

Education for Sustainable Development
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Lecture - 36
Sustainable Education (Contd.)

So, welcome back viewers. We were discussing in the last class about ESD framework UNESCO ESD framework for achieving sustainable development goals by 2030 and how a multi-stakeholder partnership, multi-stakeholder initiative framework that we have already discussed and to continue with that, that now we will discuss about the other aspects of ESD and sustainable development goals.

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So, here again, we will discuss about some community based ESD practices and policies. So, in the in that framework that multi-stakeholder partnership framework, we have already discussed the different categories of stakeholders, how they play active role and how at the community level how they coordinate etcetera.

So, similarly, community based ESD practice and how the community plays a very important role and what sort of ESD practices and policies they should adopt to mobilize all the thing, all the human, all the resources both in natural resources as well as the human resources.

So, first thing is that we can say here as you can see first is that responding. Responding is the first thing is that responding is the, whatever the challenges that we are facing, what are the emergencies that are coming, we have we need to respond to it. The on all the environmental you know alerts, environmental alerts, challenges, disasters, all kinds of any in whatever happening is happening in our environment, we need to respond to it, we cannot ignore, we cannot be immune to.

So, that way that is a nowadays for example, there is climate change, climate change excessive you know temperature and heat rise, temperature rise or frequency frequent natural calamities, disasters, pandemics all kinds of thing so, we need to respond to these emergencies ah; we need to respond to this emergencies. So, responding should be our first level of behavior at the community level.

Then, second time is that sustaining it. Like if when we adopt some kind of good habits, positive habits, positive behavior, skills, training, competencies, we have to sustain it so, we have to sustain it, keep on it, carry on it for a long run long time so, that is a sustaining the positive behavior, positive attitude and positive lifestyle.

Then so, with sustaining behavior, positive behavior, then can then only we can bring any kind of transformation. So, responding to the urgencies needs of the society, needs of the; needs of the environment, time etcetera, then sustaining the positive behavior, lifestyle, sustainable habits, consumption styles, care, caring the environment, all kinds of things and conserving the resources, then after the sustaining behavior, then we can bring the transformation in our community in our society.

So, transformation can only be possible with the positive sustenance of our habits, behaviors and the conservation patterns.

So, after transforming, then again, we have to engage, we have to engage. So, thereafter our job next step comes in that after transformation, we have to engage ourselves into this positive behavior, positive actions, positive habits and positive patterns of behavior like that that is then, how to engage, how to engage all kinds of stakeholders in a very sustainable manner and way so, that is the engaging.

Engaging youth engagement, engagement of the senior citizens, engagement of your our people, engagement of common man etcetera so engaging how everybody, every citizen,

every stakeholder can be a change agent by engaging themselves in different kinds of positive activities.

Then, after engaging, then again enabling so, here comes here enabling or empowering. Then, enabling them that means, enhancing their efficiency and efficacy by giving more training, more workshops, more awareness programs, more internship, more work experience so, then from engaging to enabling. An enabling is here the enabling their capacities, capacity building, training etcetera.

Then, after enabling after empowering. So, you can say by empowering, by enabling, enabling through training etcetera, we are empowering them. Then, after this the last stage is you can say embedding. So, automatically it becomes a feature of our culture you can say of our community of our cultures that is embedding that all these positive practices, sustainable practices, lifestyle all kinds of good things will be a part of our day to day practices that is embedding in our cultural practices ok.

So, starting from responding to the environmental you know challenges, demands, alerts, etcetera to sustaining behavior, transforming these into the positive impact, then engaging our youth or in positive activities etcetera, then enabling them and empowering them through different kinds of training and programs and then, making it a part of the whole work culture or society at the community that is it would be embedded in our work practices in our lifestyles.

So, these are we can say, these are the community based ESD practices, how? These are the different aspects you can say aspects of ESD practices and policy. So, whatever we are doing, it should be based on either in the ESD based, this kind of policy or the practices, then automatically, it would be embedded in our culture, in the work culture.

