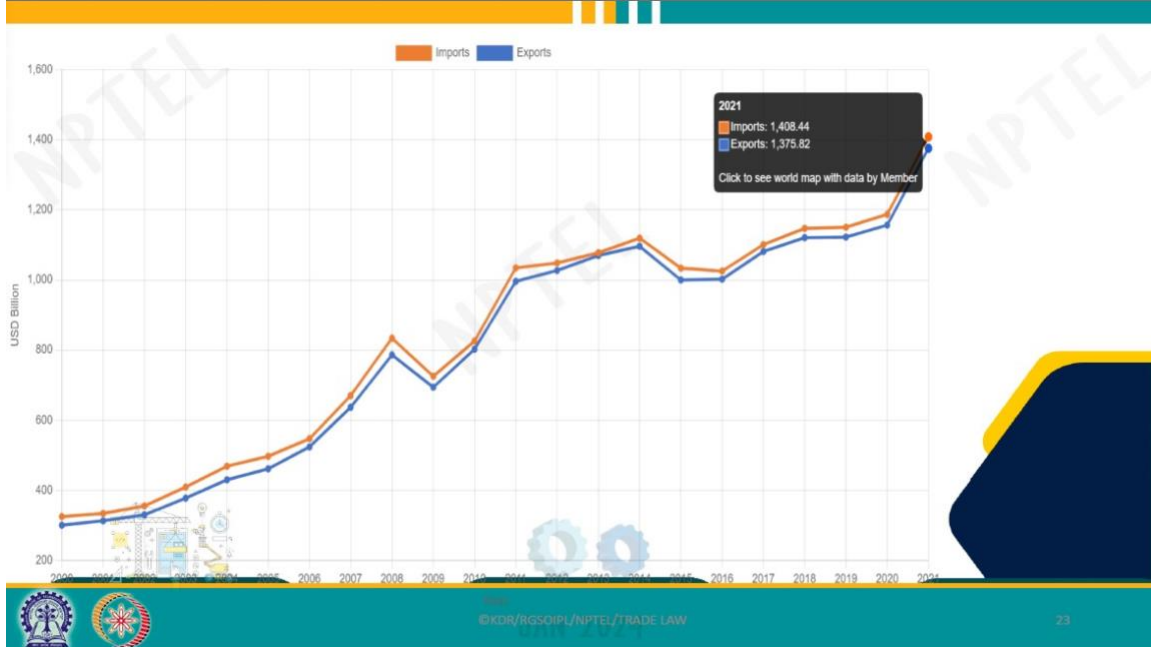


And here you can see exporting countries. Which are the exporters? Africa export is very less. Then who is the exporter? The largest exporter which you can find is the Asia followed by Europe and then you can see that CIS countries. So, CIS countries includes all former Soviet Union countries and then South and Central America. So, North America is also one of the important contributor and the Middle East is a very small

contributor along with CIS countries. So, the two largest or I would say that three largest contributors are Asia, then Europe and North America are the largest exporters of agricultural products up to 2020. So, all the data is taken from the Food and Agriculture Organization (FAO). So, these are authenticated data.



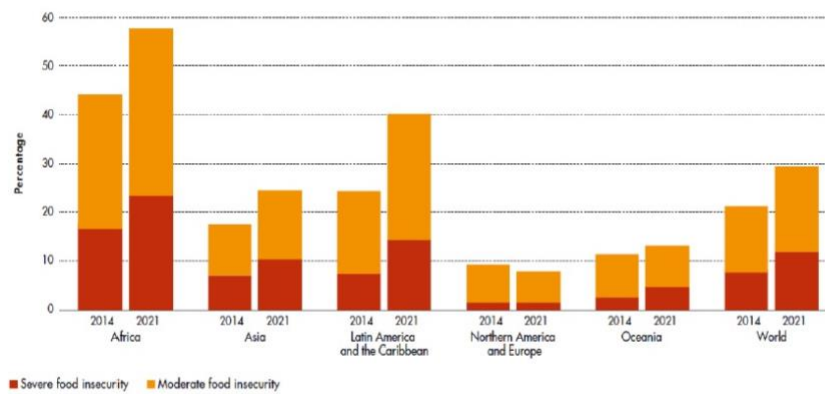
And also see that exporters we saw. So, who are the importers? So, it is not surprising to see that the largest producers, the exporters are also importers as well, for example, Asia and also Europe. So, these exporters are importers as well. So, because it means that they are exporting as well as importing these particular agriculture products.



