

Sustainable Planning and Architecture

Lecture 9

Sustainable Development

A new type of thinking is essential if mankind is to survive and move towards higher levels. This has been said by Albert Einstein.

Why do we need to look at urban sustainability is because we need to have a balance growth in throughout all the aspects in which is been giving as the sustainability to the world. So, different aspects that we have to look into for creating an sustainable development will be covered in this presentation. So, let see what actually sustained development means. According to Brundtland commission, 1987,

Sustainability is meeting “the needs of the present without compromising the ability of future generations to meet their own needs”. So, what sustainability means you should not only think about what’s necessary at this moment but you should always keep and mind how much resource we have for the future and what we have to do for the future, it is not only solving the problem for the today but also giving an answer for the problem that might happen in the future as well.

According to U.K. Forum for the Future, 2006. Sustainable is “A dynamic process which enables all people to realize their potential and improve their quality of life in ways which simultaneously protect and enhance the Earth’s life support systems”. So, according to this definition what they mean is sustainability is not that thinking about the whole system about earth on the overall scale not just thinking about what you need the energy builds of you. But its more about global level you thinking your aspects and your actions must be taken into a global level to meet all the scenarios.

What is sustainable development?

The term “sustainable development” has become commonplace mainstream politics. However, not everyone is aware what sustainable development truly means because there is no fixed definition. So, sustainable development is not define properly because of which we are not able to followed are make it complete process which can be used for the future generation has been followed. So, sustainable development is dynamic process. Which need to be understood in various different layers and levels to make the future more sustainable?

What do you think sustainable development is?

THE BRUNDTLAND DEFINITION (1987)

“Sustainable development is development that meets the needs of the present without compromising the ability to meet their own needs”. So, we must be coming across lot of reports from the united nation and sever it unions. Which is saying we are already using a lot of national resources and we don’t have anything reserve for the future generation to come. So, sustainable development is completely co traversing completely to what they are telling to we need to take care of the needs of today as well as protect the needs which will fall as in the future and the future generation is to come.

Also known as the “triple bottom line”. Three interrelated dimensions of sustainability: ecology, sociology, and economics. The three are conceived of and labelled in various ways:

- i. Economy, equity, ecology
- ii. Profit, people, planet
- iii. Economy, security, social justice, ecological health
- iv. Economic well-being, social harmony, ecological integrity

So, according to this assay said as before it is not just looking one aspect. it is divided into three main dimensions’. Which acts up to the sustainable development? Which is economic aspect which

takes care of how much money we have and how much we spent for the future and how much we should be protected for as meet to the requirements of the day to day life. And social aspects taking care of people, health and their life style and protect the health well being etc. and ecological dimension is an overall biodiversity scale and ecosystem which we discussed in the previous chapter as well. So, now moving on to the three dimension ecology, economic and social.

So, you see in the picture it's all three equally given the importance and nothing should be unknown and nothing should be given more priority.

Sustainable development is more than just about the environment, or generating money through economic growth. So, sustainable development you should not restrict just to the environment it should also be producing some money out of it to meet our requirements. So, there is we cannot imagine life without and income. So, that's have it is. So, you have to build a future and make this even the development that we are making should be not only protecting the environment but also should be giving in resource income on out of it.

So, this is the three economy aspects. Society, Economy and Environment. Which gives sustainable development?

It is at the intersection of three pillars:

Environment, economy and society. So, as you see in this picture it's a summation of all the three aspects society, economy and environment. But in today politics mainly focus on the economy part and how much money each and every development will give. But we need to consider all the aspects as well to maintain human health and their life style and also protect the environment to reduce green house gas effect and reduce emission levels. So, which

interconnected with human health which contributes to the social aspect of that sustainable development?

The relationship among the three dimensions is conceived of in two primary ways.

Social and environment together makes at a bearable and social and economic together to makes at a equitable and environment and economic together makes it viable. All three which makes this whole system a sustainable development.

SOCIAL SUSTAINABILITY

Social sustainability is the ability of a social system, such as a country, family, or organization, to function at a defined level of social well being and harmony indefinitely. Problems like ware, endemic poverty, widespread injustice, and low education rates are symptoms a system is socially unsustainable.

