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Course Name

Strategic Communication for Sustainable Development

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Lecture 06: Approaches to Sustainability Communication: Integrative Approach

Welcome back to the course titled strategic communication.

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For sustainable development my name is Aradhna Malik I have been helping you with this course.

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In this session we will talk about another approach to sustainability communication and this is the integrative approach. In the previous class we talked about the concept of strong and weak sustainability in this class we will talk about the integrative approach to sustainability communication okay.

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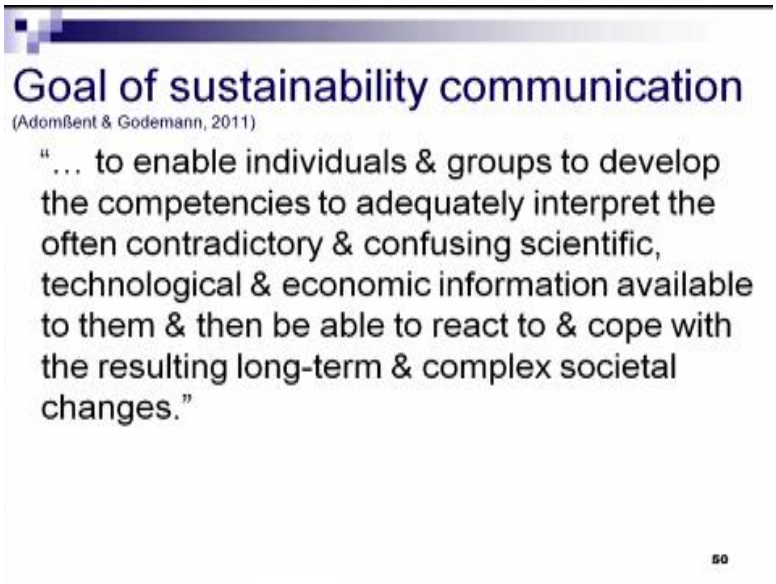

So according to this approach the goal of sustainability communication is to help to enable individuals and groups to develop the competencies to adequately interpret the often contradictory and confusing scientific technological and economic information available to them and then be able to react to and cope with the resulting long-term and complex societal changes. So throughout the course of this lecture you will realize that the focus here is on understanding what is coming to us from the environment from the community.

When we talk about sustainable development and I have mentioned this in the earlier lectures also when we talk about sustainable development we are essentially talking about the needs of the community, what does the community want, where do we do sustainable development, how are we going to operationalize it we cannot think of the concept of development in a silo we cannot understand, we cannot imagine what the, what development will be like without actually looking or without actually considering what will happen if we do what we want to do.

How will it affect the stakeholders? So we are essentially talking about enabling individuals and groups to develop the competencies to adequately interpret or understand these signals coming to them from their environments and these signals are going to be contradictory scientific

information will give you one aspect of the problem technological information will or technological information will give you.

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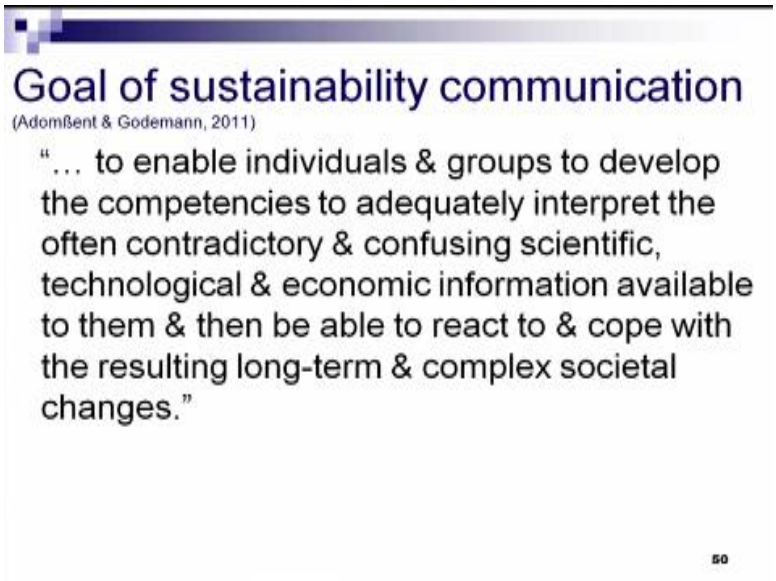

Another aspect of the problem, economic information will give you another aspect of the problem science, pure science will talk about theories, pure science will talk about what, you know what is verifiable, what is not technological information will give you the applications of science, and then economics economic information will tell you the feasibility of these things, and you think is it possible in theory, but in practice this cannot be done and all of this needs to be put together and one has to understand and respond to it and cope with the changes that these bits of information bring in our society.

