

*This Climate Policy Brief highlights critical issues raised in the Cities and Resilience Dialogue held in Bangkok, Thailand September 28-29, 2009. The Dialogue reviewed the progress of cities in addressing the consequences of climate change with city representatives from India, Indonesia, the Philippines, Thailand, and Vietnam; their respective national climate change negotiators; and key supporting institutions active in the region.*

*Already home to more than half the world's population, cities are the frontline in efforts to address climate change. By combining local knowledge and global support to tackle climate change issues, cities are in a position to lead successful adaptation and sustain those gains through proactive 'climate-proof' development policy and planning.*

## WHAT IS NEEDED AT CITY LEVEL?

- Strong support and commitment to local government programs and community based initiatives to address the consequences of climate change.
- Increased research and analysis on projected local climate impacts and conditions of vulnerability which will amplify the effects on poor communities and those living in informal settlements.
- Clarification of organizational responsibilities for city-level climate policy planning and development.
- Civic partnerships to bring together diverse set of local actors including local government, civil society organizations, and the private sector to ensure sustainability.
- Access to specific mechanisms for adaptation funding through clear budget lines specific to city-level environment and climate change adaptation.

## WHAT IS NEEDED INTERNATIONALLY?

- Provision of adequate funding streams to support urban climate resilience, including increased support for micro-finance and micro-insurance for the poor and vulnerable.
- Recognition of the role of local governments and other local actors in implementing the adaptation strategies to be brought forward in the Copenhagen Agreement and follow-up activities of the UNFCCC and IPCC.
- Technology transfer through the provision of replicable tools, methodologies, technical assistance and dissemination of good practices to support cities to build capacity.
- Promotion of 'Champion Cities' as role models for other cities in each region to address the diversity of vulnerability.



Source: UN-Habitat

Urban vulnerability in the Philippines

## WHAT IS NEEDED AT NATIONAL LEVEL?

- Commitment to include local governments in post COP-15 planning when mechanisms are being designed in each country.
- Integration of climate concerns into urban and economic development plans and poverty reduction strategies, and integration of urban concerns into national climate change planning.
- Provision of funding mechanisms to support urban climate resilience, increase access by local governments and other local actors, and provide incentives for economic activities suitable for new climate patterns.
- Devolution of authority to local governments to implement local resilience strategies.
- Relevant capacity building, guidance, and resources for local governments to implement urban resilience strategies.
- Improved tools to analyze and project local impacts from climate change and further research to guide investment in adaptation.
- Promotion of effective regional strategies through regional bodies like ASEAN.

For more information please go to [http://www.rockfound.org/initiatives/climate/Resilience\\_Dialogue/agenda.shtml](http://www.rockfound.org/initiatives/climate/Resilience_Dialogue/agenda.shtml).

## WHY ARE CITIES IMPORTANT IN THE CLIMATE DEBATE?

### Cities ...

- represent half of the world's population.
- drive national and regional economic growth (and consequently consume up to 80% of the energy used by each country).
- are concentrated areas of vulnerability, and represent the majority of economic assets vulnerable to climate change.
- have strong abilities to develop and implement creative, locally relevant solutions that can achieve significant impact through spatially targeted efforts.
- offer a window of opportunity with current rates of urbanization to address risks now or be locked into vulnerabilities for decades into the future.
- through local governments, are the governance level closest to citizens.

	India		Indonesia		Philippines		Thailand		Vietnam	
	recent	2030	recent	2030	recent	2030	recent	2030	recent	2030
Urban pop. (millions) <sup>1</sup>	316.7	659.4	106.7	192.7	52.0	96.7	20.9	35.1	22.5	50.4
Urban pop. (as % of national) <sup>1</sup>	28.7%	41.4%	47.9%	67.7%	62.6%	76.1%	32.5%	47.0%	26.7%	43.2%
Urban growth rate <sup>1</sup>	2.3%	2.5%	3.9%	1.5%	3.1%	1.5%	1.9%	2.0%	3.2%	2.5%
# of cities <sup>2</sup>	384		92		120		23		82	
# of urban centers <sup>2</sup>	5,161	6,000	349		1,514		118		15	
% of national economic output (GDP) <sup>2</sup>	60%				75%					
% of national expenditure <sup>2</sup>					67%					

<sup>1</sup> UN Common Database (UN Population Division estimates), 2005 and 2030 ; <sup>2</sup> Various sources (listing available on request)

