

**UN**  **HABITAT**  
FOR A BETTER URBAN FUTURE

Expert Group Meeting on Sustainable Urban Transport:  
Modernising and Greening Taxi Fleets in Latin American Cities  
Rio de Janeiro, 18 May 2011

## Taxis and alternative-transport services in developing countries:

### Sustainable Urban Mobility?

Frederic SALIEZ  
UN-Habitat Representative

UN-HABITAT  
Regional Office for Latin America and the Caribbean

# Contents

1. Context

2. Sustainable Urban Mobility

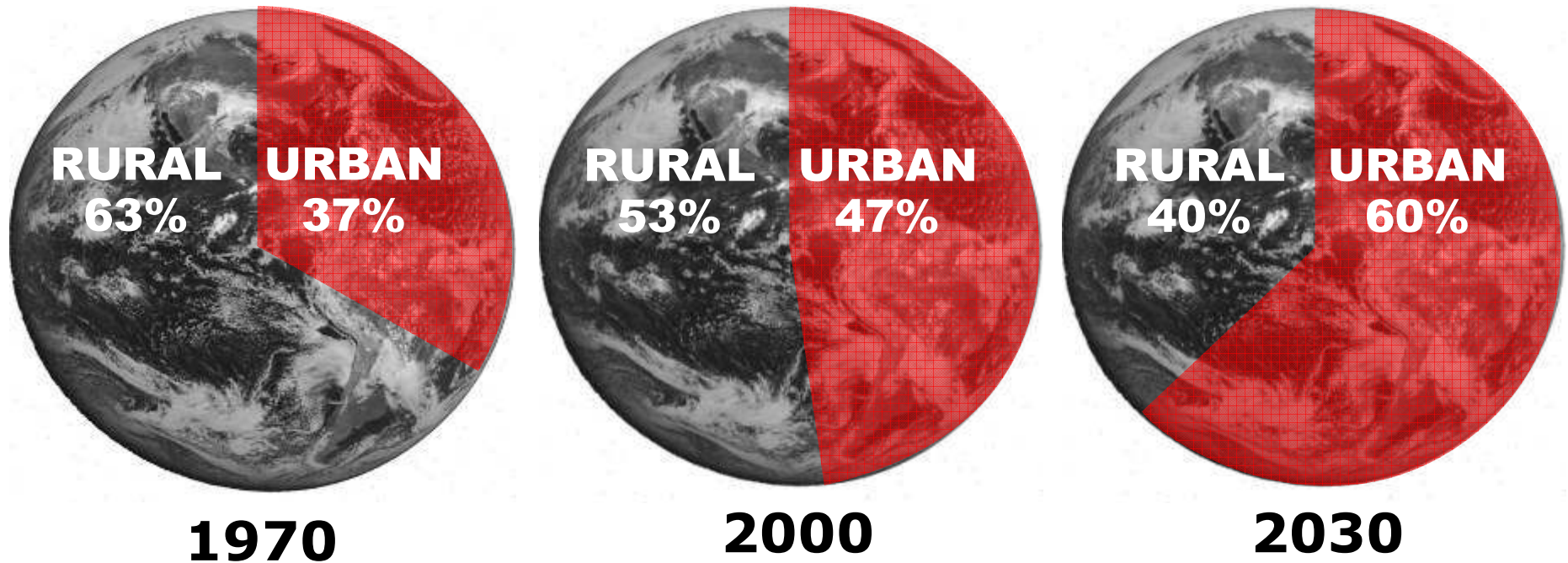
3. Taxi services and alternative transport in the “mobility chain”