So, like for example; for example, I am giving you an example of Japan. Japan is a leader, is a you can say sustainability SDG leader, you can say in Asian context is in Asian context is a sustainable leader and from the very beginning, starting from the grass root level to the school education to till the year over the generation, over the years, over the generation, again and again they have adopted these kind of ESD practices these kind of remedies.

So, you can say in the Japanese culture, sustainability is you know in is that means, immensely inherently embedded in their culture, every small child to a senior citizen to any machinery, any organization, any institution, everybody, everywhere you can find the reflection of this sustainability in their habits, in their lifestyle, in their care and in their care for the for the planet every for every action, attitude, behavior and yeah behavior and everything you can find a sustainability complex.

So, it is not easy to you know build in built-up over it only 4-year, 5-year of 10-year, within 10 years. It requires actually generations; it requires ages. So, but if you can start, you can begin from very beginning from the very um early time so then we can achieve.

So, after the World War 2, this Japan has adopted not only a kind of peaceful culture, but a sustainable culture and from the very beginning, from the grass root level itself, it has adopted. So, now, you can say in the Asian context, the Japan is the sustainability champion you can say, champion.

So, now it also promotes promotes sustainability across the world by giving you know donations, contributions towards the African countries, to other underdeveloped or developing countries. So, similarly, it has to be embedded in our lifestyle, in our culture, cultural practices, in our environment, in our you can say in our habit pattern, in our habit and in our habit pattern in our system itself. So, this is the community based ESD practices and policies to be adopted for achieving SDG by 2030.

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Now, we can see the Okayama commitment. So, it is a Japan case study I am discussing. So, Okayama commitment, how this the 2014, thus Japan has conducted a kind of survey, a project, it is a project how every member, every stakeholder, every citizen is actively engaged in this kind of sustainable practices, sustainable projects. This is an example of this, you can go through the case study in detail in the website.

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So, Japan and Okayama commitment. Their commitments are like first is that first commitment is the environmental conservation ok So, environmental conservation, second is the disaster risk reduction. Yes, you know as all of us we know Japan is very prone towards the natural disaster or frequent tsunamis, earthquakes and all kinds of natural disaster so, their disaster preparedness is very strong.

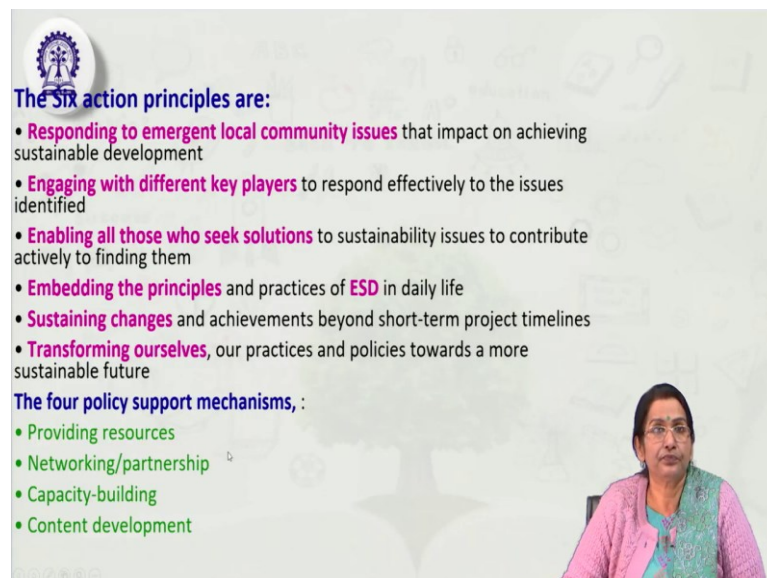
So, there you can say they have developed a system not only in their housing, not only in their agriculture, not only in their infrastructure and industry so, they have adopted a kind of you know disaster proof disaster, proof kind of technology for protecting, but however, they have also developed the disaster risk reduction, how to minimize the reduction, how to be proactive and prepared for the prepared with the system for the you know disaster proof or risk proof kind of infrastructure and system.

