

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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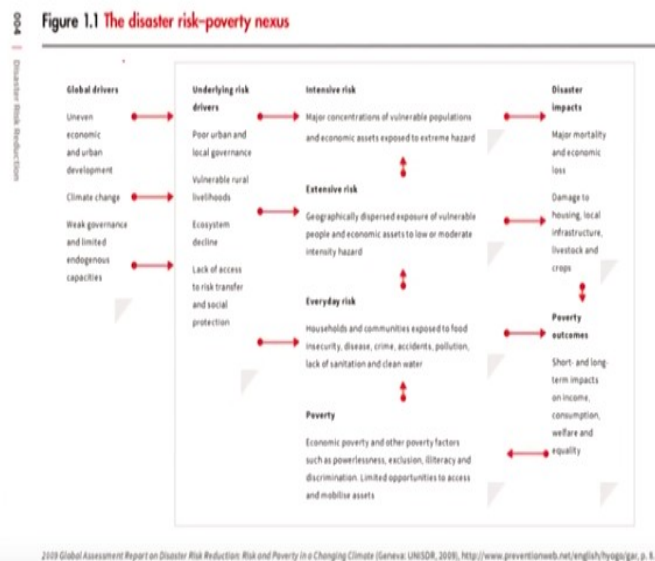


And whatever the frameworks which I am going to talk to you about, it is based on a huge compilation of various frameworks and understandings by John Twigg, especially on the disaster risk reduction. And it is published in the global practice review in volume 9 and Humanitarian Practice Network which 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 all actually formulate 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 unable 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 assets 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

means there is a skill or there is a limited access for them in facing the risk, facing that particular shock.

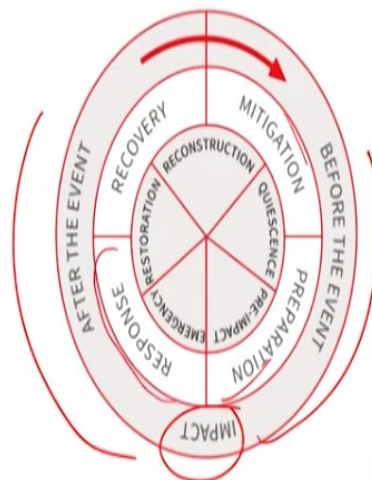
So that is where it has given a particular group has been targeted. And similarly an economic loss especially with drought or the flood impacts where people have lost their agricultural fields, damage to local housing infrastructure, livestock and crops. Whereas the poverty outcomes, when we say about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

So this is the basically the 2009 global assessment report on disaster risk reduction, which is risk and poverty in climate change which has been discussed in Geneva UNISDR and this is a disaster risk poverty nexus. When poverty becomes an integral part of the disaster risk and the vulnerability component, and in the context of developing countries this aspect cannot be secluded from the disaster discussion.

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.

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Figure 1.3 The disaster cycle



© Alexander Drotos, Disaster Risk Reduction and Management, Terra Publishing, 2003, p. 6.

In the richer countries, they have the regulatory frameworks to minimise the disaster risk which are enforced. Here in poorer countries, the regulatory frameworks are weak or absent, or the

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.

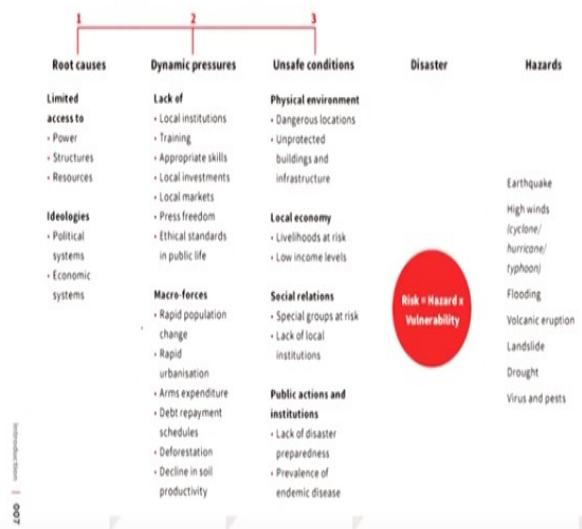
And here is very quiet and calm in the quiescence and pre-impact situation and the emergency situation, restoration situation and the reconstruction situation you know so this is a kind of time taking process. You know how it was when nothing has happened people remained calm, they did not bothered about 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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Figure 1.2 The progression of vulnerability



And they talk about they have come with the understanding of this framework is called a pressure and release model. So we have the root causes as I discussed with you, that the limited access to the power, structures, resources. Ideologies where the political ideology, the systems, political systems and economic systems and how these root causes can actually create certain add-on to the dynamic pressures.

