



Co-located with



13th International Conference and Exhibition on “Sustainable Habitat and Smart Cities”

9th to 11th December 2015

**Jaipur Exhibition & Convention Centre, Sitapura
Jaipur**

Supported by



Ministry of Urban Development, Govt. of India
Ministry of Housing and Urban Poverty Alleviation, Govt. of India
Ministry of Communication and Information Technology, Govt. of India
Ministry of New and Renewable Energy, Govt. of India



UN HABITAT
FOR A BETTER URBAN FUTURE



*Empowered lives.
Resilient nations.*

Partnership

Host State - Government of Rajasthan

Host City - Jaipur
Municipal Corporation



Local Self Government Department



Partner Country

Participating Country
Singapore

Canada

Building and Construction Authority



The Event

- **Municipalika 2015, the 13th International Conference and Exhibition** was held at **Jaipur Exhibition & Convention Centre, Sitapura, Jaipur** from **9th to 11th December 2015**, had participation over **1,600** delegates including over **150** Mayors and Chairpersons, **40** Municipal Commissioners, Secretaries from **24** states and **7** countries and **300** cities comprising of governing leaderships, Urban Planners, professionals, technology providers, financial specialists, ICT and other stake holders including civil society groups.

- **Municipalika 2015** was inaugurated by **Smt Vasundhara Raje, Hon'ble Chief Minister of Rajasthan**. The inaugural session was presided over by **Shri Rajpal Singh Shekhawat, Hon'ble Minister for Local-Self Government, Urban Development and Housing, Government of Rajasthan**.
- The other dignitaries in the inaugural session were H.E. Nadir Patel, High Commissioner of Canada in India, Shri Choo Whatt Bin, Executive Director, BCA, Singapore, Shri Yuri Afanasiev, Resident Coordinator, UNDP, Shri Alain Grimard, Country Representative, India – UN-Habitat, Smt M Teresa Kho, Country Director – ADB, Dr K V Pratap, Economic Advisor, Ministry of Urban Development, Government of India, Shri Nirmal Kumar Nahata, Worshipful Mayor of Jaipur Municipal Corporation, Shri Ashok Jain, Additional Chief Secretary, Urban Development and Housing, Government of Rajasthan and Dr Manjit Singh, Principal Secretary, Local-Self Government Department, Government of Rajasthan.

- The Exhibition of **Municipalika** and **CAPEX** was inaugurated by **Smt Vasundhara Raje, Hon'ble Chief Minister of Rajasthan.**
- The Exhibition showcased technologies, services, products, equipments, machineries and managerial systems incorporated into a common space of over **8,500 sq.mts.** It received all-round appreciation from all dignitaries and visitors. Over **140** Exhibitors displayed including live demonstrations for new technologies. Over **5,000** visitors benefitted from the display.

Conference Segment

- The Conference Sessions under Municipalika including NASSCOM Segment – 12
- Technical Sessions under CAPEX – 4
- Vision Address – 1
- Open House Session – 1
- Speakers – 200+

CS 01: Smart Cities, AMRUT

- 100 Smart Cities Mission and Best Practices
- Reforms for AMRUT / Smart Cities
- What Makes a Smart City Competitive, Sustainable, Resource rich, Inclusive
- Key Features of a Smart City / AMRUT City
- Drivers and Enablers
- Resource mobilisation and Financial Management
- National & International Case-Studies

CS 01A: Leveraging Innovations and Technologies for Applications in Smart Cities / AMRUT Cities - NASSCOM TRACK

CS 02: Safe and Resilient Cities

- Disaster Mitigation and Management
- Fire Safety and Protection
- Anti-terror capabilities, Homeland Security
- Gender sensitive and child-friendly Cities
- Policing and Community based Security Support Systems
- Flood Relief

CS 03: Vibrant Cities (Heritage Issues) HRIDAY

- Key Features of HRIDAY Cities
- Conservation of Heritage Zones
- Linking Heritage Buildings and Precincts as City Tourism
- Heritage Walk
- Capacity Building for Heritage Conservation in Cities
- Progress Status on HRIDAY Cities

TS 01: Innovative Building Materials and Technologies for Building and Infrastructure Applications

