Holistic Approach for Improving Urban Mobility

Amitava Basu
President
Intercontinental Consultants and Technocrats Private Limited
TABLE OF CONTENTS

- Rapid Urbanization in Africa
- Urban Mobility – a Key Dynamic of Urbanization
- Usual Response to Address Challenges of Urban Mobility
- The Need for Holistic Approach
- Public Transport System
- Non-Motorized Transport
- Our (ICT’s) Approach
- Key Observations
- Way Forward & Future Outlook
Rapid Urbanization in Africa

- Rate of urbanization soared from 15% in 1960 to 40% in 2010.
- Urban population is projected to reach 60% in 2050.
- Increasing urban population impacts change in profile of the region and provides challenge to policy makers to harness sustainable and inclusive growth.
- Without managing urbanization, growth and poverty cannot be addressed appropriately.
Urban Mobility

- Separation of residential areas from places of employment, markets, schools, and health services force many residents to spend increasing amount of time and about a third of their income, on transportation.
- In African cities walking can account up to 70% of all trips.
- Low-density horizontal urban development causes further exclusion of the urban poor.
- Mobility is a key dynamic of urbanization.
The Need

Residents must be able to access home, work, amenities and other places of leisure or personal fulfilment in fast and efficient way.
Usual Response

- Paramount focus is given on road construction.
- Leads to increased private vehicles and motorization.
- Results in congestion and traffic gridlock.
- Impacts urban life through negative externalities such as noise stress, air pollution, and accidents.
The Issue
Can development and construction of roads, flyovers, tunnels be a panacea?
Need for Holistic Approach

- Mobility should not only be a matter of developing transport infrastructure and services.
- It has to be placed in a context of integrated city planning to overcome social, economic and physical constraints of movement.
- Thus, addressing mobility challenges call for a paradigm shift in urban planning, encouraging compact cities and mixed-land use as a way to increase accessibility and to reduce transportation.
- Understanding that the purpose of mobility is to gain access to destinations, activities, services and goods, urban planning requires to be resident centered so that functional end-points are as close as possible to each other, reducing distances and easing transportation.
Public Transport System

The focus should be on Public Transport System that—
- Have high passenger capacity and area coverage and are low in energy use and carbon emission;
- Reduce reliance on private motorized transport;
- Can be developed attractive, accessible and affordable within geographical and financial reach of residents, especially the urban poor.
Integrated Approach to Public Transport System

• Combination of several modes of transport through provision of multi-modal transport system and modal integration forms a major component of urban mobility strategy.

• For example, high capacity public transport system consisting of metro, light rail, bus rapid transit need to be integrated with other forms of public transport that serve as feeder services to ensure full utilization of conveyance capacity.
Non-Motorized Transport

• The urban space needs to be rethought to optimize flow of traffic.
• Increase and encourage non-motorized transport such as pedestrian movement and cycling.
• Streets need to be adapted with walkways, crossings and cycling lanes.
• Transport junctions need to be established to connect points between different transport modes, facilitating access to and extending range of public transport system at city and neighborhood levels.
Snap Shot of Integrated Public Transport
ICT’s Approach in African Cities

• **Mombasa, Kenya: Integrated Strategic Urban Development Plan**
  - Improvement in transport system through BRTS, Pedestrian Facilities and Cycling Tracks, Commuter Rail System, and Parking.

• **Design of Kumasi Roads and Drainage Extension in Ghana**
  - Developed plan and design for bicycle lane, footpath, pedestrian crossings and integration of NMT facilities with bus stops and with major intersections.
ICT’s Approach in African Cities

- **Feasibility Study, Preliminary Design, Detail Engineering and Preparation of Tender Documents for Upgrading Zanzibar Town Entry Roads, Tanzania**
  - Designed public transport facilities, including bus stopping facilities, integration of walkways with bus facilities and pedestrian crossings.

- **Advisory Services for City Traffic Management of Addis Ababa, Ethiopia**
  - Developed legislative and institutional framework and capacity building & training for Transport Branch of City Administration.
Key Observations

• Urban mobility is not only about building transport infrastructure.
• It has to be integrated with overall city planning.
• Develop integrated public transport system.
• Build, reinforce and maintain pedestrian and bicycle traffic.
Dignified Places Program
Cape Town, South Africa

• Dignified Places Program (DPP) started in 2000 in Cape Town underlined in many cases where it will take long time and many resources to implement extensive city improvements, quickly and economically executed minor projects reinforce daily life, serve city areas, and provide inspiration.

• Following the DPP, in 2007, the City of Cape Town approved plans to transform the city’s public transportation infrastructure through an integrated rapid transit system that aims at integrated bus system which will link communities across the municipality to each other and Cape Town’s center city district; and will also invest in new infrastructure for walking, biking and other non-motorized modes of transport.
The Way Forward

To meet the challenges of growing urbanization in Africa:

- Integrate urban mobility with city planning;
- Development of roads, flyovers and tunnels cannot provide the panacea;
- Also, focus on public transport system, pedestrian movement, bicycling tracks;
- Link non-motorized transport with bus facilities;
- Develop legislative and institutional framework;
- Capacity building of city transport administration.
The Future Outlook

• This will facilitate to appropriately address the challenges of growing urbanization.
• Lead Africa to sustainable inclusive growth and improve the quality of life of its people.
• Show the path of sustainable development.
thank you