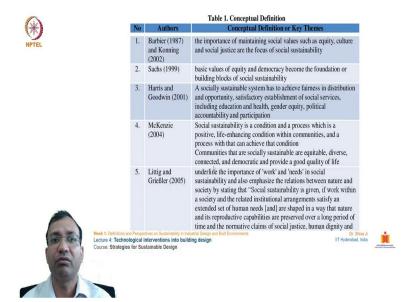
## Strategy for Sustainability Design Professor Doctor Shiva Ji Indian Institute of Technology, Hyderabad Lecture 7 Social Sustainability

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Hello, everyone we will talk about social sustainability now. So, well, of course social when we talk about like a word social, so it is obviously related with the people, with the community, with the masses, so we the people I think is very important factor in the sustainability in the recent time. So, it involves the participation from the people, working from the people to serve the people, serve there the masses in an efficient way while maintaining the ecological balance.

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So, what is the, let us see what are the definitions of this social sustainability, so I have taken this from various researchers who have conceptualized who has given their definitions of the sustainability, so the first one says the importance of maintaining social values such as equity culture and social justice are the main focus areas of social sustainability.

So, we see there are some values involved with the social sustainability over here which are equity, culture and social justice. So, it talks about lot of these social value systems which are prevalent which should be there in the society. So, the next one talks about basic values of equity and democracy become the foundation or building blocks of social sustainability.

So, it talks about like the again the equity is repeated over here and it talks about our democracy, so democracy what is the property of democracy, democracy is political administrative system where the we the people we devise our own ways of our governance system, how we are going to governance, so it is decided by the public itself and it is implemented by the public itself.

So, in the democracy it works for the people by the people and that is how it is known as the a democracies, so in the democracy actually everybody has the equals say, so everybody is say an opinion and things matter and as a responsibility social system, you must move ahead keeping everyone beside us. So, that is a democratic system where society works for the equal equity and equality of every citizen.

The third ones says a socially sustainable system has to achieve a fairness in distribution and opportunity. So, what is the opportunity? Opportunity is kind of a thing which can be in cash by everyone to uplift their life uplift their future by the use, by the help of education, education is an opportunity which everyone must get so that they can educate themselves and become proficient first of all to attain the knowledge and second to become relevant and applicable in the society where we can apply our knowledge for our livelihood to earn our livelihood.

So, this is why education is one of the very first and foremost opportunities where one has the potential to improve their life. The next is talks about satisfactory establishment of social services. So, what are the social services? This includes education as we spoke of like health, gender equality, political accountability and participation. So, with the help of these one should be able to participate in the society in the community and live a satisfied and happy healthy life.

The next one talks about from the McKenzie 2004, social sustainability is a condition and a process which is a positive life enhancing condition within communities and a process with that can achieve that condition, communities that are socially sustainable are equitable diverse and connected and democratic and provide a good quality of life.

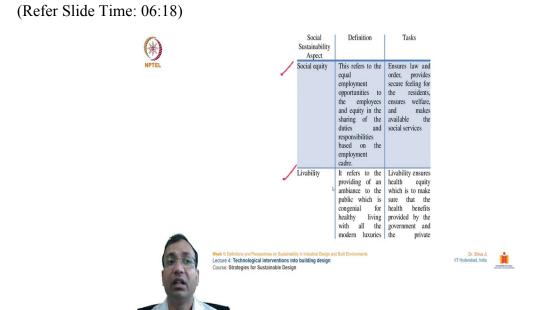
So, it talks about here about a good quality of life. So, what is a good quality of life and what are the traits and features through which a good quality of life can be attained? So, this become very important over here as a human being, as a social creature why are we living on this planet and how do how should we live to enhance that the quality of life?

So, this becomes another study in itself like how we can improve the quality of life in a general community in the general social life, the last one talks about underlining the importance of work and needs in social sustainability and also emphasize the relations between nature and society by stating that social sustainability is given if work within a society and the related institutional arrangements satisfy an extended set of human needs and shape in a way that nature and its reproductive capabilities are preserved over a long period of time.