To achieve this social sustainability we need to think about all different aspects which will make all the human being equal. So, you cannot restrict education only to the western countries are low laying countries like Africa and all is not getting proper education and even the quality of life there is so much different between what an American life style is and what life style let by Africans. So, there should be unique harmony in the whole system. So, it's not only thinking about your state or your country are globally maintaining the well being of each and every user and end user it's going to get benefit.

Its taking care of a group everyone together like all the people and because when you maintain a social sustainability problems like ware, poverty can be completely avoided and earth will start acting as a global one system and its little not be divided into any borders.

ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability is the ability of the environment support a defined level of environmental quality and natural resource extracting rates indefinitely. This is the world's **biggest actual problem**, through since the consequences of not solving the problem now are delayed; the problem receives too low a priority to solve.

They are saying we must come across lot of things like climate change and how much resources is being used by different countries and like different food print, human food print and ecological food print which says more developed countries are using more resources even for a short distance they are using cost which is taking of not only adding to the pollution and destroying the environment but, also it adding into the natural resources which goes in for making of all the fuels. So, that is has an example. So, they are consuming more of natural resources which are available which leaves there is lot of in equality in this system because of the developed countries and developing countries. So, because of which there are consuming everything and for the it's not only there for the future but, it is also not enough for everyone to consume across the world. So, maintain this type of equality must think about the environmental sustainability and how to solve this problem equally.

ECONOMIC SUSTAINABILITY

Economic sustainability is the ability of an economy to support defined level of economic production indefinitely. Since the Great Recession of 2008 this is the world's **biggest apparent problem**, which endangers progress on the environmental sustainability problem.

So, as a said before in each system when you developed you need to focus on how much resource its giving also and not just think about people and environment but, you should also consider the economic

aspects of each and every development that we do. So, there is no point in creating a development which will be eco friendly and it will benefit a user. But, actually the cost of this development is very high. Then there is a lot of imbalance to the whole system. So, you need to think about all the aspects which will meet the requirement and to keep the whole system balanced. So, social dimension of this economic sustainability becomes very important and always been addressed after the greater session which happened in 2008.

SYSTEM APPROACH

When we think of sustainable development we must think of a system where the decisions taken ensure that every component of the system – man, trees, environment, society, wealth, is capable of flourishing without hindering the capacity of the other component to do so, whether in the present or in the future.

So, as we saw before the entire three circle interconnected together to make this whole system sustainable. So, it should not just think about one aspect you should think about from each and small aspect like from a tree to the end user and how much income is going given return to the government. So, you should not give one importance and you should not more invest just on industries and not think about human health. Then there is no point if all the humans are not their own be any people to work on the industries. So, you need to come up with the system which will be balanced.

The principle is to look at everything as part of a whole: the issues which we face are multiple, and complex. We need a holistic vision, which looks at the wellbeing of man and the planet together. So, each and every decision we make is usually interconnected with everything that happens around the world. So, even a small aspect might seem at a very smaller level to one user. But, actually it might create a significant impact on the ecosystem. So, for example if we are increasing the building sector and we are destroying all the forest

just for building up and there is lot of deforestation which will be happening and which will be reducing the environmental aspect of the glob totally. So, you need to think about all the aspects and you need to come out with holistic approach. Which will consider each and every element of this glob?

The approach towards sustainable development should encompass all aspects and take into consideration the fact that everything is connected: across generations and cross countries (and communities etc). so, even though we are separated by a borders we been importing and exporting different materials from different country. Which is coming to is to meet our day to day requirement. So, it not just about the sustainable development you have to consider about throw out a global system and not just your country and your state or your home. It has to be considering on a overall global scale.

HOW DO WE KEEP TRACK OF EVERYTHING?

- This may seem daunting – how to we keep track of everything?
- But if we all understand the principles behind sustainable development: principles such as equality, green living, social progress, responsible consumption and so on, it is easy to reach agreement about what sustainable development truly is, and what conditions are necessary to achieve it. So, as we are telling need to keep everything equal and we need to keep thinking about on a global on a global level. But, it very carry to think about how do we passive everything together and as a end user. So, whenever a greater system it should be addressed on a equal level and it should not affect the environment also. So, when you make sure this is been feasible as a principle and then this sustainable development will be much more easier to understand and it can go and reach even the end user or a laymen to make they are own

decision which will be a part of the sustainable development scheme.

Can you list some principles for sustainable development?

- Imagine what would happen if, for example, all the forests were to be destroyed for the sake of building an industry. Imagine if there were no trees at all on earth: would life be possible? ...