And that is the goal of sustainability communication that different kinds of progress, different kinds of development are going on in different arenas all of these developments all of these progresses need to come together. And by coming together after they come together we have to understand how they are coming together, what kind of a hole they are forming, how are they interacting with each other, and how can we use this interaction and integration to ensure that the development moves in a in a set base it does not stop it goes on okay.

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Some aspects of this approach are first is the environmental communications, when we talk about an integrative approach to sustainability communication there are different parts to it. So one is the environmental communication, the other is risk communication. and third is science communication we look at each of these independently and then see how they come together. Environmental communication is communication about the environment, communicating for the purpose of conserving and preserving the environment.

And this is traditionally where this whole idea of sustainability or sustainable development firstly, sustainable development, and sustainability communication came from. It was primarily to preserve the environment, environmental communication seeks to enhance the ability of society to respond appropriately to environmental signals relevant to the well-being of both the human civilization and natural biological systems.

Again I am stressing on this again and again it is all about the well-being of human beings, it is not about what human beings can do, what they can achieve, how far they can go, whether I can make a flying car, or a pink elephant, or a bird that can dive into the depths of the sea, it is not

about what I can do using my capabilities, it is about what I want to do to enhance the well-being of the people around me okay.

So environmental seeks to enhance the ability of the society to respond appropriately to environmental signals what is the environment telling me, what is nature telling me. The increase in the number of typhoons, the increase in the number of storms the change in weather, you know extremes of weather they are all indicative of something we are doing to the environment that we should not have done I belong to the state of Himachal Pradesh and my hometown is at the foothills of a mountain called the Dhauladhar range and they came, the name for this range was a result of it been white throughout the year.

So it was persistently white mountain range and we have seen this practically in our backyard. We have seen the snow depleting, there are, you know when I was growing up and I was a child the mountain used to be white throughout the year. And nowadays we are lucky if the mountain is completely white in the winter in peak winter. In the summer the mountain is barren it is a gray Dhauladhra and that is unfortunate.

So we see global warming in our backyard, we see extremes of temperature, we see extreme that the place where people did not need fans at one point of time, now requires air conditioning. So, you know all of these are impact this is what nature is telling us, nobody has told us to use fans you say, you know people will say you got spoiled we grew up without fans where temperatures in those days never went beyond say 28 or 30 degrees Celsius when I was growing up. So people did not need fans, these days in my own home in my parent's house the temperature goes up to it, it sometimes touches 40 degrees Celsius inside the room.

That may only be for half an hour or one hour in the afternoon, but it does happen we have seen it happen in our own house. So that is what I am so passionate because I have seen this happening, the environment is giving us signals we need to be receptive to those signals coming to us from the environment, what is nature telling me, animals are dying, animals do not live as long. Some varieties of trees do not grow anymore, you know for us Apple is meant something

that is this big and it is red and these days you find tiny apples and they are, you know becoming more and more expensive.

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And the quality of vegetables is going down, fruits are not as sweet as they used to be, what is nature telling us? So we need to be receptive, okay. So it is communication about all of these changes, and that scholars teachers and practitioners have a duty to educate question critically valuate or otherwise speaking appropriate forums, when communication practices are constrained or sub owned for harmful or unsustainable policies towards human communities and the natural world.

So it is not only about beings being prevented from speaking it is also about exercising the right or using the opportunities that are presented to you and that is precisely what I am doing here, I was given this opportunity to offer a course in a subject of my choice and I elected I thought about it and this is a subject that is very, very close to Aradhna Malik's heart this is something very close to my heart.

