

**Business and Sustainable Development**  
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**Lecture - 01**  
**Introduction to Sustainable Development and Sustainability**

Hello, welcome to the first session on Business and Sustainable Development. Before getting into the detail of session 1 what are we going to discuss in session 1. Let me give you outline what were going to deal in this course in every week.

So, week 1 we will start with Introduction to Sustainability we will find out what are the key issues, the business implications and firm's responses. Then week 2 we will get into the Sustainability Tools. We will try to pick one or two tools from each of this sustainability tool that is assessment, sustainability assessment tools, sustainability management tools and sustainability reporting tools.

Then in week 3 we will take few example of the Sustainability Standard. We will understand what it is and how it works and also we will introduce the different kind of corporate strategies those are being used in the context of sustainability.

Then in week 4, we will understand that how beyond firms also sustainability can be maintained that is how the supply chain can be green or how the supply chain can be sustainable. Then we will understand, what are the market associated with the sustainability. Mostly we will look at what are the startup, what is the role of the private sector in the sustainability. Also what are the new financial instrument that has come because of this sustainability.

And also at the end of it we will try to bring a synthesis of whatever we have discussed in the sustainability. And we will see what are the new perspective that we can add through this course.

Now in this session we will understand what is sustainable development, what is sustainability. Most of us we know typically what is sustainable development or what is sustainability.

But we will try to see how this definition of sustainable development, what it was earlier and when it was widely accepted and also we will try to see what are the different dimensions associated with the sustainability. And then we will see how the sustainable development that is evolved over a period of time.

Now let me start this course with the with a picture that was created this is a picture of a sand art that is created by Sudarshan Pattnaik whom we must be knowing, he is a sand art artist and he created this sand art in the Pristine beach of Puri during the last World Environment Day that is in the 5th June 2021.

And the picture gives three words that is reimagine, recreate and restore and the picture speaks itself and this is what the essence of this course what we are going to deal with. It is all about sustainability where we have to reimagine the things. We have to recreate the things and we have to restore whatever we have damaged or whatever we have degraded.

Now, coming to the fact that what we understand is the sustainable development. So, if you ask anyone possibly the answer what we get someone just say that it may be eliminating waste, someone talks about quality of life. Someone say any eco-friendly, whatever is eco-friendly, environmental friendly that is sustainable development.

Some say that the green issues related those are sustainable development, some talks about carbon neutral, some talks about less consumption and I have picked up those words mostly from how we understand sustainable development. So, more or less we understand, what is sustainable development and we use the word what we feel that ok action can be over there or the agenda can be over there.

So, it like you take the example of your biodegradable or you take the example of a renewable. So, all this comes from the fact that what you feel that the action is needed on this front or action is needed in the other front and that is what typically the sustainable development is.

Now, let us see how we define the sustainable development or what are the formal definition available for the sustainable development. So, the first one this is a Haida Proverb and this says that the way we define this is that, “We do not inherit the earth from our ancestors. We borrow it from our children”.

And the widely accepted or the popular definition what for the sustainable development it came in 1987 from the “Brundtland Commission”. This is the UN World Commission on Environment and Development. And this says that “Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own need”.

And so, till now this is considered to be the most widely accepted definition of the sustainable development where two things are being emphasized. One the need how we should meet the need and second it is not about only the present generation also it is about the future generation.

Now, going further, let us see how we define sustainability. So, I have taken a definition of Viderman 1995 which says that sustainability is a vision of the future which focuses on two things; one it is a set of values and second it is ethical and moral principle. So, at a later point of time we see that how there is also an argument available from an economist that whether sustainability is ethical or whether sustainability is moral.

But for the time being let us take this definition which says that sustainability is a vision of the future which focuses on set of values ethical and moral principles. And this set of values and the ethical and moral principle by which to guide our actions. So, mostly sustainability is all about our actions when it guided by a set of value and ethical and moral principle.

So, by this now what is sustainability? Sustainability is a community’s control and prudent use of all form of capital. So, now we are introducing the jargon that is capital and through which we are trying to understand what is sustainability. So, sustainability is what, how the community controls the different form of capital and how they do a prudent use of this forms of capital that is all about sustainability. So, there have been different types of capital like physical capital, human capital, natural capital, social capital and cultural capital.

And all this why there is a need for control and prudent use of all form of capital to ensure that present and future generation can attain a high degree of economic security and achieve democracy and by it is when they achieve the high degree of economic security and achieve democracy by maintaining the integrity of ecological system upon which all life and product depends on.

