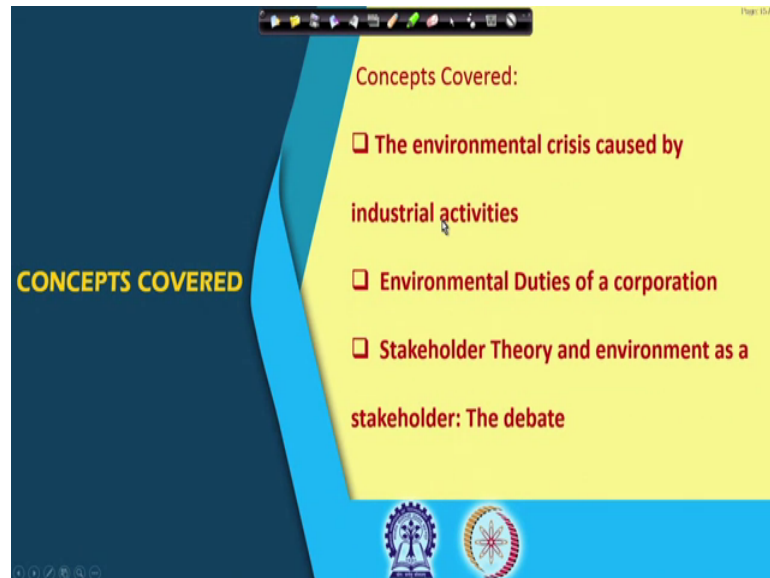


The Ethical Corporation
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Lecture - 26
The Ethical Corporation: Natural Environment

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Hello, we are starting this 6th week. And our topic is Natural Environment about which many of you know a lot, but still in this course how this is going to appear. We are going to talk about today about the environmental problems caused by business activities, industrial activities specifically, what could be the duties of a corporation towards the natural environment. And we will try to see whether the stakeholder theory that we have discussed earlier Freeman's stakeholder theory whether that is applicable to natural environment, because there is a debate in the research literature regarding that. So, this is our topic for today.

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Climate change, global warming and the natural environment

- One of the biggest challenges in human history is: Climate change.
- Climate change is a change in the pattern of weather, with related changes in the oceans, land, ice covers.
- The Earth's climate has changed many times in the last 650,000 years: 7 Cycles of glacial advance and retreat, due to small variations in Earth's orbit.
- But, current change is very significant because: (a) It **is proceeding at an alarming and unprecedented rate: NOT IN 2000 years (2019), and (b) most of it is very likely to be caused by human activity**

The slide includes a small globe icon in the top right corner, a video inset of a woman speaking in the bottom right corner, and three images at the bottom: a forest fire, a cracked dry lake bed, and a hurricane.

First of all you know today's burning issue is as you know very well climate change. This is a major challenge in human civilization which is threatening our existence, not just our existence, but the existence of this planet as we know it. Climate change is a big change in the weather pattern that you all know. And it is so global and pervasive that it is not going to be controlled by the humans this is what the major fear is. Now, climate change is not new. If you look into the history of earth, then seven times the ice edge has come and gone due to variations in the earth's orbit.

So, what are we now this time so concerned about? The answer is here. The climate change that we are genuinely concerned about is worrisome for at least two reasons; one of them is that the change is happening too fast and in too big proportion all right. You may have seen in various science reports that people are saying that the glaciers that the ice in the polar ice is going to melt very soon that is a gigantic change, that is going to have very long reaching implications for everybody all the countries, specially the countries which are coasts on both sides.

The way it is happening it has not happened that rate of change is so alarming that in 2000 years of world's history we have not seen it. And second point is that most of the change is very likely to be caused by human activity. So, it is us who are causing this climate change, this is the reason why this is such a major problem.

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Climate change, global warming and the natural environment

- **Global warming:** Increased levels of greenhouse gases (GHG) causing Earth to warm up, sea surface temperature is also rising.
- Warming oceans, shrinking ice caps in Greenland, Antarctica, glacial retreat, sea level rise, shoreline erosion, coastal area flooding, : Many omens
- **Extreme weather:** Abnormal heat wave, drought, unusual cold wave, greater storm surge, more rainless days, very heavy sudden downpour: Many disrupted weather patterns.