For example, when we have the institutional lack of institutional training, appropriate skills, local investments, even how the markets will also create some kind of everyday issues. And the press freedom you know like if you take the example of North Korea you know how what is happening in North Korea may not be known to the whole world you know how to communicate with this, the press freedom, ethical standards in public life and these are more of the everyday processes.

The other aspects are the macro-forces, the demographic change you know the rapid population change, rapid urbanisations and the amputation expenditure, the debt repayment because we have been taking lot of loans from world bank and other things. So how we are able to, how this particular debt is increasing, and it is adding to the burden of the citizen's lives and their livelihoods.

Deforestation because of the industrial and expansions, physical expansion of cities, and how the deforestation is in turn affecting the climate change and which is again relating to the DRR. Decline in soil productivity you know, in many at cases we have this how the agriculture have been converted into aquaculture, and again aquaculture has been at some point they come into losses, and again they want to come into agriculture you know how they face these difficulties and how it will reduce the soil productivity as well.

However, not only that it will also go with the land use like imagine you would talk about a industrial land use and how it can pollute the surrounding soil nature, that is also an important, and it will affect certain species of trees and flora and fauna, this how the result into the unsafe conditions.

Where we talk about the dangerous locations people live in the physical dangerous locations, unprotected buildings and infrastructure, maybe many of in poorer countries, they do not have even money to safeguard those existing structures. People tend to live in the places where they are habituated to.

Livelihoods at risk and the low-income levels like today we are looking case of Venezuela, how the situation, the financial situations have been you know disrupting the whole community in a global level, and it is also relating how even on one side when the economy falls down how it have impact on the whole society as a whole.

Social relationships, special groups at risk maybe a target groups, lack of local institutions. And when we talk about the public actions and institutions, this is where the preparedness because majority of the political institutions they do not rely on, they do not fund for the preparedness program because that is not much visible because they are not sure whether disaster is going to happen or not.

But the most visible programs are mostly focused on after the disaster. Yes, we have constructed this many houses, we have given this many boats, we have given this many livelihoods, but

before what are the training programs, what are the early warning systems you know how we can actually dedicate our budget in the preparedness programs.

Prevalence of endemic diseases; so this is all sets up the setting for getting the society prone to an hazard, and then this builds a pressure to the existing you know the natural hazards and that is where a push and pull process works you know that is one side the hazards and one side this the continuous dynamic pressures, the root causes on the unsafe condition, and how they actually bring the pressurized situation that is where Subhajyoti Samaddar might have explained, $\text{risk} = \text{H} \times \text{V}$, that is how when hazard has been added with the vulnerability that is where the risk component is being visible.

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Hyogo Framework for Action 2005–2015

1. Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation.
2. Identify, assess and monitor disaster risks and enhance early warning.
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.
4. Reduce the underlying risk factors.
5. Strengthen disaster preparedness for effective response at all levels.

So coming to the frameworks, when we talk about the Hyogo Framework for Action from 2005 to 2015 and these are the 5 principles which they have established. One is ensure that disaster risk reduction DRR is a national and local priority with a strong institutional basis for implementation, so it is not just only a national priority it has to go with a national and as well as a local priority.