Would like us possible. So, as I told before so imagine for a case scenario. If all the forest is just for building an industry completely been deforested. And we are building a whole new industrial sector but what is the use of there is the trees which are going to give us oxygen for us to live which is very essential. Which is not there already. So, this is the system in which there focusing only on the economic dimension of the sustainability. But they are completely ignored about the environmental aspect. So, this is something which should not be happening.

- But, when you imagine, on the other hand, if we based an economy which tried to protect those forests. Thus, the wealth would grow; the people would have a fair share not only of the wealth, but also the access to those resources. That's sustainable development. If we develop an organization which is just focusing on protecting this forest there will be lot of reduction in deforestation and we can may come out with alternative material which can replace wood and it can preserve the forest and this type will increase the presents of natural resources which will not only meet our requirement but we can also preserve this natural resources for the future to come and they can also be benefited out of this. So, this type of development is called sustainable development. So, we need to keep at tab on each and every aspect which is been going

around the globe the major aspects from one. So, that this can be feasible earlier and quicker.

A LOOK AT THE THREE PILLARS OF SD:

ECONOMIC:

So, first is economic. So, economic is all about how much we are going to give and,

1. Opportunities for growth.
2. Increased GDP and benefits
3. System stability and security
4. Green jobs and eradication of unemployment
5. Prevention of practices which misuse resources
6. Regulation of over- exploitation and harmful externalities.

So, first when you come the economic aspect it focuses about how much resource in terms of money the system is going to give back people and as we discuss before that should mean know poverty line or there should not be unemployment so, then again there is imbalanced which is happening. So, avoided all this due when we create an economic dimension for the sustainability development. We need to consider all the aspects to make this economic aspect complete.

SOCIAL:

And then moving on to the social aspect which is all about the people,

1. Participation and inclusion of everyone
2. Eradication of poverty and exclusion
3. Food security
4. Equitable distribution of resources
5. Better life changes and opportunities
6. Protection from exploitative

So, it is all the people end users for going to benefit it out of sustainable development we need to take care of their health well being life style and we must protect them from being getting any shot of harmful decides or any other health issues., which will completely destroy the human race moving on the environmental aspect.

ENVIRONMENTAL

So, which is protecting the environment?

1. Protection of ecosystem and biosphere
2. Increased quality of air, land, water
3. Better management of waste and pollution
4. Respect and protection for all species- flora, fauna, marine species
5. Measures to ensure resource sustainability and harmony

So, on the environmental aspect we need to think about as we discussed in unit-3. We need to think about more like about ecosystem and how do we protect the biodiversity and different flora and fauna species which has to be protected if it's completely eradicated there will be a void which will happen in the ecosystem which might completely collaborated the whole environmental aspects of the sustainable development. So, we need to take care of environmental aspect as well. Now you must understand sustainability is been supported by three pillars. This is economic, environment, and social.

SUSTAINABLE DEVELOPMENT- The Economic Dimension

- The economic pillar is often made to be the strongest or even the only pillar in “development”. To ensure economic development and sustainability at the same time, we need to look at issues such as:

- Fair trade
- Debt eradication
- Putting in place mechanisms which ensure that everyone gets their due reward
- That corporations, industries and governments or industries do not use up resources and put a strain on the environment. So, coming to the economic dimension this is which is been most importance are priority in every time sustainable development is been made because. This is which is going to money out of it and which is going benefit for the people. So, but also we need to keep tapes on everything like when an industry is growing of course which if going money profit out of its but we must keep a tap so that environmental aspect of the sustainable development is not affected. It's not taking up all resources from the forest just to make economy grow. But it should also keep and mind that environmental aspect also important. And it should make a balanced to both of them.

Health: everyone having access to healthcar4e and leading lifestyles, and diseases (such as HIV) being eradicated.

Social dimension we need to protect human health and we may be aware that lot of new medicines which is been available only to the developed country and when it been imported towards the developing countries there is lot of tax which is been late. Which makes low income group of community which cannot be accessed such type of medicines and they are only solution just to prolong for some period and there is no medical importance given just because of the economical aspect. So, this has to be eradicated and everything has to be made equal to all the people on the globe.

Education: everyone, esp. Girls and people from poor background having access to education.

Equality: everyone should be equal and not be discriminated against because they do not have the same resources or wealth as others, or because they are a girl or belong to a specific community etc.