And I thought I would offer a course in sustainability communication because I feel it, I feel it deeply, I am concerned about the environment and I wish more people were concerned about the environment and more people were talking about it and I have been given a forum to voice my opinion and to share my ideas with the with the students interested in this. So that is exactly what I am doing.

This is environmental communication me talking to you about the environment about what is happening in my backyard is communication about the environment. More and more opportunity and this is one opportunity that I grabbed with both hands you have a place to speak about it go speak talk discuss do things, so that the word spreads, okay.

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All right, the second aspect of in the integrative approach is risk communication and this addresses the question, how on an individual as well as on a societal basis uncertainty can be dealt with, in order to influence the future to one's own advantage, that is risk communication. How do we how we, we cannot be prepared we cannot, we cannot plan for uncertainties we can only be prepared for uncertainties.

Risks are uncertainties in the future, so we can only be prepared as best as possible and how can we deal, how can we be prepared for these uncertainties, how can we deal with them in order to ensure that the harm that comes to us as a result of these uncertainties is minimized. There are two types of risk, man-made risks things that we as human beings are responsible for, that we can control or regulate.

So if we build buildings in places that are earthquake-prone then that is a man-made risk knowingfuly well that the land is not stable, we are building a building, so one day it will go down or, you know indiscriminately cutting trees where we should not thereby resulting in the instability of the soil over there and then causes further problems land sinks in places.

Because the tree the roots of the tree are not trees are not holding on to the soil underneath these are in those regions. So soil gets washed away so those are all man-made they are not, I mean they may not be directly linked to the activities of one person or a group of people, but overall these are man-made problems. And then there are those that exist independently from human subjects and are neither attributable to more justifiable by them.

So earthquakes and, and volcanic eruptions and tsunamis and so, you know were storms and I mean overall we cannot really pin the blame on one thing that has been done. So these are you know things that we cannot control as human being, so there are two types of risk, okay.

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Frameworks for risk communication, various ways in which we communicate about risk first is preventive communication. So we talk about preventing risk we talk about we inform people about the risks that they are susceptible to and we say this is how you can prevent this uncertainty, okay. And this can only be done or primarily be done in the case of man-made risks, so if you do not indulge in this destructive activity this harm will not come to you, that is preventive communication.

The second aspect is scientific communication in which experts inform laypeople about the concepts of phenomena they come across in daily life including permanently recurring communication about health and environmental risks caused by humans. So human activities cause risks for example cigarette smoking causes cancer many smokers do not have cancer, but a large number of them are at a higher risk for cancer or heart related or lung related problems.

And that is scientific communication that because we have made cigarettes and people are smoking cigarettes we are at a risk for these severe health problems. So these are permanently this is permanently recurring communication, you know stop smoking, stop smoking, stop smoking so that whatever is written on the every packet of cigarettes in India cigarette smoking

is injurious to health that is a statement written on every single packet of cigarettes within India and that is a repeated warning to people that is scientific communication scientifically proven.

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Next is political communication, so experts tell lay people what to do and then policies are made regarding environmental policies, risk assessment management and possibly prevention. So how do we assess risks at a larger community level? They focus on cooperation, how do we get together and prevent this risk, what do we need to do as a community to prevent this risk what do we need to do as a community to prevent this risk what do we need to do as a community if this uncertainty or if something happens to the environment what will we do, how are we going to be prepared.

So that is cooperation precautionary let us not do this as a community let us promise not to do this, let us not indiscriminately bore wells into the ground to preserve water because soon we will run out of water and nobody will have enough water to drink that is a precautionary policy that has been made or polluter pays principle whoever releases effluents into the atmosphere will have to, you know beyond this point will have to pay so much of penalty if this is found then you will be penalized you go to jail etcetera.

So how are these policies made that is political communication if this happens then we will do this or to prevent this we will do this or if something happens we will get together and do this or if some somebody does something wrong this is what will happen that is political communication.

Then there is a systems theoretical perspective and this deals with risk communication in a poly contextual risk society how do we evaluate risk what is the risk from whose perspective who evaluates or what impact will it have on different parts of the society so that is a poly contextual society different contexts.

