



# Road to COP 21 Dialogues

# **Cities Resilience to Climate Change**

Friday, 30th October 2015



## Knowledge Partner









## "Cities Resilience to Climate Change"

### Friday, 30<sup>th</sup> October 2015

**Moderator & Chair:** Shri Durga Shanker Mishra, Additional Secretary, Ministry of Urban Development (TBC)

#### **Potential Speakers:**

- Dr Jyoti K Parikh, Executive Director, IRADe.
- Smt. D Thara, Municipal Commissioner, Ahmedabad Municipal Corporation
- Prof. Jagan Shah, Director, National Institute of Urban Affairs
- Mr. Mahesh Babu, Managing Director, IL&FS (TBC)

02:30	Registration
03:00 – 03:05	Welcome address by Ambassador Richier
03:05 – 03:20	Introductory remarks by moderator and chair, Shri Durga Shanker Mishra
03:20 - 03:35	Remarks by Dr Jyoti K Parikh, Executive Director, IRADe
03:35 – 03:50	Remarks by Smt. D Thara, Municipal Commissioner, Ahmedabad Municipal Corporation
03:50 – 04:05	Remarks by Prof. Jagan Shah, Director, National Institute of Urban Affairs
04:05 – 04:20	Remarks by Mr. Mahesh Babu, Managing Director, IL&FS
04:20 - 05:00	Discussion
05:00	Vote of thanks by F.J. Schichan, Counsellor, French Embassy
05:00 - 05:30	Refreshments





### Cities Resilience to Climate Change

Cities in the 21st century are facing enormous changes – growing populations, physical expansion, major new infrastructure investments, shifting governance parameters, and increasing citizen demand for infrastructure services. Nowhere is this more true than in **urban India**, **which will swell to 600 million by 2030**, adding an additional 223 million new inhabitants and building, 70 per cent of the infrastructure of these future cities over the same period of time. Cities currently contribute around 58 per cent to India's GDP, which is expected to grow to 70 per cent by 2030.

Cities are also considered as a major contributor to GHGs and accounts for 60% of all carbon emissions while they consume 78% of global energy. On the other hand they are also likely to suffer the most due to impact of climate change. Urban activities and consumption has lead to an increase in air pollution causing a range of new potential health risks for the population. India currently has 13 of the 20 most polluted cities in the world, with its capital Delhi ranking first, according to a WHO study published in 2013. In cities, people and infrastructure are often concentrated within a limited geographical area. IRADe's vulnerability assessment analysis of 20 cities in India supported under Asian Cities Climate Resilience Network (ACCCRN) project highlighted that all 20 cities are prone to multiple hazards (floods, cyclones, droughts, thunderstorms, heat waves, cold waves etc.). Such hazards may further aggravate the strains that cities face like poverty, inadequate services, infrastructure deficits, and environmental stress. A range of risks and impacts extend far beyond physical risks posed by climate change. The economic losses caused by cyclone Hudhud in city of Vishakhapatnam is estimated to be USD 11 billion while in Srinagar losses due to the floods were around USD 16 Trillion. It is evident that city governments can no longer afford to ignore the huge economic impact of disasters on the cities will further aggravate. Climate change could also become a strategic economic and political concern as it starts to erode India's economic performance and affect the lives and livelihoods of millions of people. If we are to meet future challenges with effective solutions and sufficient levels of preparedness, we must begin today to devise mitigation and adaptation strategies for the cities which will lead way to development of climate resilient and low carbon cities.

Mitigation strategies which may lead to development of low carbon cities include efficient transportation (fuel standards, fuel fix, public transportation), energy efficiency, clean energy

technologies (solar roof tops, LED street lighting) etc. The energy demand of the cities can be reduced by retrofitting residential, commercial and industrial buildings and shifting to energy efficient lighting and appliances. Transport sector is one of the largest consumers of energy. Improving access to efficient public transport, promoting usage of low emissions vehicles like electric cars, promoting cycling and sidewalks for pedestrians offer solutions towards reduction of GHGs. Efficient management of municipal services viz. solid waste management and sewage treatment plants can help cities in cutting down emissions.

Infrastructure services viz. provision of water, energy, waste management, sewage treatment need to be strengthened and made climate resilient and energy efficient. Disaster risks reduction should be integrated into the city planning where in early warning systems are strengthened. Drought and floods can be addressed simultaneously if water bodies like urban lakes, ponds and wetlands are managed properly. The same expertise as used for managing green areas and parks need to be developed for water bodies' management to make sure effluents do not accumulate and water quality is maintained. City adaptation plans need to be developed to provide a roadmap for cities for developing resilient cities.

Government of India has launched many missions and programmes like Smart City Mission, AMRUT, Housing for All, National Solar Mission, National Mission for Enhanced Energy Efficiency (NMEEE), Green India etc. They will provide opportunities to build climate resilient cities. While Smart City Mission will cover 100 cities, AMRUT will cover 500 cities over the course of five years (2015-20) and have been allocated a budget of 48,000cr. and 50,000cr respectively. National Solar Mission under NMEEE has set a revised target of deploying 100 GW of grid connected solar power by 2022.

Cooperation across sectors and among stakeholders such as national and local authorities as well as civil society (NGO, think tanks and citizens) is essential in order to formulate efficient action plans and ensure their implementations at every level. This has been asserted during the World Summit "Climate and territories" organized in Lyon (France) as part of the "Agenda of solutions" whose goal is to encourage non-state actors to get involved in concrete actions in the fight against climate change. It emphasizes the value all stakeholders' capacities, including cities and local authorities, to contribute to conclude an international agreement on climate at COP21 in Paris.