

Education for Sustainable Development
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Lecture - 57
Sustainable Consumption and Production (contd.)

Hello viewers. So, welcome back to this NPTEL class on ESD. So, in the last class, we are discussing about responsible consumption and production, that is SDG 12 of UNESCO.

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Sustainable Development GOALS #SDGsketch
17 GOALS TO TRANSFORM OUR WORLD

- **Demand for materials** will likely outpace efficiency gains in supply chains as well as overwhelm **already stretched ecosystem services**.
- **Consumption patterns** need to be made **sustainable**, particularly **lifestyles** in industrialized societies, and **reduce their ecological footprint** to allow for the **regeneration of natural resources** on which human life and biodiversity depend.
- A **better understanding** of environmental and social impacts of products and services is needed, both of **product life cycles** and how these are affected by use within **lifestyles**.

GOAL 12: Ensure sustainable consumption and production patterns

By 2030 halve per capita food waste of the retail and consumer level

Promote sustainable public procurement practices

By 2030 ensure that people everywhere have the relevant information and resources about sustainable development

Implement the 10-year framework of programmes on sustainable consumption and production

By 2050 achieve the sustainable management and efficient use of natural resources

Encourage companies, especially large and transnational companies, to adopt sustainable practices

Support developing countries to move toward more sustainable patterns of production and consumption

By 2030 Double and implement development impact for sustainable tourism

By 2030 substantially reduce waste generation through prevention, reduction, recycling and reuse

By 2030 Develop and implement tools to monitor sustainable development impacts for sustainable tourism

By 2030 Reduce inefficient fossil fuel subsidies that encourage wasteful consumption

Sketchnote by @Lambert2016 see more on #SDGsketch CC BY

So, now to proceed with this, so we are discussing about how to adopt sustainable consumption behavior, production etcetera. Similarly, now here we can also continue, that how the demand for the materials; actually the demand for the materials will likely to outpace the efficiency of gains in supply chain and that is as well as overwhelm already stretched ecosystem. So, for example, the more as population increases, the more demand of the materials are is going to take place.

So, with the demand of materials more, you know more production will be there. So, production, but production will you know will not, production not will outpace this efficiency gain. So, because with the more production also, resource depletion also takes place; it also directly or indirectly affects the ecosystem.

So, that is a consumption patterns need to be made sustainable; how much actually we are we required, we have to optimize it, we have to make it you know we have mess a sustainable the same stead in terms of lifestyles, in terms of you know reducing the you, in terms of industrial societies and reducing the ecological food prints, regeneration of the natural resources.

If suppose if you are like for example, I mean is the creation of the processing of you know water, water what; water management or the creation of the you know you know drinking water facility, creation of the drinking water facility or affordability or accessibility to safe drinking water across the country that is the biggest challenge.

Similarly, you know protecting the air quality that is reducing the air pollution; noise pollution vehicle and the carbon emissions because of the vehicles, because of the automobiles, how these kinds of things are to be taken care of. And at the same time the our biodiversity should be protected, human life also should also be protected.

So, it all depends on our consumption pattern and the production process. So, production it should not mean; that means, over production means over exertions, over uses, over exploitation of the resources. But how to minimize it? So, that is a better understanding of the environmental social impact of the products and services.

And what should be the product life cycle, what should be the supply chain for you know distribution, for distribution and consumption; this should also be all these things should be you know judiciously should be logically, should be rationally rational, rationally decided, rationally decided, rationally adopted rational we should adopt the rational behavior, rational decision, rational consumption, judicious planning, judicious activities to protect all these things.

So, better understanding clarity, clarity and the supply chain, processes, mechanisms as well as the behavior as well as the behavior and a lifestyle, that is very much very much important in our day to day practice.

Be it a be it technological tools, technologic gazettes; be it natural resources, be it food products whatever, we have to just we have to just as much as we require; that means to with a minimum consumption with the required production. And how can we enhance

the resources, how can we recover the resource depletion and how can we create more resources for the future generations.

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One of the core objectives of the 2030 Agenda for Sustainable Development is to decouple economic growth from resource use and environmental degradation, notably through improved resource efficiency

- The extraction of primary materials has tripled in the past four decades, which has led to severe environmental damage and depletion of natural resources, and inequalities have kept growing, both within and between countries.
- SDG 12 promotes SCP, means using services and producing products that minimize the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations.

Consumption and Production - A Complex System

The diagram illustrates a complex system of production and consumption. It shows a central box labeled 'Products' with arrows pointing to 'Consumption' and 'Production' on both sides. The 'Production' and 'Consumption' boxes are arranged in a circular pattern, with arrows indicating a continuous cycle. The UNEP logo is visible in the top right corner of the slide.

So, here you can say this is the production products and consumption, how this process; it is a very complex system as you can see consumption, production and the consumption, production is a production to products to consumption. How this complex system works in and what is the life cycle of this production and consumption system.

So, how to make it more energy efficient, how to decouple the economic growth from the resource use and environmental degradation; economic growth is very good, creation of more creation of more jobs, creation of more opportunities, creation economic growth is a positive concept.