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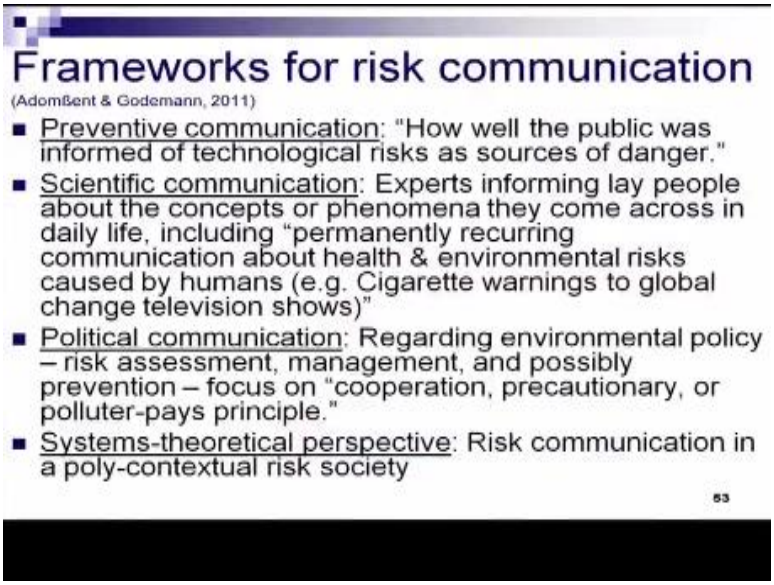

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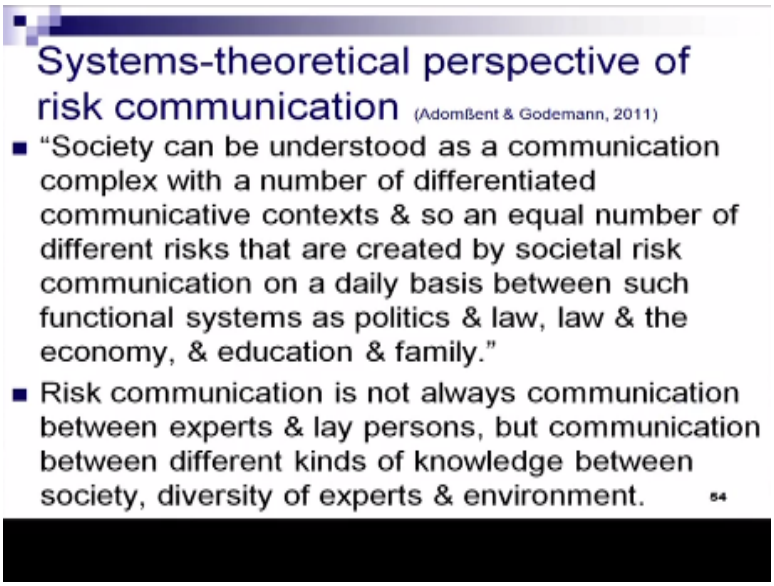

Systems theoretical perspective of risk communication says that society can be understood as a communication complex with a number of differentiated communicative contexts and so on equal number of different risks that are created by societal risk communication on a daily basis between such functional systems as politics and law, law and the economy, and education and family. So different systems, different combinations of systems interact with each other and the risks come up as a result of these interactions and all of these interactions this is facilitated in and through communication.

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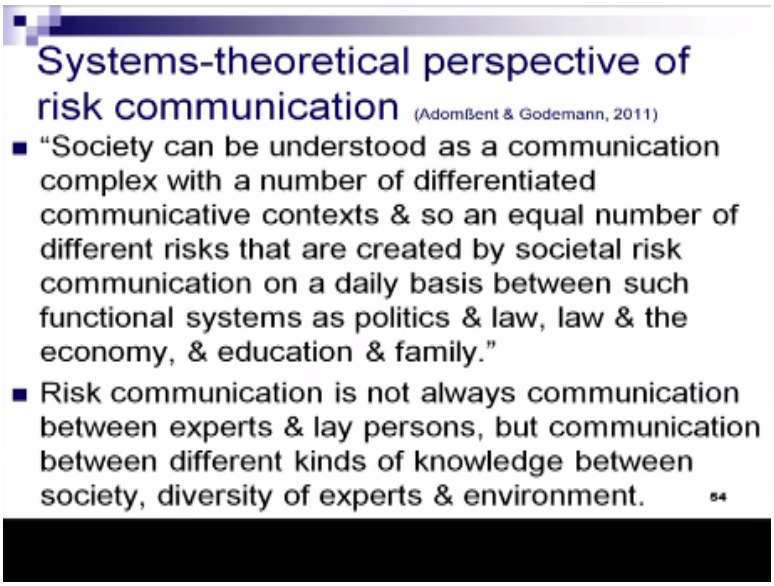