You know that its manifestations are of two kinds; one is what we call global warming that is the temperature, temperature is rising due to increased greenhouse gas emission. The earth's temperature is rising, the ocean surface temperature is rising, as a result the ice caps are the polar ice caps are shrinking, glaciers are practically vanishing, sea level is rising, etcetera. And then there is the other manifestation that is known as extreme weather.

So, where there is heat, it is becoming extremely hot unusually hot, where it is cool it is becoming unusually cold. Or where it is supposed to be cold there is a heat wave and where it is supposed to be hot, there is a cold wave of unprecedented kind. Greater storm surge you know though if we used to have storms, now we have the most fierce kinds of storms. We the rainy season does not bring rain, but when the rains comes it actually floods etcetera, these are what we call the signatures of disturbed weather patterns and these are the signs of what they say is climate change.

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The environmental Issues

Our focus is on: The climate crisis **CAUSED** by human activities.

We are concerned with: Industrial, or business activities contributing to environmental crisis

Problem 1. Industry-scale carbon emissions: By the processes (Oil and Gas sector, energy sector), use of fossil-fuel based transportation and air pollution, logistics.

Just 100 corporations responsible for 71% of global emissions (Carbon Majors Report 2017)

Paris Climate Agreement (2016): Agreement signed on dealing with GHG emission mitigation, change and financing. To keep the global temperature rise below 2 degrees Celsius. In June 2017, US pulled out of that agreement.

So, this is the phenomenon that we are looking at. We are at the threshold of a major crisis. This crisis that we are looking at as I said we are looking at it because we have caused it. There is scientific evidence to show that humans have caused it significantly, but our course is on ethical corporations. So, we are not talking about the individual contributions, you know if you as a person you pollute that is also creating environmental crisis, contributing to the environmental crisis, but we are not talking about that. We are talking about what the corporations or businesses, large businesses how they have contributed to this environmental crisis.

Why, because though if you are; if you are cause of the problem, then you should be also part of the solution to the problem that is where the duty and other things would come. But first let us try to understand the problem. First is the industry scale carbon emission we are not talking about carbon emission by one car or one person's car. We are talking about the industry scale carbon emissions coming from the production processes in certain sectors, energy sector for example, the oil and gas sector for example, or the heavy usage of the fossil fuel for various business processes.

In fact, the alarming report is that just 100 corporations are responsible for 71 percent of the global carbon emissions. This is why the Paris Climate Agreement was signed the signatory nations were supposed to curb to decrease carbon emission, United States was

one of the signatories, but you know in 2017 under Donald Trump's presidential rule Donald Trump walked out of this accord.

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The issues

Problem 2. Dumping of untreated industrial effluents, sludge, solid and liquid waste disposal in rivers, oceans, and land: Toxic pollutants. Soil and water contamination. Fatal for many lifeforms.

In India: Air pollution, smog, water pollution, noise pollution, soil pollution, uncontrolled mining, hazardous chemical into soil and water, plastic pollution.

Problem 3. Industrial deforestation: Timber industry, industrial scale or intensive agriculture, aim is to maximize yield. Has led to habitat loss for many species and biodiversity loss. E.g. Soy, Palm oil companies.

Problem 4: Industrial non-renewable resource overuse and depletion: E.g. Groundwater, fossil fuel, mining.

Problem 2 is that of the dumping. The irresponsible dumping by various corporations of untreated industrial effluents or sludge solid liquid waste, which actually pollutes, but that is not worried the problem ends, there is also toxicity involved which is fatal for various life forms including humans. Now, in India, the pollution of various kind, I do not have to explain to you is of very high and serious nature. In fact, respiratory disease is the worst killer of India at present and that is coming from air pollution, smog. This is not to say that water pollution is any less or noise pollution is any less or soil pollution is any less, but there are various kinds of problems.