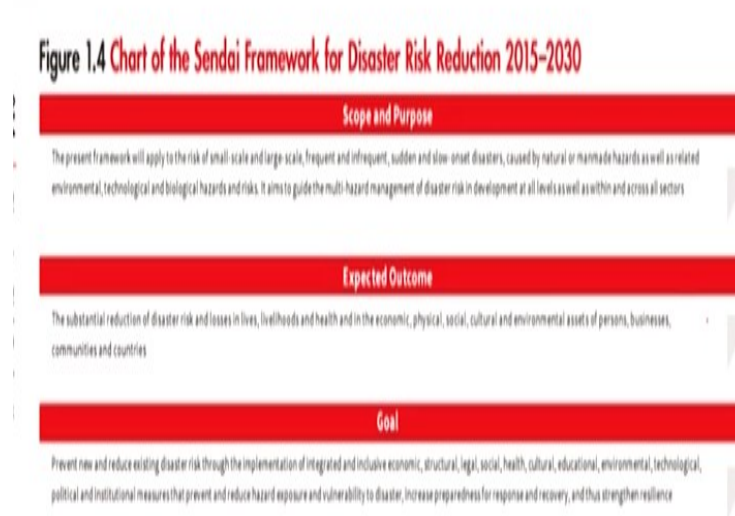
Identify, assess and monitor disasters and enhance early warning systems.

Use knowledge, innovation and education to build a culture of safety and resilience at all levels. So how we can build this culture of safety through the preparedness programs.

Reduce the underlying factors; what are the strategies that we can implement to reduce these underlying root causes?

Strengthen the disaster preparedness for effective response at all levels you know that is not only at one unit or one local level, but it has to work out a different scales, different levels.

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And follow up on the Hyogo Framework for Action, Sendai Framework for disaster risk reduction sets up like this 2015 to 2030, and I will try to present into few slides on how this whole scope and purpose to the guiding principles. So this will apply to the risk of small scale and large scale, frequent and infrequent, sudden and slow-onset disaster caused by natural and man-made hazards as well as related environmental, technological and biological hazards and risks.

It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors. Here we have moved our dimension not just only focusing on a particular type of a disaster, it is not just only earthquake, it is not only by a drought, it is not by only tsunami. So now we have to look at the multi-hazard approach as well. Like for instance in

Uttarakhand 2013 flood, a cloudburst have resulted in the floods, and floods have resulted in the landslides. So there has been a very multiple hazard-prone areas okay.

So that is how we are not just dealing only with one set of disaster, but it has to go with the multi-hazard management of disaster risk in the development at all levels both at site level, the specific site level and also the regional level and also various sectors. What is the outcome of this? the substantial reduction of disaster risk and losses in lives, and livelihoods and health, and economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

So they need to improve these strategies how we can reduce these losses. And the goal, we talk about the prevent new and reduce existing disaster risk through the implementation of integrated and inclusive these are the two important words and integrated DRR and inclusive DRR.

It talks about the economic, structural, legal, social, health, cultural, educational, environment, technological, political and institutional measures that prevent and reduce hazard, exposure and vulnerability to disaster so that it can increase the preparedness for response and recovery thus strengthening the resilience.

So the targets which they have set up is about they need to reduce the global disaster mortality by 2030. Aiming to lower average per 1 lakh global mortality between 2020 and 2030 compared to 5 and 15 so they are trying to set up some targets.

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Targets						
Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2010-2015	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2010-2015	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Priorities for Action			
There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas.			
<p>Priority 1</p> <p>Understanding disaster risk</p> <p>Disaster risk management needs to be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment</p>	<p>Priority 2</p> <p>Strengthening disaster risk governance to manage disaster risk</p> <p>Disaster risk governance at the national, regional and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national</p>	<p>Priority 3</p> <p>Investing in disaster risk reduction for resilience</p> <p>Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social,</p>	<p>Priority 4</p> <p>Enhancing disaster preparedness for effective response, and to 'Build Back Better' in recovery, rehabilitation and reconstruction</p> <p>Experience indicates that disaster preparedness needs to be strengthened for more effective response and ensure capacities are in place for effective recovery. Disasters have also</p>

And again we talk about this reduction of this affected people, reduce direct disaster economic loss in terms of GDPs and also disaster damage to critical infrastructure and disruption of basic services. And as well as substantially increase the number of countries with national and local disaster and you know how we can actually enhance the international cooperation through adequate sustainable support to complement the national action. So how the national action plans can actually relate with the international cooperation as well.