### Importance of Cities in the Climate Debate

*The Cities and Resilience Dialogue reviewed the progress of different cities in addressing the consequences of climate change by bringing together local knowledge and global support to lead successful adaptation efforts and sustain those gains through proactive 'climate-proof' development policy and planning. Please find below highlights of the Cities and Resilience Dialogue:*

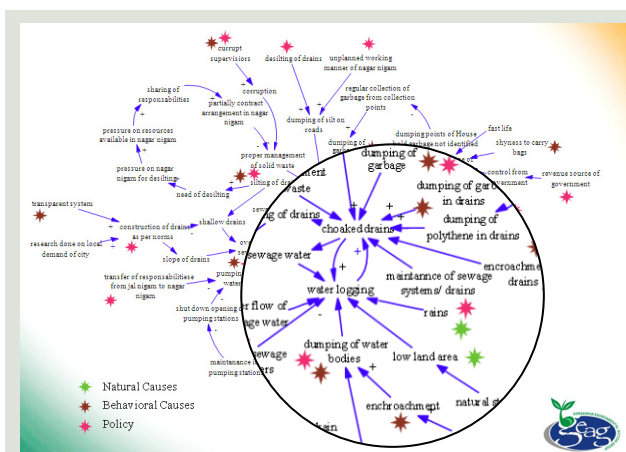
## IMPROVING ANALYSIS

To address the issue of inadequate information, data, and awareness about climate risks at city levels, the participating cities from India, Indonesia, Thailand and Vietnam have all been involved in the Asian Cities Climate Change Resilience Network (ACCCRN) and are testing a basic approach to urban resilience based on the following elements:

- Vulnerability and impact assessment to understand potential impacts on poor communities.
- Sector studies to look at impacts on disaster planning, energy, environment, health and related sectors.
- Participatory iterative planning through Shared Learning Dialogues.
- Pilot projects to test solutions.

See <http://www.rockfound.org/initiatives/climate/accrn.shtml> for more details.

As an example, the city of Gorakhpur in India has used causal loop analysis to develop a risk frame including both behavioral aspects and natural causes (*illustrated below*).



Causal loop analysis in Gorakhpur

For more information please go to [http://www.rockfound.org/initiatives/climate/Resilience\\_Dialogue/agenda.shtml](http://www.rockfound.org/initiatives/climate/Resilience_Dialogue/agenda.shtml).

## BUILDING PARTNERSHIPS

Cities are central to adaptation to climate change and it will be critical to strengthen national-local government partnerships in order to develop viable adaptation strategies. In addition, effective public-private partnerships drawing in local government, civil society organizations, and the private sector are crucial to bringing all necessary stakeholders into the dialogue and planning.

For example the city of Surat in India has established a multi-stakeholder city advisory committee and a set of vision sheets for the future to guide and support the implementation of city resilience planning and programs.



## STRENGTHENING THE POLICY AND ENABLING ENVIRONMENT

To play their role effectively, cities face a number of challenges in monitoring, financing, and building the capacity to support the range of resilience activities that will be necessary.

Cities themselves need to clarify organizational responsibilities for local climate policy planning and development. Many are starting to do this through Local Adaptation Plans integrated with the Urban Master Plans. Cities also need to share learning with one another through networks such as the League of Cities of the Philippines which facilitates dialogue among its members on urban adaptation.

From national governments cities need technical knowledge about potential solutions and a strong legal basis for adaptive response. Due to the many sectoral linkages in responding to climate change, it is critical to sort policy and planning structures and to integrate climate change resilience into development policy and planning at all levels. Proactive efforts on national adaptation planning, such as the National Target Program in Vietnam, must include all relevant ministries in institutional arrangements to transform policy into actions.

Cities also need national government to lead regional collaboration to address transboundary issues like those raised by cities in Thailand affected by smoke / air pollution from the burning of crops and forests in neighboring countries and which also share access to the Mae Kong River.

## ENSURING ACCESS TO RESOURCES

Cities already face many challenges to simply continue existing services given the pace of urban growth that is projected in cities throughout the world. Protecting these services, and the poor and vulnerable communities that are often ill-served in the first place, against the consequences of climate change and other hazards will be an even greater challenge. Ultimately short-term and long-term interests must be balanced.

Technical assistance and technology transfer will be necessary to help cities to prepare and implement resilience action plans and to mainstream climate change adaptation into sustainable socio-economic development.