So, here you can see the graph exports and imports. So, exports are going up. This is very recent data. For the last two decades imports are also going up, equally going up. So, whenever there is a dip in imports, export also goes down. So, it means that it is

highly balanced, highly balanced imports and exports. You cannot find a wide difference in this particular map in the world exports.

FIGURE 49.
FOOD INSECURITY LEVELS BASED ON THE FOOD INSECURITY EXPERIENCE SCALE BY REGION

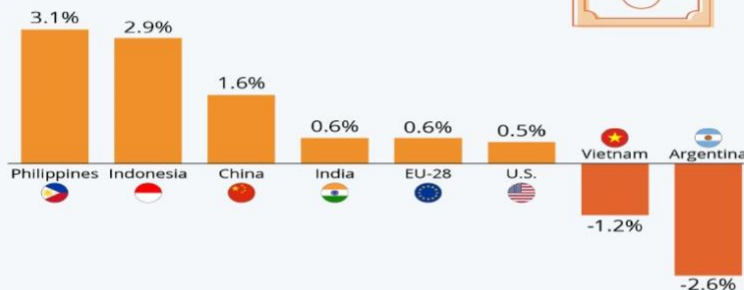


Source: FAO, 2022. FAOSTAT. State of Food Security Indicators. In: FAO, Rome, Cited October 2022. <https://www.fao.org/faostat/en/#data/FS>
<https://doi.org/10.4060/c2211enfig49>

So, here food insecurity levels and food insecurity is one of the important factor in the agricultural negotiations in WTO. So, you can see that this severe food security, severe food security you can find it in Africa and Asia, Latin America, then Oceania, then a slight severe food security in northern America and Europe even Europe. So, Europe is not devoid from food insecurity. Then you can see the moderate insecurity is also highest in Africa followed by Latin America, and then if you look into the 2014 situation and 2021 situation there is slight improvement the food insecurity has increased. So, food and agriculture organization(FAO) says that the food insecurity is very severe in some of the continents like Africa and Asia.