Then, income generation for all categories of the, you know citizen's income generation, entrepreneurship skills, community development, these are their primary commitments, Okayama, Japan projects commitments. Similarly, cultural diversity and dialogue,

having the dialogue with other with everybody so, cultural diversity not only restoring, conserving, preserving their own culture, but also you know welcoming the cultural diversity and dialogue.

So, similarly, intergenerational exchange, intercultural exchange so, these are also their primary areas and yes, how to enhance to increase, to improve, to ensure the literacy rate, highest level of literacy rate, literacy to increase the literacy rate across the country, then empowerment. Empowerment means every human being, every individual citizen would be empowered with one or other skills, competences etcetera to lead their livelihood in a sustainable way. So, these are the in the Japan, Okayama project, the commitments were these are, these were the commitments.

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The Six action principles are:

- **Responding to emergent local community issues** that impact on achieving sustainable development
- **Engaging with different key players** to respond effectively to the issues identified
- **Enabling all those who seek solutions** to sustainability issues to contribute actively to finding them
- **Embedding the principles** and practices of **ESD** in daily life
- **Sustaining changes** and achievements beyond short-term project timelines
- **Transforming ourselves**, our practices and policies towards a more sustainable future

The four policy support mechanisms, :

- Providing resources
- Networking/partnership
- Capacity-building
- Content development

So, here again so there are there can be the six action principles, there can be six action principles. So, for example, as we have already you know discussed these things earlier, responding to the emergent local community issues that impact on achieving sustainable.

Like when we are operating, functioning, our performing in a particular local locality area, we have to urgently address the local issues, community issues that are the like the resources available, the skills available, the potentialities the available and how and what are the local community I mean; that means, local challenges, what are the community issues so to address these emerging community issues and issues that can have the impact on achieving the sustainable development to address these urgent issues.

Second engaging with different key players to respond effectively to the issues of identified. Engaging with different key players like you know health professionals, block development officers, school I mean schoolteachers, students or parents, then other community members etcetera so, all that to engage with all the key players; key players who can who can play a major role in achieving this sustainable development so, engagement with these key players.

Enabling all those who seek solutions so, engage enabling all those who seek solutions to sustainability issues to contribute actively to finding them those who are interested, how to enable them to through you know through resources, through training, through workshops etcetera.

Then embedding these principles and practice of ESD in our daily life after engaging and enabling and empowering the people, then how to embed these principles in the ESD of ESD as the daily life. In our school life, in our at in our community level, in our health centers, in our panchayaths, in our police station, in our all block development officers, everywhere how can we adopt a ESD practices.

Then, sustaining the change. So, whatever positive changes are taking place the achievements that is the which can be not should not be focused only for the short term project timelines, but also for the long term.

Whatever changes that has happened because of this 3- year 4-year projects, sponsored projects or the it is a government sponsored projects etcetera, but how to continue that continue with that positive changes, it is not just for that the project is over, the change is over the or the timeline is gone no, not like, how to keep on, how to continue with that positive changes ok so, that is a sustaining the changes and achievement beyond the short term project line, beyond that means, in the long run.

Then, transforming ourselves, transforming ourselves, our practices, our policies towards the more sustainable future whatever it has already happened during this 4; 4; 3 to 4 years project period action, research period etcetera, how to continue with that for the future and how to you know; how to you know how to safeguard, how to conserve, how to use utilize how to practice how to continue with that practices and policies have to ensure that this transformation this transformation becomes permanent.

So, here the four policy support mechanisms are there. What are the policy support mechanism? Providing the resources, providing the resources sufficient resources to all stakeholders, networking and partnerships because otherwise, without networking, without partnership, without collaboration, it is not possible by only handful of people.

