The role of urban mobility in (re)shaping cities

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Structure

1) Urbanisation
   - Challenges

2) Mobility shaping the city

3) Mobility reshaping the city
   - Need for institutions and governance
   - UN Habitat policy:
     - a) national b) expansion
   - Example: SUSTRAN Project
   - UN-Habitat Agenda for 21st Century
Urbanization: recent trends

Beginning of the 19th Century
Urban world population
2%

Beginning of the 20th Century
Urban world population
10%

Beginning of the 21st Century
Urban world population
50%
Urbanization and Development

There is a positive correlation between urbanization and development. Urbanization is a **source of development**, not just an outcome of it.

Urbanization is not static and its characteristics change as society changes:
- Economically
- Culturally
- Politically
Development and rate of Urbanization

Urbanization and GDP

Challenges of urbanization

• **Unemployment** (largely due to slow industrialization)
• Socio-economic **divide/inequality**
• **Slums** and informal sector expansion
• Inadequate urban **basic services**
• **Urban sprawl**
• Increased vulnerability
• **Unsustainable consumption**
• **Environmental damage**

accessibility
Poor accessibility -> Urban Sprawl

• In developing countries, the main reason for urban sprawl is lack of planned extension
• As in developed countries, urban sprawl has been enabled by the car/low energy cost

Results:
• Often congested city center and chaotic urban periphery: Commuter pain index
• Unsustainable energy consumption
• Inefficient spatial structure of the city, and loss of urban productivity/loss in GDP
Mobility Shaping the city
Dense cities <--------------------------> Diffuse cities

planned spontaneous growth Urban sprawl
Well-designed network of public spaces, including streets for proper connectivity

(difficult to apply) historical lessons for successful planned urbanization
Well-designed density and mixed uses, ensuring adequate proximity of the Factors of Production (FP)*

*(difficult to apply)* historical lessons for successful planned urbanization

*FP* (specialized labor, goods and services)
Strategic link between Mobility and Planning

- The coordinated planning of transport and land development starts with a collective vision of the future city.
- Visioning the future city as a precursor to transportation decision-making reflects the derived nature of travel.
- Long-range planning visions shaping rail investments which in turn shaped urban growth comes from Copenhagen, with its celebrated “Finger Plan”.[i]
Vision of having a compact city

E.g. Barcelona. Similar population to Atlanta’s, its longstanding commitment to planning and designing a compact, mixed-use walkable city has produced a spatial coverage and carbon footprint that is but a fraction of Atlanta’s (Figure). [i]
Reshaping the city
Political Decision Making

Re shaping cities requires institutional capacity to manage differences, land disputes, and conflict of interests. In a democratic context it requires political legitimacy, trust and the rule of law
The transition from spontaneous urbanization to a planned city requires governance capacity at both the national and local levels.
Urban mobility to reshape the city

As an agency, UN-Habitat works in two areas:
1. **National Urban Policies**
2. Planned city expansion and infill (linked to city/metropolitan/transport planning)

Our work in urban mobility focuses on:
- Urban legislation
- Urban planning
- Urban design
- Mass rapid transit (MRTS/BRT, etc.)

Our main partners/implementers are:
- Local authorities
- Finance institutions (international and local)
- Transport service providers and private sector
Maximizing national and local benefits of urbanization and mitigating potential negative impacts

Two lines of action: 1-National Urban Policies
Two Lines of Action: 2-City Enlargements

- **Adequate planning** and future supply of land with affordable solutions
- Reduced risk of unplanned or informal settlements
- Mitigate effects of urban growth and land speculation
- Optimise use of land and population closer to employment opportunities
- Reduced carbon footprint as well as less energy consumption
- Maximise use of existing infrastructure and develop infrastructure in a phased and cost-effective manner
Two Lines of Action: **2-Urban infill**

**Build within built-up areas -> reduce the footprint of cities**

- Densify, but provide enough public space and street capacity
- Urban development in areas that have basic services, infrastructure and transport
- Improve provision of transport to existing areas and create interventions that support the development within urban areas and avoid sprawl

Sources: [ii] Nicolas Lux and [iii] Johannesburg Development Agency
Reshaping the city - SUSTRAN Project

East-African countries developing and implementing urban transport policies for creating socially-equitable and environmentally-sound urban transport systems.

Starting date: June 2011
Funded by the Global Environmental Facility (GEF), a new model initiative will support the design and implementation of integrated sustainable transport projects in the three capital cities of Kenya, Uganda and Ethiopia.

BRT integrated with NMT and TDM changing paradigms from "more roads" to "travel- and user-oriented public transport".

Thus alleviating congestion, attracting development and preventing further sprawl.

UN-HABITAT
Goal: Create the technical and institutional basis for implementing metropolitan sustainable transport networks.

- Technical basis: Establish a demonstration corridor for sustainable urban mobility.
- Institutional basis: Building Awareness, understanding, skills in public institutions, the public and other stakeholders
**SUSTRAN Project**

**Accomplishments**

**Building local capacities**
Future Transport Authority in Addis Ababa building capacity through ongoing technical support in BRT, NMT, TDM and supporting policies. Technical review of existing dedicated lane is nurturing the planning of the future BRT corridor in Addis Ababa. In Kampala, local authorities are currently developing own NMT proposals and requesting more support and capacity building. Feasibility study reviews and value-engineering exercises by GEF Sustran are orienting the path for MRTS interventions in Nairobi.

**Community outreach and Participation**
Continuous promotion of community participation, started with initial consultation meetings and is progressively building awareness.

**Holistic approach to urban mobility**
Integrating transport planning with City Master plans and urban development initiatives. UN-Habitat supporting transport planning with urban planning and related expertise. Initiatives by other donors are aligned to GEF Sustran recommendations.

**(+ ) Expected environmental benefits**
- Full bus rapid transit network in each city: 9m tons each year
- Indirect GHG reduction by 2035: 5.6 – 11.5m tons of CO2
- Direct GHG reduction by 2035: 2.53m tons of CO2
UN-Habitat and a new “Urban Agenda” for the 21st Century

UN-Habitat has the mandate, competence and experience to strengthen partnerships with all stakeholders so as to:

a) Facilitate urban policy reform; and
b) Provide technical assistance for programme and project implementation

- Space for dialogue and interaction, to address social, economic and environmental issues in urban areas. These include quality of life, equity and prosperity, job creation and energy and transport.
- Focus on local governments’ and mayors’ participation in shaping cities
UN-Habitat and a new “Urban Agenda” for the 21st Century


WUF 6 Habitat III Organizational Session GC 24 WUF 7 Preparatory Meeting GC 25 Preparatory Meeting Habitat III

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