- Walling & Roofing options
- Innovative use of Industrial Waste like fly ash
- Structural systems including composite materials
- Doors, Windows, Shutters & Fenestration options
- Water Proofing and damp proofing options
- Flooring and external hardscapes
- Build Materials and Products Super Market / Malls / Retail outlets - a la Home Stores

DAY - 1

TS 02: Tecno-legal regime for acceptance of new products and approval systems including Standards, Testing & Certification

- Strengthening Testing and Validation Facilities for Quality Assurance
- Provisions in Building Regulations, Development Control Rules and Codes to permit innovative options

Vision Address

In addition the event also had **1** vision address delivered by:

Shri Koh Lin Ji

Group Director

International Development

BCA, Singapore

DAY - 2

CS 04: Healthy Cities Integrated Water Management

- Water Supply, Treatment and Distribution
- 24x7 Water Supply
- Metering
- Reduction of T & D issues
- Water Conservation
- Rainwater harvesting, Aquifer Recharging
- Ground Water Use

CS 05A: Healthy Cities - Swachh Bharat Mission 2019 & Integrated Solid Waste Management

- Collection, Segregation and Transport of Solid Waste
- Recycling - ESP building materials, plastics and E-waste
- Waste-to-Energy
- Hygienic and Safe Sanitary Landfills
- Composting and RDF
- Bio Medical Waste handling (Autoclave, Hydroclave, Microwave and Incineration)

DAY - 2

CS 05B: Sanitation for All by 2019

- Individual Toilets
- Public and Community Toilets
- School Toilets
- Safe and Hygienic disposal
- Technology options and Delivery Systems

CS 05C: Awareness Creation and Community Participation

- Capacity Building
- I E C
- Role of NGOs

CS 06: Green Cities - Low Carbon, Energy-Efficient, Sustainable Built-Environment and Communities

- Sustainable Development options
- Passive Designs for Energy Efficiency
- Active Design and Application for Energy Efficiency
- Use of Renewable Energy
- Solar Cities

DAY - 2

CS 07: Connected Cities- Sustainable Urban Transportation, Traffic Management & Networked Cities

- Paradigm Shift in Urban Mobility with Effective Public Transportation
- Transit Oriented Development
- MRT, BRT, LRT
- Non-Motorised Options, Walk ability
- Transport and Traffic Infrastructure Parking

TS 03: Green Building Technologies and Products

- Thermal Efficient products for Walling, roofing
- Energy Efficient Fenestrations
- Energy Saving Star Products for Building Services
- Solar Thermal and Photovoltaic Products
- Sound insulation
- Green interiors
- Environment Friendly and Functional Paints and Surface Treatments for various situations
- Building Automation & Smart Buildings

DAY - 2

TS 04: Modern Construction Systems, Practices and Technologies

- Fast Track Construction Solutions
- Prefabricated and Precast Construction in Building and Infrastructure
- Innovative Construction Practices using Modern Form works and Reducing Slab cycle
- Composite Steel-Concrete Construction
- Modern Developments in High Strength Concrete Construction
- Cost Effective Housing and Building Technologies
- Underground Buried Utilities and infrastructure and NO DIG and Tunnel Boring Technologies
- Water Saving and conservation products, low flow fittings, fixtures and equipments

Participative Cities Open House Citizen Interface

DAY - 2

- There was a very interactive participative Open House Session between those governing and governed in matters of City Development, ably moderated by **Smt Shazia IImi**.
- It had participation of many Mayors, Commissioners, representatives of Industry, Civil Society Groups and Professionals.
- The theme discussed were “**WHAT CAN GOVERNMENTS DO AND CITIZENS DO, TO MAKE CITIES CLEAN AND SAFE AND SECURE**” and ensuring good governance through civic and citizens engagement.
- The two hour Open House brought in very interesting insights and interventions with excellent suggestions for heralding **Public-Private-People’s-Participation and Partnerships (PPPPP)** – together leading to **improved, efficient and smart Performance** of Cities for improving quality of life of Citizens

CS 08: Inclusive & Humane Cities - Pradhan Mantri Awas Yojana (PMAY)

- Housing for all by 2022
- Slum-less Cities
- Optimisation of Resources for Land, Building Materials and Technology, Finance
- Delivery System through Partnerships