So, it talks about social celebrity, it talks about the importance of work and the importance of need in the social sustainability what are our needs, so there is always a difference between need and requirement and obviously there is one statement you may have heard Mahatma Gandhi

once said if this planet has the potential to satisfy everyone's need, but it cannot satisfy even one person's greed.

So, there is a stark difference between need and the greed, so for any our normal fulfillment of our everyday activities and every day requirements this planet has sufficient actually amount of resources and a systems to do so. But in absence of responsible sense of utilizing and harvesting these resources this may end up in a very bad event and that is what is happening post in the post industrialized nation actually a time.

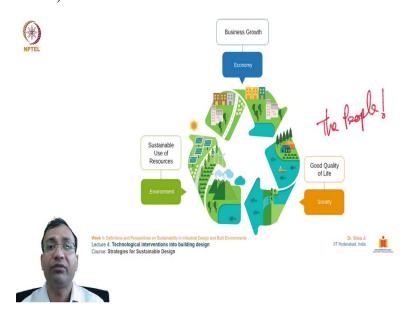


So, what are actually social equity and livability, let us have a look of the these two. So, the definition says social equity this refers to the equal employment opportunities to the employees and equity in the sharing of the duties and responsibilities based on the employment cadre. So, one should have the equal opportunity, one should have the sharing of the duties and responsibilities, so these are the features and traits which makes to the social equity and what are the tasks divided into this, ensure law and order provides secure feeling for the residence, ensure welfare and make available the social services.

So, these are the task through which the social equity can be made available to the citizens. The next one what is livability? So, the definition says it refers to the provision providing of an ambience to the public which is congenial for the healthy living with all the modern luxuries. And what are the tasks assigned to this is livability ensures health equity which is to make sure

that the health benefits provided by the government and the private sector. So, this talks about livability, so creating such healthy condition in which the human society the citizens can live comfortably.

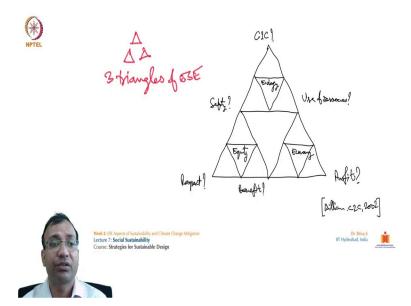
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So, with this figure I think this is a very known figure to everyone the cyclic progression between these three aspects of sustainability environmental, social and economic. So, the social ones talks about good quality of life, that is very important aspects as long as we have a good quality of life we are happy, we are satisfied, I think the overall well-being and the taking care of the society will always be keep on actually improving.

So, one must be in a good state of mind, good physical state of the mind and body to have a good quality of life. So, for whatever amount of things which we can consume which we can collect in the (())(08:32) from resources, but if we are not happy if we are not at content if we are not having a good quality of life everything becomes actually worthless.

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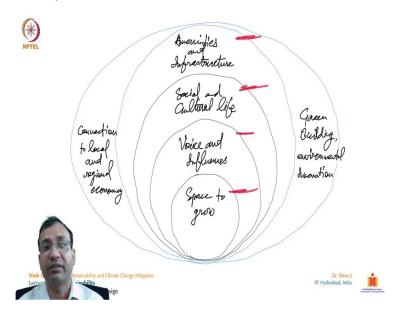


So, if you bifurcate this triangle of sustainability into three different triangles, which have their own actually (())(08:49) so we will get this figure. So, this is from William McDonough, so he talks about ecology, quality and economy, has three different actually triangles as a submission of these three triangles they get the triangle of sustainability.

So, let us focus this equity on the life left bottom side, so this talks about equity, ecology, society and socialism and equity and economy. So, here if you see in equity and ecology are employees customers and stakeholders safe in making and using our products, so this is from a for example a perspective of this approach of cradle to cradle, so is it the people who are the buyers or who are the consumers are they having safer experience of having such things and the last corner actually says are employees and customers and stakeholders treating each other with respect.