And the increase and availability of access to multi-hazard early warning systems and disaster risk information by 2030, so they have set up these targets. So what are the priorities of action? Number one, understanding the disasters risk in the first stage, number 2, strengthening the disaster risk governance and the manage disaster risk.

So how we can look at the management and the governance perspective. Then investing in disaster risk reduction for resilience so this is where both the structural and non-structural measures are essential to enhance the social and economic aspects and enhance disaster preparedness for effective response and to build back better into both recovery, rehabilitation and reconstruction.

So that is where these are the kind of set of priorities which they have established.

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Priorities for Action (cont'd)		
and local frameworks of laws, regulations and public policies that, by defining roles and responsibilities, guide, encourage and incentivize the public and private sectors to take action and address disaster risk	health and cultural resilience of persons, communities, countries and their assets, as well as the environment. These can be drivers of innovation, growth and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses and ensure effective recovery and rehabilitation	for effective recovery. Disasters have also demonstrated that the recovery, rehabilitation and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to 'Build Back Better' through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases

Guiding Principles						
Primary responsibility of States to prevent and reduce disaster risk, including through cooperation	Shared responsibility between central Government and national authorities, sectors and stakeholders as appropriate to national circumstances	Protection of persons and their assets while promoting and protecting all human rights including the right to development	Engagement from all of society	Full engagement of all State institutions of an executive and legislative nature at national and local levels	Empowerment of local authorities and communities through resources, incentives and decision-making responsibilities as appropriate	Decision-making to be inclusive and risk-informed while using a multi-hazard approach
Coherence of disaster risk reduction and sustainable development policies, plans, practices and mechanisms, across different sectors	Accounting of local and specific characteristics of disaster risks when determining measures to reduce risk	Addressing underlying risk factors cost-effectively through investment versus relying primarily on post-disaster response and	'Build Back Better' for preventing the creation of, and reducing existing, disaster risk	The quality of global partnership and international cooperation to be effective, meaningful and strong	Support from developed countries and partners to developing countries to be tailored according to needs and priorities as identified	

And that is how they sort of establish some kind of guiding principles you know how this whole the society could be engaged, how the build back better has to be, the build back better for preventing the creation and reducing existing disaster risk. So it is not just only taking them to the back but how we can improve things better. That is how the whole understanding talks about the empowerment you know. So DFID defines resilience.

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The UK Department for International Development (DFID) defines disaster resilience as:
the ability of countries, communities and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses – such as earthquakes, drought or violent conflict – without compromising their long-term prospects.

RESILIENCE

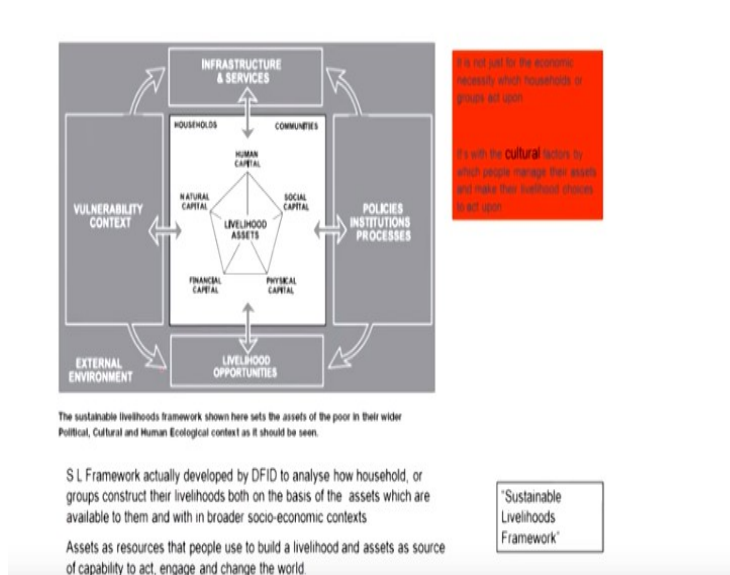
So the word resilience has become an important dimension of the DRR and this is what the DFID defines as the department for international development of UK. It says the ability of countries, communities, and households to manage change, by maintaining or transforming

living standards in the face of shocks or stresses such as earthquakes, droughts or violent conflict without compromising their long-term prospects.

