Disaster Recovery and Build Back Better
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Lecture - 11
The Built Environment Professions in Disaster Risk Reduction and Response

Welcome to the course disaster recovery and build back better.

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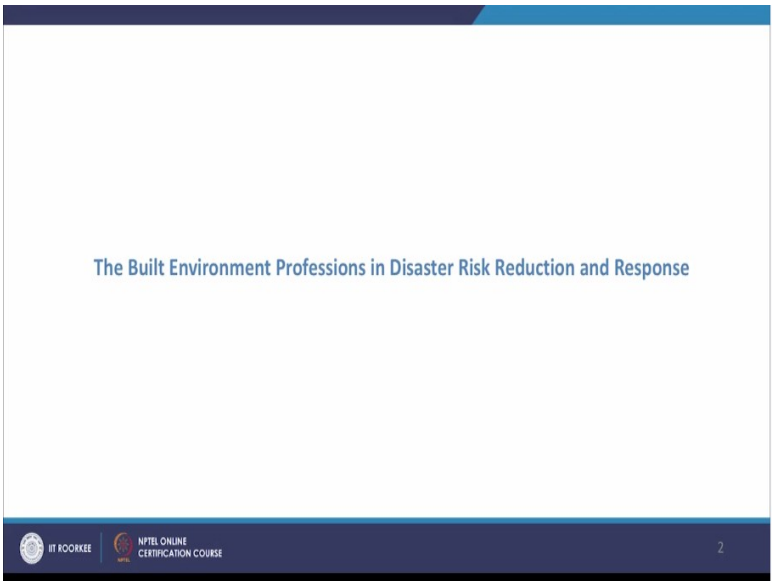

Today, we are going to talk about the built environment professions and disaster risk reduction and response. Until the Tsunami recovery, there has been a lot of professionals get involved either in the terms of voluntary organizations or through any development agencies or any local NGOs. So, many of the professional youngsters and even individuals or even groups they try to get involved under the immediate impact of a disaster.

They try to get involved and try to contribute to some sort of assistance but then especially from the built environment because we are trying to talk from the built environment perspective, there are various disciplines comes within that bigger umbrella. My own experience when I was in Devanampattinam village, and I was documenting a few fisherman villages, I have come across even many dentists is involved in the reconstruction part of it in the smaller fisherman Hamlets.

So, they were coordinating with some NGOs, so which means even a medical body apart from his medical profession how he is engaged in a different manner has actually you know

and one side it is exciting to see how a different profession is contributing to the shelter process. On another side, I also have to see how the relevant processes are not on the table you know relevant professions are not in the discussions. So, in that way, we can see a good overlap of various professions like what is the role of an engineer, what is the role of an architect, what is the role of a valuer you know.

So, all these come, professional individuals come together to contribute for building back better. So, this is where to understand this jargon and to classify various categories and roles and responsibilities of each profession and how they can contribute to the disaster risk reduction and more focused into the built environment practice. There is a guide to the corporates, all the NGOs who are working in the humanitarian sector.

It was developed by the Max Lock Center in University of Westminster, London where I was doing my doctoral research at that time and my supervisor Tony Lloyd-Jones and his team they have contributed a guidebook for the humanitarian agencies.

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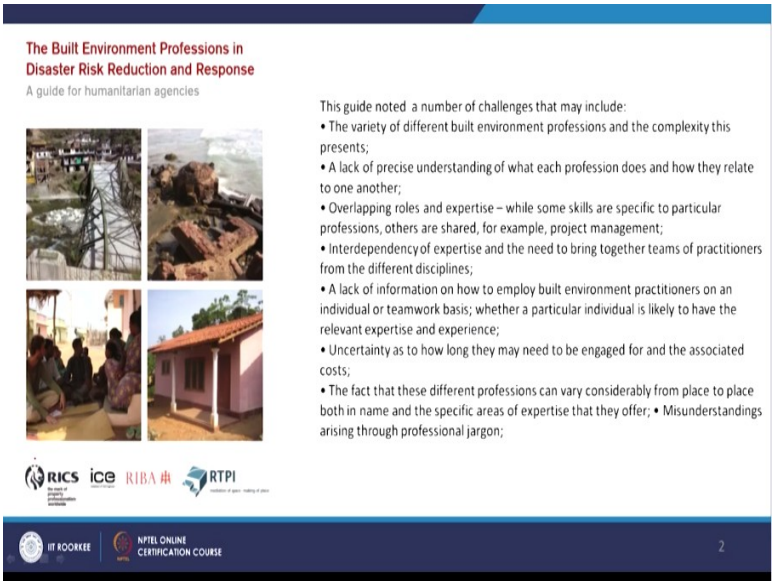

What is the role for whom and when? So, this is the report which you are looking at it, the built environment professions in disaster risk reduction and response. And this guide have noted a number of challenges. For instance, it presents the variety of different built environment professions and the complexity this presents; because you can see an architect, a planner. A planner's pre-qualification as an architect who have turned into a planner and an engineer can turn into a planner. So that is where a very complex situation of understanding

the professionals contribution and its scale on the spatial scale, a lack of precise understanding of what each profession does and how they relate to one another.