So, is there is this value system in place is it working? So, how is it being taken care of you know and equity economy party talks about do men and women receive the same benefits, the equality what we spoke of the gender equality what we spoke of (())(10:05) in UNSDG's chapter, so is there equality and equity among like different genders, different races that the people from the different countries, different backgrounds and different stratus, so this is actually very important and collectively these value systems, these traits form the triangle of social sustainability.

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Here if we see this talks about how things progress from one level to another, so at the first level it talks about space to grow, a flexible planning, housing, infrastructure and services that can adapt over time meanwhile use of buildings and public spaces and the next at the next level it talks about voice and influence, the government structures to represent future residence and engage new unseen shaping local decision-making and (())(10:59) check.

The third level it talks about social and cultural life. So, shared spaces collective activities and social architecture to foster local networks and belonging and community arrangement. The last level in this series it talks about amenities and social infrastructure, so amenities and support services in place on early life of new community emphasis on school social spaces transport and community.

So, if you see there is a progression happening from personal space to the social space, so how a person is also taken care of in a social space and how the overall community is also taken care of in a social space. So, this is the beauty of this diagram and this concept over here which talks about the arrangement of sharing spaces, the personal spaces is talks about you know the opportunities the space to grow and being heard voices should be heard, the influence should be also shared between the agencies, government structure should be in such place so that it respects the feedback it respect the opinion of the public in an the overall sense.

And it is connected at to levels, so connection to the lower local and regional economy and a green building environmental innovation and (())(12:25) poor environmental behaviour, so there are actually two sides to this, so the one works for the regional economy and the other one on the environmental factor and in between we have this social structure over here. So, this becomes very clear and evident over here with this how this social sustainability can be woven between other two aspects of sustainability.

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Some indicators let us see, what are the major indicators and they are finer indicators in that set, so the first and the bigger one is the trust, so trust is built for example any product is there, any product which is being consumed by the society, so is there satisfaction level? Is there respectable satisfaction level achieved by that product? Because that satisfaction will build that trust, for example, we have we know certain brands on which we kind of rely generally, if we hear that this brand is this, like this, then we assume that the quality is going to be at least on this standard.

So, that is the trust a brand builds over time. So, in society there should be at this the quality of trust to maintain a pace of equilibrium a pace of this coherence so that it keeps moving at that intended at a pace. The next one talks about the management of personal data. So, the how the privacy and other personal information is being taken care of in the society gives trust at the personal level.

Next comes dispute resolution. So, the how the disputes and other situations of conflict of interest and other disputes of economical in nature or other types of personal in nature, familiar in nature, so these things are taken care of the that also builds a trust this society runs on a system of justice, it follows the law and order so this also builds the trust.

So, the value of trust comes from transparency also, how transparent our like other system is, so the system of government, system of any public service activity, what are the health care facility, how it is being discharged, what are the education facility, how it is being discharged, how it is being extended to the each and every citizen of the country. So, there should be a transparent procedure to handle these things. So, that also builds the trust.

The second last one talks about the identity verification system where the society knows about its individuals and so that it can plan in accordance, who has what kind of perspectives and ideas and it can actually build around that. The rating system, the rating systems are also very important features which evaluate on some objective actually evaluation like a parameters.

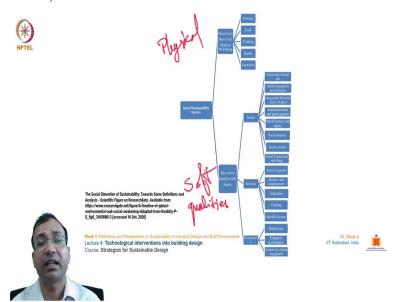
So, if we are for example evaluating for example a one building, on a rating system, we are trying to, we are evaluate the sustainability quotient or special quotient or economical quotient or any of these, so transparent reading system is also very important to build the trust. Next comes empowerment. So, the how empowerment has is the use at the user activity level as the stakeholder collaboration level, job creation financial independence level, personal growth level and power to influence level.

So, all of these values they have the ability to empower, so they empower for the benefit of the overall this thing, so if somebody wants to make a progress economically or maybe to improve their education or improve their or the working of their for the health, so these are the values where one feels empowered.