Third is the industrial scale deforestation what we are talking about is acres and acres of deforestation just for industrial activity. What kind of industrial activity, one could be the timber industry or it could be some very intensive kind of agriculture, palm oil companies have been held accused of deforestation in rainforest, Amazonian rainforest which is supposed to be the oxygen creating plant for the planet, so that is where it hurts. And then of course, there is the non-renewable resource, over usage or depletion we are talking about coal, we are talking about groundwater and so on. So, these are the issues at hand.

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Examples of notable environmental disasters caused by business

- **Bhopal Gas Tragedy, India, 1984:** Union Carbide (now acquired by Dow Chemicals)
- **Chernobyl, Kiev, Ukraine, 1986:** Nuclear reactor explosion
- **Niger Delta, Oil companies: 7000 oil spills, 1970-2000**
- **Laje Agrio oil field:** Texaco drilling in Ecuadorian rainforest, oil spill, toxic waste, water contamination
- **Tisza/ Baia Mare, Romania, cyanide spill into Tisza and Danube rivers, Gold mining company Arul, 2000.**
- **Exxon Valdez oil spill, 1989**
- **Hindusthan Lever Thermometer factory, Mercury dumping, Kodaikanal, India, 2001**
- **Deepwater Horizon BP oil spill, 2010: Gulf of Mexico**
- **Guiyu, China, biggest electronic waste site, presence of heavy metals in soil and water.**
- **The Aral Sea, Russia, 2010:** Once a vibrant large lake, now dry massive desert: Overfishing, diversion of water.

Examples the concrete examples if you want I can bring many, I have listed some. I think most of you have heard about the Bhopal Gas Tragedy of 1994, sorry 1984, where Union Carbide was involved. Various oil companies while excavating oil in Nigeria has practically exhausted or are practically done irreversible damage to Niger Delta and the life forms that are dependent on it.

It has destroyed the habitat for so many species. Maybe we can mention about the British Petroleum Oil Spill in 2010 in Gulf of Mexico which affected a very large area, and not just human beings and their livelihood and their everyday life, but also the birds, the marine species that actually lived in that water. So, there are many such examples you know crisis or problem environmental problems created specifically by business through their activities, through their irresponsibility.

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MSMEs are also responsible for environmental harm

- **Leather tanneries, Kanpur:** Rawhide treated, processed with heavy metals e.g. chromium, cadmium. Discharge dumped in the Ganges. Pollution and water contamination.
- **Bantala SEZ, Kolkata:** Toxic effluent dumping
- **Vapi-Ahmedabad-Mumbai Road:** Over 200 Kms 'Golden corridor' for chemical industries. **Practically every river that runs through it, Sabarmati, Mini, Narmada, Damanganga, leaves with lethal toxic load of industrial poisons.** Affected: Approx 71000, Pollution type: Industrial. Mercury level in Vapi's groundwater: 96 times higher than WHO's safety levels

But our discussion point is about the Corporations.

The slide includes a video inset of a woman speaking and images of industrial pollution and a river.

Now, while saying that I have to also add to this that it is not just the corporations, but also MSM is the medium, small, micro enterprises, who are often overlooked in this regard, but they also contribute very significantly to environmental problem. We specifically I have given some examples here you know the leather tanneries in Kanpur or certain SEZ area in Kolkata or maybe certain areas in Gujarat, where there is a cluster of chemical industries. This is also a fact, but our talking point is about the large corporations, so that is where we will get back.

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• Does this mean there should not be any industries or business and corporate activities?

Ans: **No**, but the poor and environmentally irresponsible practices, which worsen the environmental crisis, must stop. Business and corporate activities must learn that in this crisis their fate is also intertwined : Environmental problems can disrupt supply chains, raw material sourcing, and health hazards can impair employee efficiency and availability. They must find another way to do business.

• Does this mean we should stop all development?

Ans: **No**: A balanced approach is required. Paradigm of Sustainable Development.

The slide includes a Venn diagram with four overlapping circles labeled Environment, Social, Economic, and Equitable, with the word 'Sustainable' in the center. It also features a video inset of a woman speaking.

Now, having said that some of you might raise the question that when you say that corporations are creating this problem and under problem, are you trying to say that all businesses it should stop, the answer to that question is clearly no, we are not saying that. We are not saying that the business should stop, what we are saying however, is that the all those poor and irresponsible environmental practices which actually worsen the environmental crisis that should stop, so that is the point we want to make here. This is not to say you do not have to do business what we want to say rather is that they have to find the different way of doing the business and another way to do business that is what we are prescribing.