In our built environment education, especially in the architects training, we do have training on the surveying and leveling. But then to what extent it is useful in your daily practice and especially in the disaster recovery programs to how you can actually take away the knowledge from the surveying and how you can implement in the architectural practice. What is the limitation and what actually the surveyor who have done his qualification and what is his role and a person who has a smallest contribution what is his role, you know this matters a lot, this was a complexity.

There is always overlap because everything is interdisciplinary. The architecture has a part of planning, an urban design and on one side you are talking about the structural engineering, one side you are talking about the surveying. So, this interdependency of expertise and the need to bring together teams of practitioners from different disciplines. There was a great need that we have to work with different teams of experts.

Also, a lack of information and how to employ built environment practitioners on individual or teamwork basis, whether a particular individual is likely to have the relevant expertise and experience?. In fact, one has to look at what kind of information do you have. Especially, when you have to hire some agency or form a team of architects or planners to document something or to do a habitat mapping exercise.

What kind of relevant expertise one has to look at it, what kind of relevant experience one has to look at it. If we ever look at any recruitment website of United Nations, UNDP or Aga Khan Foundation or any other agencies who are working on the humanitarian shelter programs, they often describe that if you have an experience working in the humanitarian sector, how many years?

We have the project management on this, irrespective of whether you are an architect, whether you are a doctorate candidate or if you are whatever the rich qualification you have, but they look for whether you have worked in this context or not, whether you have some apprenticeship where you have so which means that forms a basis of an understanding of the professional to get an understanding of the reality of the disaster context.

Uncertainty as to how long they may need to be engaged and for the associated cost. If you have to engage an architect or an engineer, how long one can engage? Is it throughout the reconstruction process? Is it from the relief stage to the post-disaster recovery or the whole reconstruction stage? To what stage one has to be engaged? Which profession has to be engaged in what point? Where are the pickup and drop points of that particular profession?

Where are the travel together partnership positions? The fact that these different professions can vary considerably from place to place both in name and the specific areas of expertise that they offer and also there are many misunderstandings arising through professional jargon.

Here, this particular guide brings the Hyogo Framework for Action and built environment practice. It talks about the guiding principles, what have been listed under the Hyogo Framework for Action and how it is relevant to the built environment practice and what kind of activities one has to look at it.

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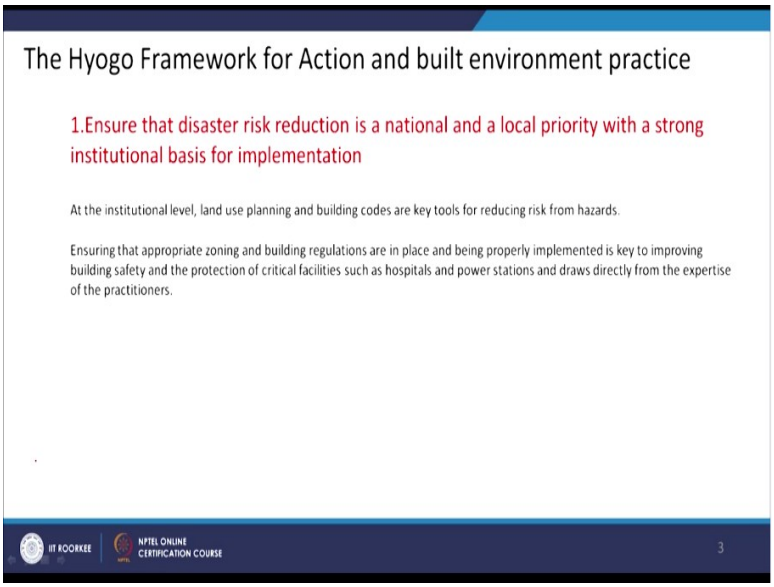

The first point talks about ensure that disaster risk reduction is a national and the local priority with a strong institutional basis for implementation. I would like to share my own experience. When I was doing my architectural thesis on disaster recovery in Gujarat, many of my friends advised why are you taking that project, do you really have a future in that profession?

And because unless you may have to wait for a disaster because there is not much of awareness during my time whether this field has such a large gateways and different disciplines to work together. And later on after the Tsunami, the many of the state governments and the national governments and the international sectors, they have emphasized that it has to be a national priority also with the local priority.

And there should be a strong institutional network, and that is where the National Institute of Disaster Management has been formulated and then you can see the State Disaster Management Authority, you have the District Disaster Management. So, there is from nation level to the state level, and you have the local level that whole hierarchy has been established.