And that is what makes the society what it is. Risk communication is not always communication between experts and laypersons, but communication between different kinds of knowledge between society, diversity of experts and environment. It is not lay persons it is experts, it is the people who use the knowledge that is transmitted or shared by the experts and how the natural environment reacts to this knowledge that is shared and implemented and applied by the experts and the society.

So somebody, you know makes a packet of cigarettes somebody else smokes it the smoke is released into the environment. It starts harming the environment one person's you would say how much more can a person release, well if you have ever lived with a smoker you will know that at the very least there is, you know things become yellow everything in the room is yellow, your bathroom tiles become yellow, I mean so you know so things are affected.

So if enough smoker stand in one place the plants in that say in that smokers area will die and, you know translating that to a larger group of people if smoke is released into the atmosphere the flora and fauna in that region will be disturbed the effluents that are released into the sea cause a

lot of damage to the marine life etc. So, you know so it is how the environment responds to us what we do and how the environment tells us what to do and that is what risk communication is, risk communication from this perspective is listening to the environment in hand and with what we know and how we apply what we know.

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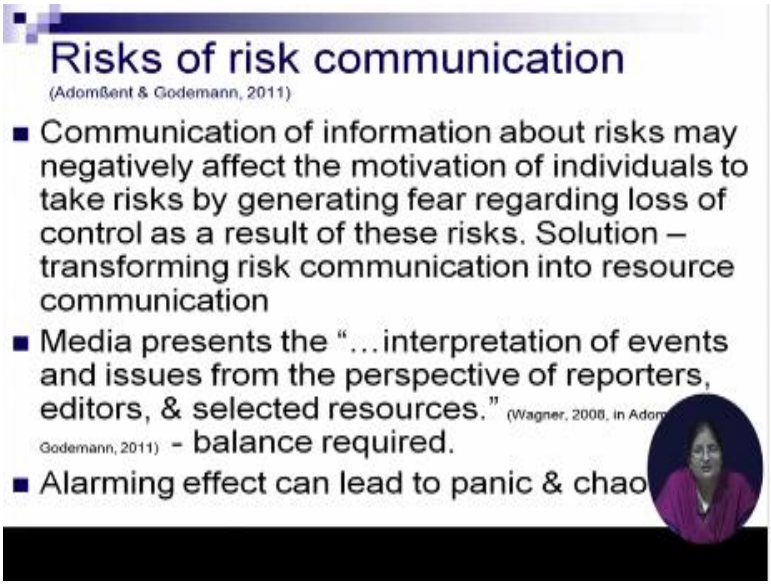

Okay the risks of risk communication, now when we talk about risk communication we are talking about harm, we are talking about damage, we are talking about the problems we will encounter, and that can again be risky okay. So the first risk of risk communication is communication of information about risks may negatively affect the motivation of individuals to take risks by generating fear regarding loss of control as a result of these risks. I will not do something new because I may get killed, I may get hurt okay.

So if there is a risk involved I will not do it if there is uncertainty I will not do it. And the solution to this is transforming risk communication into the source communication we will deal with this in the upcoming lectures, but instead of labeling something as risk we can label it, we

can we can communicate risk by saying that this is an opportunity for us to step up and do something differently, so that the possibility of an unexpected event harming us is minimized that would be the transformation of risk communication into resource communication next.

