



Overview: 'Sustainable Development, Carrying capacity, Policies & its Implementation, Smart city, etc.'- "Engaging **Communities for** Improving Our Cities"





# Sustainable Development

- Sustainable development or City Sustainable means the availability of quality services matching the growing influx of population
- At URJA we define Sustainable Development as the ability of the Govt., ULBs, medical services, police and others, to maintain the prescribed standards of services to Citizens despite increased densification. Quality of life indices must be maintained at high standards.





- Increased human population, economic growth, application
  of resource depletion and polluting technology has
  degrading the environment and society beyond repairable
  limit resulting into the people facing a constant struggle
  with polluted water, polluted air, overflowing sewage,
  congested roads, hanging cables and wires, open foul
  smelling garbage dumps, construction dust choking nasal
  passage and lungs, poor infrastructure and many others.
- Some of the barriers for sustainable city development are encroachment, additional growth in number of vehicles occupying the mobility space, unregulated vendors, noncapping of public transport, unregulated waste management practices, non-implementation of industrial rules and non-implementation of penal actions, governance failures and missing local area planning.





 Sustainably strong, healthy, liveable cities with compatible carrying capacity depend on clean air to breath, clean water to drink, smooth mobility, proper infrastructure, proper Garbage management, adequate energy and food supply, use of latest technologies and regular monitoring and speedy grievance mechanism. This is not possible to achieve without considering the carrying capacity of the city.





- Carrying Capacity: means the compatibility of available resources, utilities- sewage, power, water, health services, education services, infrastructure and transport, housing, urban & rural green lung, security etc. in the state that can cater to the needs of population or accommodate a particular level of population continuously and without any constrain.
- There are set norms Nationally and Internationally but in case of metro cities like Delhi, Mumbai etc. they change.
- Ever increasing Population each year serves as a deterrent to carrying capacity of the city and hence the announcements of Free Bees and Soap-opera in these cities should be completely discouraged and banned.
- The political compulsions cannot and shall not encourage it and methods to control the same must be developed. May be a challenge?? To accomplish it





# Levels of carrying capacity evaluation

- Infrastructural capacity level (water supply system, sewage system, transportation system, waste disposal system, etc.)
- Institutional capacity level (Environment protection acts, Biodiversity conservations act, as well as zoning regulations, building permits, land use ordinances, etc)
- Perceptual capacity level (the basic thinking of people & their duties towards environment)
- Environmental capacity level(clean air & water, low pollution, etc.)
- Sustainable capacity level (how long the resource will be available for usage)
- Bio centric capacity level (different threats which harm the integrity, stability and beauty of the biotic community of an urban area)





# **Beyond carrying capacity**







# Policies that exist but failed to see the light of the day may be recorded as:

#### » Water:

- » Rain Water Harvesting
- » Water Conservation
- » Clean drinking water
- » Drainage & Sewage
- » Water Reservoirs
- » Rejuvenation of water bodies

#### » Master Plan Development

- » Master plan 2021
- » Footpath & Pedestrian -Right to walk
- » Safety of Buildings Structure
- » Green Buildings
- » Parking space management
- » Creation of Community Halls





## **State Policies:**

- » Plastic free City
- » Vendors Policy- Vending Act
- » Solid waste management
- » Renewable energy- Solar
- » Forest & Green Lungs
- » Pollution Control
- » Noise & Sound
- » City aesthetics & Signage's
- » Cable/ wires hanging around
- » Security
- » Controlling dark spots –Electricity/ street lights
- » Transport- e-rickshaw, tricycle, buses, Commercial vehicles etc.
- » Fire
- » Electricity
- » Health
- » Education
- » Transport





#### **Municipal Policies:**

- » Building Bye-laws
- » Garbage Disposal
- » Removal of dumps
- » Public toilets & Urinals
- » Food Licencing
- » Hotels & restaurants
- » Farm Houses
- » Street Lights
- » Advertisement

#### **Central Policies:**

- » Environment
- » Telecom Regulatory Authority of India- Regulations
- » Open Duct Policy
- » Gas Pipelines
- » Police
- » Master Plan



# **Policy Failures':**



- The implementation of the policies formulated and announced by govt. during the previous many years for a sustainable developed city but the implementation of these policies on ground failed.
- Non compliance of policies is usually taken as policy failure





# Policy Failure reasons are contrary

- Ignorance of citizen with respect to lack of communication between government and policy makers
- No framed structure is available for regular interaction of authorities, experts and ministries with masses.
- Local area plan is missing
- Ignoring carrying capacity
- Environment degradation is by and large occurs as a ripple effect of the all above and reduce the capacity of available clean air to breath





# **Smart City**

In order to move towards making of a smart city some workable Solutions of the existing problems that block the path of the development of sustainable city may be as:

- Need to develop a process to take citizen into confidence to work with the policy to achieve desired outcome
- Behavioral change and capacity building of the authorities and agencies
- Knowledge sharing and reporting within the departments and inter departments
- Reporting and execution under one roof in a ward
- Ward level /district level/zone level planning committees that include the executors and the beneficiary
- Don't provide free housing, subsidies to utilities in the name of poor or below poverty line. If at all it is needed a provision should be made to keep a capping period of not more than three years.
- Besides this, each and every step planned for the advancement of the city should be only initiated taking the carrying capacity into consideration, without which any development would not sustain for land and eventually effect the environment and society adversely.