We also are not anti-development, this is not about you know you do not have to do any development work in and a development has a obvious environmental cause. So, do you want to stop all developmental work, no, we are not saying that either, I have already mentioned about the paradigm of sustainable development. Again the point is there is another kind of way to look at development and we need to keep that in mind because the environment is not going to come back.

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Obligations of a Corporation

- Increased energy efficiency
- Decrease Carbon emission
- Increased use of renewable energy
- Change to less resource-intensive technology
- Change of production processes
- Change of disposal process, etc.

Some path-breaking concepts and domains: "Cradle to cradle" design (regenerative cycle), Industrial ecology (study of finding ways for lessening the environmental impact of industrial systems).

The slide also features a diagram with two cycles: 'BIOLOGICAL CYCLE' and 'TECHNICAL CYCLE'. The biological cycle includes icons for 'Plant', 'Animal', 'Soil', and 'Water'. The technical cycle includes icons for 'Material', 'Energy', 'Information', and 'Time'. A video inset in the bottom right corner shows a woman with glasses speaking.

So, what are the obligations of a corporation, various things. We will elaborate these points, but as you know there are several obligations that have become clear because of the context. For example, decreasing carbon emission you know has become an imperative for the time or increase the use of other kind of energy, nobody is saying that

you have to do business with you without using energy, but you have to find other kind of energy, the one that does not pollute, the one that does not get depleted and so on.

Therefore, innovations are what are the obligations. And we have seen that great innovation some path breaking inventions have been done in business. For example, design there has been a proposal of a cradle to cradle design. We will talk about that instead of cradle to grave, the product does not go from cradle from its birth point to end point, but it comes back. So, cradle to cradle, it is a regenerative process that is the design idea. There is also a proposal of industrial ecology. So, it is ecologically conscious industrial system which lessens its environmental impact and throughout in this in the system.

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Kinds of 'Duty' for a corporation

REACTIVE MEASURES

Compliance

(a) Controlling pollution
(b) Curbing waste
(c) Avoiding damage to environment
(d) Avoiding damage to environment

PROACTIVE MEASURES

Conservation, innovation:

(a) Controlled consumption: Demand-side control
(b) Alternative energy usage
(c) Repairing, restoring
(d) Waste recapture, reusage
(e) Biomimicry

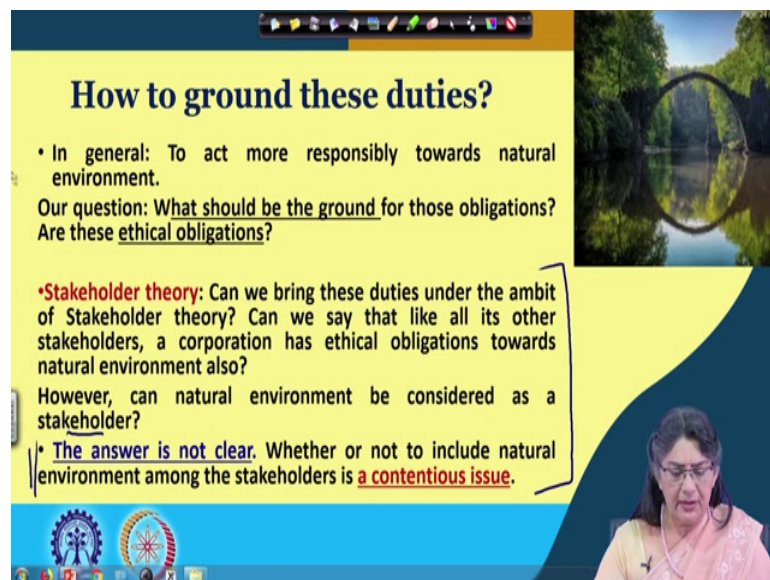
So, what are the obligations? As I said well we are going to make it more clear, one kind that we will say comes under what we call compliance, compliance. Compliance to the legal requirements the environmental laws in most countries are already very conscious about what businesses it should do, what corporation should do. So, the duty for the corporation is to comply with it.