Cities will also need access to specific mechanisms for adaptation funding through clear budget lines specific to the city-level environment and climate change adaptation. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) has been mentioned by cities in India as a model that could be adapted to provide both necessary financing and technical knowledge to cities for investment in climate resilience. Similarly the Government of Indonesia has launched the Indonesia Climate Change Trust Fund (ICCTF) as a financing mechanism for the Indonesian climate policy framework, and cities in Indonesia are looking for indications of how the ICCTF can support urban resilience.

For more information please go to [http://www.rockfound.org/initiatives/climate/Resilience\\_Dialogue/agenda.shtml](http://www.rockfound.org/initiatives/climate/Resilience_Dialogue/agenda.shtml).

## Agency support

A wide range of institutions are providing support to local governments and other local actors in addressing the consequences of climate change through effective adaptation and disaster risk reduction (DRR). These include:

### Asian Cities Climate Change Resilience Network (ACCCRN)

ACCCRN is a program to empower local governments to develop actionable adaptation strategies, capturing learning in the process for replication elsewhere.  
[www.rockfound.org/initiatives/climate/acccrn.shtml](http://www.rockfound.org/initiatives/climate/acccrn.shtml)

#### Global partners

Rockefeller Foundation – [www.rockfound.org](http://www.rockfound.org)  
Institute for Social and Environmental Transition (ISET) – [www.i-s-e-t.org](http://www.i-s-e-t.org)  
APCO – [www.apcoworldwide.com](http://www.apcoworldwide.com)  
ARUP – [www.arup.com](http://www.arup.com)  
ICLEI – Local Governments for Sustainability – [www.iclei.org](http://www.iclei.org)  
ProVention – [www.proventionconsortium.org](http://www.proventionconsortium.org)

#### National partners

India	Gorakhpur Environmental Action Group (GEAG) – <a href="http://www.geagindia.org">www.geagindia.org</a>
	TARU Leading Edge – <a href="http://www.taru.org">www.taru.org</a> Cities: Gorakhpur, Indore, Surat
Indonesia	Mercy Corps – <a href="http://indonesia.mercycorps.org">http://indonesia.mercycorps.org</a>
	Urban and Regional Development Institute (URDI) – <a href="http://www.urdi.org">www.urdi.org</a> Cities: Bandar Lampung, Blitar, Semarang
Thailand	Asian Disaster Preparedness Center (ADPC) – <a href="http://www.adpc.net">www.adpc.net</a>
	Thai Environment Institute (TEI) – <a href="http://www.tei.or.th">www.tei.or.th</a> Cities: Chiang Rai, Hat Yai
Vietnam	Challenge to Change – <a href="http://www.challengetochange.org">www.challengetochange.org</a>
	NISTPASS – <a href="http://www.nistpass.gov.vn">www.nistpass.gov.vn</a> Cities: Can Tho, Da Nang, Quy Nhon

### Other Initiatives

#### Earthquakes and Megacities Initiative (EMI)

EMI is an initiative with local governments to mainstream DRR across sectors and develop tools that leverage existing planning processes.  
[www.emi-megacities.org](http://www.emi-megacities.org)

#### ICLEI - Local Government Climate Roadmap

A process steered by local governments as part of the ICLEI network of cities to mobilize global, national, and local actors to influence the UN international climate negotiations.  
[www.iclei.org/climate-roadmap](http://www.iclei.org/climate-roadmap)

#### UN ESCAP

UN ESCAP promotes Green Growth as a way to achieve the Millennium Development Goals (MDGs) through programs like the Kitakyushu Initiative for a Clean Environment and its pro-poor development guides.  
[www.unescap.org/esd/index.asp](http://www.unescap.org/esd/index.asp)

#### UN Habitat

UN Habitat programs like the Cities in Climate Change Initiative (CCCI) and Sustainable Urban Development Network (SUD-Net) support cities to address the links between urbanization and climate change impacts.  
[www.unhabitat.org/content.asp?typeid=19&catid=271&cid=6003](http://www.unhabitat.org/content.asp?typeid=19&catid=271&cid=6003)

#### UN ISDR

UN ISDR programs, including the new Urban Risk Campaign for 2010-2011 and the Local Government Alliance, target the development of adaptation measures that incorporate solid consistent DRR.  
[www.unisdr.org](http://www.unisdr.org)  
[www.preventionweb.net](http://www.preventionweb.net)

The *Cities and Resilience Dialogue* was hosted as a joint initiative among the organizations listed at right. These organizations would like to thank the city representatives, the national climate negotiators from Indonesia and Vietnam, and all of the other participants for their contributions.