So, if you look at the entire slide how we are trying to understand sustainability? Sustainability is mostly we need to we are highlighting two things; one how we should use the available capital. How we should control this, how we should use this and this should be guided by the fact or the use or the control should be guided by a set of value and the ethical and moral principle.

Now, let us understand a little bit more about the different types of capital which comes in the definition. Now, how do we define capital? Capital is typically if you say this is the kind of inputs right.

It is a kind of a “factor of production.” So, capital is the stock of assets that serve as a factor of production. So, it is one of the inputs in our production process and what is the role of a capital? The role of a capital is that it increases the rate of output of goods and services when we use this as the inputs and it can depreciate this capital can be depreciate over a period of time and it can be also augmented through the investment.

So, mostly capital is the input which is used in the production process, it may depreciate and it may be augmented through the investment. Now let us see what are the different types of capital what we have defined in the previous slide. So, in case of physical capital typically we take the built environment or the man-made capital; technology, the built environment, all this form of man-made capital that comes under the physical capital.

Human capital; our education, typically the proxy of knowledge what we get through our education, the experience of the working in the different fields and also health. So, these are the three main things what we take in the context of the human capital education, experience and health.

Then we take the natural capital and the natural capital we take all ecosystem resources air, water quality, forest. So, it includes everything whatever comes under the ecosystem resources. Social capital where we take the proxy for our social capital when we take the variable for this is social connection, social networking.

And cultural capital is the body of folklores supporting our world view and our role that comes under the cultural capital. So, some point of time it is easy to operationalize what comes under the physical capital, human capital or natural capital, but it may be little

indirect when it comes to the social capital and cultural capital, but they do play a role in our operationalizing the sustainability ok.

Now many times you many times you must have heard that we use the word sustainability and sustainable development interchangeably right. So, sometimes we say it is sustainable development, sometimes we say sustainability. So, there are difference between sustainable development and sustainability, some point of time it looks very finer. But we go in depth there is a significant difference between the sustainable development and sustainability.

Now, I have picked a few differences that have been cited by a different in the different blog or the different site and we will see what how they define or how they differentiate the differentiate between sustainable development and sustainability. So, the first one is from UNESCO and here the way they brought the difference is sustainability is often thought as a long-term goal that is more sustainable world and sustainable development refers to many processes and pathway to achieve it.

So, sustainability development sustainability is a long term goal mostly when you talk about a sustainable world in next 20 years then 30 years then becomes the or 50 years that is sustainability, but sustainable development talks more about the processes and the pathway.

So, the typical example of processes and pathway over here is that when we say that we are adopting a sustainable agriculture or sustainable forestry or we are talking about sustainable production, consumption, good government, research and technology transfer, education, training. So, these are all this comes under the process and the pathway.

The second one is from a blog by blog from Maryville and how they have defined or how they have identified the difference between these two terms. So, for them sustainability is a broad term that describes managing resources without depleting them for the future generation. So, it is a broadly they see that sustainability where we are managing the resources without depleting them for the future generation.

And, how they have defined sustainable development that is the process for improving long term economic well-being and quality of life without compromising the future

generations ability to meet their need. So, the difference over here is that one is it is a broad term about managing resources and secondary about this is a process for improving the long term economic well being without compromising the future generation ability to meet the need. So, here also the difference is one is a broader term and second one is getting into the process.

If you come to the third difference or the third kind of difference what I picked up this is also from another blog which says that, sustainability is a broad concept. But; however, it can be simply put as the ability to meet the needs of the present without compromising the ability of the future generation. And how is the sustainable development, it is a sum of actions, decision, innovation towards improving the quality of human life within the capacity of supporting ecosystem.

So, mostly from this three opinions what we have taken about the difference between sustainable development and sustainability if you see in every case sustainability is more about a broad term, broad concept, long term goal and sustainable development is more about process, pathway, actions, decision and innovation.

But what is important is that we need to integrate this sustainability and sustainable development for designing the effective and effective short term and long term strategy. So, possibly mostly one of it is goal broad concept, second one is the process action, but the integration of both needed when we are designing the short term and long term strategy then only we can see the so called sustainable world ok.

Now let us understand sustainability more by understanding what is the dimension associated with the sustainability. So, there are mostly three dimension of sustainability; one is environmental sustainability, second one is the economic sustainability and third one is the social sustainability.

Now, what is environmental sustainability? Here typically we ensure that the consumption of natural resources such as material, energy fuels, land, water should be at a sustainable rate. So, mostly we are ensuring a sustainable rate of consumption in case of environmental sustainability.