4. Challenges and ideas for action



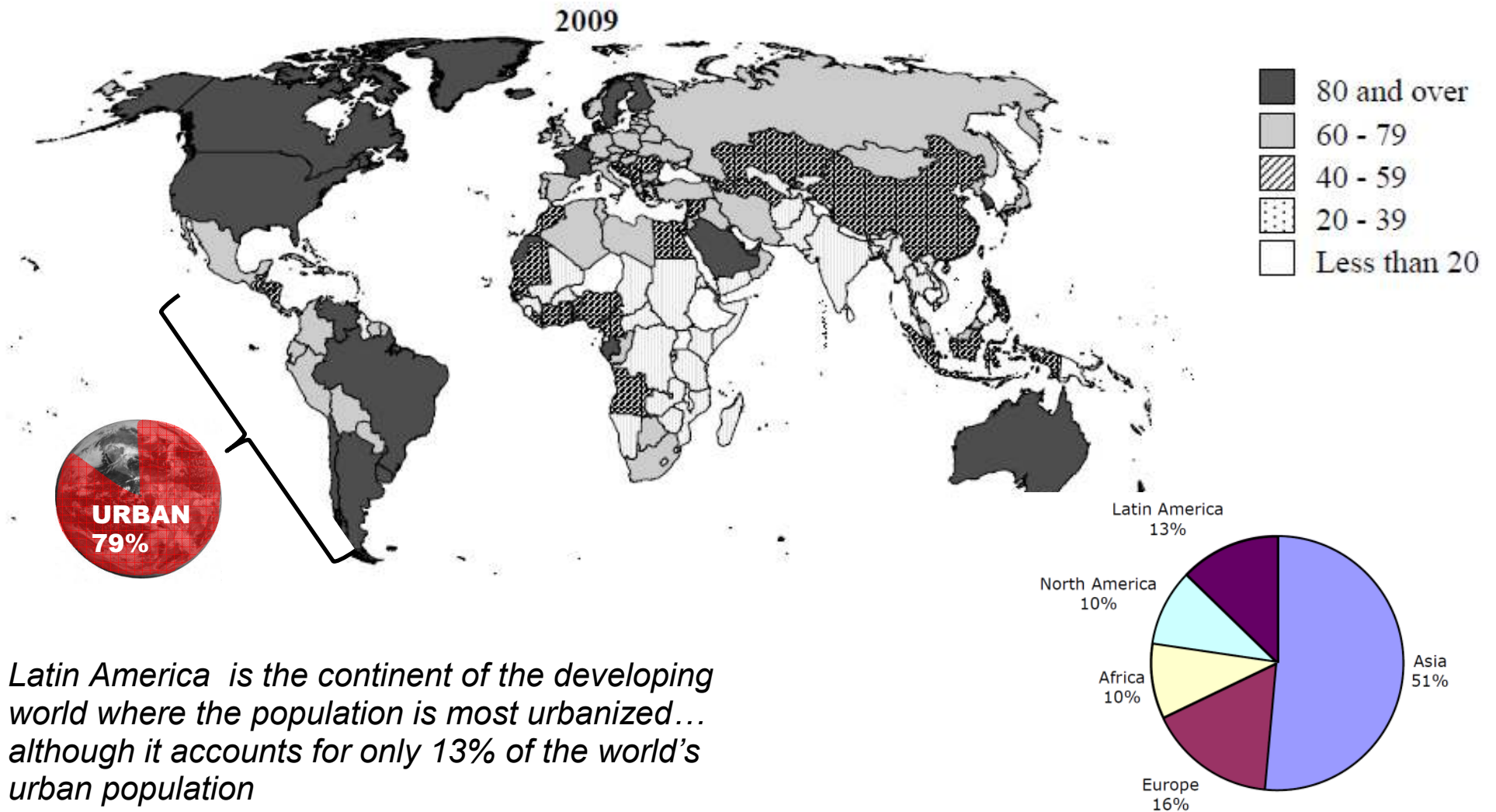
# Context

## Global Process of Urbanization



# The urbanized world – A world in movement

Figure IV. Percentage of the population in urban areas, 2009, 2025 and 2050



# Sustainable Urban Mobility?

## Economic

- Economic development generates demand for urban mobility
- Urban mobility orients development geographically
- The mobility infrastructure and services sector is an activity in itself

## Environmental

- Atmospheric contamination and noise
- Reduced consumption of energy / climate change
- Infrastructure as a barrier in the territory
- Consumption of urban space / construction of public space

## Social

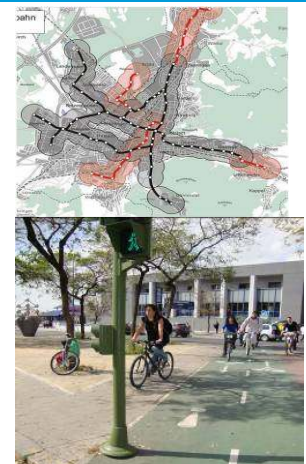
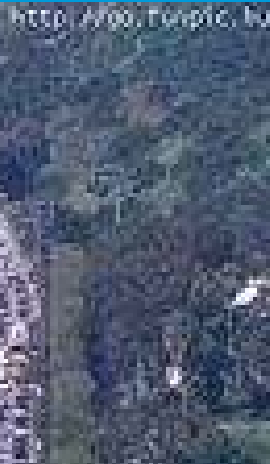
- Contributes to building an inclusive city
- Mobility for everyone, including groups with specific demands (the urban poor, elderly, women, disabled, children, etc).
- Offers opportunities for vulnerable groups to develop
- Traffic accidents