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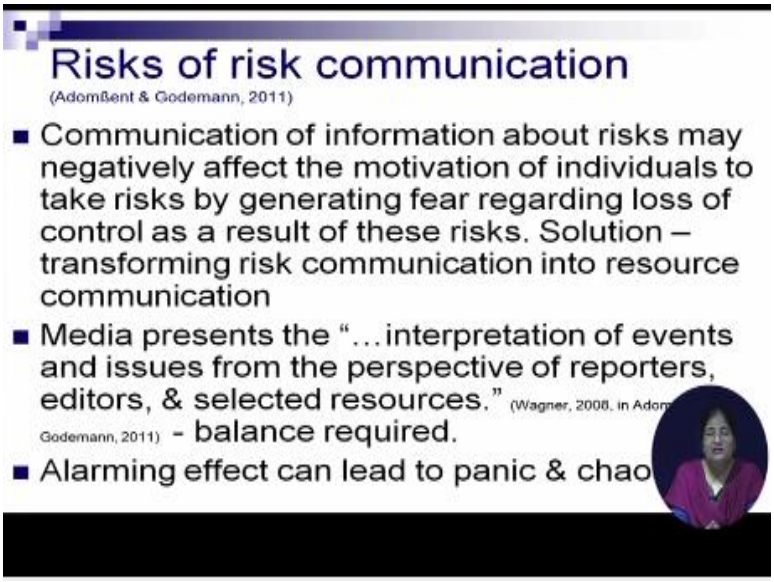

Media presents the interpretation of events and issues from the perspective of reporters editors and selected sources. What does media do, media will sell the news that sells somebody tells you in the news that, you know effluents are being released in water, so many effluents were released in water it does not make a difference to you. So many effluence were released in so and so river which borders a town with so many people these people draw water from that same river they drink the same water.

So this is how these effluents that have been, you know mixed with this water even after treatment they will affect human life in this manner. The marine life or the river life will be harmed in this manner, this is how the effluents and the water will affect the vegetables that grow in the region. Now when all of this news are shared with you that is when our ears go up like this and say, oh my god, so many people, so many things are going to be affected eventually I will be affected my health will be affected.

If I eat vegetables grown in a region where water is drawn from a river into it so many effluents are released it is going to affect me directly and that is where our ears cock up and we say my god I should not be eating this, I should not be doing this, if I have a factory in that region I will make sure that the water is the effluents are treated or managed a little different, okay. So the balance is required, but when we talk about communication from the media it is not the medias fault, that is what the media is for if it is just run of the mill people will not listen to it.

But whatever is presented is presented from the perspective of the people who capture that information treat it and then release it into the public space. And nobody can capture all facets of a single piece of information as hard as they try. An army of reporters cannot capture all different facets of a single piece of information. So it is presented from the perspective of the person who has captured that information.

We all have our limitations okay. So that is what this point deals with that, within our limitations we make our best efforts to capture as much information as possible treated as fairly as possible and presented as logically as possible through public media. But that comes with a whole set of limitations.

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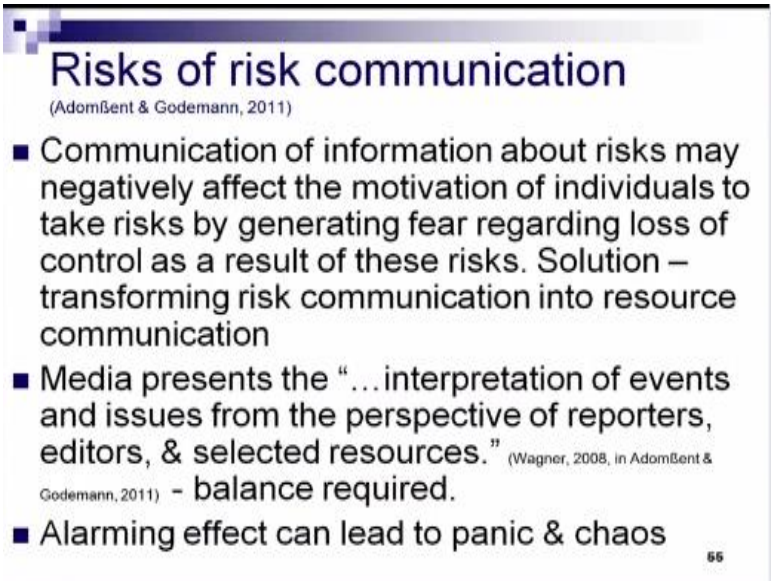

Then and a balance is required as far as possible, okay. The other impact or the other risk of risk communication is the alarming effect that it can have that can lead to panic and chaos. So for example, a factory is releasing effluence into the water, into a river and they give us all these numbers and suddenly we say my god! so much is happening otherwise we are breathing the same air, we are living in the same environment, our bodies have learnt to deal with these things, we are fine, we will survive, but then suddenly panic is created and we do not want to go near that factory, we do not want to work in that factory the stocks go down, all of this happens.