So, for this we have to develop a robust networking, network, partnership that is multi-stakeholder partnership and frequently that means, with the frequent meetings, frequent awareness programs, timelines you know more formal structure of these governing bodies and platforms, then action plans, monitoring, evaluation everything.

So, then thereafter from time-to-time, capacity building through you know organizing different health camps, different training programs, different awareness programs and different kind of you know different kinds of you know intervention programs so, this is the capacity building programs through different kind of training program etcetera then, the content development.

After some time, then after these things, then we can also develop some content like you know for the for using it as the leaflet, for media publication, for learning material as also in informal and informal and non-formal context so, content development for the adult literacy, for adult or senior citizens, for the health professionals, for the community level, workers or the youth organizers.

So, these are the four policy support system providing resources, networking, partnership, capacity building through training etcetera and then, content development.

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How education is related to other SDG targets(UNESCO, 2016a)

Goal 1	Education is critical to lifting people out of poverty.
Goal 2	Education plays a key role in helping people move towards more sustainable farming methods, and in understanding nutrition.
Goal 3	Education can make a critical difference to a range of health issues, including early mortality, reproductive health, spread of disease, healthy lifestyles and well-being.
Goal 5	Education for women and girls is particularly important to achieve basic literacy, improve participative skills and abilities, and improve life chances.
Goal 6	Education and training increase skills and the capacity to use natural resources more sustainably and can promote hygiene.
Goal 7	Educational programmes, particularly non-formal and informal, can promote better energy conservation and uptake of renewable energy sources.
Goal 8	There is a direct link among such areas as economic vitality, entrepreneurship, job market skills and levels of education.
Goal 9	Education is necessary to develop the skills required to build more resilient infrastructure and more sustainable industrialization.

So, again now it is here we will be discussing how education is related to other SDG's. So, we are talking about that ESD, how ESD can enable us, can help us in achieving SDG's all the SDG 17. So, now we will see how this education is related to all the 17 SDG targets; SDG targets.

As we can see goal number 1, goal number 1 is zero poverty. When it is it says that zero poverty is the goal of SDG 1 so, definitely education plays a very critical role in lifting the people out of poverty through education, through jobs, through employment, through skills etcetera so, definitely it is directly related to.

Goal 2 that is education plays a key role in helping the people to move towards more sustainable farming methods and farming methods and understanding the nutrition. So, when we talk about the goal 2 that is zero hunger, how to ensure the zero hunger? Definitely, we have to enhance our farming practices, agricultural practices, we have to enhance our nutritional status, health issues etcetera.

So, education definitely plays an active role, important role towards you know towards promoting, sustainable farming methods, agricultural method and understand the nutrition, basic nutrition's, health and balanced diet and sustainable health, all these things.

Then, goal 3 is that education again play critical difference to raise the health issues ok, health issues are like how to reduce the mortality in fact, mortality rate, how to ensure the healthy reproductive health, spread of disease, how to spread of disease can be curbed by through vaccines, through immunization programs like you know pulse polio, all these pulse polio programs or you can say HIV awareness camps etcetera.

So, how to adopt a healthy lifestyle, healthy wellbeing, take care of our health status both in physical health and mental health so, that is the education can only make the difference.

Then, goal 4 itself is a quality education and goal 5 is that education for women and girls you know particularly, very important to achieve the basic literacy, improve the participative skills and you know skills and abilities to improve the life chances the goal 5. Then, goal 6 is that education, training also increases the skills increases, skills and capacities to use the natural resources more sustainably and how it can promote health and hygiene etcetera.

Goal 7 again education; again educational programs both formal, informal, non-formal can promote the better energy consumption, how to you know how to invest in the more research and intervention in the clean and safe and clean and sustainable energy, creating the clean energy from solar sources, solar energy, wind energy and hydro energy, then how to minimize the our carbon footprint, how to be carbon positive that means to; that means, how to adopt this zero carbon footprint kind of approach towards our life.

