

Student Seminar

Building climate resilient cities: Exploring theories, practices and prospects

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Mainstreaming Climate Resilience

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CLIMATE RESILIENT CITIES: A CHANGE IN PERSPECTIVE

The level of resilience of our cities and towns is dependent on the quality and performance of the overall urban system.

Adaptation to climate change and focus on disaster risk reduction is becoming increasingly relevant as the negative impacts of climate change increase.

“There needs to be a shift, in both adaptation to climate change and disaster risk reduction, from a singular and specific focus on affected infrastructures and locations towards a more integrated focus on overall risks, development conditions, and local area performance”*.

CLIMATE RESILIENT CITIES: A CHANGE IN PERSPECTIVE

This calls for :

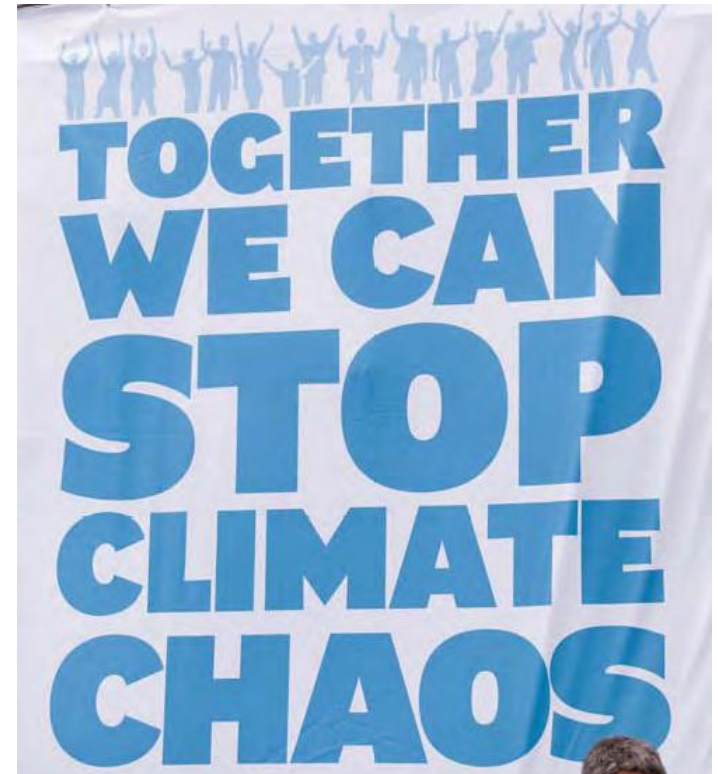
- Mainstreaming climate and disaster risk reduction to become factors in conventional planning processes, project design and development decision making.
- Developing specialized financial instruments for the risk-oriented components of these projects that cannot be addressed via mainstreaming measures.
- Building local institutional capacity to prepare, structure and manage large scale redevelopment

WHAT IS MAINSTREAMING

Mainstreaming climate resilience is the iterative process of integrating considerations of climate change into policy making, budgeting, implementation and monitoring process at national, sector and subnational levels.

It is multi year, multi stakeholder effort grounded in the contribution of climate change to human well being, pro-poor economic growth and achievement of the MGDs.

It entails working with a range of government and non government actors, and other actors in the development field.



WHY DO WE NEED TO MAINSTREAM CLIMATE RESILIENCE

Recent calamities in Uttarakhand, Kashmir, and Visakhapatnam have brought out the need for building climate resilience into development systems and planning

Climate change in urban areas interferes with a wide range of existing and emerging policy challenges, among them poverty eradication, water supply and sanitation, scarcity of food and water, and population growth.

Climate change, therefore, should no longer be considered a solely environmental challenge, addressed in isolation from other social and economic issues.



WHY DO WE NEED TO MAINSTREAM CLIMATE RESILIENCE



Cities need to consider impacts of slow onset climate change as well as vulnerability to extreme events in their planning decisions, infrastructure planning and land use planning



A strong policy mandate and regulatory backing is needed to start this integration.



When climate change is embraced as an integral part of these challenges, solutions can be designed to more adequately reflect and address myriad impacts upon cities

CHALLENGES

- Lack of understanding of the impacts of climate change and the fact that adaptation interventions are best employed and covered at local level.
- Creating awareness amongst the local government that adaptation is synonym to their functions and their development goals
- Already pressing development pressures might overlook adaptation issues
- Integrating adaptation at municipal level would be difficult because of the perception of contest for budget.
- Lack of capacity within the local government .
- Development plans of cities do not factor climate change related factors in a targeted way.
- Translation of global impacts of climate change to local level (downscaling) has been missing
- Lack of data and modeling framework at the city level

Need for a robust 'Institutional Policy Arena' To be made available to support city resilience building

KEY ENABLERS

Policy and mandate at national and state level

Integration of climate agenda with city development agenda

Institutionalization of urban climate resilience planning.

Use and involvement of local expertise to generate context specific locally driven solutions

Capacity building and awareness generation to generate momentum and facilitate action at all levels

Access to knowledge on climate variability and change

Data management and updating to facilitate decision making

INTEGRATION POINTS FOR MAINSTREAMING

Action to address climate change in urban areas should be multi-level, involving national-, state-, and city-level governments, as well as multi-sectoral including sectors such as infrastructure and services, urban planning, transport, disaster risk reduction, and housing and construction

1. Policy
2. Regulations(Building bye laws, Acts etc)
3. Institutions
4. Schemes like (JNNURM, RAY, Smart cities)
5. Project level interventions (DPR, Master plans, CDP



INTEGRATION POINTS FOR MAINSTREAMING

POLICY

An effective policy will :

Be that which provides for capacity building, mainstreaming, facilitating data, tools, and techniques to enable risk assessment and climate projections.

