Promoting Policies for Eco-Productive Cities in the Global South

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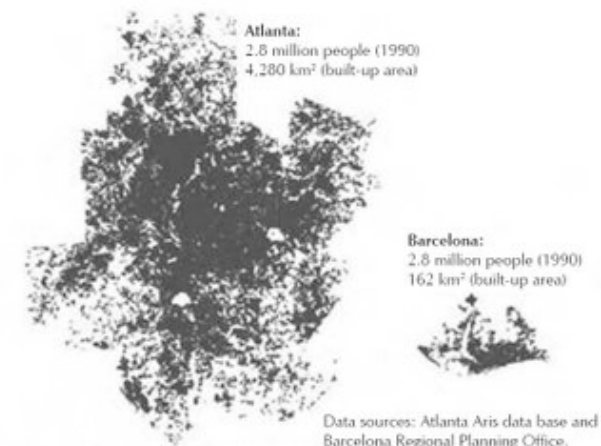
Contemporary cities

- In many industrialised countries, cities have been shaped and built to become "automobile-sized", allowing for little or no pedestrian access to certain parts – sprawl

- Sprawl is self-reinforcing – residences, shops, schools, jobs and recreation are all distant from one another, requiring cars and a built environment to support them


Figure 2: The Built-Up Area of Atlanta and Barcelona Represented at the Same Scale

Atlanta:
2.8 million people (1990)
4,280 km² (built-up area)

Barcelona:
2.8 million people (1990)
162 km² (built-up area)

Data sources: Atlanta Aris data base and Barcelona Regional Planning Office.

"Third World" cities

- In the developing world, urbanization has taken place in a mixed mode: an attempt by the state to shape the city along the design strategies developed in wealthy countries, but plagued by the realities of poverty –> highways over slums, pedestrians and slow-moving vehicles forced to compete for space with fast cars

- Alongside sprawl we also have slums, poor access to infrastructure -- both physical concentration and dispersion, associated with different labour modes (formal and informal)

- But most developing country cities are characterised by high density and mixed use (houses and commercial establishments in close proximity)
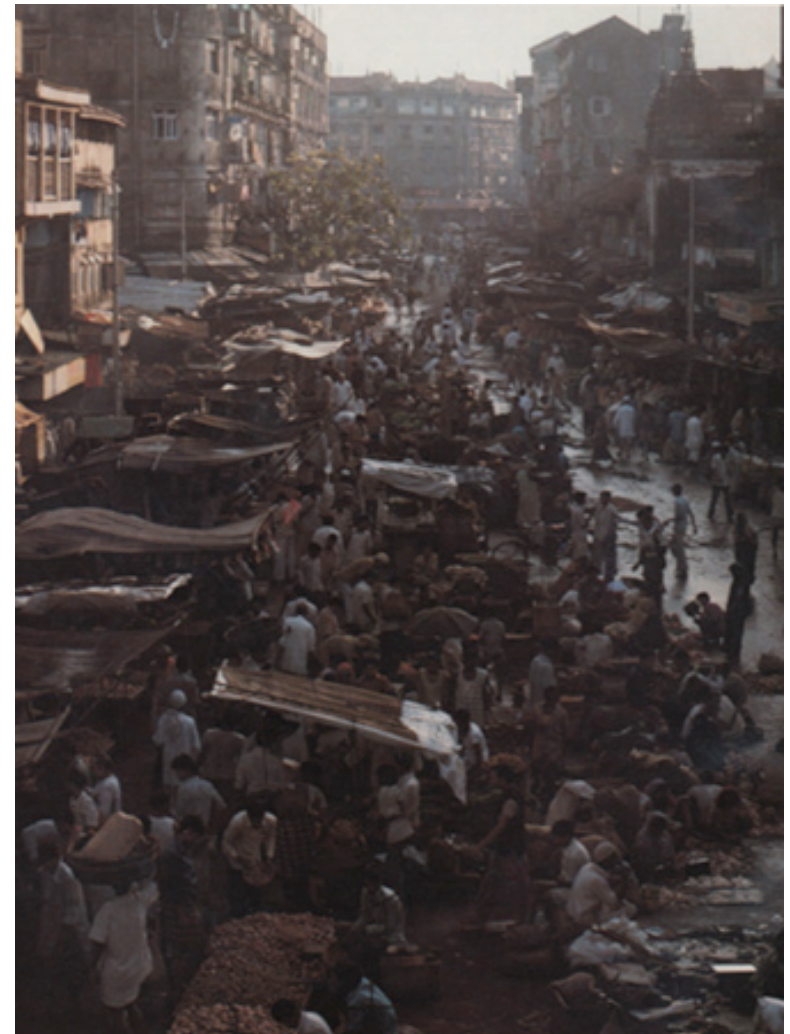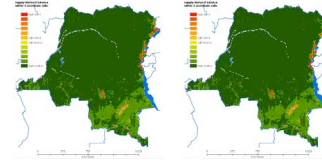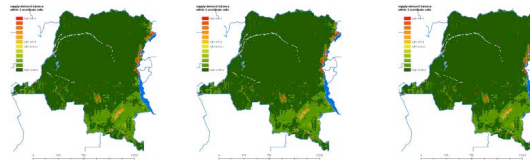
India is 10.5 countries in one
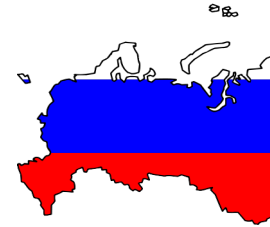
5% of population
Average income:
US$20,000
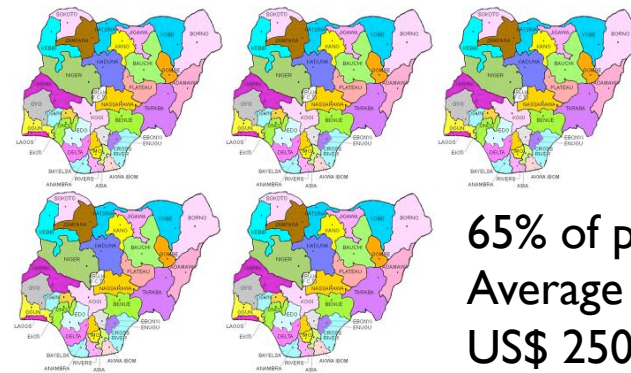
65% of population
Average income:
US$ 2500