For example, you know control your waste and pollution, curb the waste and pollution, and try to avoid the damage to the environment, this is these are the basic things. But we are calling it reactive measures reactive measures why because there is a demand from

external body namely the regulatory body and you just react. The corporation reacts and comply to the external request.

These on the other hand is our more advanced category, these are proactive measures that the corporation itself can adopt if it is environmentally conscious. So, we are talking about the duties of conservation and innovation. So, conservation as in consumption control, this is what we call demand side control. You know using different kind of energy or using some different kind of process which actually emulates copies, mimics the biological models. We will talk about that also. So, there are several duties here that the corporation can think about.

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How to ground these duties?

- In general: To act more responsibly towards natural environment.

Our question: What should be the ground for those obligations?
Are these ethical obligations?

• **Stakeholder theory:** Can we bring these duties under the ambit of Stakeholder theory? Can we say that like all its other stakeholders, a corporation has ethical obligations towards natural environment also?

However, can natural environment be considered as a stakeholder?

- The answer is not clear. Whether or not to include natural environment among the stakeholders is a **contentious issue**.

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In this lecture, in the remaining part of it, we will talk about those duties more and in greater details in the subsequent lectures. But in the remaining part of this lecture, we will talk about how do we ground this duties in what kind of theoretical framework, what should we be basing this duties on. Now, one obvious choice here is probably that of stakeholder theory. We have already discussed what the stakeholder theory is. The question that we are currently looking at is whether we can bring this duties of a corporation under the ambit of stakeholder theory.

Can we say that as we have said earlier in corporate governance or employee that an ethical corporation should have should carry out its ethical obligations to all its stakeholders which includes natural environment, can we say that can we consider it as a

stakeholder? This answer unfortunately is not very clear. You will find out soon that there is a debate among the thinkers regarding this. Let me tell you about that.

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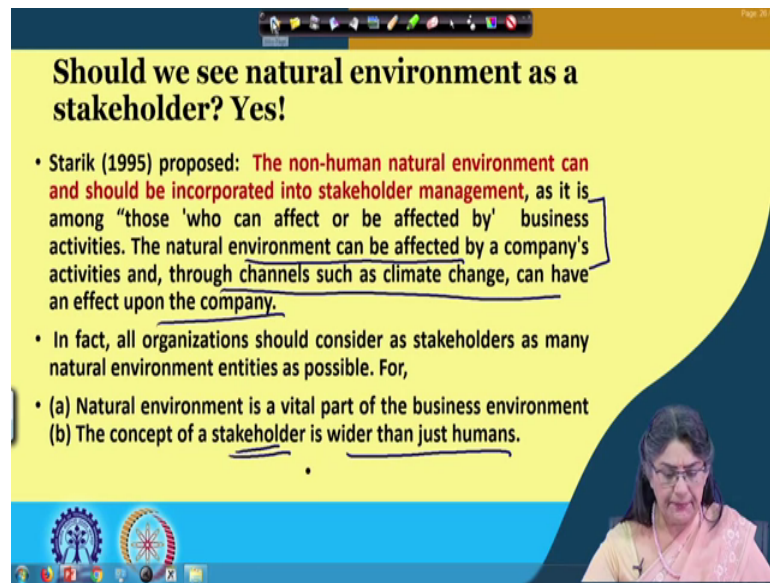
The slide is titled "The debate" and lists five questions. A woman is visible in a video inset in the bottom right corner. The slide has a yellow background with a blue border at the bottom. The questions are:

- Haigh and Griffiths (2009) framed the debate along the lines of these questions:
- (a) Is there a moral obligation between organizations and the environment?
- (b) Can something without the human attributes be a stakeholder?
- (c) Is business dependent /partly dependent on the natural environment? If it is, should it consider the environment as a stakeholder?
- (d) Is Freeman's broad definition of a stakeholder as someone who 'can affect or is affected by' adequate?
- (e) Does inclusion of the environment break the law of theoretical parsimony? A good theory should provide the simplest possible explanation.

