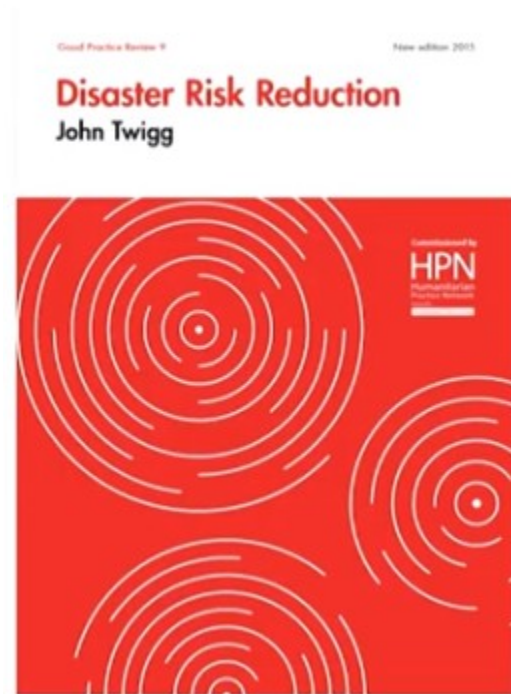


Disaster Recovery and Build Back Better
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Lecture – 15
Frameworks

Welcome to the course disaster recovery and build back better. I am Ram Sateesh Pasupuleti, assistant professor, department of Architecture and Planning, IIT Roorkee. Today I am going to discuss with you about a few of the frameworks which are relevant to the DRR which is disaster risk reduction, and it covers both from a theoretical understanding to the project and the implementation aspects and also with the kind of community management process as well.

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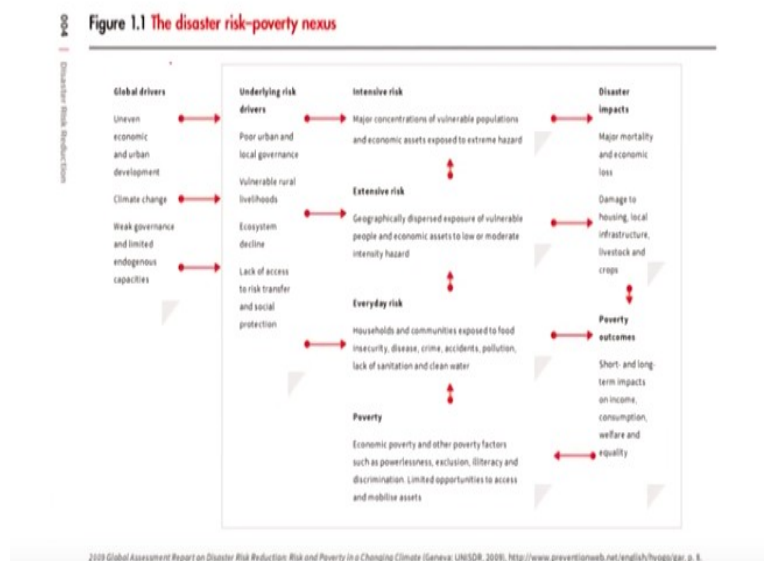


And whatever the frameworks which I am going to talk to you about, it is based on a huge compilation of various frameworks and understandings by John Twigg, especially on the disaster risk reduction. And it is published in the global practice review in volume 9 and Humanitarian Practice Network which has been commissioned by the humanitarian practitioner. John Twigg, he is part of the UCL Bartlett, and I am going to discuss a few things.

Of course, there are been some frameworks which has been discussed much earlier from 1980s but what he tried to do is he tried to bring all of the current literature into 1 big document which actually talks from the theoretical understanding, the terminologies, the institutional networks, and the project management part of it, and the community asset management. So there is a variety of schemes which he tried to address in 1 holistic approach.

First of all, we have to understand with the especially from the disaster risk context and also with the developing countries context. Countries like India which are more to do with the poverty because India, Bangladesh, Pakistan, Sri Lanka, Nepal so we have along with the disaster risk reduction we also have a challenge of the poverty reduction. So let us see how this whole process is going to work. First of all, it starts from the global drivers.

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Because first of all, we are the whole geography has been unevenly distributed. There are rich countries, there are poor countries, there are resourceful countries, the resourceless countries and that have actually as a very diverse economic indicators into it. Also the climate change both from a macro level point of view and the meso level aspect of it. Also come into the governance and limited endogenous capacities.

So even the governance because how one particular community or society is unable to handle shocks and stresses and that is where a system how it fails, so that is where the time talk about

the governance. And these are all actually formulates the underlying risk drivers. When we talk about underlying risk drivers, we talk about the poor and urban local governance and the vulnerable rural livelihoods because especially with the climate change.

Let us say you have an impact of cyclones or floods and which has affected the whole farming industry and farming sector I can say but then how the farmers are unable to cope up with their crops because of the low economic development process and how the market is dribble to destabilize their economy and all these aspects that is talking about the vulnerable livelihoods

Also the ecosystem declines, so due to these disasters, how gradually not only the disasters as a continuing the development processes and its impact on the environment and the ecosystems and its services, and how they are actually degraded, and in turn it is causing a kind of irreversible damage to the human habitats and a global climate. Also lack of access to risk transfer and social protection, so these are the kind of underlying risk drivers.

So they tried to classify into intensive risk when you say intensive risk major concentrations of the vulnerable populations and economic asserts exposed to the extreme hazard. Whereas the extensive risk, when he talks about the extensive risk, he talks about the geographically dispersed exposure of vulnerable people and economic assets to low or moderate-intensity hazard. So this is talking basically on the exposed aspect of the vulnerable society or a particular group and their assets.