So you do not compromise their long-term prospect, but still they are able to manage you know what kind of change, what kind of stress or a shock which has come to that particular society or a country or a community and how they could be able to look at that without compromising their long-term prospects. There are few more frameworks which I let us go through; one is the sustainable livelihoods framework.

This has been developed again by the DFID in 1999.

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And you can see that it talks about the capital because they are referred as an asset framework as well and how the individual or a community, how they use, they, I would say like how they construct their livelihoods you know how they improved, enhance their capacities and because sometimes let us say the human capital is more accessible for them sometimes the natural capital. So in that way communities tend to access these resources in whatever the capacities they have.

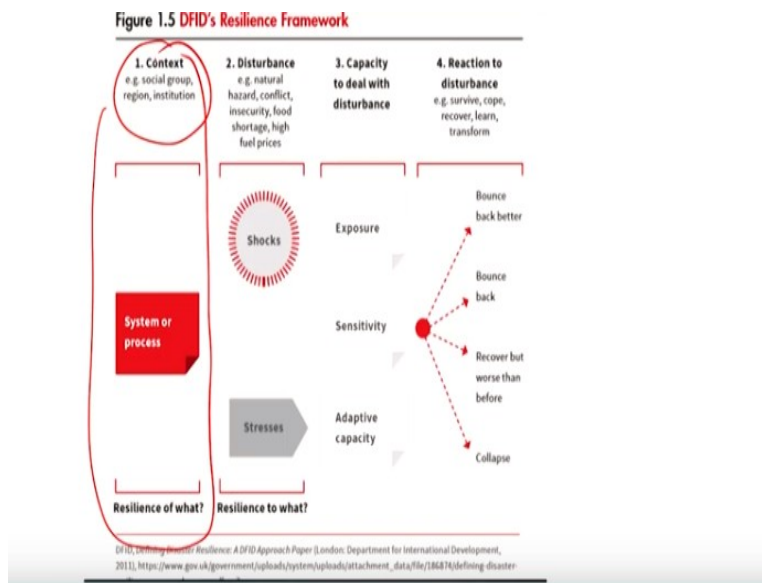
And that is how they sustain they livelihood opportunities. Like for instance in Ghana, which has much of gold resource, but is it a rich country? So which means that is where it is talking about

where there is certain limitations and even having natural resources, how the country is still lacking with some abilities you know how the capacities.

So then as we discussed in the vulnerability context, how it also have a give and take aspect of this influencing these abilities you know because these are the how he manages, I mean the community manages to access these resources. So vulnerability context itself or the poverty context itself acts as an underlying phenomenon on to making these access work and do not work. Infrastructure and services and how it have a direct implication of these access.

And then the governance situation, the policies, institutions and the processes how they actually work. So it is not just only because of this natural, human, social and physical and financial capital. Sometimes we also have to understand it is also true the cultural factors which people manage their assets and make their livelihood choices to act upon.

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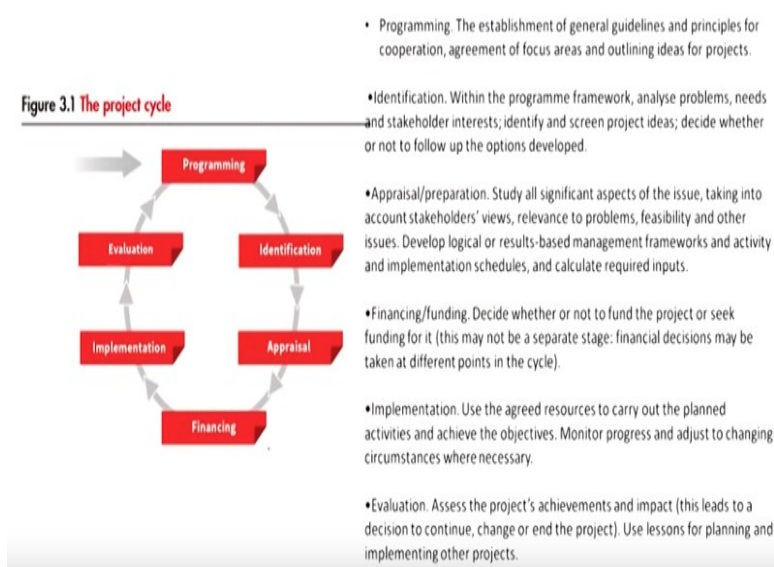