So, how to uptake the renewable energy sources, how to conserve our energy, how to minimize the our you know how to I am how to discover, how to innovate this energy efficiency methods, bulbs like LED bulbs and so, and things so how to conserve energy, how to save energy for the future generation and how to go for the renewable and clean energy.

Similarly, education in helps in goal SDG 8 that is to increase the economic viability, entrepreneurship, job market skills vocational through by promoting technical vocational education, entrepreneurship educations and how to enhance the economic prosperity economic growth of our country.

So, then goal 9 again education is also necessary to develop skills required to build more resilient infrastructure and more sustainable industrializations. Now, we have to learn also how to build up this resilient infrastructure with you know long longevity, more longevity, more usefulness cost effectiveness for building a sustainable industrialization in our country. So, this is up to goal 9.

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Goal	Description
Goal 10	Where equally accessible, education makes a proven difference to social and economic inequality.
Goal 11	Education can give people the skills to participate in shaping and maintaining more sustainable cities, and to achieve resilience in disaster situations.
Goal 12	Education can make a critical difference to production patterns (e.g. with regard to the circular economy) and to consumer understanding of more sustainably produced goods and prevention of waste.
Goal 13	Education is key to mass understanding of the impact of climate change and to adaptation and mitigation, particularly at the local level.
Goal 14	Education is important in developing awareness of the marine environment and building proactive consensus regarding wise and sustainable use.
Goal 15	Education and training increase skills and capacity to underpin sustainable livelihoods and to conserve natural resources and biodiversity, particularly in threatened environments.
Goal 16	Social learning is vital to facilitate and ensure participative, inclusive and just societies, as well as social coherence.
Goal 17	Lifelong learning builds capacity to understand and promote sustainable development policies and practices.

Source: ICSU and ISSC (2015)

Then, with regard to goal 10 again so where the quality equally accessible education makes proven difference in the social and economic equality. So, when goal 10 deals with the social ensuring the social and economic equality so, how education can help us in bringing the difference that is in ensuring the social and economic equality.

Then, goal 11 that is education can give the people the skills and practices to shape their safe and maintain the sustainable city, sustainable cities to achieve a resilience and disaster situations, lifestyle to promote their sustainable promote their behavior, lifestyle so how to build the achieve the resilience and disasters disaster proof situation so, skill and preparedness all kinds of for building the sustainable cities that is education again is there.

So, goal 12 again education can also make the difference in the production pattern when we talk about the sustainable consumption, sustainable production and can enable the consumers to understand the you know to understand to how to use more sustainably produce the goods and how to prevent the food wastage, goods wastage etcetera and how

to consume sustainably and how to conserve it for the future also with the minimum again, with the minimum depletion of the environmental resources.

So, then, goal 13 again it is the education; it is the education again is the keys for mass understanding the impact of climate change and impact of climate change and to the adaptation and the mitigation of these and particularly, at the local level ok. So, to how to bring down the carbon footprints to the zero-level so and how to take actions strategic actions for this.