So, empowerment is very important and integral factor like social sustainability. Then comes inclusivity, well as a society are actually made up of the smaller units and the smallest unit of a society is like a one person, irrespective of caste, greed, gender or location or colour or anything. So, every human being is equal and should be treated as equal.

So, this inclusivity involves involving each and every individual from wherever they were from for whatever number they are into they must be involved in the mainstream of the society then only it becomes adjust and social sustainable system, where it talks about inclusiveness. Then the last one is the social justice. So, the protection of individual right, so the every human right every fundamental right of the society of the individual should be preserved should be maintained, then it becomes socially a justice system.

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So, in much more direct terms if we bifurcate social sustainability factor so we can do them into two different groups, the first one will be on the physical base like a macro level, basic level and physical well-being level, things like housing, food, clothing, health and sanitation, so which are very direct and materialistic requirements and the needs of the society.

So, these can be taken care of at the physical level and then there are some softer quantities, so the software quality in this social sustainability factors, they are listed as micro level quality of life likes for example, equity and then in this one or there are three bifurcation social services and governance.

So, in social there are social and cultural life, social homogeneity and cohesion, integration diversity and sense of place, communication and participation, social justice and equity, social amenity, social security, social capital and well-being and then the solution part access to goods, so the one should have the access to stuff for his or her requirement, service and employment, education, training, equitable income and then the last one the government has factors of democracy, (())(18:43) governments and system of citizen engagement.

So, the how social and cultural life of society can be designed for progressive movement in the forward direction. How does social homogeneity and cohesion can be (())(18:59) and how the participation can be increased, how the cultural exchange, how the communication exchange can be enhanced in the society and how people from the diverse backgrounds can be integrated at the same platform.

So, this is also one of the very important factors for social sustainability and then comes community and participation, so the how well the every quarter of the community is able to participate in the developmental activities. So, what are their saying? What are their concerns? So, these should be addressed in an any socially sustainable society.

Then there are justice and equity which we have discussed earlier then there is a social amenities for example, public services public facilities, which we come across whenever we visit outside our homes. So, in the urban spaces in the busy districts of the city busy areas or zones of the city, we require a lot of public facilities which are common for everybody.

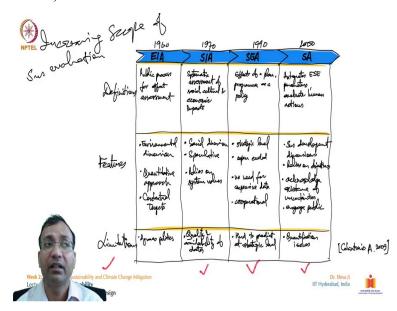
So, transportation is there, sanitation is there and traffic management is there, there are other management other government governance related some factors which are there, so they fall under this or social enmity factors. Social security they are actually the well-being of every individual the right to food, the right to education, the right to health are taken care of.

So, these are collectively grouped in one social security where someone's economical well-being economical sustenance is taken care of, even if he or she is not earning he must receive some amount of food for the survival, one must never die because of the hunger, so these values are derived from ancient like our social systems, which I have found relevance in our even today's factors which are talking about sustainable development because this is one of the social UNSDG point from where we have derived this thing.

Then there is this service and employment then there is this education, training, equitable income, so the equitable income talks about, there should be some parity in the society for economic well-being. So, one must be able to receive some monetary benefits for their sustenance, so it is very important for the society to maintain that pay parity and this inequitable income in the society.

Democracy we have discussed and then there is a engaged government, so the engaged governments talks about with the participatory government where the involvement of people is there, so that everybody participates everybody postulates what do they need and how this is going to be facilitated. So, this is about engaged governance and then there is a system for citizen engagement, which is just say it has a lot to do with the previous one where there is a concerns of participation and a democratic systems.

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So, in this one the how these things have evolved, we know environmental impact assessment system is there, lately this social impact assessment system was also evolved also was formulated because as far as environmental concerns are there almost everybody is aware of those environmental concerns, but are we aware of our social concerns also? Are we aware of our communities also? How community is developing? How community is evolving how community is progressing?