Here we call about DFIDs resilience framework, so one is the first part which talks about the context and where the context talks about the whole system and the processes and that is where when the context where the vulnerability context, where the political context, where the demographic context, where the social context whether how it geographically positioned, what kind of political institution.

These frames as a part of a system or a processes and then how the disturbance comes as a stress and the shocks and how the capacities to deal with these disturbance like how they are exposed, how they are sensitive you know it talks about exposure, sensitivity and the adaptive capacity, how they can adapt to this. And this is where the reaction to these disturbance you know so bounce back better, bounce back, recover but worse than before, collapse.

So these are the ways how the whole capacity we will talk about how they are able to respond to these stresses and shocks. So when we talk about resilience, first of all resilience to what? resilience by whom? resilience when? these all the time factor, the context factor and the position factor is very important.

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When we talk about the project cycle in the disaster context, these are the 6 aspects which we need to look at the programming, identification, appraisal, financing, implementation and evolution. This is the most important which many of them does not look into it. Because in the programming it actually sets up the general guidelines and principles for cooperation, agreement of focus areas so it will also define the project lay.

Identification so here we will identity what are the real problems you know analyse the problems, what are the needs in the stakeholder interest, how they project ideas, how to decide on, and this is where the appraisal you know it talks about how it can consider the accounts of

stakeholder views and relevances and it talks about the finance part of it. At the end of the day, we need to look at the funding aspect.

Who is going to promote, how much we have, how to bring, how to pull out funding from the crowdsourcing or the community sources or an NGOs or an external so this whole thing has to be looked at and mainly the financial decisions may be taken at different points in the cycle, so one has to keep reviewing intermediately?

And implementation so when we say about the agreed resources and how we going to implement these planned activities. So this is where we need to see the monitor progress and adjust to changing circumstances. Imagine you have started some program and imagine some calamity have occurred again. So how we have to adjust with that? how is the whole project management schedule. After finishing it, one has to look at what kinds of projects, achievements and the impacts and what kind of learnings it has. So that it can take out to other projects you know. So these are the lessons one has to take it.

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Box 4.2 Government roles in DRR

Governments play a number of roles in DRR:

- As providers of DRR goods and services (e.g. maintaining early warning systems, emergency response services, evacuation shelters, hospitals).
- As risk avoiders (e.g. ensuring investments in public infrastructure and facilities, such as roads or schools, are protected against environmental hazards).
- As regulators of private sector activity (e.g. creating and enforcing building codes and land use regulation).
- As promoters of collective action and private sector activity (e.g. public education about preparedness and business continuity).
- As coordinators of multi-stakeholder activities and DRR partnerships.

E. Wilkinson, *Transforming Disaster Risk Management: A Political Economy Approach* (London: ODI, 2012), <http://www.odi.org/sites/odi.org.uk/files/odi-asset-s/publications-opinion-files/7555.pdf>.

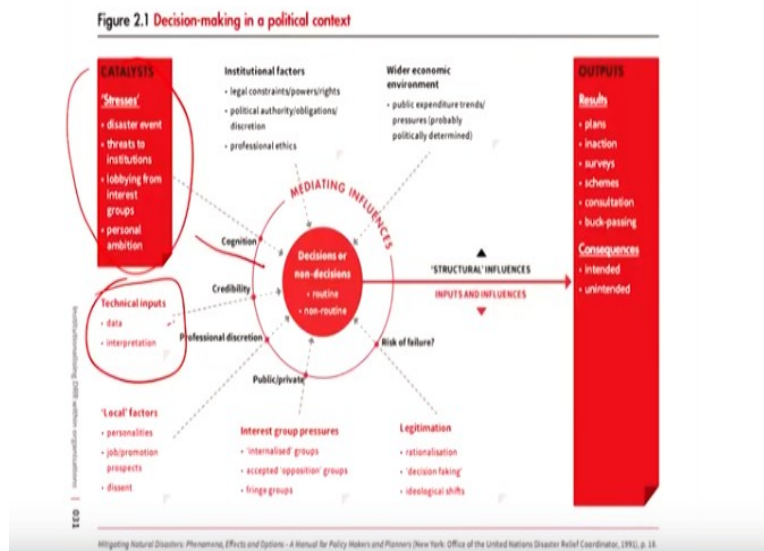
And they also list out the government roles in DRR. So it plays a number of roles, one is as a providers of DRR goods and services for instance, maintaining early warning systems, emergency response, evacuation shelters and the healthcare sector. As risk avoiders, ensuring