Both this aspect education and equality comes hand in hand because education is not treated equally even in countries in which we must word about this story Molalla In which girl education was stopped and lot of wars happening. So, this education must be maid equally to both a genders and it should not be restricted just because of the gender difference this specific person is belong into some other community and they are not allowed to get the equal resources as what other persons are from the people from other community are eligible for so everything must be for made equal.

Peace: many of take peace for granted; however last year, over 30 conflicts and wars around the world were taking places and lack of security is a very real issue.

Food security, technology and communication, equal opportunities etc.

The social dimension we need to think about problems like ware, conflict, poverty and if the food is reaching all the people there is no discrimination in that and also about ware that's been bursting out and to find out the reason behind to complete eradicate this type of conflicts. Which might happen in the future which will take up lot of resources and which will collaborate the whole system?

SUSTAINABLE DEVELOPMENT – the environmental dimension

- The environmental pillar of sustainable development is crucial; once we understand that the planet offers are finite it becomes clear that current methods of consumption are using up more resource than the planet can afford.
- So, as well saw in unit 1 about the ecological food print and human food print there is different depending on how much

resources we are using in terms of fossil fuel and other resource consumption whatever which is been used through the country. The natural resources which is available not going to be sufficient to the future generation to come. So, this is giving a clear aspect that we must be considering about the future generation. We must protect the environmental pillar which becomes a major crucial for the whole sustainable development.

- Examples of how human activities have altered the planet are: climate change and global warming. For these to problems are which has been majorly impacting right know. We must be hearing about increasing temperature and melting of mounting Himalayan glazier which is been happening because of these to aspect.

CLIMATE CHANGE AND GLOBAL WARMING

- Human activity and choices (esp use of fossil fuels) have released huge amount of carbon dioxide (CO₂) into the atmosphere, which are naturally trapped by our ozone layer – thus contributing to the “green house effect” and global warming.
- This we saw in previous chapter as well and this is just about the small recap about it again. Which is because of our over usage of fossil fuels and over usage of natural resources we are letting out of carbon dioxide on the environment which is been trapped by the ozone layer and it is becoming a huge threat change which we are expiring write know. Which is contributing to the “green house effect” and which is intern affecting by global warming.

DEFORESTRATION

- Human have destroyed huge amount of trees to make place for agriculture, construction, industry and to use as resource eg for

making paper or houses. This has had a huge impact on the planet as trees are not only a huge sink of the planet's CO₂, but they also provide "ecosystem services" such as preventing erosion, land sliding, harvesting countless species and so on.

This aspect which is also been going throw out globally we are more considerate on only about the economic aspect of the sustainability and when we are affecting environment aspect which is by a deforestation and we are completely destroying a species of trees lot of different species which is intern affecting by collapsing the whole ecosystem and biodiversity and the whole environmental aspect becomes very crucial. So, importance on light should through on this aspect as well. And we should come out the development which will reduce deforestation as well as keep in tap the economical, sustainability is met.

LOSS OF BIODIVERSITY

- Human activity have disrupted ecosystem and also led to the disappearance – extinction of numerous flora and fauna.
- Many conflicting views of sustainable development believe that it is actually anti-wealth. On the contrary, SD is about balance and a holistic approach to development. This means that be given incentive to be developed.

What more could be added to this list?

What can be improved? What things need to be protected?

What needs to be sustained?
1. People and cultures
2. People and cultures

3. Bio diversity
4. Environment and ecosystem

What needs to be developed?
1. Quality of life
2. Justice and social equality 3. Equal opportunity
4. Institutions
5. Culture of sustainability
6. Fair income
7. Dialogue and communication

WHAT IS MY ROLE IN SUSTAINABLE DEVELOPMENT (SD)?

- Sustainable development requires the active involvement of all stakeholders: government, NGOs, private sector but also civil society. It is not just politicians or policy makers, who decide what SD should be like. The most important stakeholder in SD is YOU! When you make each and every decision you must keep in mind about all the three aspects and you must make your actions are meeting the sustainable development and it's not collapsing the whole system.
- You have to remain policy-maker to make decisions which protect your future: you can remind them that you want better

jobs, cleaner cities, more equitable resource distribution, and above all, a guarantee that your future is secure, full of opportunities, a pleasant world to live in and a health planet. It just not a sustainable development is not just your contributing but it also should be different bodies like envious and government sector civil sector should be involved in making all this work.