# Indicators of Inclusiveness in Transport

Darshini Mahadevia
Rutul Joshi
Centre for Urban Equity (CUE), CEPT University
Presented at Workshop on Developing Low Carbon Mobility Plans for
Indian Cities


for
UNEP Riso Centre, IIM Ahmedabad, IIT Delhi and CEPT University
At India Habitat Centre, New Delhi
October 19-20, 2011

# Sustainable Cities

- An 'Inclusive Approach" that is pegged on four pillars:

  (i) Environmental sustainability,

  (ii) Social equity,

  (iii) Economic growth and

  (iv) Political empowerment

# Macro Level Indicators

## Input Indicators

- Fiscal Instruments – These are in the national and state level decisions within the Indian Federal structure. These decide the pricing of the public transport at the local level. Many
  - Taxation
  - Subsidies
- Urbanisation
  - Level of urbanisation (population base)
  - Rate of urbanisation (rate of rural urban population migration
- Urban settlement structure and policy – Determines the urbanisation structure such as concentration of population in mega cities or more dispersed urbanisation

- Urban Employment structure

  - Extent of participation of workers in the economy

  - Employment Structure , determines the travel needs (41% of urban workers are self employed, 41% are regular employed and have regular travel pattern)

  - Of the self employed, 5-6% are working as street vendors, who can be displaced by the transport projects

  - About 6-7% of male workers in the metros and 10-12% of the male workers in non-metros are in transport

- Financing of transport under the national level programmes – In this, expenditure on NMT at the national level

- Urban land policy – Landuse policy instruments at the national level, including space allocation for informal sector

# Output Indicators

- Health indicators

# Characteristics of Indian Cities (All South Asian cities)

- Mixed land use and high densities, which reduces travel demand by motorized vehicles
- Informal sector – informal housing & informal working and now increasingly home-based working (Nearly half of the manufacturing employment in urban India has moved into self-employment category, that is working out of homes).
- Informalities are caused on account of economy as well as legislative structure – poor live in the interstices of formal land market
- Is transport a reason for 'slumming'?

- Land market dynamics (speculative land market) have led to urban sprawl and pushing out of the urban poor to the peripheries.
- Thus, the cost of travel, especially for the poor, has increased considerably (NUTP, 2006).
- Women drop out of the labour force, inspite of need to earn, in the poor families in event of displacements or poor women trade their time for money
- Thus, poor's access to livelihood have become far more difficult.
- Spaces for vending are vanishing on account of public transit systems as well besides competing demands of private vehicular traffic and parking

# Differentials within the poor

- Poor working women have fewer transport choices.
- Cycling is a taboo. Shared autos are not always preferred. Most women walk to work in Indian cities.
- Most poor women manage household, children and work.
- Even in poor households, rest of the family does not have an access to private modes.
- Long walking hours cuts into their leisure and creates a situation of time poverty



**Photo: Carlos F. Padro**

- **Access**
- **Infrastructure for each mode**
- **Safety**
- **Mobility needs**
- **Time use**

# Level of Accessibility

- '**Shorter' distance** - linked with time spent, cost and mode selection.

- There might be different benchmarks for the different sizes of the cities.

    - For such cities, one-way trip of walking for more than 30 mins (for men and 15 mins (for women) or more than 20 mins of cycling can mean putting an 'extra effort'.

- 'Short distance' would vary according to the trip purpose. Work trips could be longer compared to shopping or education trips.

# Other corresponding conditions for inclusiveness

- Heterogeneity, mixed land use, multiple job centers
- Displacement in the cities
- Low-income group housing policies – i.e. Land reservations for the poor in planning mechanism
- Effective parking policy – encouraging restrains in parking by pricing
- Air-pollution – more share of low-carbon transport

# How to bring inclusiveness

- Inclusiveness is not 'topping on the cake' or add-on. It is the base
- Inclusiveness is addressing structural aspects
- Inclusiveness is multi-focal view of society
- Inclusiveness is paying special attention to needs of vulnerable population through policy interventions
- Benchmarking important for inclusiveness
- Inclusive of all trip-purposes

# For inclusiveness

Transport surveys to include data disaggregation by:

- All trip purposes
- Economic groups
- Social groups to capture the issues of minorities
- Residents of vulnerable geographic locations such as peripheral areas and rehabilitated areas
- Age groups
- People with special needs

**The data should be disaggregated by gender**

# Attention to be given to in methodology

- i) Slum dwellers
- ii) Within the slums, of households living in katcha housing as that is indicating BPL households
- iii) Recent migrants to the city and temporary migrants to the city
- iv) Residents of old city
- v) Households living in relocated sites
- vi) Scheduled Caste households
- vii) Minority groups
- viii) street vendors etc.