Draw out a structure of the institutions and regulations needed to implement the same, and identify windows for financing the actions.

Facilitate preparatory actions like risk and vulnerability assessments to potential climate impacts in the near future.

Informs the requirements of such assessments like data base, multi-sectoral and multi institutional coordination.

Guide the overall mechanisms to support resilience mainstreaming into urban development discourse, it should also identify various entry points within existing institutional mechanisms and regulatory framework.

Integration points for mainstreaming

KEY POINTS THAT THE POLICY SHOULD ADDRESS

Making a case for climate-related actions and investment: The need for risk and vulnerability assessments and data base management systems for facilitating the same

Capacity building : The policy must ensure capacity building, competence, and adaptability at various levels of urban governance that would eventually be dealing with mitigation and/or adaptive practices on ground

Multilevel engagement: policy should establish a mechanism to institutionalize the process of this multi-stakeholder engagement; e.g., the national government could incorporate climate resilience in the reforms agenda and resource planning under national schemes, and bring in incentive mechanisms for states and cities. They could also facilitate partnerships with international and non-government actors for technical and implementation support.

Integration points for mainstreaming

KEY POINTS THAT THE POLICY SHOULD ADDRESS

Integrating climate resilience into urban development laws and regulations :

- 1. Integrating Climate-related issues through the state-level acts and regulations.**
- 2. Resilience interventions could be included into the development regulations of the cities.**
- 3. Integrating measures to bring in climate resilience into national and sub-national schemes and plans**

Financing urban resilience:
Financial allocation for resilience building and adaptation projects would also be an integral part of the proposed policy. Policy should support and facilitate establishing national- and state-level climate funds and resource planning under various national schemes

Integration points for mainstreaming

REGULATIONS

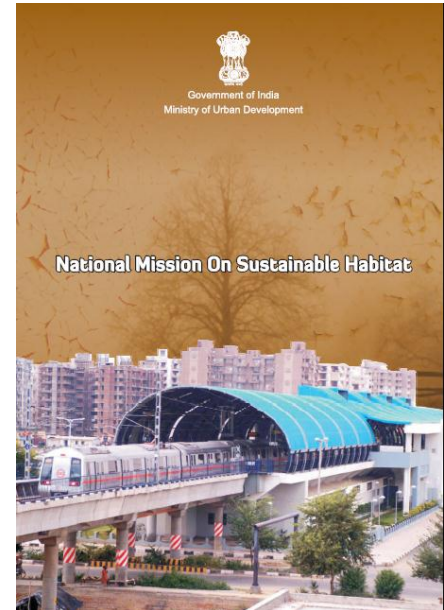
Integration of elements that support climate resilience into:

National level Acts like the Disaster Management Act, National Mission on Sustainable Habitat

State Level Acts those govern land-use and town planning, defines development regulations and environmental zoning, sector specific regulations like solid waste management, ground water, water supply, waster water and sanitation .

Example

- 1. Town and Country Planning Acts**
- 2. Coastal Regulation Zone Notification, 2011**
- 3. Regulation on Land Development and Building Construction**
- 4. Ground Water Regulation Act**
- 5. Building Byelaws and codes**



Integration points for mainstreaming

INSTITUTIONS

Once mandates are created at national , state and local level; Institutionalization of the same needs to be carried out by creating necessary institutions to implement resilience options and to drive resilient city planning practices in a city.

<http://uhcrc.org/home>



Surat:

Surat city is a part of Asian Cities Climate Change Resilience Initiative(ACCCRN).

The city engaged with The Rockefeller Foundation and the technical partners to come up with a city resilience strategy that identified critical challenges for the city in the wake of climate change

This led to the formal adoption of the strategy by the municipal corporation and creation of the :

1. Urban Health and Climate Resilience Centre (UHCRC) and
2. The Surat Climate Change Trust (SCCT).

SCCT

- **SCCT is a city level multi-stakeholder public trust, having its office at the City Engineer's Office**
- **Formulated with the objective of addressing problems arising out of urbanization and climate change and to facilitate capacity building of Surat to address these challenges**



S C C T

Surat Climate Change Trust



UHCRC

- **Establishing the UHCRC in order to provide support to the state and central-level urban health support systems to incorporate climate change resilience issues**
- **Established within SMC's Health Department, this first-of-a-kind institution in the country aims to address public health and climate change adaptation issues**
- **In February 2013, the SMC announced that it would allocate INR 10 million to UHCRC for its functioning**

Integration points for mainstreaming

SCHEMES

Either floating new schemes or integrating elements of resilience /climate response into the existing schemes of the government like:

Centrally sponsored schemes like JNNURM (Jawaharlal Nehru Urban Renewal Mission), UIDSSMT (Urban Infrastructure Development Scheme for Small and Medium Towns), etc.

In case of large scale urban transport projects (e.g. metro rail, bus rapid transit), industrial zones, Special Economic zones (SEZ), etc. economic policies or manifesto of the national/ state governments

Integration points for mainstreaming

PROJECT LEVEL INTERVENTIONS

Master plans- The land-use plans should be prepared giving due cognizance to the climate risks and vulnerability.

The development regulations spelt out in the master plans must spell out the vulnerable locations and restrictions/ guidelines thereof for development should be drawn up

CDPs- The city development plans provide details for various projects that need to be implemented and for which central and state level grants have to be sought. The CDPs therefore can integrate climate adaptation projects

**THANK YOU FOR JOINING
FOR THIS SEMINAR !**

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