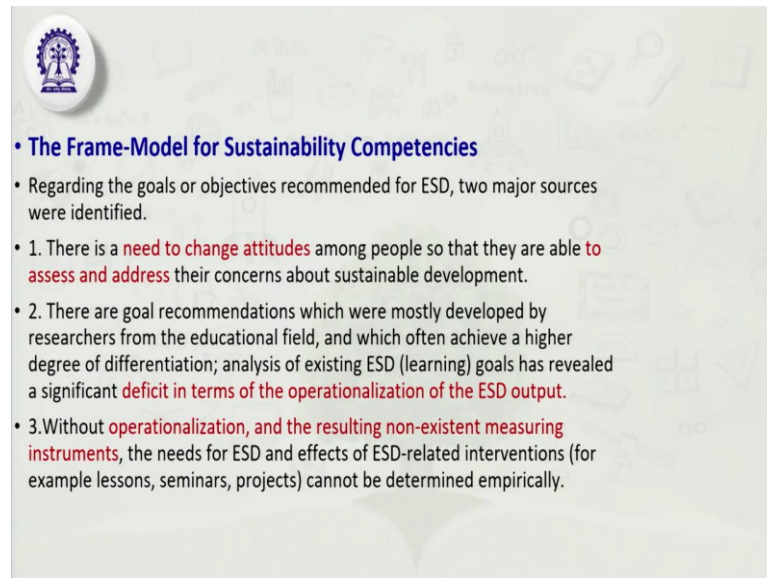
Then, goal 14 again so, goal 14 again education is important in developing the awareness of the marine life, marine environment that is life below water, how to take care of the marine life, life below water, how to take care of the how to take care of our marine life through proactive consensus regarding the wise and sustainable use of marine, marine water and without wasting the; without in damaging putting without; without damaging the marine life ok.

Like through you know through in the business transaction, through oil spills and all kinds of the waste that means, waste products being released to the oceans and rivers so, that is then how to take care of the biodiversities how to you know recycle the waste and waste management's, how to that is to make to take care of our marine life ok that is 15.

Then, 16 is that yes, social learning is again it is it plays a vital role in facilitating and ensuring the participative and inclusive and just societies for all for all the stakeholders and the citizens as well as maintain the social coherence. Social learning, observational learning social intelligence, skill skill-based learning, sustainability competences all these are to be learned and acquired for maintaining the social cohesion, social coherence.

Then, goal 17 it deals with the global partnership you know partnership is that partnership through the network model, partnership networks so, lifelong learning builds the capacity to understand and promote a sustainable development policies, practices through global partnership like through global partnership across the globe with partnership and networking, how can we ensure, how can you we sustain this development and how can we update our policies and practices for ensuring the sustainable future.

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The slide features a logo in the top left corner, which is a circular emblem containing a tree and a book. The main content is a bulleted list under the heading "The Frame-Model for Sustainability Competencies".

- Regarding the goals or objectives recommended for ESD, two major sources were identified.
- 1. There is a **need to change attitudes** among people so that they are able to **access and address** their concerns about sustainable development.
- 2. There are goal recommendations which were mostly developed by researchers from the educational field, and which often achieve a higher degree of differentiation; analysis of existing ESD (learning) goals has revealed a significant **deficit in terms of the operationalization of the ESD output**.
- 3. Without **operationalization, and the resulting non-existent measuring instruments**, the needs for ESD and effects of ESD-related interventions (for example lessons, seminars, projects) cannot be determined empirically.

So, the again so here the frame model for sustainable competences again. So, in order to achieve these all these things, then and to make education as a key tool weapon for achieving all these things definitely, we have to develop a kind of framework, a framework model.

So, regarding the goals and objectives as recommended by ESD, two major sources were identified first thing so, two major sources, what are these two major sources? There is a need to change attitude among the people. So, you can say for ESD can; ESD can play an active role, key role in bringing the transformation in our society, in our lifestyle, in our behavior, but it will take time, it time and effort consistent effort, time and practices.

ESD can mobilize it, but again at the end, we are the end users, we are the major stakeholders so, we have to adopt it, we have to understand it, we have to absorb all these practices, we have to be been we have to learn it immersively so that it is it embedded it is being embedded in our not only in our behavior but in our mindset, in our thought process, in our feeling, in our affective domain, in our you know in our cognition so, how can we absorb these kind of you know; how can we absorb these kind of practices, ESD practices.

So, that for that way from the very beginning we need to change attitude among the people so that they are able to access the, access and address their concerns about sustainable developments. So, here we can say ESD has to be inculcated, has to be

included, has to be incorporated, has to be nurtured within ourselves, within the mindset, within the attitude of our people across the region, across the category, across the age group etcetera as a paradigm shift; as a paradigm shift, as a shift in our thought process that can only bring the positive changes.

