Business and Sustainable Development
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Lecture- 32
Course Summary

Hello. So, we have reached to the last session or we have reached to the final session of this course and in this lesson what I will try to do is that I will give you the I will try to summarize all the topics what we have cover in this course and possibly briefly, I will also talk about that how we have connected the different things, different topics what we have plan in our course objective. So, to start with we started this course on in the initial session by understanding what is sustainable development and what is sustainability.

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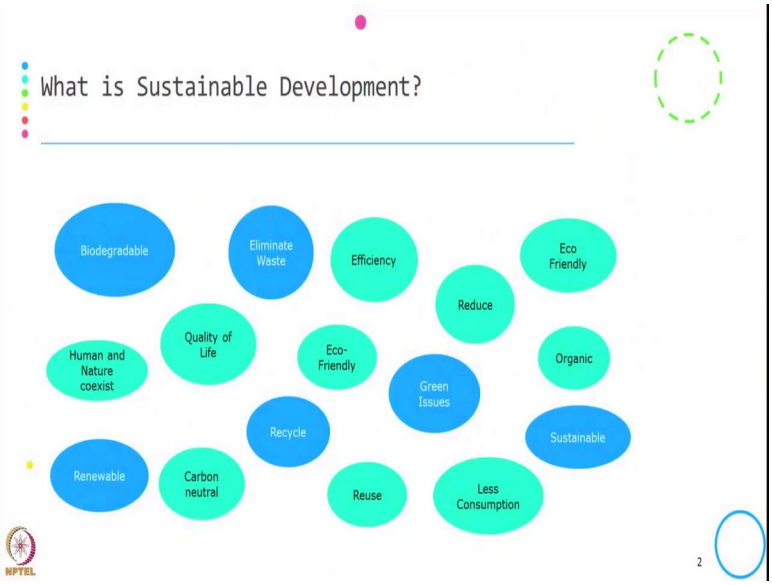

So, if you remember this was the very first slide when we say that what it means sustainable development.

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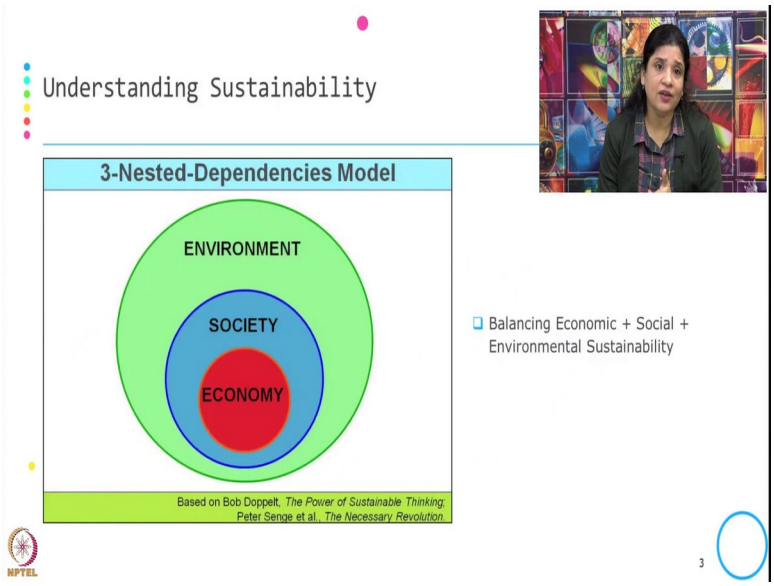

And our basic understanding started from there in understanding what is sustainable development, what is sustainability, how sustainability is balancing the economic social and economic sustainability and we took the help of this 3 - Nested - Dependency Model to understand the 3 dimension of the sustainability.

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Then we saw the evolution of the sustainable development how the idea of sustainable development started from industrial revolution.

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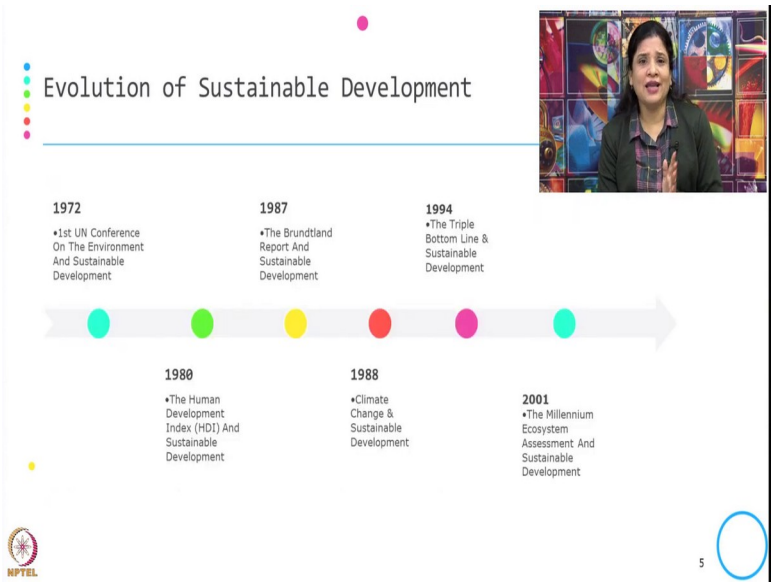

Also that about the crisis what the globe has faced over a period of time, then the tragedy of commands, limit to growth and the evolution in 1972 when the first UN Conference on environment and sustainable development started and the journey from there to millennium ecosystem assessment and sustainable development in 2001.

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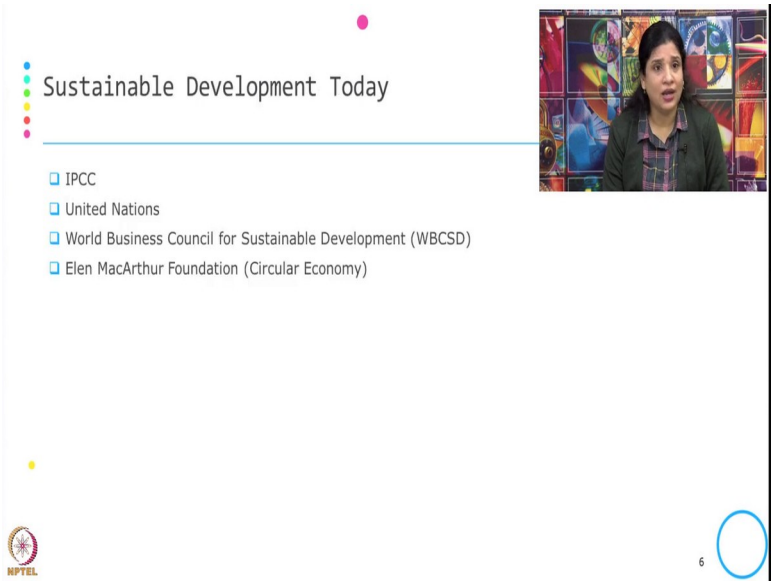

And then we have also discussed that, what are the organization or what we understand as a sustainable development today in term of the role of IPCC, United Nations, World

Business Council for Sustainable Development and also the circular economic concept given by Elen Macarthur Foundation.