CS 09: Digital Cities

- Next Level E-Governance Solutions for City Level Services
- Geo-Spatial Technologies
- GIS-GPS Applications
- Retro Fitting

CS 09A: Smart Governance Roadmap for a City - NASSCOM TRACK

CS 10: Integrated Cities and New Vision

- Integrated, Self-Contained Cities
- New Town Development, Twin Cities, Satellite Cities

The following major points of observations and areas of recommendations emerged

- The agenda for creating clean Cities with total sanitation as part of **Swachh Bharat Abhiyaan** was considered the most important intervention for changing the landscape of the country.
- The conference noted that in addition to the policy support from Government of India, State and Local Governments, the programme can be successful only with the full participative involvement of the citizens. To that extent it has to be made a people's movement through **Jan Andolan** has to be launched has to be created.
- Community toilets with socially, culturally acceptable, appropriate, affordable and indigenous options need to be encouraged.
- School Toilets need to be provided for all schools as fast track initiative.

The following major points of observations and areas of recommendations emerged

- The technology and financing options for total sanitation should take in to account the scale and size of cities and provision of sanitary options with safe disposal systems.
- Working towards ***Open Defecation Free (ODF)*** cities should get the top priority attention in years to come.
- **Gangtok and Sikkim being ODF cities was acclaimed.**
- There is a need for making ***Toilets for all*** linked with ***Water for all*** as an integrated approach (***Taal Mel***).
- In addition the major thrust has to be on cleanliness in the cities through integrated solid waste management options for Door to Door collection, segregation, transportation, treatment and safe disposal. De-centralised options are preferable. Utmost efforts should be made for converting the waste to compost, refuse derived fuel and energy through various technology options.

The following major points of observations and areas of recommendations emerged

- All efficient water management system including waste water recycling has to be introduced compulsorily and revive traditional systems and also involve communities to deal with the present crisis. Water demand management with reduced **fresh** water demand of 90 lpcd as against 135 lpcd and use of treated waste water has become a necessity. Water conservation techniques need to be implemented in all building projects to bring in 35 to 40% water savings. Rainwater harvesting and aquifer recharging has to be made compulsory. Indiscriminate tapping of ground water resources has to be controlled.

The following major points of observations and areas of recommendations emerged

- Disaster mitigation and preparation to deal with natural and manmade disaster has to be one of the major thrust areas that require attention at the local body level. Most of the cities are ill-prepared. City Disaster Management plans should be prepared and the multi disciplinary team are fully coordinated to get into operational gear when disaster strikes. Assessing/documenting the natural capital within cities including preparation geo referenced maps, emergency map plans, etc. are some of the implementations. Proactive Pre-Disaster Mitigation efforts should be given priority than reactive post disaster response.
- The City Master Planning should have inclusive planning approach with safety, security issues also kept in view.

The following major points of observations and areas of recommendations emerged

- Keeping in view the large scale automobile revolution in cities, there is urgent need to encourage and strengthen public transportation modes and using less polluting and energy efficient public transportation modes. For this mass rapid transport (MRT and BRT) options would need increased applications.
- Mobility management including strategies to avoid/address crowding/congestion need to be addressed on a priority basis including stress on non motorised transport options. Transit Oriented Development (TOD) planning options will help this in big way. Cycle track network and pedestrian movement space more so for the disadvantaged section movement need to be created and serviced.
- City space are for people and not necessarily cars.

The following major points of observations and areas of recommendations emerged

- Considering the larger impact of global warming and climate change, there is a major need to adopt, technologies and practices, which will contribute to creating, environment friendly, ecologically appropriate and energy efficient and saving and built environment. A major attitudinal change of mind, body, heart and soul is needed in this connection – a paradigm shift. The need for creation of “**integrated green cities**” has clearly emerged for which all encouragement should be green, which will contribute to Integrated Water Management (30 to 40% saving), Integrated Energy Management (40 to 45% saving), Integrated Waste Management (improving health and physical quality of life) and increased Green Cover (for clean and green environment)

The following major points of observations and areas of recommendations emerged

- Considering the major challenges in housing in cities as well as provision of shelter for slum-dwellers, under **Housing for all by 2022**, through the 20 million urban homes the predominant thrust has to be on weaker sections and low-income group and through optimisations of all resources, land, finance, building materials and technologies, for the speedy construction of affordable homes.
- Keeping in view the limited land and high costs, low rise high delivery development has become necessary. The safety aspects from all point of view have to be kept in view and the building bye laws and enforcement have to take care of the same.