30% of population
Average income:
US$ 500

	Slum % urban pop.	Number (millions)
China	37.8	193.8
India	55.5	158.4
Brazil	36.6	51.7
Nigeria	79.2	41.6
Pakistan	73.6	35.6
Bangladesh	84.7	30.4
Indonesia	23.1	20.9
Iran	44.2	20.4
Philippines	44.1	20.1
Turkey	42.6	19.1
Mexico	19.6	14.7
South Korea	37.0	14.2
Peru	68.1	13.0
USA	5.8	12.8
Egypt	39.9	11.8
Argentina	33.1	11.0
Tanzania	92.1	11.0
Ethiopia	99.4	10.2
Sudan	85.7	10.1
Vietnam	47.4	9.2

Davis 2006

Squatter features

- Crowding – very high density
- Land squatted is not well-developed, no services
- Squatting on both public and private property (including speculative land-holding or because of regulatory requirements or rent controls that make investing on that land unprofitable
- Squatters do not pay formal rent but incur costs, including fees to community leaders

Urbanization

Centripetal forces

- Natural advantages of particular sites
- Harbors, rivers, and the like
- Central locations
- Market-size external economies
- Access to markets (backward linkages)
- Access to products (forward linkages)
- Thick labor markets
- Knowledge spillovers

Centrifugal forces

- Market-mediated forces
- Commuting costs, urban land rent
- Pull of dispersed resources, such as farmland
- Nonmarket forces
- Congestion
- Pollution

Krugman 1996

Addressing Slums

- Slum demolition programmes have been promoted by and large by elites in residential welfare associations that want to 'clean up' and 'reduce crime'.

- Often, professional knowledge is used to supplant local knowledge, resulting in the erosion of the informal economy, which itself forms the base of the formal sector

- But in successful cases of rehabilitation rather than resettlement, patronage and exploitation of the urban poor is bypassed by providing public infrastructure services (water, sanitation, *pukka* housing) and rights to community-led organisations to manage and operate public spaces and make informal economies self-sustaining.