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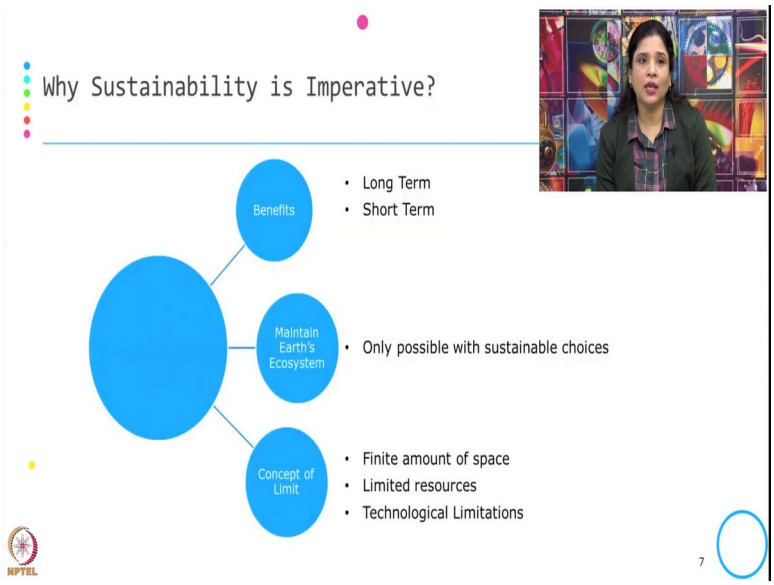

Then we started once we understood what is sustainable development, sustainability, how it is evolve over a period of time, then we got into the second part of this that is business and sustainable development like; why sustainability is important at least for the for everyone and for specifically with respect to the business.

So, we know that sustainability is important, because it gives us the long term and short term benefit, this can be only possible with the sustainable choices and there since there is a concept of limit in order to address the concept of limit sustainability is important for us.

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And then we discuss that sustainability is important because of these underlying issues; that is those are environmental issues, change in the economic system, the so called change in the structure of the economic system, in term of globalization, in term of other changes in the structure.

Then we discuss the environmental issues, resource degradation, climate change under; climate change under environmental issues, then we saw that how the role of the stakeholder has increase over a period of time and also the changing business model all this four factors making the sustainability important.

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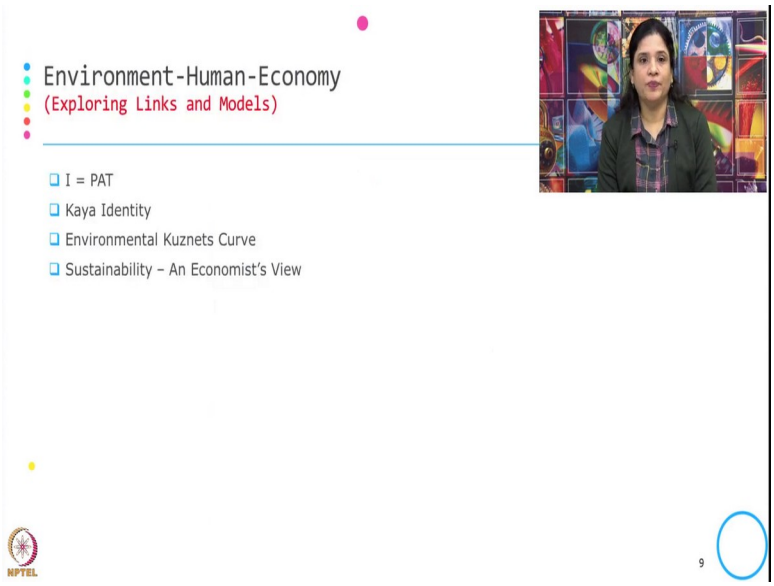

Then we explore the relationship between the environment, human and economy. So, you remember; we started linking this with the IPAT which is considered to be the simplest one to link all these 3 dimensions and then we did with Kaya identity the linking with the Kaya identity, then we did the environmental Kuznets curve and finally, we started understanding the a sustainability from the economic viewpoint that is from the viewpoint of Professor Solow.

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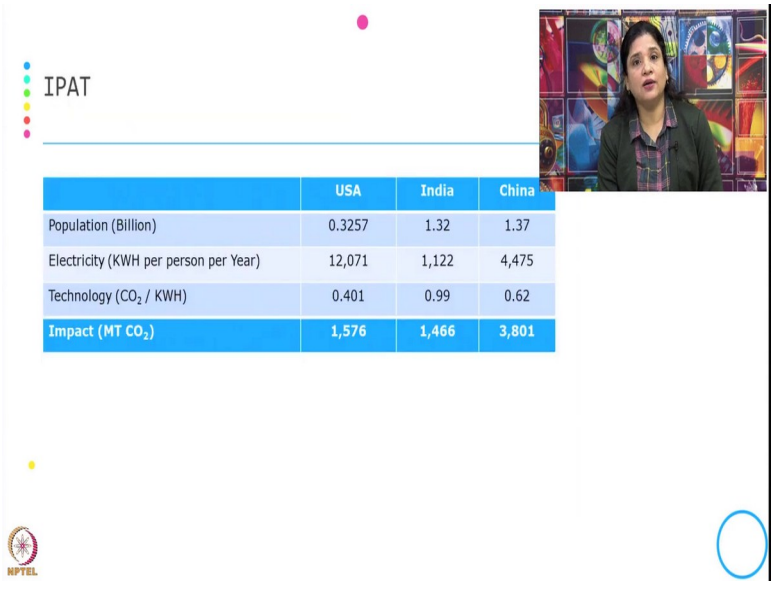

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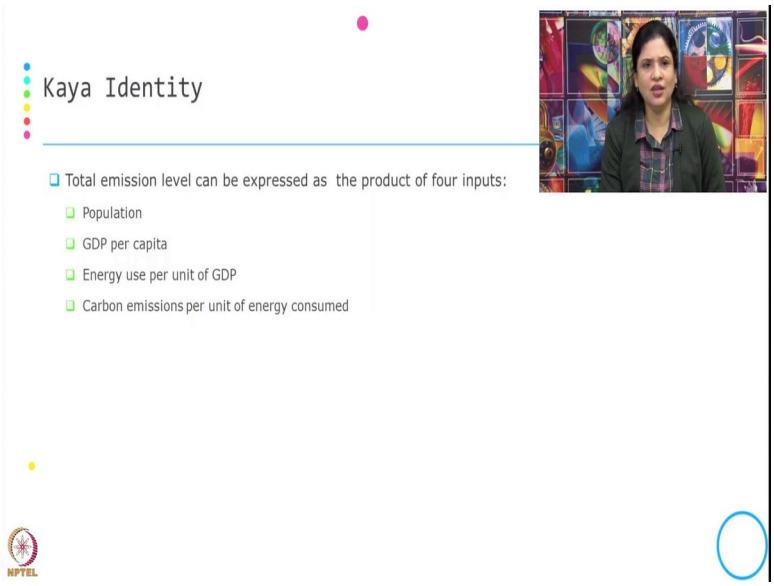