But economic growth should decouple, should reduce, should minimize, should get rid of this negative impacts of economic growth. So, that is environmental that, economic growth with the positive the with the minimum environmental degradation or neutral, neutral carbon footprint and with the improved resource efficiency, improved competency, improved resource efficiency and, but how to decouple it, reduce it from the environmental degradations

So, with the minimum with the environment, with the restoration with the environment protection; how can we move on in economic prospects that is good, but how to

decouple it, how to minimize the degradation, how to minimize the negative impacts that is a thing. So, environmental, that means social cohesiveness, social benefits, social community well-being is thing is ok.

Economic growth prosperity, prosperity is ok; but yes environment should be protected and environments should be, environmental positivity, environmental resources should be well maintained and the we have, that is why we have to find out the way outs of reducing this environmental degradation or the negative impacts through some other mechanism, so that resources will be natural resources, environmental resources will be intact.

And, but we can make progress without affecting negatively affecting the environmental resources, without resource depletion. So, we for that we need sustainable habits, sustainable consumption, sustainable lifestyles, resource, efficiency, more technology to be used for enhancing the resource efficiency, sustainable uses, maintenance all these thing.

So, similar, so that is why and you know the extraction of primary materials, basic resources; basic resources you know it has also given us a lesson that how the severe environmental damages and depletion of natural resources also causes the inequalities, poverty, these are again the causes of all kinds of inequalities, poverty, joblessness, all kinds of things that affects our society socially and economically.

So, environment you can say, this planet earth is the is actually the source is the source of our life. So, if unless until we conserve it to preserve the resources, how can we move on either in economic prosperity or in social cohesiveness. So, we have to actually keep protect our natural resources or environment first; thereafter we can move on towards the economic growth and etcetera.

So, that is why to minimize the use of natural resources and toxic and the toxic materials; to minimize the toxic material or can say addressing it reprocess it, recycle it and recycle the emissions of waste and pollutants etcetera and now, but the thing is that not, we are not doing it or not to jeopardize the needs of future generation, but also to, but to create a sustainable future, to create a sustainable future.

So, here consumption rates, habits to the natural resources, the production, then supply chain all these thing whole system is a very complex systems; but we have to be very careful and cautious and you can say ethically like in you know. So, here we can say, we have to adopt the ethical practice of consumption production.

So, sustainability again it goes with the ethics and values; unless and until each and every citizen all of us will become aware, conscious of ethically aware of conscious of or motivated or we must adopt the kind of value orientation that no; I should not waste the food, I should not waste the resources like water, energy etcetera in even in every household.

So, we must adopt this kind of basic philosophy and principle in our life. So, we can say ethic in. So, sustainable consumption is also a ethical consumption, require consumption. So, and production also with more demand, with more production; more production, then market price increases, then again that also affects the economy.

So, that creates more gaps between rich and poor. So, that again makes and creates an unsustainable society; unsustainable society becomes a reason of all kinds of chaos and conflict and inequalities everything. So, that is all these 17 goals are very much interrelated.

So, one every one and one every single SDG is related to other SDG, so one causes; if all these things 17 things goes together, move in a same direction, then total complete sustainable future sustainable planet we can create. But if we deviate in one SDG also, it will definitely directly and indirectly affect other SDGs.

So, unsustainable consumption, production similarly affect; it will affect all kind all other SDGs like poverty jobs and infrastructure, to marine life, to land on life on land all kinds of, all other SDGs will be affected, because all these are interdependent, interconnected.

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- Identifying “hot spots” within the value chain where interventions have the greatest potential to improve the environmental and social impact of the system as a whole is a crucial first step.

UN Environment and SDG 12

- The UN Environment Programme (UN Environment) has been promoting the shift to SCP patterns for the past two decades; UN work focuses on the areas such as :
 - Engaging with Governments in their transition to SCP patterns and inclusive green economies
 - Fostering partnerships with business and industry to promote green investments and apply sustainable business practices across value chains
 - Disseminating consumer information and promoting awareness and engagement towards sustainable lifestyles

So, here, so that is why identifying the hot spots within the value chain where intervention. So, if required sometimes, we need to introduce some kinds of the intervention; some kind of the intervention to enhance the ability, enhance the capability of the stakeholders like the greatest potential to improve the environment social impact, social impact of the system as a whole.

So, identifying the, like in the whole process of consumption, production; so we have to identify the hotspots the key areas, the key domains where we have to strengthen either in terms of introducing new strategies, new technology, new practices, new investments. So, by focusing attention and addressing these key issues, we can take care of; we can enhance the potentiality of the environment and the social impact.

So, our ultimately goal is also, that means to enhance the social; that means yes society community should be benefited, social benefits should also be there, but environmental protection, environmental conservation, environmental restoration should also be there.

So, that is why we from time to time we also not only; we are not only required to organize different intervention programs, workshop programs, awareness camps to bring that consciousness in the collective, consciousness that consents in the collective consciousness.