So there is this emergency, you know the panic pattern goes off suddenly when we hear something in the news suddenly everybody becomes scared of something they have been living with and that leads to panic and chaos and that can interfere with normal development efforts in that region, where things could have been handled in a much more efficient manner if, so much of alarm had not been created. And again that is one downside to having a public communication or, you know communication through mass media, okay.

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Science communication has an aspect of the integrative approach, traditionally science has been for scientists and has not been expected to be for or understood by lay persons. Scientists do their own thing traditionally they do their own lab work, they come up with their own information and then as and when they think it is necessary they go and share it with the public that was traditionally the case not nowadays that is not the case. The current trend is that, you know the various reasons for scientific reporting have changed over the years and the current trend is one the utility argument, which is the concrete application and use value of information.

For example, health tips for example, you know you were told about the benefits of a medicine that is being prescribed, you have been given a medicine and you have every right to know how and why that medicine will be used. So if a doctor prescribes a medicine and then gives you something to counter the side effects of that medicine you have a right to ask the doctor if an alternative is available which will not have so many side effects that you need another medicine to counter the side effects of this medicine, okay.

So it is the utility argument you gone you know you are given something and it has to have some value for you, okay. So you have every right to find out this information and the information is given to you about the value and the harmful effects of the sign of the of the applications of

science that you are using. The culture argument which views knowledge has an integral part of the creation of culture, whereas this knowledge come from why is it important for us, why do we need to use it, how are we going to apply it in our in our milieu. The democracy argument according to which science and technology are of enormous importance for societal development and everyone must be informed in order to be able to take part in societal decision-making processes as responsible citizens.

We are all, you know these days people are so well educated and informed and everybody is opinion is necessary, if a scientific process is going to be beneficial for a larger number of people then by all means we should engage in it. But if a large amount of money and resources are being spent on something that very few people are going to use then, you know it may not be worth very much and then when we talk about scientific reporting we also have to keep everybody's opinions and ideas into, in mind and we structure the information in such a way that it appeals to a or it appears to be of benefit for the larger social structure, okay or for a large chunk of the society. So we keep everybody's opinions in mind and I mean not opinions but everybody is perspectives in mind and we communicate it

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In such a way so as to come, you know we communicate the benefits of something so that it appeals to a larger group of people okay.

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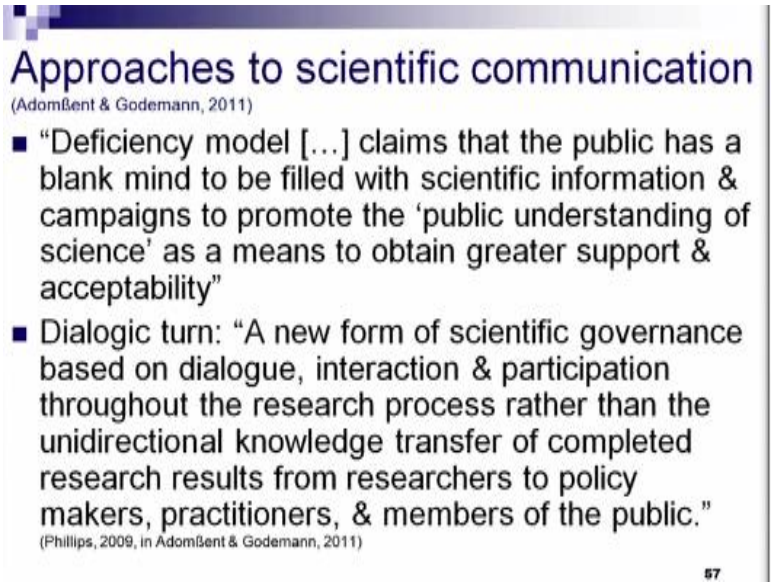

Some approaches to scientific communication one is the deficiency model, it claims that the public has a blank mind to be filled with scientific information and campaigns to promote the public understanding of science as a means to obtain greater support and acceptability. So people do not know anything we are the experts will tell them what they need to know that was the deficiency model.