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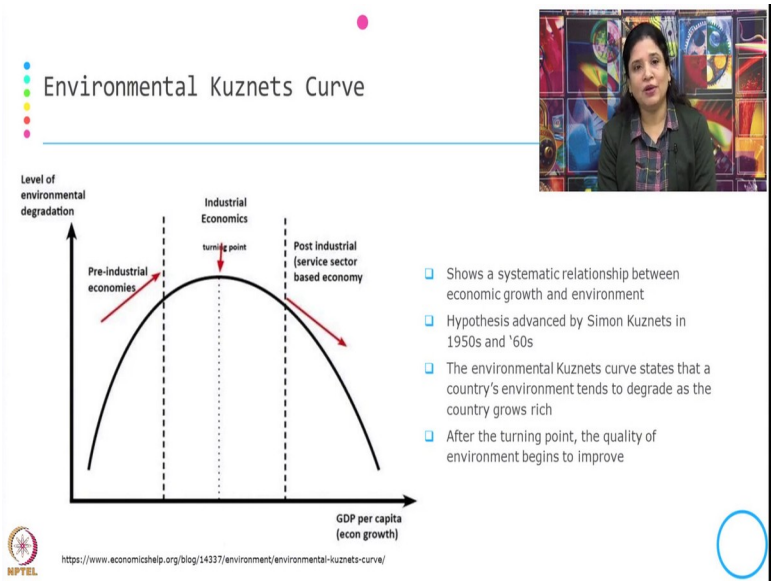

So, this is quickly just to just to give a again the focus on what we discuss in IPAT mostly impact is through population, effluence and technology. In Kaya identity we have taken population, GDP per capita, energy use per unit of GDP and carbon emission per unit of energy consume and in environmental Kuznets curve this is the relationship between GDP per capita which is proxy for income and level of environmental degradation.

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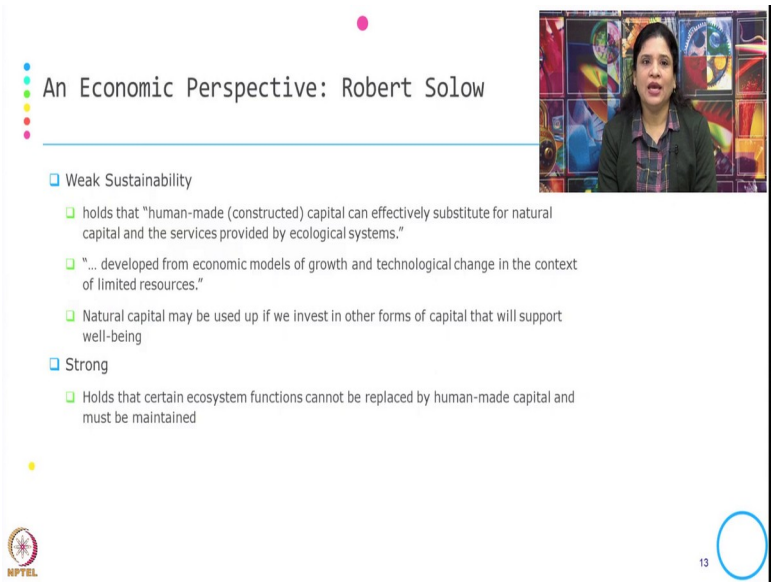

Then in from the economic perspective understanding sustainability; we did we took the view of Robert Solow which gives two types of sustainability.

One is weak sustainability and second one is the strong sustainability; strong sustainability holds that certain ecosystem function cannot be replaced by human made capital and must be maintained and weak system sustainability says that, human made capital can effectively substitute for all types of capital and services provided by the ecological system.

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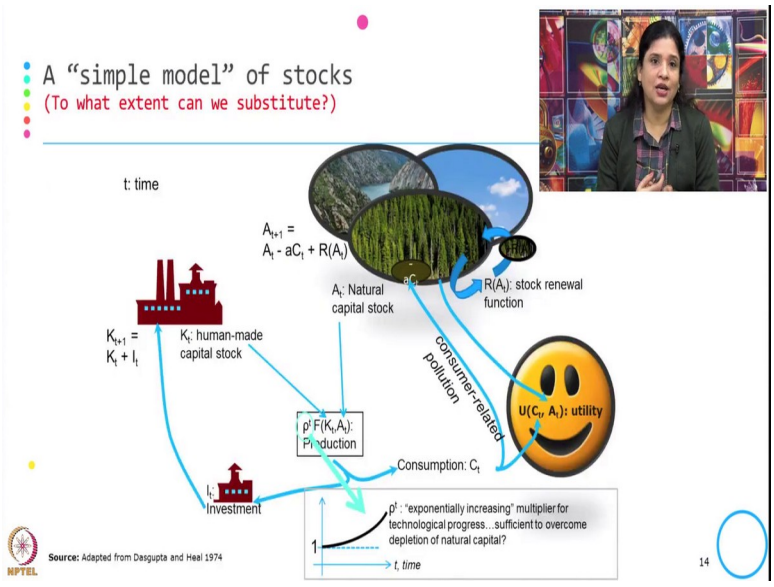

This is the “simple model” of stock to understand to what extent we can substitute our human capital into the other forms of the capital.

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Then we discussed the firms response to sustainable development and typically this is with respect to the fact that the firm or the business they are both the drivers and the facilitator for the change, the changing role of corporation over a period of time, how the perceive risk, how risk leads to opportunity, what the company should do in order to address the sustainability challenge and what are the initial responses that we see when firms responds to sustainability development.

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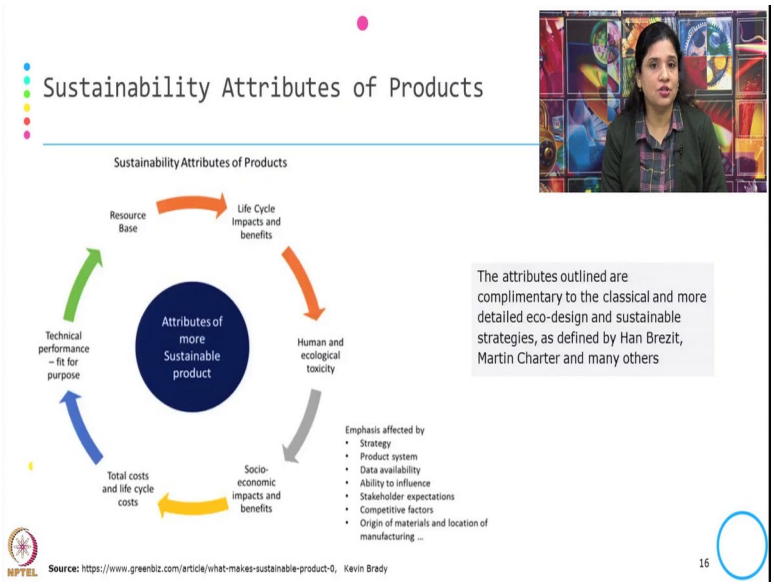

So, here is the sustainability attributes of the product and this gives the fact that; when the organization is planning for a sustainable product where they should focus on.

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Then these are the few of the examples what we discuss in the session about the sustainable product; that is the Kindle e-book reader from Amazon, Dairyland and also the Natura cosmetics.