So, changing the attitude, human attitude of different categories of people and stakeholder and citizens is not an easy thing. So, in order to change the attitude means to change the mindset, we have to shift, you have to emphasize, re-emphasize and focus on education, learning, training on learning certain unsustainable practices, relearning, transforming, updating, continuous effort with deep contemplation, with deep realization, deep reflection so, it is a continuous effort to bring the change in the attitude that is you have to bring the paradigm shift in our thought process in our thinking style.

So, there are goals on recommendations which are mostly developed by the researchers in the education field which often also achieve a higher degree of differentiation like analyzing the analysis of existing ESD learning goals etcetera but you know there are so, we are getting so many, so much of good results findings etcetera in learning tools, goals, etcetera in research etcetera, but there is a significant deficit in terms of operationalization of this ESD output.

So, whatever research findings we are getting, it is very difficult to operationalize to make it a part of our practice, daily practice. So, that requires rigorous training, rigorous exposure, rigorous you know refreshing our mindset, attitude, behavior through repetition, through learning, through unlearning, through training so, that is why we have to bring that paradigm shift through you know; through you know embedding it in our practices, engaging ourselves actively in all the activities and behavior, thought process emotion so that it can be become a part of our consciousness.

So, how can we put it in the conscious mind of every citizen, they only the attitude can be changed. So, at the cognition level, we have to ensure that it has been ah; it has been put in our mindset, in our thought process, in our consciousness level so that we are not only actively thinking of it, but we are actually adopted it, we have absorbed this thing as a characteristic features within ourselves.

So, every whatever we are doing, be it cooking, be it taking food, being it going for an attending a ceremony, cultural practices, any you know function, anything whatever do

that kind of consciousness that awareness would be there within us. So, that is the whatever ESD research outcomes are coming out, but it is very difficult to operationalize, to implement it at the grass root level.

So, that is why so, without operationalization, the resulting non-existent measures; the resulting non-existing measuring instruments so, again we need to operationalize it again, from time to time also we need to measure it that how much positive impact and progress has been made. So, for that, we also need the proper instruments, proper instrument measuring tools and instruments.

So, the needs of ESD and the effects of ESD related interventions in terms of you know interventions seminar projects etcetera can be determined, can be measured, can be evaluated empirically ok. So, first thing is that how to bring change in the attitude of all the people and give; and give them the access and address to concern to be concerned about the sustainable development issues, factors, targets and SDG's etcetera.

But again, research findings we have to find out a kind of way out of implementing the research findings of existing ESD, learning goals and policies and the framework etcetera to operationalize it at the grass root level so that ESD outputs can be implemented, can be operationalized and again, when after operationalizing, we have to measure its resulting effect that is for that also we have to develop different measurement tools and instruments and the skills etcetera to measure the positive; measure the impact both quantitative impact and the qualitative impact.

So, that is why it is a major challenge like we can say how to bring that bring that change in the mindset, how to put it into the; put it into the consciousness, how to inculcating the consciousness of the people of the citizens so that not only they think of it, they are aware of it, they feel its importance, they are motivated you know motivated to adopt that kind of sustainable lifestyle, consumption style etcetera.

And again, what are the latest research findings are coming up that how it can be operationalize, how it can be implemented at the practice level and again, how we are going to measure the impact of the transformation, the impact of that positive changes that has happened because of you know engaging and enabling and empowering the sustainable resources, sustainable manpower and sustainable lifestyle.

So, that has to be which again can be can be verified empirically. So, here to bring the change paradigm shift not only at the thought process, at the level of cognition, but at the level of emotion, affect, motivation and then, in terms of practice, behavior and then, in terms of measurement, evaluation, measurement and then again, at the level of empirically validating it empirically experimenting and (Refer Time: 31:10) validating it. So, this is a kind of so, through this we have to develop n number of sustainability competences.

So, right now, I am stopping it here. So, in the next class, we will continue with this.