Everyday risk, so when we say everyday risk, we are talking about households and communities exposed to foods, insecurity, disease, crime, accidents, pollution, lack of sanitation and clean water. Like if you ever travelled in the developing countries many people even still doubt whether the water we are drinking is safe or not. So which means we are even not able to trust our own surroundings.

And also the surrounding atmosphere the environment is not also giving that guarantee that that is more safe you know, whether it is a crime, whether it is an accident, whether it is an industrial accident because of safety issues, whether it is a pollution aspect like in the moment you come to

the city of Delhi you actually understand that kind of pollution, right? And similarly the food insecurity.

When we talk about the food insecurity, we see a slow phase disasters like the drought, you know how it can actually yield to the reduction of crops and how it will have an impact on the markets and how it turn impact on the livelihoods of the poor sector. So this is a kind of everyday risk it is not just only happening during an event or anything, but it is a common problem for the developing at least the developing countries.

Poverty, economic poverty and other poverty factors such as powerlessness, exclusion, illiteracy and discrimination, limited opportunities to access and mobilise assets. So, in fact, we have many technical inputs you know I will show you a small example when we were working in Tamil Nadu, we went to a house and we could able to see that we have built a toilet inside the house and the moment we went we were unable to get even inside the house.

Because the fishermen community what they did was they did not understand it was a toilet and they started putting a whole the fish dirt into that, and it was like foul smell and people are living in a very unhygienic environment. So what is the reason behind it? It is basically their lack of awareness on what a toilet is and what how a toilet functions. And similarly in a system like different cast systems, different political systems when they are actually living together.

And it is also about haves and have nots, power and powerful and powerlessness. So in fact, when we talk about how certain societies have been excluded in the development process or in the dialogue of the development you know these all things are actually the risk processes and poverty adds much more of the excluded aspect of it, and they also talks about the access to these assets and the resources.

So that is how we have this disaster impacts and poverty outcomes. So disaster impacts because these people live in this kind of risk factors situations that is where the majority mortality and economic loss. Let us say for women who have lost their lives in the tsunami many of them were woman because they are lack of certain skills even swimming or protecting themselves so which

So that is where it has given a particular group has been targeted. And similarly an economic loss especially with drought or the flood impacts where people have lost their agricultural fields, damage to local housing infrastructure, livestock and crops. Whereas the poverty outcomes, when we say about poverty outcomes, it talks about the both short, medium on long term impacts on income, consumption, welfare and equality.

When we talk about poverty, obviously we are talking about the abilities and the capacities, the disaster risk reduction capacities in richer and poor countries.

Figure 1.3 The disaster cycle



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capacity to enforce them is lacking. It is true the evidence is we have the coastal regulation zone from 1991, it has been revised 19 times until the wakeup of the 2004 tsunami, many villages or the many local governments did not even realise that this regulation do exist and this is what we need to do.

We have to move away from the high-tide line 500 meters or 200 meters away so which means there is no strict enforcement of this until we face that impact of the disaster. Here they have effective early warning and the information mechanisms in place to minimise the loss of life. So that is where I talked about the distribution of power you know distribution of in the powerful country that is where they have these instruments and mechanisms and the network.

How it can, how the information has been disseminated from one area to another area. I will tell you some examples in the poorer countries where the information has not been passed, and it has not been people who have not responded. Lack of comprehensive information systems linked to pre-emptive response okay. For instance, the same tsunami it took 180 minutes to get into the Tamil Nadu state or in the southern Indian side.

In 3 hours, it took the waves, for the waves to reach 3 hours (180 minutes). If that information has been passed out and that information has been from central to the state, to the district level, and to the local level, we would have saved many lives we have saved many livestock and as well as animals. Have highly developed emergency response and Medicare systems. Divert funds for development programmes to emergency assistance and recovery.

Here they have more funds and also the medical care systems are accessible like in some of the rural places where these particular disasters to gets affected. Normally in a regular development context itself how many of the rural villages do have some medical facilities or a good professionals. So in the time of disasters, even access to that kind of medical infrastructures also becomes difficult.

Insurance schemes spread the burden of property losses. Here in a developing countries, insurance is one big thing you know that is where the whole they try to insure their home, their

properties, their life so, in that way the family is protected, the business is protected. But here we hardly give anything much about the property losses and livelihoods, and this is very important that one who can even think on these kinds of instruments, financial instruments.

Where we can actually safeguard our properties even in the case of disasters. So in that way, your continuity of your life will be there. And the David Alexanders Diagram of the disaster cycle. He talks about the impact, and one is the before impact and the after impact, and in the before, we talked about the mitigation and the preparation, and after the impact, we immediately talk about the response and the recovery. So which again has to somewhere related to you know how this developed the response process, and the recovery process has to be connected with the usual development process and that is where mitigation has to be enforced later on as well.

And here is very quiet and calm in the quiescence and pre-impact situation and the emergency situation, restoration situation and the reconstruction situation you know so this is a kind of time taking process. You know how it was when nothing has happened people remained calm, they did not bothered about what is going to happen, how to prepare for it or how to, so even in the pre-impact situations many at times people do not realise what it is going to happen. But in certain occasions like you know the drought aspect you know certain continuous disaster, they see that yes there is some kind of impacts may start. And that is where after the impact we think about the emergency, and the relief operations works on.

And this has to actually look at how these 5 stages and has to be coordinated and planned accordingly. And that is where the disasters and development as Frederick Cuny had pointed out the disasters and development are the integral processes it is they are not separate.

The progression of vulnerability, this is by Ben Wisner.

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