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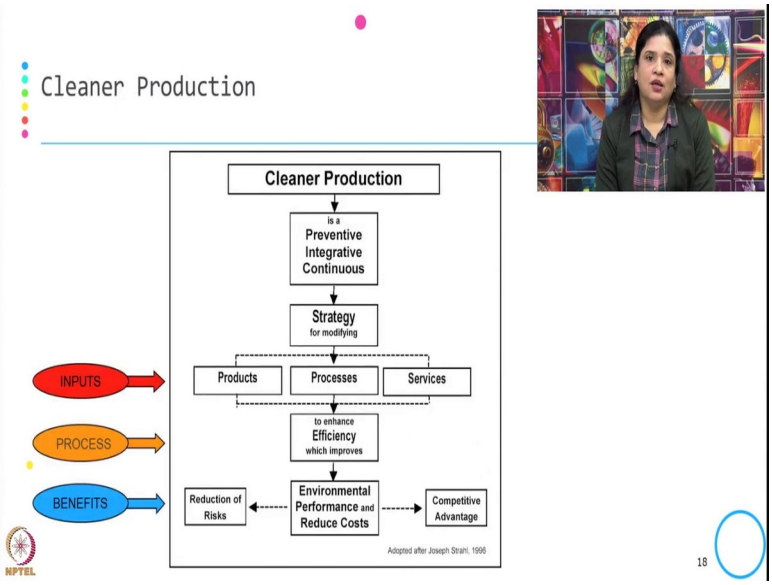

Then we got into the second week of our course and if you remember in the second week of our course we focused more on tools and different sustainability tools. There we discuss about the assessment tools; there we discuss about the management tools and also we discuss about the re putting tool.

So, we started our discussion on cleaner production, which is a preventive integrative continuous strategy for modifying process to enhance efficiency which improves the environmental performance and the reduce cost.

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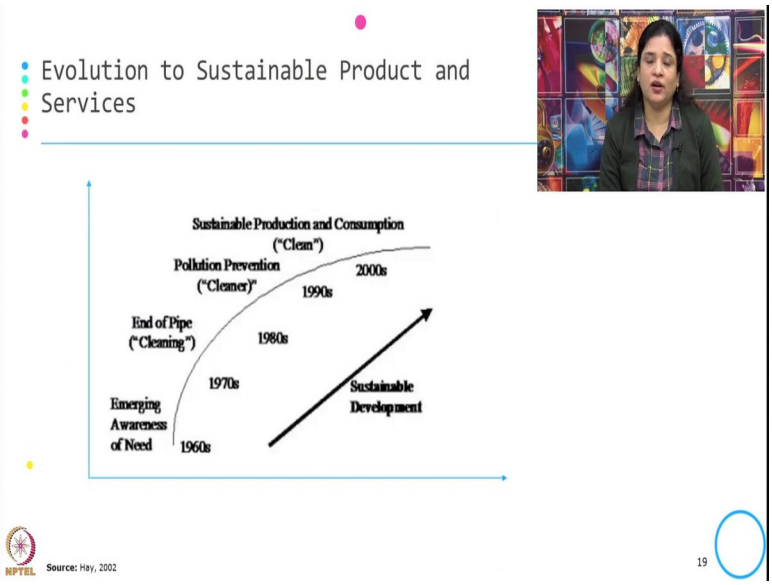

Then we also discuss about the practices of the cleaner product or cleaner product; how things can be improve with respect to product with respect to process. So, this is the evolution of sustainable product and services over a period of time and between 1990 and 2000 we started addressing not only the prevention it is about bringing the clean production and clean consumption.

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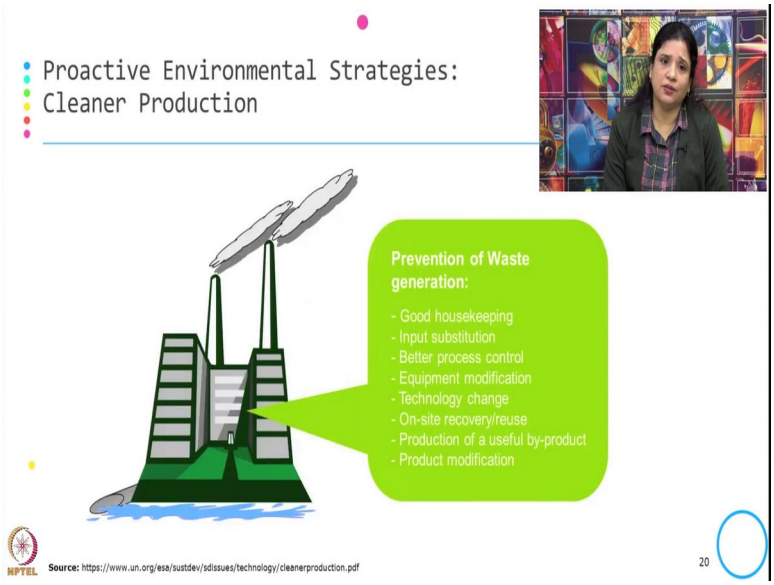

These are the proactive environmental strategy; what is being suggested for the cleaner production in order to achieve the efficiency which will help in the environmental improvement of the process and the product.

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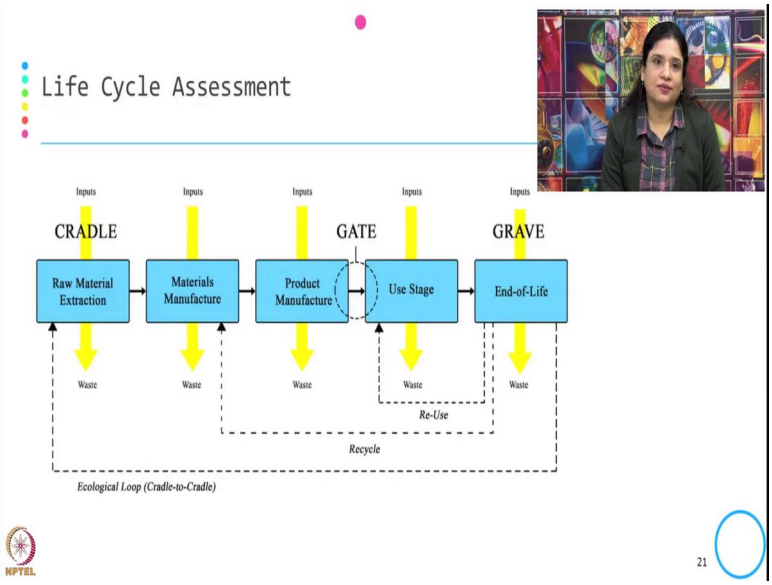

Then we discuss about the life cycle assessment which is our impact tool and here life cycle assessment is nothing but when we calculate the impact environmental impact associated with each phase of the product life cycle, that is from cradle to grave.

So, cradle start with raw material extraction and grave and the end of the end of the life for the product happens. And beyond this also you will find there are different variant of life cycle assessment what we have discussed that also it goes cradle to cradle; where the whatever the amount which can be recycled, what can be reused again it go back to the loop of the cradle for the new product or for a different product.

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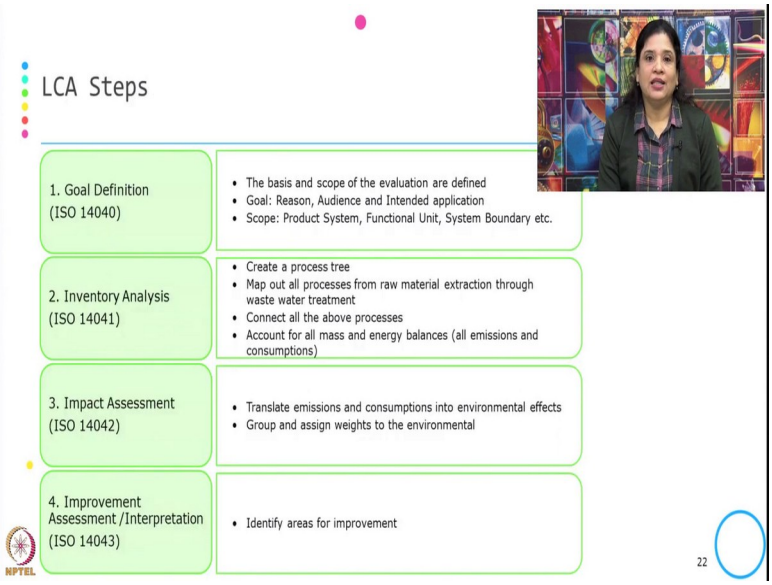

Then these are the LCA steps that is goal definition, which is mapped with ISO standard, inventory analysis, impact assessment, improvement assessment and the interpretation.