The following major points of observations and areas of recommendations emerged

- For this Governments at the centre, state and local level has to create an enabling environment to get participation of all stakeholders and remove bottle necks and support with additional resources on land, finance and building materials.
- As part of the **slum free cities** development strategy, in addition to efforts for providing adequate and affordable shelter and basic services equal attention should be given for poverty alleviation, job creation and skill development.
- Inclusive Planning to provide for the marginalised, poor and disadvantaged is a major message for future city planning – include the Master Plan for Slum free housing in the CDP and in Building Regulations in line with NBC 2015.
- Needs of Homeless people and pavement Dwellers have to addressed through *Rain Baseras* or Night shelters with basic amenities and facilities – not only in creation but also in 24x7 maintenance and upkeep

The following major points of observations and areas of recommendations emerged

- The potential of land as a resource has to be fully tapped for enhancing the resource base as well as providing equitable and inclusive solutions benefiting all groups.
- Considering the limited availability of land there is sufficient scope to increase FAR/FSI including innovative TDR commensurate with infrastructure addition.
- As a major housing strategy increased efforts for institutionalised rental housing options should be encouraged and made part of delivery systems.

The following major points of observations and areas of recommendations emerged

- With a view to bring vibrancy in and conserve the traditional and historical importance of cities there is pressing need to conserve the present built environment and heritage along with new developments. Cultural past is the pillar for future growth and the soul of the city has to be preserved and nurtured by respecting the natural elements of growth.
- Further there is a need to ensure **Natural** Heritage sensitive area to be protected (e.g. ground water revamping zones).

The following major points of observations and areas of recommendations emerged

- With a view to promote **100 Smart Cities** (upgradation and retrofitting of brown field cities including cluster of white field cities and creation of green field cities) and **500 AMRUT Cities**, an integrated and holistic approach is needed to bring in the smart elements in all infrastructure and built environment components as well as in the operation, management and service delivery for the city development needs with 24x7 service life.
- ICT becomes a major **integrated enabler** for back up infrastructure and not necessarily **driver**.

The following major points of observations and areas of recommendations emerged

- Modern tools of Geo-Spatial Technologies with use of Remote Sensing Tools and Digital mapping should be increasingly adopted. For this GIS/GPS tools should be utilized for city based information system and property mapping, natural resources and planning for development and infrastructure both above and below grounds.
- E-Governance to be given top priority for transparency, information sharing, provision of services to the citizens in user friendly and efficient manner - taking service delivery to the door steps of the people. This has to be a two way platform between the service providers and customer and citizens.
- **E-Governance** and **M-Governance** would be the **Next-Gen** change in urban areas for the increasing number of **e-Citizens**

The following major points of observations and areas of recommendations emerged

- The initiatives for **Public-Private-People's-Participation and Partnership (PPPPP)** to be encouraged for housing and infrastructure initiatives for all groups for technological, financial and managerial resource tie up.
- There is an **imperative need to strengthen local bodies** through capacity building at the level of Mayors, Counselors, Commissioners, City Managers, service providers to deal with the multi-dimensional development needs to make cities work. Appropriate training modules suiting each groups have to be evolved. The need for Urban Services Regulator is also been one of the areas of reform recommendations.
- The intense potential and needs for galvanising the citizen's engagement and people's participation through CBO/NGO/RWA and Civic Society Groups has come into sharp focus for partnership development and ensuring active citizen's participation.

The following major points of observations and areas of recommendations emerged

- **Professionalism** and **transparency** of functions is required for efficient city management through capacity building programme.
- Culture is changing fast and there is an imminent need to **adapt to new realities** and plan policies accordingly with cities adopting **new technologies and skill sets** to execute them.
- Possible flexibility is needed for diverse regional needs and managerial efficiencies. Building positive relationships among all stakeholders and hold key to success.



Thank You

for the outstanding participation from all stake holders dealing with urban development, management and governance contributing to creating ***sustainable*** and ***inclusive*** cities leading to **Safe, Secure, Healthy, Green and Smart Cities** resulting in **MAKING CITIES WORK**