Then came the dialogic turn, which was a new form of scientific governance based on dialogue, interaction, and participation throughout the research process rather than the unidirectional knowledge transfer of completed research results from researchers to policy makers, practitioners, and members of the public. So initially the people who were engaged in scientific development and scientific discovery said you do not know what you are to what we are talking about.

We will tell you what to put in your policies, how to structure your policies, and you do it and then came the dialogic turn, dialogic turn, so you actually take the opinions of people into account and then do things hand-in-hand with the policymakers, the practitioners, and the stakeholders the people who are going to benefit from the communication and then in and through this participation a new form of dialogue is created and that dialogue eventually leads to the formation of or the development of information that the larger group of people can consume and that in turn feeds into the scientific communication okay.

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Goal of scientific communication sustainability is sustainability communication has the role of sensitizing a scientifically generated awareness of problems to questions of sustainable development and introducing them adequately into the public discussion. We need to sensitize the public, we need to generate a scientific awareness through scientific methods in response to the problems that the society is experiencing only then will it be acceptable, and then the public also has to be involved in this discussion okay.

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Some challenges to sustainability, communication sorry it should not be sustainability to communication it is challenges to sustainability communication. So this is the invisibility of causes, we do not know what is causing the problems we have distant impacts how far will our efforts reach lack of immediacy and direct experience of these impacts, so we do not know how what.

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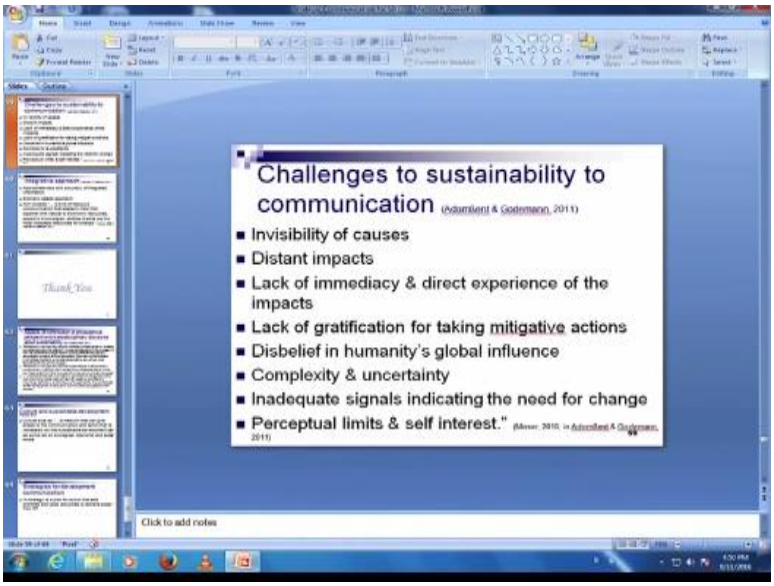

We are doing will affect what it will or how it will affect what we are doing so that immediacy is not there.

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Then lack of gratification for taking mitigative actions, if I do something now how will it impact what happens in future, disbelief in humanities global influence, complexity and uncertainty, inadequate signals indicating the need for change, and perceptual limits and self-interest eventually how will it benefit me, how will lay out what impact will it have so all of that.

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Contributes to the challenges to sustainability communication.

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And now the bottom line here is the integrative approach primarily refers to the appropriateness and accuracy of integrated information from all these spheres that is risk, that is scientific communication and environmental communication. It is a scenario based approach it is not a sense a specialty or specialization based approach the communication happens, you know according to the scenario the community is experiencing.

And it aims towards a kind of resource communication that keeps in mind that together with natural and economic resources people's knowledge, abilities and skills are the most important resource for change of the community is the only thing that matters. We need to listen to the community we need to understand how different aspects of what the community is experiencing affect the community and we respond to it in a manner that is acceptable to the community. So that is the integrative approach and we will stop here today and we will take it from here in the next session, thank you very much for listening.