Where Agriculture is Most Subsidized

Support of agriculture* as a share of GDP in selected countries in 2019

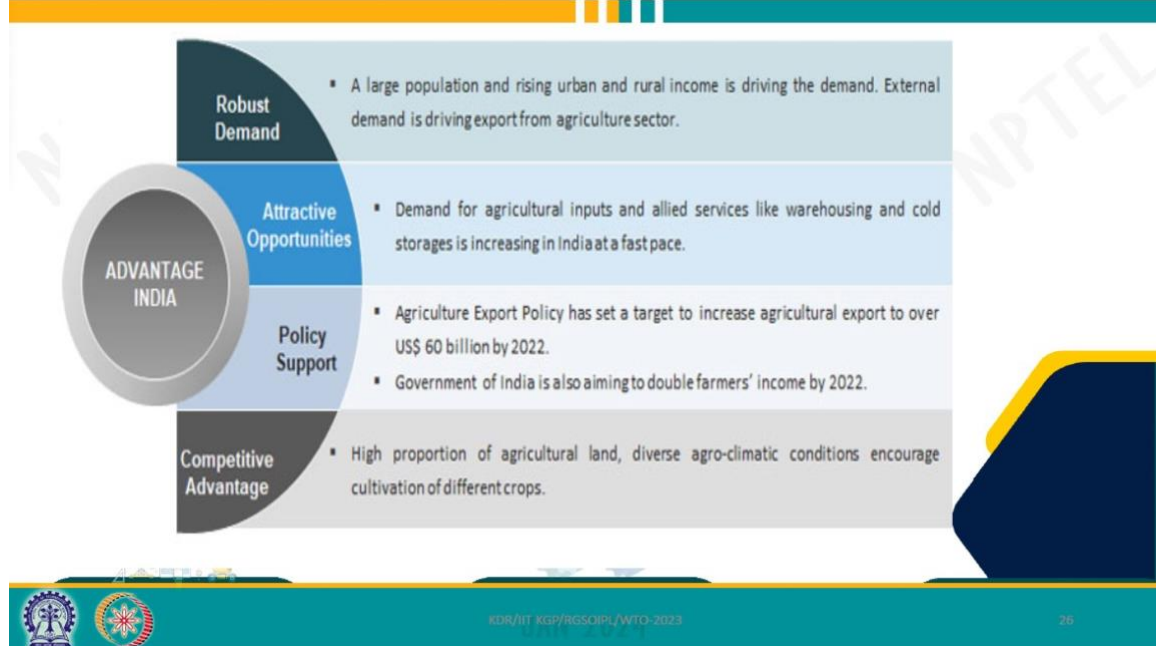


* transfers, price moderation, services and infrastructure
Source: OECD

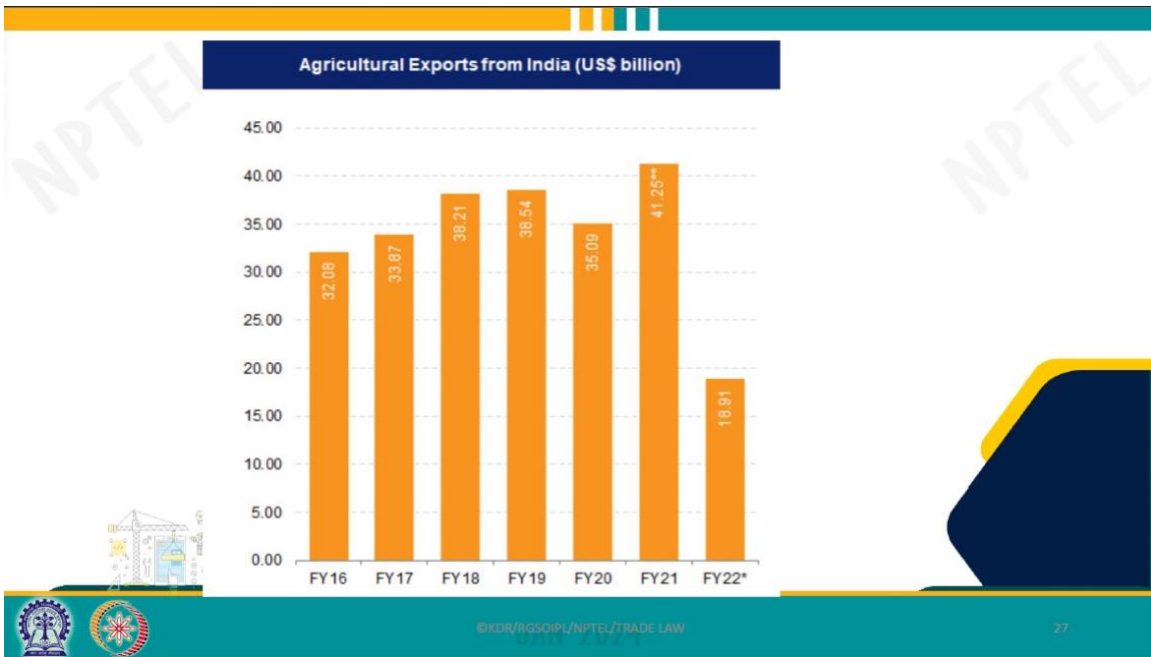


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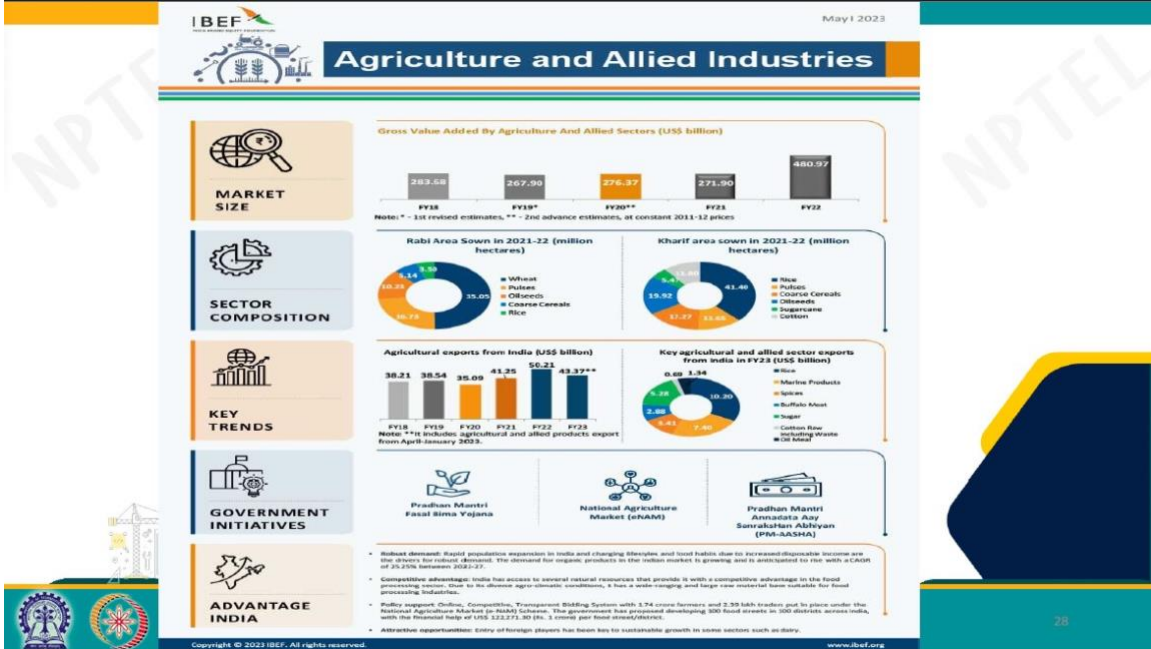
So, for our discussion in the coming classes on food subsidization, who is the highest subsidizer in the world? So, some of the OECD data says that Philippines is one of the largest provider of subsidies, followed by Indonesia, China and India. Remember we blame United States and the European Union for providing very high subsidies to their agricultural sector, but the data says that India is also equally a culprit and India is providing more subsidies than the US, but still our agricultural sector is not stable because our consumption is very high and European Union is providing 0.6 percent, India and European Union is equally providing 0.6 percent subsidies and some of the countries, if you look into Vietnam and Argentina, their total aggregate measurement of support is in minus. So, we will see later on what is the aggregate measurement of support, this is negative. So, this particular figure completely changes our perception. So, it is not the US and EU that are the highest subsidy providers in the world, it is other countries, especially developing countries. So, you can see the first four countries Philippines, Indonesia, China, India, all these are developing countries, are the highest providers of subsidy to the agricultural sector. So, it is not the developed countries.



So what is the Indian scenario? Indian scenario is very peculiar with regard to this agricultural sector. India has the largest population in the world and at the same time there is the largest importer of agriculture in certain products we are the largest exporter of certain products as well. So, the demand of certain products are very high from India, at the same time, we import most of the agricultural products. So, the agricultural export in 2022, very recent data says that, a target of 60 billion is targeted by India in 2022. So, the income also the government is expecting more and whether we