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And this is the example of Levis jeans; if you remember like how the one pair of jeans in entire the entire life cycle of the one pair of jeans how much impact they are creating to the environment.

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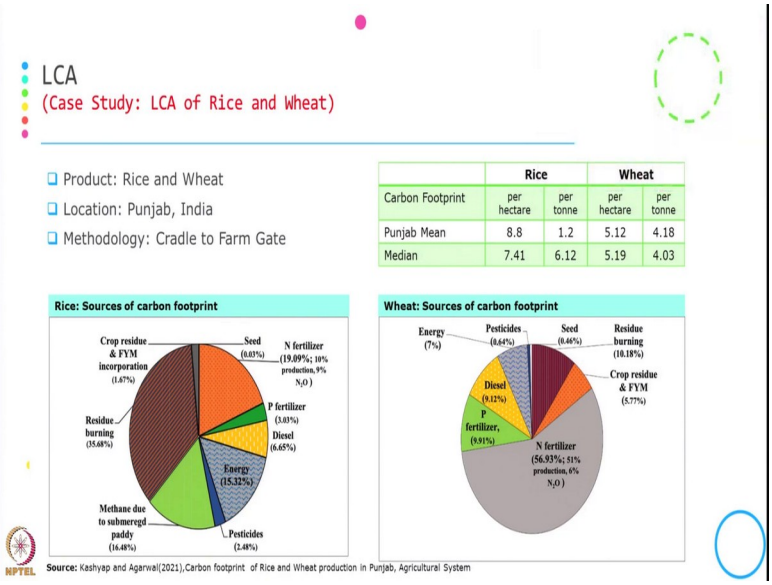

Then this is the another example what we discuss that is the life cycle impact of rice and wheat.

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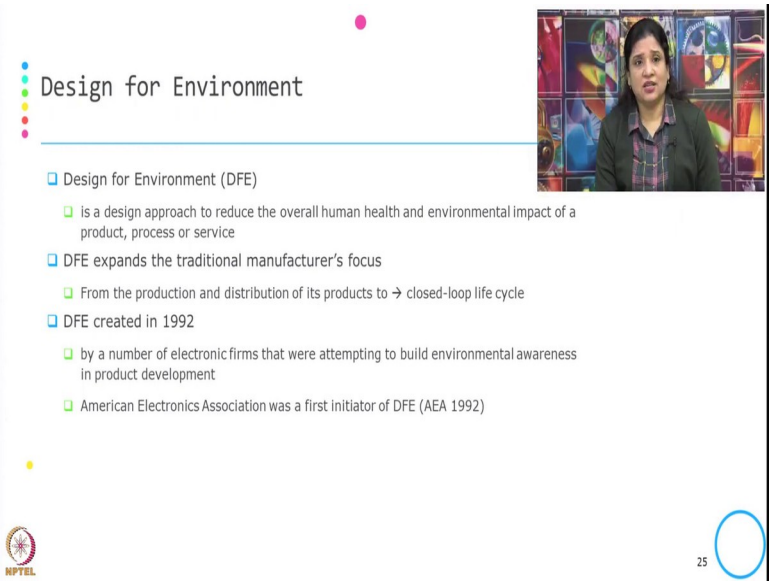

Then we discuss about the management tool that is design for environment, this is a design approach to reduce the overall human health and environmental impact of product, process and services. So, mostly here the concern for environment gets integrated at the designed phase of the product.

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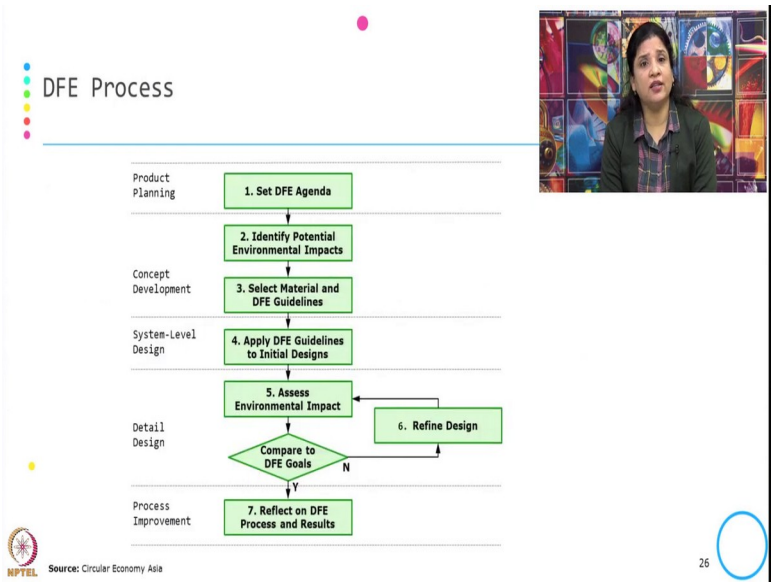

And then from there when this design the phase of product this is being integrated the so called challenged for environmental improvement is also address over there.

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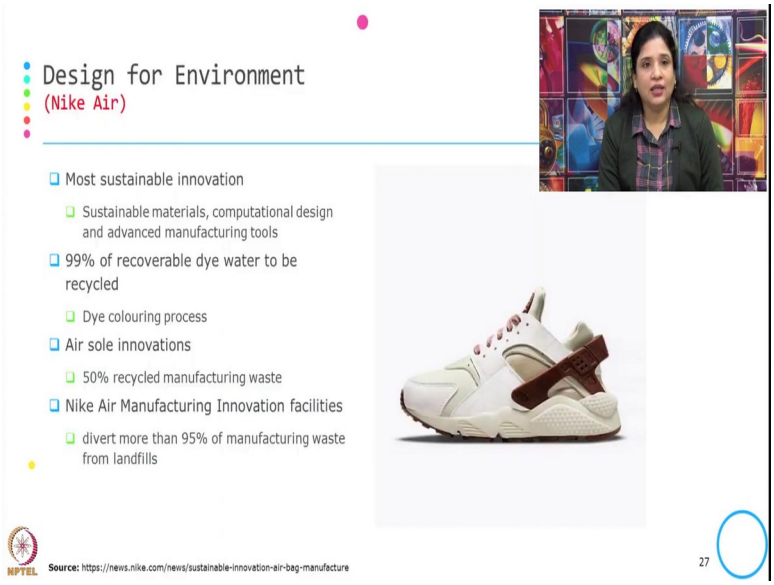

Then we took many examples and one of the example is Nike Air; coming under design for environment which is the most sustainable innovation and 99 percent of the recoverable dye water to be recycled for this product, they the air sole innovation what they have done that use 50 percent recycled manufacturing waste and Nike Air

manufacturing innovation facility divert more than 95 percent manufacturing waste from the landfill.