That every people, every single citizen in the community that is the to raise the collective consciousness of our society. So, that is why the engaging with the governments in the transition to sustainable consumption patterns inclusive green economies.

So, here again you know multi stakeholder partnership it can be introduced; public private partnership can be can be introduced, all the agencies across the country, both the government private and non government also volunteer organization this would work in a cohesive manner together you know in building up a frame multi stake holder, partnership frame.

Similarly, fostering partnerships, even business industry and even ah; that means the technology area also in creating more green technology for a in to be applied in the agricultural sector, in the manufacturing sector, in service sector. So, that is to apply the sustainable and best business practices across the value chains and the different points and the different openings and different points.

So, disseminating the consumer information and promoting the awareness and engagement towards the sustainable lifestyle is also should be a part of the you know. So, here also it is not just being to be offered by the government or agencies, but from educational institutions, from private organizations, from you know NGOs also from time to time or time to time this kind of awareness camps, workshops, community programs, outreach programs should be organized.

So, that is the thing and again here another thing is that means we have to raise all through and media also definitely, media and social networking sites and digital platforms it also definitely plays a very important role in propagating and communicating and spreading and disseminating the information.

So, here from time to time we need to again, we need to update ourself in terms of our behavioral change and conceptional consumption style; that is the in terms of sustainable starting using the sustainable strategies, then practices, sustainable practices and judicious investments. Judicious investment not only in the natural resources business such as bus or, but also in terms of consumption you know sustainable consumption, innovations, then mobilizing the financial capitals.

So, in both in terms of social practices, business social and business practices, economic practices, financial capital investments, and the protection of the natural resources. So, how can we change the behavior of our citizens towards this sustainable consumption style.

So, behavioral change of consumption style how, every citizen every how it should be embedded in our system; not just in terms of education, but also in health sector, but also in a administration, in governance, in business practices, in you know service sector, in you know marketing, in marketing, in you know even in the; even in the stakeholders, stakeholders awareness.

So, how everything it should be embedded in such a way like it is a part, as if it is like a it is a part of our unit of our lifestyle. So, that is a overall sustainable lifestyle can be developed, so but again.

So, here we have to educate people may create that awareness emphasizing all the three domains, like we have to put across their mind, across their decision making power; put across in their motivation and emotion that is feeling like they taking the ownership or responsibility of yes it is our planet, it is our place, it is our you know land. So, how why not to use sustainability, use it and restore it and protect it.

So, it should be there in our emotion and motivation and definitely it should be reflected through our practices, ok. So, that is why sustainable consumption, production you can say it is again; it is likely a life cycle, it is like a circle learning cycle and life cycle. So, it should go on like that.

So, that is it of course, it is the biggest challenge; how to create that awareness, that collective awareness, conscience, and consciousness among our society within our society towards moving towards more sustainability.

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- **Strengthening and communicating the knowledge and scientific base for resource efficiency and SCP**
- **Supporting fiscal policy reform to be better aligned with inclusive green economies**
- **Strengthening the sound management of chemicals and waste** by supporting parties to the multilateral environmental agreements to meet their respective obligations
- It aims to **protect human health and the environment from harmful effects of chemicals and waste** by applying the **life-cycle approach to the production, use, trade and disposal** of chemicals and products containing hazardous substances
- It promotes the **environmentally sound management of hazardous and other wastes and their disposal**, including efforts to **prevent and minimize their generation and efficiently and safely manage** that which cannot be avoided.

So, again here you can say; then strengthening, the strengthening and communicating this knowledge of scientific base of resource efficiency sustainable consumption, how to spread it, then again in supporting the physical policy reform also, to better align with the green technology, green economy.

Similarly, strengthening the sound management and of management of the chemicals and the industrial waste; industrial waste especially the chemicals and industrial emissions, waste emissions, protecting the human health, how it also affects the urban health or rural health or the protect the human health and environment from the harmful effects of the you know gas emission, chemical emissions and the waste.

So, or how to you know process it thoroughly through life cycle approach to the production usage and trade of the disposal of the chemicals and the all these hazardous substances and how to promote the environmental sound management of the hazardous and waste other waste and other disposals; how to prevent and minimize the generation and efficiently save the management.

So, resource not only, so resource; that means consumption of the resources, but resource management ok, resource management, natural resources, human resources, all kinds of technological resources. So, resource management resource, resource management and then resource development; so from the consumption to resource management to the to are moving towards the developments.

So, we are not just consuming and consuming it all; but we are also trying to improve, enhance the resource repository also resource, resource like natural resources, human resources, technological resources. So, human resource consumption, resource management and then resource creation you can say, resource development and creation.

So, our like again this flow flows of the flows this flow at the process of the mechanisms should move towards that. So, but yes starting sustainability should be the theme, sustainability should be the philosophy, sustainability should be it is you know its idea; in the sense that even if we are consuming, how sustainably we can consume.

Or even if we are managing, distributing it; how sustainably we can manage the resources and again moreover how can we create resources new, through new technology, through innovation. So, resource creation, then only we can enhance our repository; see it is not just it is not just limited to this resource consumption management also, how to create, how to create resources.