# Space Crunch- A Challenge

- All industries, agencies and citizens are fully aware that the additional space cannot be created
- Whatever is planned & structured to control the future needs experts fail to address the growing needs for next 50 years + and so on in all previous policy documents
- The time duration taken for execution of policy & when the policies starts showing the effect on ground, by that time the ground realities are already changed/altered.





# **Availability of Resources: Current Status**

- Polluted water
- Polluted air
- Overflowing sewage
- Congested roads
- Hanging cables and wires
- Open foul smelling garbage dumps
- Construction dust choking nasal passage and lungs
- Poor infrastructure





# Requirements for sustainable city

- Clean air to breath
- Clean water to drink
- Smooth mobility
- Proper infrastructure
- Proper Garbage management
- Energy and food
- Use of latest technologies
- Regular monitoring and speedy grievance mechanism





## Lack of resources & mechanized tools give rise to

## **Out fall**

- Regular out burst of fire at dump sites
- Burning of hazardous material here and there
- Regular fatal accidents in cleaning sewer lines
- Visible, irregular signage's and merging roads
- Structural safety of the buildings
- Encroachments & mushrooming of vendors
- Fitness of the vehicles
- Hanging wires all-around the city
- Eroded Faith & Trust
- Governance failure
- And many more such issues





## **Public aspirations to Resource access**

- easy access to public transportation
- good air quality
- garbage collection and disposal services
- Safe infrastructure
- Quality drinking water & sewer disposal
- quality education, health services, safety and other modern living necessities.
- Clean & Green environment
- Proper signage's & aesthetics





## **Urban renewal actions**

- Waste management practices
- Urban spaces
- Public streets
- Public parks
- Public Transport
- Easy Communication
- Farm Produce/ Irrigation etc





## **Reduction of CO2 emissions**

#### Shift to

- Renewable energies
- Good supply of alternative means of transport (e.g. bicycles, trains and electric buses)
- Vertical gardens
- Household commitment to water and energy saving.





# Favouring ethical consumption

## Promote and encourage

- > Ethical consumption
- Local food production
- > Fair trade





# Reduce, reuse and recycle

#### Awareness about

- > recycling
- > responsible consumption

Create infrastructure that allows for minimal waste.





## **Must Do**

- Connection between a citizen/beneficiary, the policy makers and the experts must be established in a structured way at colony level/ward level/district level.
- Whatever structure is being planned by the study available at the national/international levels must be taken into consideration.
- The regular growing population influx in city must be taken into account/consideration before the execution and implementation period while formulating and releasing the policy.





# **Challenges for Sustainable City**

- Encroachment
- Additional growth in number of vehicles occupying the mobility space
- Unregulated vendors
- Non-capping of public transport
- Unregulated waste management practices
- Non implementation of industrial rules
- Non implementation of penal actions
- Governance failures
- Local area planning missing





# Solutions: "Engaging Communities for Improving Our Cities"-

Seems to be the only answer to all the above issues.

- Need to develop a process to take citizen into confidence to work with the policy to achieve desired outcome
- Behavioral change and capacity building of the authorities and agencies
- Knowledge sharing and reporting within the departments and inter departments
- Reporting and execution under one roof in a ward
- Ward level /district level/zone level planning committees\*



#### **Recommendations:**



### Garbage -Safai Nigrani Samiti:

To manage waste / garbage Safai Nigrani samiti- that include representative of RWA, Informal sector- Rag Pickers, Waste Collectors & Municipal Staff jointly working as a team

### **City Development -Local Area Plan:**

- To work and achieve the mandatory provisions under master Plan- Local area planning (tailor made) is the only answer to achieve the growing needs of the population as per the provisions of the MPD, the commercial, residential or mix use zone, institutional areas, industries, green belts etc. must be balanced
- Colony or ward level plan with a local residents committee in a structured, accountable time bound action plan can only resolve the growing needs timely. All policies available are achievable with public participation





#### Ward Level consultative Committee-RWC:

Residents ward Committee in each ward under the public consultation mechanism as mandated in the 74<sup>th</sup> constitution amendment

## Security-

Though Thana level committee do exist on paper but without actual or genuine stake holders

#### Clean Air-

A committee inclusive of community leaders, Faith leaders, RWA & MTA, Experts and administrative authority nodal officers as created and suggested by Delhi Clean air Forum





## Thank You!

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