And let me give you a small example that how do we ensure this, possible these are the jargon you must be hearing at the different from different places we aim for Net Zero

Carbon or the principle of circular economy or the circularity principle through which we try to ensure that the way we are consuming our natural resources that has to be at the sustainable rate.

Now, second one is the second dimension economic sustainability, now what it requires or what it means. Economic sustainability requires that a business or a country uses its resources efficiently and responsibly so that it can operate in a sustainable manner to consistently produce an operational profit.

So, here also we need to highlight or we need to remember two things; one the resource use has to be efficient and second since we are talking about economic sustainability second must thing is that it should be producing the operational profit or it should be getting the operational profit. So, the way we use resources or the efficiently the way we use resources so that it can be more sustainable and consistently it should give us the operational profit.

The last dimension or the third dimension of sustainability is social sustainability. So, what is social sustainability? Ability of society or any social system to persistently achieve a good social well-being of a country of an organization or a community are maintain in the long run.

So, social sustainability is what it is about achieving the good social wellbeing for the in different scale like in a community, like in an organization or in the country as a whole and also one is achieving the social well-being and second is to maintain it in the long term. Now, when we are talking about this three dimension of this sustainability that is; social, economic and environmental sustainability now what we achieve when we maintain this sustainability.

So, when we maintain social and economic sustainability possibly equity the equitable is the achievement, when social and environmental sustainable it is about bearable and when economic and environmental sustainability it is viable. But the what is most important over here is that we need to balance economic, social and environmental then only we can achieve the true sustainability and true circular economy ok.

Now this three dimension of sustainability is beautifully explained through a 3 legged sustainability stool in the by Bob Willard in the in his book New Sustainability

Advantage. So, this three dimension each consider as the 1 or 3 legs of this sustainability tool and here if you look at there is a economic leg, there is a environmental leg and the social leg.

So, in case of economic leg you find typical indicator of economic leg is good job, fair wages, security, infrastructure, fair trade all these comes under the economic leg. Environmental leg it is it includes zero pollution and waste, renewable energy, conservation, restoration. And social leg is how we are performing in terms of working condition, health services, education services, community culture, what is the status of the social justice.

So, this entire three dimension is understood through these 3 different leg and each leg consists of those indicators which represents the economic well-being, environmental well-being and social well-being and at the end of it what we get. We get the better quality of life, genuine wealth and genuine progress that is the end outcome when we are doing well in all these three dimension that is economic, environmental, social.

Now, this dimension of sustainability if you look at this is again explained through the nested dependency model and all these three indicator in fact, they are dependent on each other. So, society is dependent on environment, economy is dependent on society. So, in a bigger scale it is environment; a subset within that environment is society and subset within the society is our economy. And all these three are interrelated possibly they will not be able to function if they are not dependent on each other.

Now, little bit extending more on this sustainability that is mostly in the context of corporate sustainability that how these three dimensions are explained further. So, must be hearing the different jargon those are being used these days. So, possibly we discussed about sustainability what is sustainability, what is sustainable development, but the newest jargon or the different jargon over a period of time what we keep hearing is that ESG, that is ESG investment, ESG reporting. So, which says that Environment, Social and Governance.

Then CSR that is Corporate Social Responsibility, then CR that is Corporate Responsibility, then green triple bottom line 3 Es, 3 Ps these are all the jargon those are being used and, but the end of it what it calls that these are all sustainability. So, it is when you say environment, social, governance here also they are trying to see that how



you achieve the sustainability. Or how we should use what is our corporate, social, responsibility and how we should use this to achieve the sustainability.

Similarly, corporate social responsibility then corporate social sustainability, then social responsibility all these green triple bottom line at the end of it the achievement what we get that is the sustainability. So, again bringing this three dimension is that when we say 3 E s or 3 P s. So, when we say 3 Es that is economy, environment and equity, when we say 3 P s this is profit, planet and people.

And what are the indicator or what are the variables associated with each of it, when we say economic and profit typically it is about economic growth. Mostly all form of economic growth, jobs that is the indicator of employment, taxes, product services available in the market, when you talk about the second E and second P that is environment and planet that is eco efficiency, eco effectiveness that brings the variables for the environment and the planet.

And in the third one when we talk about the third E or third P that is equity and people and that is employees, community, culture all this thing that comes under the third E and third P. So, mostly the sustainability is about the 3 E s that is economy, environment and equity, economy is representing the economic part of sustainability and environment is representing the environment part of sustainability and equity is representing the social part of the sustainability ok.