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• SCP therefore **contributes to resilient societies** in several ways:

- Its **focus on resource efficiency** aims to **reduce resource use per unit of GDP**, which in turn **reduces vulnerability to resource scarcity** and resource price volatility, while also ensuring future security of supply
- It also **aims to mitigate environmental degradation** that leads to vulnerable societies, such as land degradation, water scarcity, pollution and toxic chemicals, and climatic impacts
- UN Environment **collaborates with the private sector in partnerships promoting innovation, technological solutions and financing** to tackle our most pressing global environmental challenges;
- As part of its **private sector engagement** work, it also **promotes and builds capacity in corporate sustainability reporting**.

PRODUCTION-CONSUMPTION CHAIN

Extraction | Production | Access | Consumption | Disposal

Production-side | Consumption-side

The slide features a circular logo in the bottom left corner and a small inset image of a woman in a green vest and yellow shirt in the bottom right corner.

So, that is a sustainable consumption etcetera contributes to. So, we if we cannot just sustainably use it, manage it and create more resources; then definitely it can make ourself, make our society more resilient, more resilient to face any kind of challenge, to face any kind of threat, be it natural disaster, may be it any pandemic, be it you know social crisis, conflict, war like situation, or you know economic slowdown or whatever kind of.

So, we have to create and preserve and preserve and conserve our resources, not just through sustainable consumption; but manage sustainable management and sustainable creation, more creation of the creation of the resources. Like you know now renewable renewable and clean energy, food security, you know food preservation; then you can say oh air the water conservation, water preservation, rain water harvesting.

Then you know different mechanism of storing the water and you know the drinking water, creating more drinking water, safe and cleaning clean and drinking water. Then you can say other resources like mineral resources, how can we sustainably use the mineral resources; especially you can say iron ore, coal which are the, which are you know which are the major source of our thing for the for our future.

So, like oil, even oil resources, petrochemical resources, mineral resources, again these are thing; because we cannot create instantly all these petrochemical natural mineral resources, but yes there are artificial ways of creating a thing.

But if we can sustainably use it and we can explore other means and ways of creating other energies from the solar sources, from solar energy, wind energy, hydrogen energy; then these minerals and this basic resources like petroleum products and the coals and iron ore, minerals, other things will be restored.

So, we have to explore the other ways and means of innovative ways of creating the energy from other sources, which are of plenty, which are plentifully available; like this solar energies plentifully available, oh then wind energy how can we sustainably create it, wind energy, hydrogen energy.

So, resource creation; not just resource management, but resource creation also. So, here definitely private, private sector engagements, commitments, good governance, political will, political will and you know it is a kind of partnership and now all these industries this CSR, corporate social responsibility is also there.

So, it is a mandatory law, mandatory law for all the industrial business houses, like they have to devote 2 percentage of their profit. So, in the in collaboration with the private organizations and their CSR activities with good governance, with good with political will and more over the stakeholders, all the stakeholders participation, community participation, then we can proceed.

They can we, then we can proceed. So, here you can say this is a production consumption chain is can, but it is a kind of you know kind of cycle; cycle life cycle to extraction to production to access to consumption to then to disposal. Then disposal, then disposal to waste management, recycling of whole thing and the again, then again creation of the resources from the new, from the new sources, from the new sources.

So, it is a life chain, it is a supply chain; it is a kind of life cycle, it is a kind of learning cycle, production consumption cycle chain. So, how, that means all these things are interrelated. So, climate change is directly, directly related to our consumption production habits also. So, we have to keep in mind. So, all these natural disaster also are although what the outcomes of our behavioral, unsustainable behavior and behavioral practices.

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- It is in the interest of business to find **new solutions that enable sustainable consumption and production patterns**;
- A better **understanding of environmental and social impacts of products and services** is needed, both of product life cycles and how these are affected by use within lifestyles;
- **Consumption patterns need to be made sustainable**, particularly lifestyles in industrialized societies, and **reduce their ecological footprint to allow for the regeneration of natural resources** on which human life and biodiversity depend;
- Business can use its **innovative power to then design appropriate solutions** that can both enable and **inspire individuals to lead more sustainable lifestyles**, reducing impacts and improving well-being.

So, as you can see, so therefore, the new solutions that should enable the sustainable consumption production should be explored; understanding the social and environmental impacts on of the products and services that has to be, that has to be kept in mind and should be made, it should be disseminated inform well, inform to the stakeholders and the suppliers, investors everything, everybody.

So, consumption patterns also need to be made more sustainable, particular the lifestyle, purchase behavior, supping behavior and reduce the reduce all kinds of wastage in terms of food wastage, in terms of technological tools wastage or any kind of you know goods

and services wastage. So, these and protecting our biodiversity, these are the. So, we have to be very much alert; we have to be very much conscious, we have to very much you know ethical, we have to adopt this ethical practices and value oriented.