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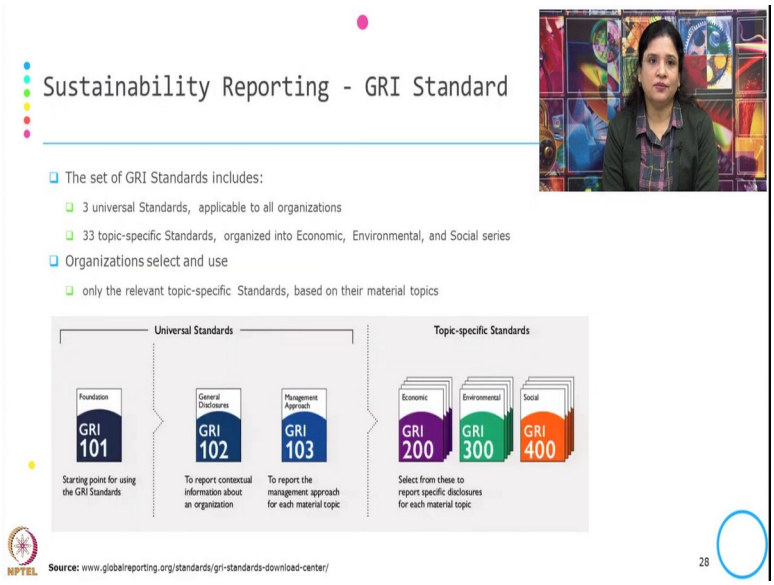

Then we discuss about the reporting tool that is sustainability reporting tool for the GRI standard and also we have we saw the detail of the GRI standard, how it is being used for the sustainability reporting, like there are two types of standard under GRI; one is the universal standard and second one is the topic specific standard.

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Then also we discuss that in term of the sustainability reporting this is the current status of ESG reporting in Indian company and these are the top 10 company those who have done the sustainability reporting.

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Then the after understanding the different tools in week 3; we moved into the strategy that is corporate environmental strategy. And we started our discussion understanding that why the corporate they should pursue the environmental strategy. And there are three general motivation in order to pursue this environmental strategy; competitiveness, legitimation and the social responsibility.

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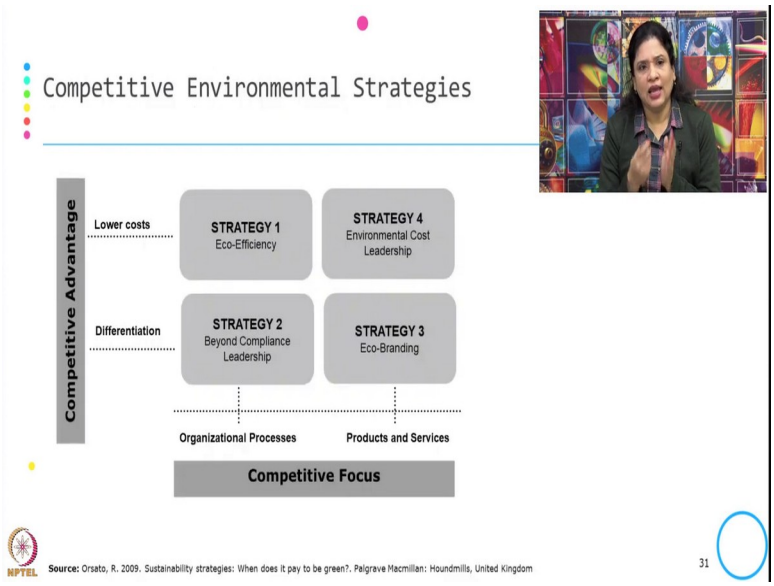

And then the four types of corporate environmental strategy what we discuss that those are eco-efficiency, beyond compliance leadership, environmental cost leadership and eco-branding and if you look at in this matrix, this four strategy have been mapped on the basis of where the focus.

Whether the focus is on organizational process or the focus is on product and services and what kind of competitive advantage this strategy will give to the organizational or to the corporate, that is differentiation and also whether it is bringing the product differentiation or whether it is lowering cost for the product.

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Then we discuss the difference between the corporate social responsibility and corporate social sustainability, how they are different in term of vision, in term of targets and in term of the motivation.

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Then we discuss the sustainable development goals, and this is typically how this is a urgent call for action by all country and it is a kind of global partnership and for each of the sustainable development goal; the plan of action is being identified in order to achieve the goal.

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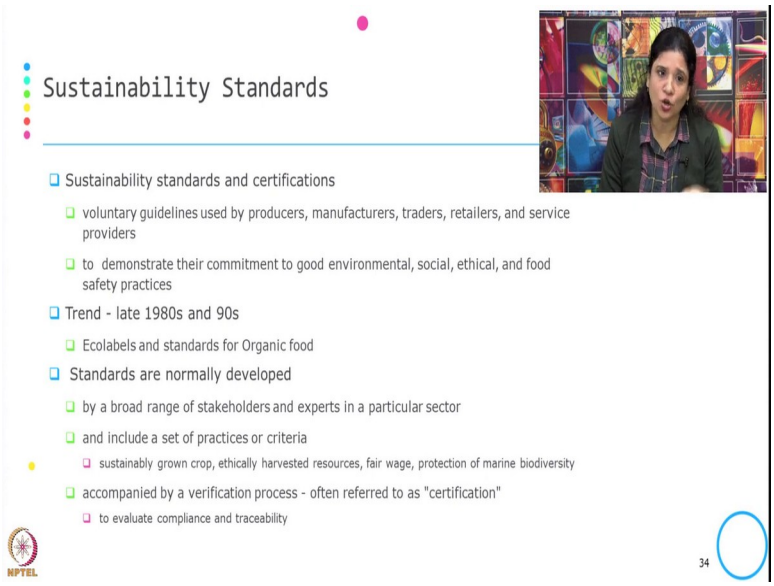

Then also we saw how this sustainable development goal have been taken as one of the highlight or the focal theme by the organization or by the corporate.

Then we discuss about the sustainability standard mostly on ISO 14000, ISO 26000 and few more ISO standards and also we have seen that how each there are also standards those are mapped into the each of the sustainable development goals which makes the job of the organization or the corporate easy, because they know that once they are working according to the standards, according to the certification they are going they are working towards the plan of action for the sustainable development goals.

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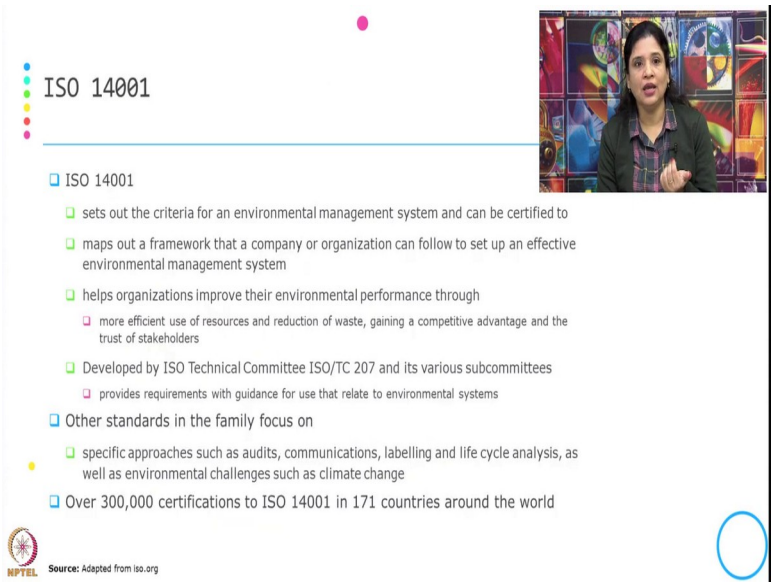

Then we discuss about this ISO 14001.