You see the debate can be posed in various in the form of this kind of question. First of all can something that is inhuman be considered as a stakeholder ok. If we follow Freeman's definition, can we fit in the objective of stakeholder to something that is not human namely natural environment? Whatever the relationship might be between the organizations and environment, is it really that of moral kind? And then though there is dependence between organization and natural environment, does that qualify environment to be a stakeholder?

Are we saying here that Freeman's concept of stakeholder needs to be broadened or is it adequate to cover the natural environment? And then finally, would the inclusion of environment break the law of theoretical parsimony? This is a principle that says that the simpler explanation is the better one parsimonies explanation. So, bringing environment in may complicate the situation for stakeholder theory. We will take a look at that. These are some of the theoretical questions that is how the debate has been proposed.

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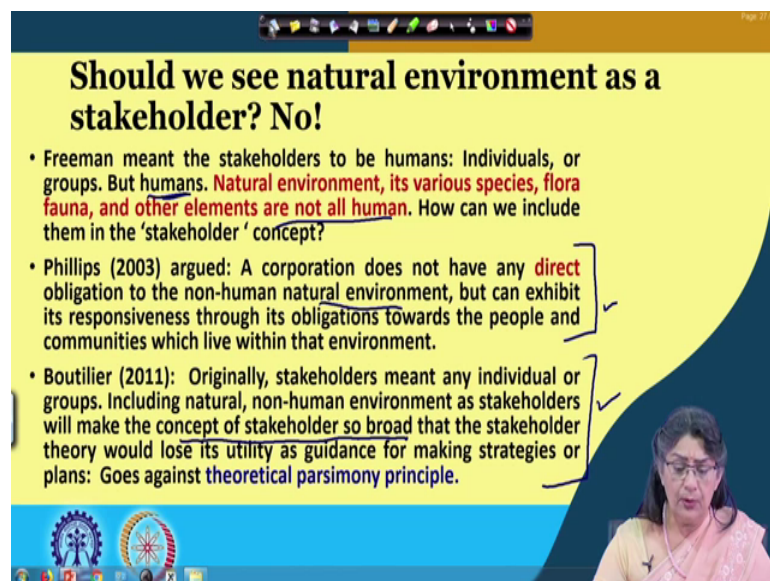


Should we see natural environment as a stakeholder? Yes!

- Starik (1995) proposed: **The non-human natural environment can and should be incorporated into stakeholder management**, as it is among “those ‘who can affect or be affected by’ business activities. The natural environment can be affected by a company’s activities and, through channels such as climate change, can have an effect upon the company.
- In fact, all organizations should consider as stakeholders as many natural environment entities as possible. For,
- (a) Natural environment is a vital part of the business environment
(b) The concept of a stakeholder is wider than just humans.

So, here is somebody who have said clearly that natural environment indeed can be and should be looked at as a stakeholder. So, because we if they said that if we follow Freeman’s definition, then it fits in because natural environment can be affected by a company’s activities and it also can affect the company. So, therefore, we should look into natural environment as one of the important stakeholders. And what we have to do is to broaden the notion of stakeholder to go beyond just humans that is what one of them has said.

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Should we see natural environment as a stakeholder? No!

- Freeman meant the stakeholders to be humans: Individuals, or groups. But humans. **Natural environment, its various species, flora fauna, and other elements are not all human.** How can we include them in the ‘stakeholder ‘ concept?
- Phillips (2003) argued: A corporation does not have any **direct** obligation to the non-human natural environment, but can exhibit its responsiveness through its obligations towards the people and communities which live within that environment.
- Boutillier (2011): Originally, stakeholders meant any individual or groups. Including natural, non-human environment as stakeholders will make the **concept of stakeholder so broad that the stakeholder theory would lose its utility as guidance for making strategies or plans: Goes against theoretical parsimony principle.**

On this point as I told you there is disagreement. And the people who disagree this say that you know though if you strictly follow Freeman's definition of stakeholders, then it clearly applies to humans. He said individual or groups, but humans. Natural environment and its various species flora, fauna, mineral, river, mountains, etcetera, all those other elements whatever they may be they are living some of them are not living, some of them are living, but they are not humans. So, how can we include them under the term of stakeholder as Freeman has seen.