Now, let us see how this different form of capital is again explained through this so called sustainability stool. So, if you remember when we were trying to define sustainability we said that this is the control and prudent use of all forms of capital. So, here how this being managed so, at the end of it whether you follow a model of 3 E whether you follow a model of 3 P it is end of end of the day it is about how do you manage the asset.

And what is asset? Asset is nothing, but the stock of asset that comes under the different form of capital that is natural capital, human capital, social capital, financial capital and manufactured capital. So, at the end of it how the asset management is being done or how in a bigger sense how the capitals are being managed, there are different form of the available capital how these are being managed that is all about sustainability.

Now, why this concern is there? Typically, why are we worried about the sustainable development or sustainability? We will have more discussion on this when we try to understand why sustainability is important. But at this moment mostly there is a concern because there is a unsustainable environmental and social trend.

And why there is a unsustainable environment and social trend? Because we know that the destruction is happening for habitat, there is a resource degradation, resource depletion, then we find that few of the species we do not see at all. Because over a period of time you do not find the species anymore, then there is environmental pollution in the different form that is air, water and also the land and different kind of the pollution.

Then there is a pressure of population although you will find that in some cases it is being argued that yes population is somehow it is the growth is not happening how it was happening before 50 years these are the fact, but still there is a pressure of population.

And because of our increase in the consumption there is over harvesting and because there are many more reason that why there is a concern. But these are few of the trends or few of the trends related to the environment and environmental and social which leads to the concern of the sustainability.

Now, because of this concern the model what we follow at this moment when it comes to the business model or the economic model it is unsustainable, because we talk more about take make and waste model.

So, why we bring it take make and waste model? Because in take typically we degrade the nature why physical means we use up the resources then we make whatever we wish to make in terms of the products. And why we make more? Because there is a overconsumption and we are undermining the people's ability to meet their needs.

And what is the end result? End result is that there is a increasing concentration of waste from manufacturing use and disposal. So, what we are doing in this unsustainable model, we are taking the resources making sometimes we are doing the overconsumption also and finally, we are getting into the waste. And at the end of it we are not doing anything to mostly in the unsustainable model we are not trying to see that how the waste can be used because it is more about waste from manufacturing use and the disposal.

Now, let us say that how the Brundtland Commission they have given the definition of the sustainability, but how they have operationalized this. So, they have identified seven strategic imperative for the sustainable development. This has been taken from Hackett 2006.

And, what are the strategic imperatives? Reviving the economic growth and it is not only reviving the economic growth also it is changing the quality of the growth. Then, meeting the essential needs for job, food, energy, water and sanitation, the most basic needs ensuring a sustainable level of population, conserving enhancing the resource base, reorienting technology and managing risk, merging environment and economics in the decision making.

So, it is not only about looking at the profit and making a decision for the production also need to see that how we are what is the impact on the environment or how what possible impact is going to be there for the environment and then we should make a decision based on the production.

And the possible solution that when we are operationalizing the principle the sustainable development principle or sustainability principle from make take and waste model we will get into the sustainable borrow use and return model. So, although we have not achieved fully you will find many few cases the sustainable borrow use return models are already started.

Now, what is this model? This model says that your you borrow the resources from the environment rather than take and they also try for a radical resource productivity and that way it will create less waste and whatever we are borrowing the resources from the ecosystem we should also invest that we create more natural capital.

So, once we borrow the resources from the environment we use rather than make we will use. And why the word use is over here? Because, it is about responsible consumption and support for people ability to meet their need.

Rather than overconsumption based on the need the responsible consumption will happen and based on that the production will happen based on the resources taken from the environment. And finally, rather than waste it is return and how the return would be possible, when you go for a ecological redesign and the closed loop production where the

waste part of the production process will again go back to the loop of the production process in the form of the inputs.

And in this case we are reducing the waste, we are not doing overconsumption and whatever we are borrowing from the environment in the form of resources what we cannot give back we should also we are also planning for a alternate investment in the form of the natural capital. And in this way in the sustainable borrow use return model if we are going to do it in a large scale. So, whatever we are thinking of a sustainability goal or the sustainable development that we are going to going to achieve.

So, till now what we have done, we have understood what is sustainable development, what is sustainability, why there is the concern, what is the difference between sustainability, sustainable development and also about the difference between these two model that is take, make and waste.

And also when we operationalize the sustainability principle or the sustainable development principle how we can achieve sustainability by using this sustainability borrow, use and return model. So, what we will do in the next session, we will try to see how the sustainable development as a concept that has evolved over a period of time.

Thank you.