So, we have to be very much motive deeply in innately motivated, intrinsically motivated. So, it should be there in our consciousness, in our sub conscious, in our conscience; that yes whatever I am doing, always we need to reflect on our behavior and active, behavior and activity; that is yes whatever I am doing, I am consuming, I am I am you know emitting, emitting or you know I am causing some kind of impact.

So, whether it is going to is, whether it is sustainable way of you know doing the things or if some if or some unsustainable things are there; then how to rectify it, how to check out, how to, that means how to minimize its impact. So, that is it nowadays we are going for every green; green technology, green jobs, green services, green packaging all kinds of going green, that means with the minimum carbon footprint.


So, here you can say now also, now the technology has also come up you know; not only not just the to map our carbon neutrality, carbon neutrality, but zero carbon, carbon neutrality of zero carbon; that means, all of us will try to adopt zero carbon footprint or (Refer Time: 24:20) or new carbon neutrality status in our society.

So, that is that that must as we must inspire the individuals to lead a more sustainable lifestyle; be it their consumption, be it their I mean purchasing power, be it their a food a food taking behavior, be it be it their you know, be it their tourism, be it their you know entertainment, whatever activity we are engaging, it has to be sustainable, it has to be sustainable.

So, reducing the too reducing the impacts in the, in impacts in the not just in the environment; but also you know in the society and improving the happiness and well being and good health of every citizen.

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- Public policies are required to create conducive environments and influence the market and economy as a whole, including sustainable public procurement policies and practices to drive sustainable innovation, and smart subsidies to divert investments away from environmentally damaging practices.
- A profound transformation of business practices along global value chains is also required.
- In order to support reform on green fiscal policy, UN Environment has established the Green Fiscal Policy Network in partnership with the International Monetary Fund .
- The Network facilitates knowledge-sharing and dialogue on green fiscal policy reforms, working with a number of associate partners.
- The exceptional situation resulting from COVID-19 has been a good opportunity to reflect on our habits and to see which ones we want to keep and which ones we want to change.



The infographic on the right consists of two parts. The top part is a pyramid with five horizontal layers, each representing a principle of the 5R model: Reduce (top, purple), Reuse (blue), Recycle (green), Recover (yellow), and Disposal (bottom, red). To the left of the pyramid is a vertical green arrow pointing upwards, labeled 'Environment'. The bottom part of the infographic is a circular diagram titled 'SCP holistic approach'. It features a central circle labeled 'SUSTAINABLE CONSUMPTION AND PRODUCTION'. Surrounding this central circle are various icons and labels representing different aspects of the circular economy, such as 'Circular Economy', 'Sustainable Consumption and Production', 'Circular Economy', 'Sustainable Consumption and Production', 'Circular Economy', and 'Sustainable Consumption and Production'. The diagram is surrounded by a ring of icons representing different sectors and processes.

So, again, so the, so sustainable consumption and production holistic approach. So, it is a like, it is a kind of you know paradigm you can say the environmental impact. So, sustain it is a like learning cycle, sustainable consumption production has a holistic approach of you know reduce, reuse, recycle, recover and disposal, ok. This should be the five steps of sustainable consumption behavior; first thing is that reduce the minimum, reduce the negative impact, reuse.

So, whatever we are creating, we are producing, we are purchasing, we are buying, we must reuse it, we are; before purchasing something, we need we need to think about it how many times we are going to use it or what is the longevity, what is the time span through which I am being going to use it, ok.

So, reuse; recycle if it is it can be recycled. So, in economies there is a theory progressive utilization of theory, progressive utilization theory, that actually advocates for that maximum utilization of the resources; recycling, recovery, it can be recovered, then the disposal then the disposal, ultimate disposal wastage, that is the that should be the more biodegradable degradable, degradable approach.

So, you can say public policies to create the conducive environment, influence the market, economy and also the procurement of the policies and practices to drive the sustainable innovation, smart subsidies also; in terms of agricultural subsidies being provided to the farmers, you know to the start up business, to the manufacturing industry

that should be judiciously reframed, then the transformation of business practices along the global value chains.

Then a green fiscal policy network, then partnership with international monetary fund and other global agencies and network facilities with and knowledge sharing and dialogue on green fiscal policy reforms, all these things and to all these things should be taken care of and first thing first and foremost we need to reflect on our habits, we need to reflect on our habits.

So, every citizens should be made aware of conscious of an adopting that this sustainable values, sustainable values and ethical standard of consumption and production. So, this is also, this is also again life cycle of this sustainable consumption, production.

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- When we say “**responsible**” to our consumption, we are **adding value to the choice we make every day as consumers** between the different goods and services offered to us by the market.
- It is a **conscious choice of products** that truly meet our needs and, at the same time, respect the environment.
- Therefore, before buying, we should **ask ourselves questions** such as “**do I really need it**”, “**am I choosing freely or am I acting compulsively**”, “**how long will I use it**”, “**can I borrow it from someone I know**”, “**is it made from recyclable materials**”, “**who made the product and how did they make it**”, “**who made it and how?**”

So, now we can say, so that is why we need to be responsible; we need to be responsible for adding value and doing the judicious choice to towards our consumption and behavior. So, we must conscious choice of products, we must be very much reflective; we must ask many questions, many questions to our self before, before doing before consuming, before purchasing anything.