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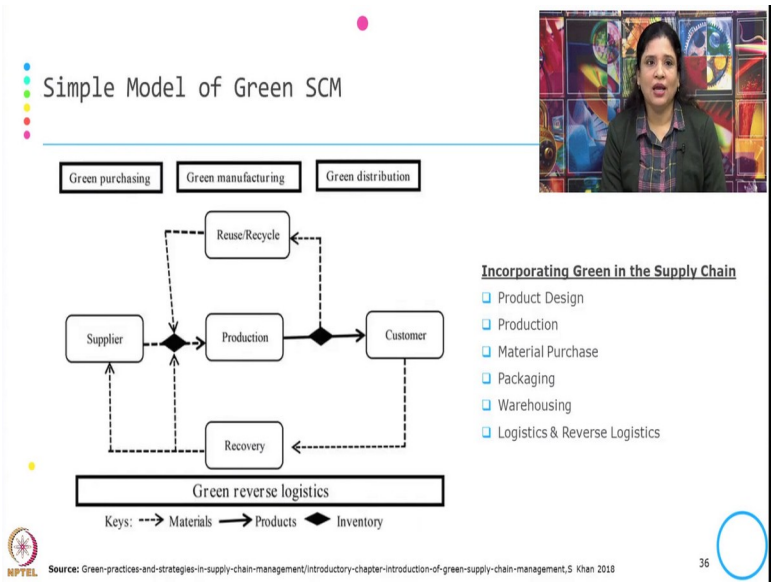

And also few more ISO as we discussed and also few of the voluntary standards; if you remember about the fair trade all also the rain forest alliance. Then we moved into the looking into the sustainability agenda that is not within the process, not within the plant beyond the firms boundary and this is what the simple model of green SCM where the green supply chain is nothing but we are incorporating green or sustainability in the supply chain starting from the product design to the final logistic or the reverse logistic.

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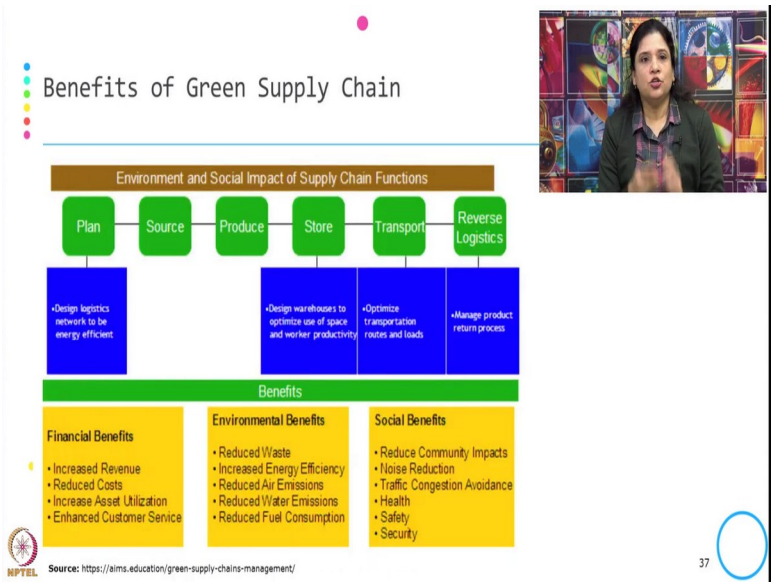

So, these are the benefits of the green supply chain those have been listed. So, green supply chain gives financial benefit, environmental benefits and also the social benefits.

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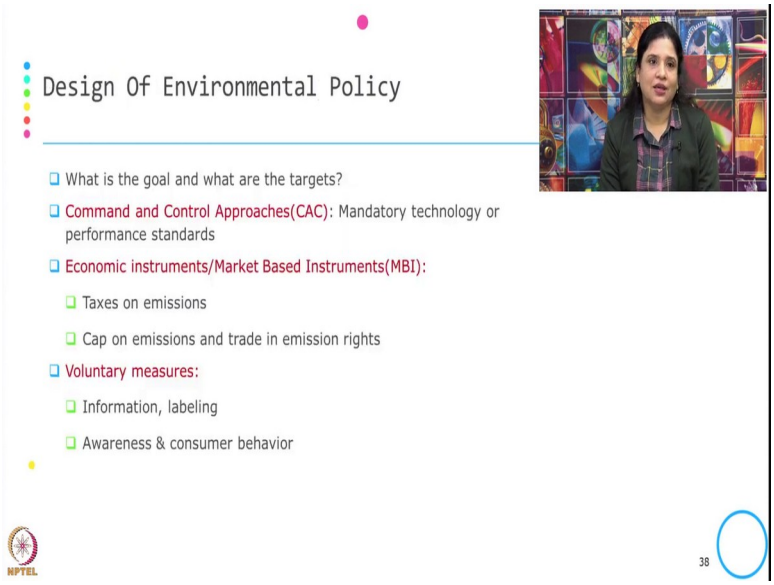

Then we got into the policy instruments that is what is the goals, what are the targets, and we discuss about two types of policy instrument one; that is a traditional or the command and control instruments and second one is the economic instrument and market based instrument.

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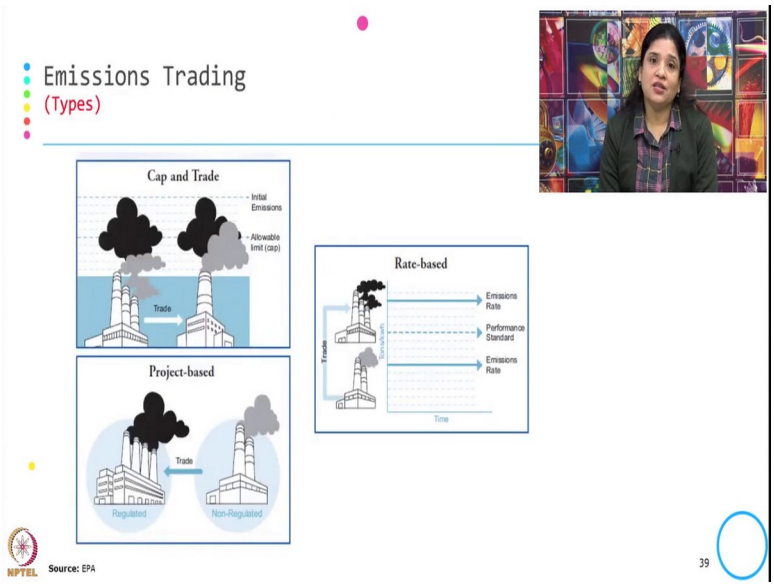

Also we discuss under market based instrument the different types of emission traded that is cap and trade project based and rate based.