## (Cultural)

- Respects local identities

Urban (public) space: a non-  
renewable resource

# VISION: Cities of streets or highways?



# Alternative-Transport Services (Taxi/*paratransit*)



- Transport service with vehicles for few passengers
- With various levels of flexibility:
  - Personalized “door-to-door” services (taxis, *mototaxis*, *bicitaxis*)
  - Shared services with itineraries set by individual passengers (shared taxis, vans)
  - Services with pre-set itineraries (similar to bus services)
- They complement and feed the offer of traditional collective transport.
  - Less busy times of the day
  - Itineraries from periphery and/or poor neighborhoods
  - Other levels of comfort
  - Special demands
  - Other tariffs



# Alternative-Transport Services (Taxi/*paratransit*)



- Almost without exception, these services are operated by private individual owners (high degree of fragmentation)
- Not (totally) regularized:
  - Legal / illegal existence
  - Tariffs
  - Taxes
  - Technical condition
  - Itineraries
  - Speed
  - .....

# Taxi/Paratransit : How many are there?

30% 40%  
70% ?

- Few data available.
- Informal services not accounted for in surveys



- An important source of urban employment
- They dynamize the local economy
- Capacity to adapt to changes in demand



# Contaminators?

Analysis in Africa: informal service = double contamination

EUR/Passenger	ABIDJAN	ACCRA	ADDIS ABABA	JOHANNES BURG	LAGOS	NAIROBI
Fuel consumption per passenger of organized PT	68.8	108.3	33.4	298.5	37.7	3.5
Fuel consumption per passenger of informal transport	101.6	148.8	65.7	157.4	180.8	11.1

Source: Trans-African Consortium 2010

- Old vehicles (in Dakar, Senegal, the average vehicle is more than 15 years old)
- Low fares manage to cover operational costs, but operators have no means to improve their fleet



## Case study: Mexico City

- 60% of the demand for mobility is covered by alternative transport
- High emissions and the poor quality of the service led to a program to renew the public-transport fleet (2011)
  - Looks to replace all the minibuses manufactured prior to 2006
  - The old vehicles are dismantled and the owners receive a subsidy that contributes to purchase a new vehicle
- The city invested in the BRT system and formalized informal practices
  - In the first BRT 262 line the old informal vehicles were substituted by 68 articulated buses, while 30 articulated buses replaced 90 public buses



## Challenges and ideas for action

### Fragmentation

**Difficulty to negotiate agreements with the local authorities**

**Capacity to adapt very quickly to the demand**

**Aggressiveness and violent competition;  
Complexity for the users**

**Low cost for the city;**

### → Institutional agreements, support for setting up consortia

- The consolidated operations of the pre-*Transmilenio* in Bogotá led to the number of bus companies dropping from 65 to 4 bidding groups. Once the concession contracts were signed, access to financing vehicles became simplified.
- In Dakar, Senegal, a method of coordinating urban transport re-grouped 446 bus operators into 13 cooperatives that provide transport services under a franchise system.

## Challenges and ideas for action

Quantity of vehicles, informality

**Risk of causing dysfunction in the transport system**

**Potential to increase territory covered**

**Supporting the demand for public transport**

→ multimodal vision, making urban density and mobility compatible

- The *Cape Town's Integrated Rapid Transit* project proposed “multimodal” networks of public transport to supplement corridors and incorporate existing formal and informal operations
- When they created the *Transantiago* system in Santiago de Chile, the idea was to contract informal operators as feeders
- In Curitiba the mobility scheme is conceived as one of the instruments of urban planning

## Challenges and ideas for action

Comfort, safety, contamination

**Poor state of the fleet**

**Accessible investment for small investors**

→ Agreements to renew the fleet/ applying norms

- Renewing the fleet in Mexico City (2011)
- In Cape Town, 22,000 vehicles were dismantled and their owners subsidized between 2006 and 2010

→ Proper use of technology

- Sophisticated collection of tariffs (*Smart Card* in Cape Town), GPS control systems (Bogotá) and priority signaling techniques (in many Latin America countries)

## Conclusion

- Each city is unique. There is no single solution for all.
- When well integrated, taxi and alternative-transport services can contribute a great deal to developing sustainable urban mobility.

Many thanks!

[Christian.schlosser@unhabitat.org](mailto:Christian.schlosser@unhabitat.org)

Urban Transport Section,  
UN-HABITAT based in Nairobi, Kenya

[www.unhabitat.org](http://www.unhabitat.org)

[Frederic.saliez@unhabitat.org](mailto:Frederic.saliez@unhabitat.org)

Office for Latin America and the  
Caribbean, Rio de Janeiro, Brazil

[www.onuhabitat.org](http://www.onuhabitat.org)