So, do I really need it, what is the long; how long how will I going to use it or is it made more, it is made from the recycled products, it is eco friendly, it is biodegradable or not, can I borrow it from someone, can I should I need to purchase it or can manage with

some other source resources, by sharing it with others, who made it, how we are making it, whether it is whether before purchasing a product whether it is being made from the animal product, animal product or is eco friendly.

So, that also we need to think and reflect upon every time. So, if this also strengthens, this kind of asking questions and reflecting on our own behavior; it also strengthens, our value system, our social values or cultural values and the ethical system of sustainable practices.

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Examples to understand why responsible and sustainable consumption is necessary:

1. We help local commerce-

- Consuming in a responsible way also means supporting local, zero-carbon products.
- Shops contribute to the local economy, which is a very important source in the current context for the recovery of our city. So, one example would be to buy more from local shops rather than from large corporations.

2. We take care of the environment-

- Before we buy, let's think about the environmental footprint that goes with it. From the sourcing of the raw materials it is made from, through production and use, to the management of the final waste.
- It is very important to prioritize products with a lower environmental impact and reduce the consumption of the most limited natural resources such as water, oil, gas and others.

So, these are some of the examples, these are why the responsible and sustainable consumption is necessary; you can go through this, consuming in a per responsible way, supporting the local and the zero carbon products. Even suppose for example, given the given the opportunity of you know purchasing from you know branded company or from the local products; we must definitely, we must support the local community, local products, local shopkeepers, local farmers etcetera.

So, that is where shops contribute to the local economy, but we must promote this local, local businessman smalls, buy more from the local shops; because you know instead of, instead of purchasing from a branded company or international agency etcetera, but try to promote this local, local you know handicrafts, local artistry, local businessmen, local or local farmers, and the local vendors.

So, that should be an kind of responsible behavior in our day to day activity. So, take care of the environment, environmental footprints, manage the management of the final waste; prioritize the products with the lower environmental impact, reduce the consumption of the most limited natural resources like the water, oil and the gas etcetera.

So, these are some of the things. So, this, so organizations are also doing it as a part of their CSR activities, that is corporate social responsibility, CSR activities. But being the individual practitioner, individual stakeholder, in individual customer also; we should need to adopt also, we need to adopt this kind of behavior and thought process.

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√3. We will **protect animals**-

- It is no secret that in order to supply the massive demand, the treatment of animals by many corporations has usually been unethical and has been questioned for decades.
- Therefore, by **buying eco-friendly, vegan and sustainable clothing**, we are also helping to **conserve the lives and good treatment of hundreds of species**.

√4. We **save money** in our homes-

- If we consume responsibly at home, we will **buy less and better**, and this will **lead to financial savings**.
- Sustainable consumption also pushes us towards **greater energy efficiency** and today there are many household appliances and systems along these lines, which make our **homes more efficient**, reduce the impact on the environment and also **generate economic savings**.

The slide features three images: a basket of fresh vegetables, a person working in a garden, and a woman in a yellow and green sari speaking. A small circular logo is visible in the bottom left corner.

Similarly, so we will also at the same time we should be caring for our environment in terms of protecting the animals; so buying the eco friendly, vegan and sustainable clothing and conserve the lives and the goods of treatments of hundreds of species, gardening. Then the you know saving the money, nurturing the animals, nurturing the animals taking care of the animals, then animal protection.

So, buying less and better inequality and leading towards the financial saving, going for the energy efficient ways of you know household appliances, purchasing technology household appliance appliances, so that we can save the energy. So, our home, even our home appliances, home at home also we should you know be using efficient technology, for efficient energy mechanism a efficiency and to reduce the reduce the wastage.

And again to not just create the economic, economic savings; but also minimum waste and waste management also, we should also be take care of the waste management and you know the equal distribution of resources among our in within the neighborhood, among our community people.

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√5. We are committed to the three R's-

- Responsible consumption also leads us to recycle, reduce and reuse. A cycle that will also be fundamental for the education of children.
- In this way, we look for alternatives that minimize the exploitation of natural resources, such as, for example, giving a second life to some products through second-hand markets, exchanges or the repair of objects and machinery.

√6. We have a responsible attitude towards others-

- Responsible consumption values the labour rights of the people who work on the final product that we end up buying.
- If we opt for this type of consumption, we will be defending first and foremost the obligation to guarantee the same rights for all people.

REDUCE
REUSE
RECYCLE

YOND REDUCE, REUSE, RECYCLE

ROT, RE-PURPOSE, REFUSE

So, that is that the slogans should be reduce, reuse, and recycle; the slogan should be every time sustain sustainable, consumption, production and reduce, reuse and recycle of the wastage of the resources. So, committed to three R's; that is responsible consumption to recycle, reduce, and reuse the all resources.