investments in public infrastructure are protected in environmental hazards. So all this public infrastructure, how they are able to protect against these hazards.

As a regulators for the control dimension of it where of private sector activity because many agencies come forward for disaster maybe it becomes a business, but a government has to look at how to monitor, how to control this. As a promoters of the collective action and private sector activity that is where the public education and preparedness and business continuity. As coordinators, so they are coordinators of multi-stakeholder activities and DRR partnerships.

So it is both not only the public sector but also the public-private, local and national and international coordination. So how government plays an important role. So when we talk about the decision making in a political context, how this whole cycle comes. Like for instance, you have the stresses which talks from an event, and there is a technical inputs which the data different sets of data come into forms the credible.

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So this is where the cognition part of it, this is where the credible sources credible information on the professional discretion. The local factors viz, personalities, job prospects, descent so these all the professional discretion and the interest, public and private because there is an internalised groups, accepted opposition groups, fringe groups so if you want to implement something it is always in a democratic environment, different oppositions have a different word, different stake

in it and there is lot of pressures on the process you know and the institutional factors where the legal constraints, political authority and also the professional ethics so how also they have contributed in the decision making process.

And the economic context, the financial aspect, the expenditure trends, the politically which are politically determined because sometimes this whole business process will works in a different priorities. So that is where in a democratic situations like this financial aspect has to be more transparent.

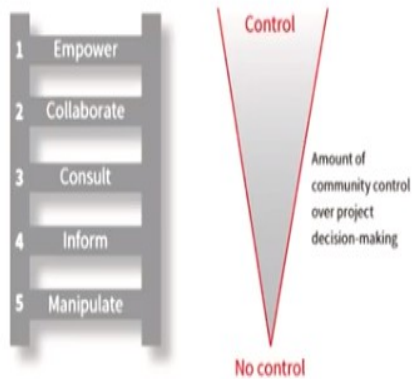
And legitimation that is where we talk about rationalisation, decision faking, and ideological shifts you know this is where, so that is how it talks about the risk of failure as well. And these, these all different factors actually mediate and influence the decision making process, decisions or non-decisions, routine or non-routine.

And then how they influence outcomes whether these outcomes in the form of plans, in the form of inaction, it could be in the form of a surveys like the technical data could work on the surveys and certain institutional or the political aspects they talk about the schemes, gender development schemes you know they taken, and the consultation business continuity and the buck-passing as well as consequences which are intended and unintended.

So this is how there is a variety of inputs come into the decision process, and this is very huge management structure.

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Figure 6.1 Levels of community engagement and participation



C. H. Davidson et al., 'Truths and Myths about Community Participation in Post-disaster Housing Projects', *Habitat*

And when we talk about the community engagement and the participation. First of all, one has to look at there are two, one is guided, and the other one is a kind of participation oriented. But now if you see if you when it is guided completely you know when you do not have, if you look at the manipulation because when you do not have a control, obviously there is an external agency which have an efficiency to control you and that is where it becomes a guided.

And whereas, when you talk about when you increase at control, when you widen that funnel, and that is where it goes from manipulate, inform, consult, collaborate and empower. So that is how the amount of community control over a project decision-making you know that is how empowerment still that is where you will have this the control becomes a wide aspect into it. I think these are a few frameworks I just tried to introduce and in the coming class we will also talk about a few tools and DRR.

Thank you very much.