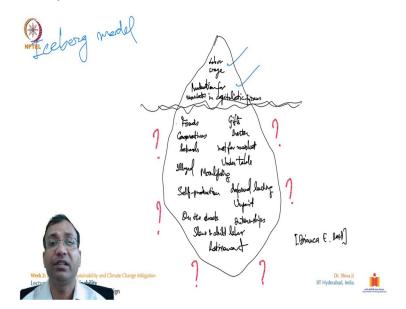
So, there are some are checks and methods are designed to evaluate that, so this social impact assessment SIA came into the decade of 1970s and there are the I would like to emphasize on the definitions and some main features of it is like a systematic iterative (())(23:19) form of assessment that speaks, seeks help individuals, groups, organizations and communities standard possible social and cultural or economic impacts or change or better, still impacts are proposed there.

So, there is a change, the change is like a constant, so how with the progression of change the society or the individual or the households are able to cook, so that is one of the biggest points of assessment in SIA. The main features it focuses on social dimension, it is speculative in nature, does not provide precise accurate and repeatable results, because it is quite subjective in nature, so the results are a little bit subjective in the output also.

The selection of targets and threshold relies on system values and political objectives rather than scientific criteria. The last one primary, secondary and cumulative and deadweight effects are difficult to calculate and measure, well that there are some shortcomings also, but the best part is at least some these kind of tools has started so long back, this is almost like 50 years ago the society started talking about SIA.

The examples of main limitations like quality and availability of data at the local level well it is sometimes very difficult to gather such subjective data and social engineering risk, well we may be aware of at the political arena, even if when we are talking about social equity and cohesion, but there are some agencies sometimes who in cash these differentials in the society for their own advantages. So, there is a risk also involved of social engineering in this kind of assessment.

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And well, there is one Iceberg model, so in iceberg model in the social of the social sustainability, there are some traits which are commonly visible and which are very very evident which are very very direct and can be seen and felt. So, those are some examples like vases of

the labourer, like how our man force is being paid. Is there any difference between men and women, is their difference between from place to place, if there is a difference between government to private.

So, these are contrasting points contrasting scenarios and settings where this should be kind of a put together in an equalized format. So, these are the and the next one is production of markets in capitalistic forms, so how the markets can be created for such so these are the such some traits some factors which are directly visible and are available for our experience. But there are some traits which are hidden, which cannot be seen directly but can be felt in and subjective atmosphere.

So, those are you can read from here how the things happen when there is someone who is unpaid, someone who is in if there is something happening is not for the market, somewhere something happening in the barter something is happening in the gift, something happening in an illegal way, someone happening with the like a self-production, so how things work in a society in such things, for example the last one you see is the about a retirement, so how people and the individuals and the families they kick, they take care of stuff how the society is taking care of them, once they are retired.

So, once the active working life is over how they are going to remain, it degreed to the society or are they going to fall out of on the fridge, so these are the inherent questions related with the social sustainability where we must integrate everyone from every corner for a cohesive and equalized growth.

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So, at there in the last I would like to mention over here, there is a this discussion on the design for empathy our design courses we discuss our design for empathy. So, what is empathy? So, empathy is an experience when we feel the pain, when we feel the experience is through which the person who is in front of us is going through if we can, if somehow we are able to feel that pain that experience is called empathy.

So, whenever we design something, whenever we manufactured something, we are doing it for our own sake so that we are looking for some commercial benefit out of it, but once we develop a feeling, develop a methodology for designing through empathy, what is being actually needed for that person if we supply only that part so of course we can make our commercial benefits, but we can first of all first and foremost we can serve that person completely as well as we can take care of the ecology also.

Because if we empathize with the ecology, if we empathize with the society, if we empathize with the environment we can design and cohesive a product or a system which will serve to all of these aspects at the same day. So, I think that is what is needed in the today's time, so that we can develop such error responsible consumerism, responsible, behaviours and responsible lifestyles. Thank you very much.