So, that is it to minimize exploitation of the natural resources, protection of the natural resources; a we must develop a kind of sense of ownership and responsible attitude towards the, towards others, towards environment, towards economy, towards society, ok.

So, we must that should be a responsible consumption and the values towards the labor rights or the you can say dignity of labor; then the obligation, obligation to guarantee the same to the rights of all people, rights of all people, to equal rights, to an accessibility, towards the towards the food, right to food, right to education, right to health, good health, right to information. So, all these things should be that can enhance, can enhance and ensure equality in our society, ok.

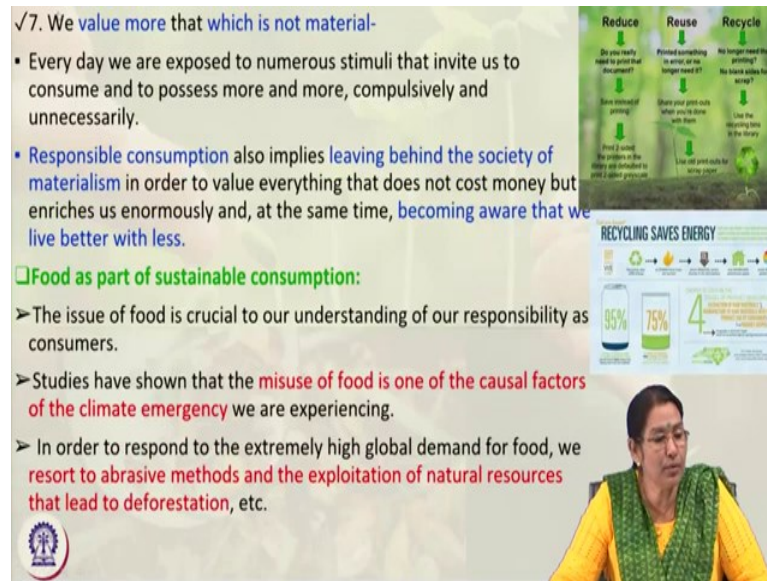
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√7. We value more that which is not material-

- Every day we are exposed to numerous stimuli that invite us to consume and to possess more and more, compulsively and unnecessarily.
- **Responsible consumption** also implies **leaving behind the society of materialism** in order to value everything that does not cost money but enriches us enormously and, at the same time, **becoming aware that we live better with less.**

□ **Food as part of sustainable consumption:**

- The issue of food is crucial to our understanding of our responsibility as consumers.
- Studies have shown that the **misuse of food is one of the causal factors of the climate emergency** we are experiencing.
- In order to respond to the extremely high global demand for food, we **resort to abrasive methods and the exploitation of natural resources that lead to deforestation, etc.**



So, that is a our values are very important. So, that is we value more towards the you know towards the; this is the cycle this is the process the steps and mechanism of things. So, that is we must value more towards the society, towards the human lives, to the planet, to the our ecosystem there rather than material hoods.

So, our philosophy should be not just a responsible consumption living behind the society of materialism but becoming more and more aware of the global well-being, happiness, you know I domanic happiness, by serving others, by helping out others, by caring for others caring for planet, caring for all the organisms of the living organization, organisms in the environment.

So, that is the food again is a part of sustainable consumption, food is a very important part; hence we should not misuse the food and we should not waste the food, because you know food is a misused means, misuse of the food is also one of the greatest causal factor of the climate emergencies. So, for minimum wastage of food or rather you can say equal distribution of food, food subsidies, food subsidies or the food products.

So, that is a we can then only we can avoid this, avoid this exploitations of natural resources and deforestation; rather we can promote the greenery in terms of kitchen gardens, in the roof tough gardens, in the promoting the more and promoting more towards indigenous agricultural practices. These things, so that cannot just maintain the

- **Key business themes addressed by this SDG :**
- Sustainable sourcing
- Resource efficiency of products and services
- Materials recycling
- Procurement practices
- Product and service information and labeling
- **Examples of key business actions and solutions**
- Implement product portfolio analysis tools to understand **environmental and social footprint of products** within lifestyles as well as production. **Innovation must align products and applications to appropriately address sustainability megatrends.**
- Develop **innovative business models** such as moving from selling products to selling services, to **retain ownership of the products** and help close the materials loop.




So, in business practices also these sustainability consumption and production practices can also be embedded; sustainable sourcing, sustainable you know material recycling all these things can be also be implemented in business practices. These are some of the examples of key business practices to business solutions and strategic business solutions etcetera; in terms of innovation, in terms of innovative business model and ownership, ownership models etcetera, which can also be embedded in the business models also.

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- Enable sustainable consumption by developing **innovative solutions** can reduce energy need in usage and **educate consumers** about these benefits.
- **Reduce manufacturing impacts** by substituting virgin raw materials in products with post-consumer materials through recycling and upcycling.
- Apply **modular design**, so products' constituent parts will be easily separated and either **re-used without further processing, or easily recycled near the point of disposal.**
- Significantly **reduce waste** and **ensure** that any unavoidable waste is utilized to the fullest degree (e.g. **organic waste as fuel or fertilizer**).