When all these has to work in an instrumental level and also the institutional level, which can formulate land-use planning, the building codes, the control mechanisms which can reduce the disaster risk from hazard. Also, ensuring that appropriate zoning and building regulations are in place and being properly implemented. In India, until the Tsunami, no one have realized the importance of coastal regulation zone which was earlier formulated in 1991.

And it has been revised 19 times still there, and even then there is not much serious implication that people started building near the sea-shore, and that is where many of the houses have been damaged in the low-lying areas. So, one has to understand that importance of this policy level decision-making process and how it can be taken to the local level implementation strategies.

That is where we talk about the building safety and the protection of critical facilities such as hospitals and power stations and draws directly from the expertise of the practitioners. So, under the any immediate impact of a disaster one has to look at how you can safeguard the people, what are the facilities the basic like hospitals, schools or where you can put them, how the sanitation facilities? The immediate response could be facilitated, so all this has to be taught.

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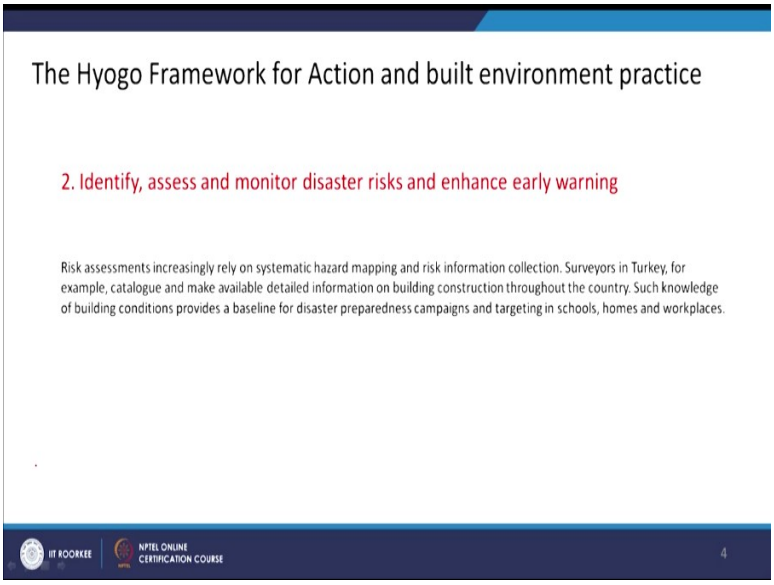

Identify, assess, and monitor disaster risks and enhance early warning. So, one has to look at the risk assessment process I think in the whole course we are talking about many of our lectures are focusing on the risk assessment process which rely on systematic hazard mapping and risk information collections, how the historical layers of the risk also talks about yes this is a prone area and inundation maps.

And in Turkey, surveyors catalogue and make available detailed information on building construction throughout the country. So, they make a catalogue that which part of the region and which is affected by the earthquakes because a fault line goes in that region and such kind of catalogues will help, and it can actually give a meaningful solutions for any local authority to work on a disaster preparedness plans or which could also talk about targeting schools and homes and workplaces.

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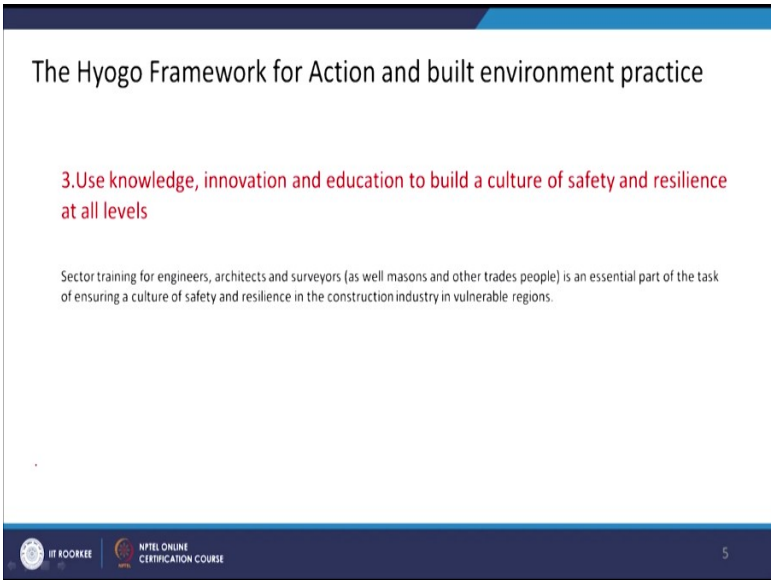

The third principle is use knowledge, innovation, and education to build a culture of safety and resilience at all levels. So, we also need to talk about the sectoral understanding, the sectoral training of engineers, architects, and surveyors also the masons you know how to train them. That is where in Hunnarshala you can see that the NGO's have been incorporating the skill development programs.

How they train the rural communities so that they can also secure skill as well as the employment and they can enhance their livelihoods. So, it has to become an essential part of culture of safety and resilience in the construction industry, especially in the hazard-prone areas.

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