Not only that some of them have argued that we can only speak about indirect obligation to natural environment, because it is not a person only between person to person we can have direct moral obligation, but not with something like this a natural environment. So, this is one and others have said that if we want to include natural environment among the stakeholders, then it is going to complicate the matter really for stakeholders. Why, because then we have to really broaden the concept of stakeholder so much that the stakeholder theory would lose its utility, because we use stakeholder theory to identify the groups to whom the business holds something, the business has to show some duties.

Now, if it gets too broaden, and if we start saying anything that is affected by business activity, then there is no end. We will have to whatever the corporation does they have to include the entire world into it. Therefore, there would be no value of application of the stakeholder theory. So, this is also a valid point to think about. In other words, there is controversy regarding this point.

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Should we see natural environment as a stakeholder? Yes!

- Haigh and Griffiths (2009): Climate change crisis makes natural environment not only a stakeholder, but a **dominant or definitive stakeholder: Powerful, legitimate and urgent.** With the ability to damage business operations, impact its products, market and infrastructure. It is a **pragmatic necessity** to treat natural environment as a primary stakeholder by a Corporation.
- No matter how we look at the issue, it is imperative that a Corporation shows responsibility towards natural environment in terms of accepting certain obligations.
- But, what other kinds of arguments can we ground these obligations on ?

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And this is also another way to put it there people who believe that it should be counted they have argued very vehemently that not only natural environment is stakeholder, but it is one of the most prominent kind, the definitive one. Do you remember that I classified stakeholders into various groups in terms of power urgency and legitimacy? So, that is what is being applied here that they are a dominant or a definitive stakeholder, because whether you consider in terms of power, legitimacy, urgency, natural environment fits in and qualify on all these three points. So, it is a pragmatic necessity to treat natural environment as a primary stakeholder by a corporation.

Now, so this is debate is not conclusive. And these are theoretical points the point; however, it remains what we started out is how do we ground where do we ground this obligations in. And it seems like that stakeholder theory can give a support, but there are some major controversies theoretical controversies involved in extending the stakeholder theory to natural environment. So, in that case, what other choices do we have? So, this that answer will have to wait until our next lecture.

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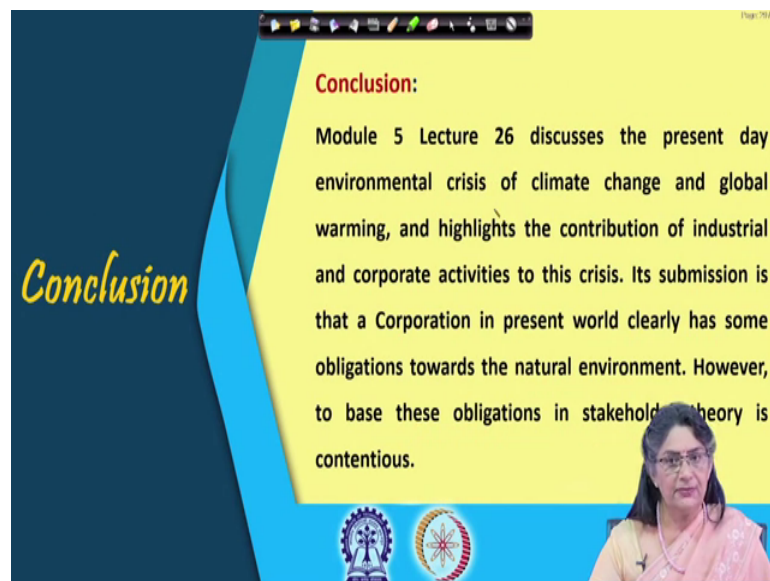
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This is where I am going to end my lecture for today.

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Conclusion:

Module 5 Lecture 26 discusses the present day environmental crisis of climate change and global warming, and highlights the contribution of industrial and corporate activities to this crisis. Its submission is that a Corporation in present world clearly has some obligations towards the natural environment. However, to base these obligations in stakeholder theory is contentious.

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We have just started out the talking about the natural environment and the obligations of an ethical corporations to it. Next time we will talk about more.

Thank you very much.