Then these are they can say, these are some of the steps; these are some of the steps can which can be implemented in the organizations like innovative solutions, educating the consumers. Now, in the digital platform also, consumers behavior, you know consumers

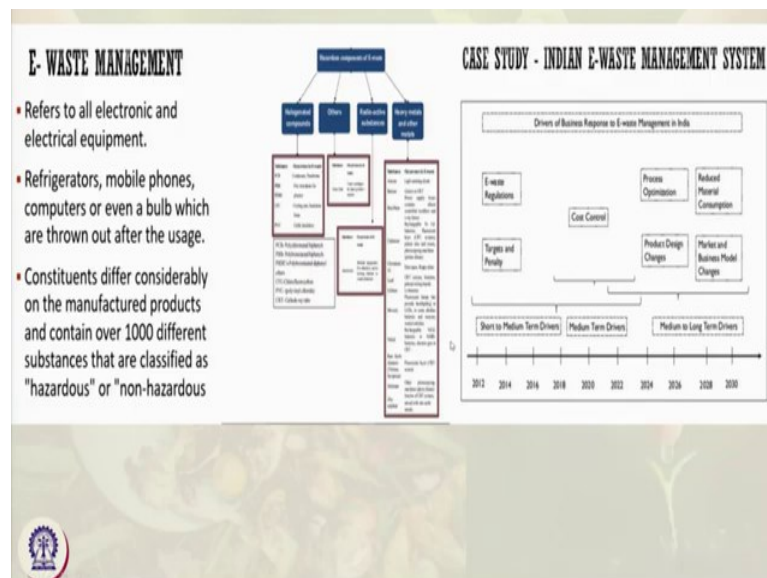
we have to observe or monitor consumers behavior, purchasing behavior, reduce the manufacturing impacts.

Similarly, also we can also apply the modular design for reusing the further processing the, further recycling the disposals, disposals; then reduce the waste and ensure the thing and organic waste as the fuel and the fertilizer.

So, how this waste manage, waste management can be done in a very eco friendly way, organic way, so that it can create more fertilizer and fuel fuels. These are five steps given here understanding the SDGs; second defining the priority areas, in whichever area industry or organization or the agencies they work on.

Then towards setting their goals setting; after setting goals and how they can integrate with other SDGs, the social and economical and environmental things. Step four is integrating with the practices, then fifth is reporting and communicating and towards the end result; like cost effectiveness and sustainable economy and sustainable environment.

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Similar say these are nowadays we have them E mechanism, E waste mechanism, E management, E waste mechanism is there. These are some of the case studies being done by them Indian system also, E waste management system. So, through the use of green technology, this can also be done.

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FUTURE FOOD TOGETHER : Transforming Food Systems in the Global South

• HOW WE TAKE ACTION

- We work with local experts to develop and implement in-country solutions along the entire value chain, by translating research and expertise into tangible solutions that are actionable and scalable.
- We build on tailored bottom-up solutions instead of simply following general frameworks in a top-down manner.
- We empower knowledge exchange and participation to facilitate insight sharing between countries in the Global South.
- Future Food Together rallies stakeholders at all levels, facilitating engagement and cooperation within international frameworks, as well as with governments, businesses and consumers.

For Governments
For policymakers, this means that integrated, coherent and cross-sectoral policies must be developed and implemented with urgency.

For Businesses
For companies, this means aligning their business strategies with both the Sustainable Development Goals and planetary boundaries.

For Consumers
For each of us, this means making more informed choices and advocating for healthier and more sustainable lifestyles.

FOR GOVERNMENTS

FOR BUSINESSES

FOR CONSUMERS




So, another venture, some of the venture some of the you know some of the trust are also moving on like future food together such a trust, which will transforming the food system into the global south. This is a kind of you know ventures NGOs, NGOs and the agency with a mission, with a mission to ensure the ensure the food security.

So, how can we take the action, how can we take the action with in the local like with the help of local experts and the develop and implement the incountry solutions. So, how they take this future food together; it is a kind of agencies, trust and the NGO. So, how they can, they have started the practice in creating their entire value chain, and how the take care expertise in tangible solutions to that are low actionable and scalable.

And how they have tailored the bottoms, bottom solutions to empower the knowledge exchange and participation to facilitate this kind of insight, so future food together. So, future food together this is these are the you it is a kind of platform, where there rallies all the stakeholders at all levels facilitating the engagement, cooperation with the international framework as well as with the governments, businessman and the consumers.

So, this platform how they can their slogan is transforming the food system into the in the global south, ok. So, this is an endeavor, this is an effort to ensure this sustainable consumption and production and these are some of the activities for the governments, for the business houses, and for individual consumers.

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So, these are some of the you know video links I have given you; that you can go through for better clarity, you know better conceptual insights etcetera. So, now I am concluding this chapter here, this topic here consumption with production and thank you very much. So, and the next few class one or two classes are there; we will try discuss about new topic, about a new topic and this SDG, based on this SDG and SGD ESD. So, thank you very much, wish you all the best.

Thank you.