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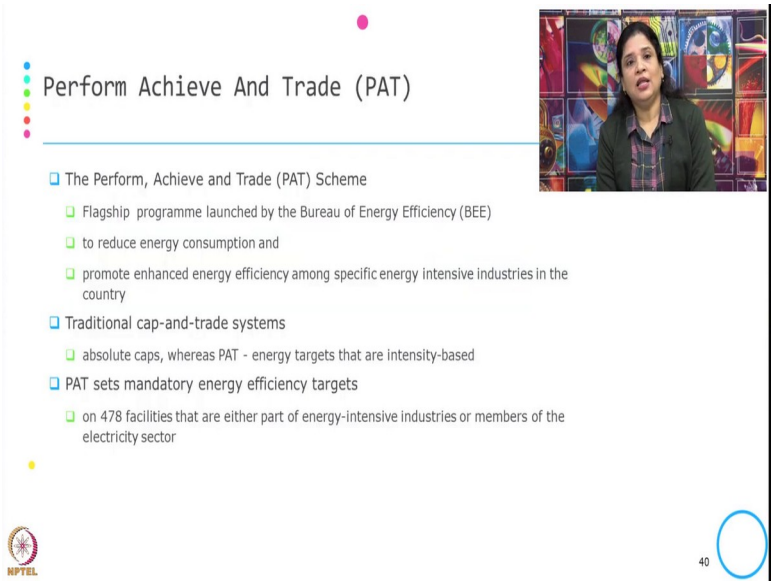

Then we continue our discussion about the market based instrument in the specific context of India that is the perform achieve and trade which is a part of the cap and trade system.

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And also, we discuss about the also we discuss about the REC that is PAT of our renewable purchase of obligation that those are RPO. So, we discuss about two existing market based instrument in India that is PAT and also the REC. Then we moved into the risk and opportunity typically to understand that, because of this climate change agenda, because of this sustainability challenges; what are the risk although we have discussed this at a different point of time to mostly to understand what kind of risk it is creating to the corporate mostly the private sector and to the organization and why they should mitigate the risk.

So, these are the risk factor what the organization incorporate they are getting because of this sustainability focus or because of not addressing the sustainability agenda or because of the climate change and why they should mitigate risk because there are internal factors and also external factor.

Internal factors we have taken the supply chain of disruption if you are not addressing the risk and also it will influence the company culture and also these are the most important issues in driving the change and when it comes to external factors typically the pressure from the stakeholders, shareholders, regulatory changes and also it incorporate sustainability into their day to day business.

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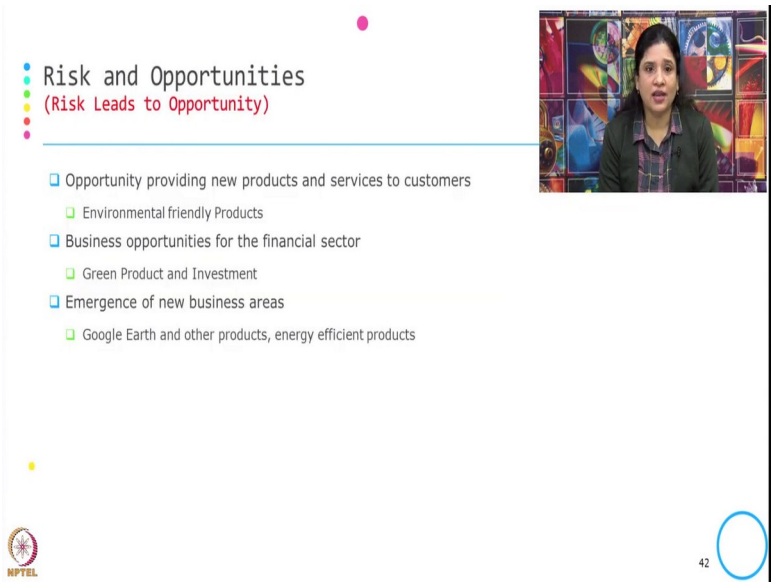

Then we also seen that how the risk leads to opportunity and those opportunity by producing environmental friendly product or it can be providing a services for the carbon clean, business opportunity for the financial sector that is green product and investment and emergence of new business area like; Google Earth and other energy efficient product.

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So, this is what we have discussed in the class also about the new opportunity.

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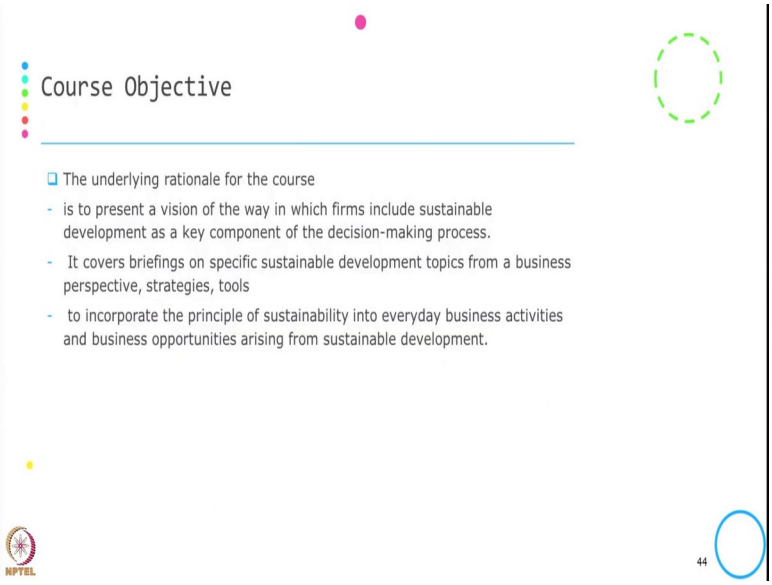

Now, then finally, also we have discussed in the context of new opportunity like different financial instrument, different financial of the services; what is being offer by offer because of the sustainability or the climate change.

So, when we finally, we gave a also synthesis of the entire agenda entire topic what we have discuss in the course through the sustainable value frame work by Stuart Hart which summarizes the entire strategy, initiative what we have discussed at the different point of time.

And if the corporate they are following it well; there are drivers which force the organization which force the corporate to follow it, but the end result is that it is giving the short term, long term benefit to the corporate and also it is giving the benefit in the present scenario and also it will give the benefit in the future scenario and the end result is sustainable value.

When we started this course, the objective was if you remember the course outline the underlying rational for this course is to present a vision of the way in which the firms include the sustainable development as a key component of the decision making process. It covers briefing or specific sustainable development topics from the business perspective, strategy, tools to incorporate the principle of sustainability into everyday business activity and business opportunity arising from the sustainable development.

Since we reach to the end of this course; I hope that whatever we kept as the course objective we have been achieved to fulfill those understanding and I hope that you all have enjoyed the course, you all have like the course, but possibly my message at the end of the course is not about whether you have like the course or whether you have enjoyed the course it is more about of since you have done the course whether you it had changed your thought process or not.

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And if you remember, I started my course with this picture that was created or this is the picture of the sand art created by the sand artist Sudarshan Pattnaik on World Environment Day on 5th June 2021. And this I started is the understanding like how this speaks about the essence of this course; now, I would like to tell you all of you that after doing all this course just look at the picture and try to know what are the what is the essence of this picture and as an individual, as a society, as a stakeholder in the sustainability journey what should be our role and responsibility.

Thank you.