have a competitive advantage, yes we have the competitive advantage in certain products and we do not have a competitive advantage in certain other products, agri-products. There are so many criteria attached with the competitive advantage, one of the important thing is the climate, agri-climate conditions which increases the crop cultivation.



So, agriculture exports if we look into, continuously the exports are increasing even though during the pandemic time we only saw a very slight decline in exports otherwise it is very high. In 2022 the data is not complete. So, up to 2022, for the last five years we can see that it is substantially increasing, our export also is increasing.



So, if you look into the agricultural and allied industries, yes, definitely, the agricultural sector's contribution to the GDP is declining. Even though it is the largest provider of employment in India, that number is also decreasing, in Asia it is decreasing and India and China are the largest two countries with agriculture sector, their contribution is also declining. So, this is something which is very alarming. So, in conclusion, the food and agriculture organization (FAO) data says that it is not that the developed countries are always the producer of all the cereals whether it is sugar or other agricultural products. It

is the developing countries who are the producers of most of the products, whether it is cereals or the oils, the vegetable oils which we use for cooking or other important agricultural products. It is the developing countries who are the producers, including Brazil. In some of the areas like maize and other things it is the US and other European countries. At the same time we are exporters of certain products, at the same time we are more than exporters, we are bigger importers of agricultural products. So, in conclusion we can see that these data shows where is the opportunity. And the opportunity lies for the developing countries and at the same time what are the policy measures required for the developing countries and developed countries in order to survive or a balanced approach towards the agriculture agreement. So, we will see the development of agricultural agreement in the GATT and WTO in the coming classes. Thank you.