Addressing Slums

- The Dharavi slum in Mumbai has 400 recycling units and 30,000 ragpickers. Six thousand tons of rubbish are sorted every day. In 2007, the Economist reported that in Vietnam and Mozambique, "Waves of gleaners sift the sweepings of Hanoi's streets, just as Mozambiquan children pick over the rubbish of Maputo's main tip. Every city in Asia and Latin America has an industry based on gathering up old cardboard boxes." There's even a book on the subject: The World's Scavengers (2007) by Martin Medina. Lagos, Nigeria, widely considered the world's most chaotic city, has an environment day on the last Saturday of every month. From 7am to 10am nobody drives, and the city tidies itself up.
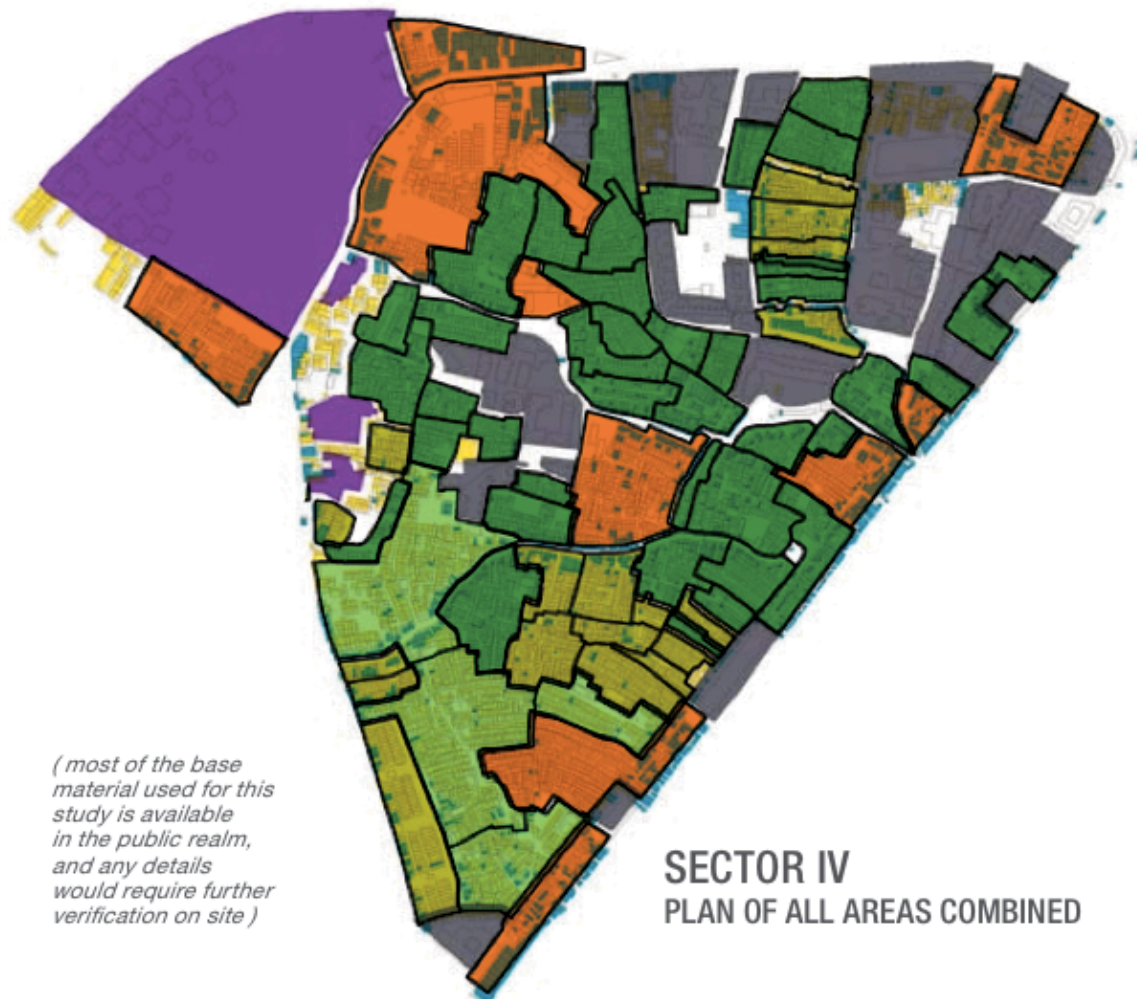
In-situ rehabilitation

- The Mumbai case used the innovative method of using the land on which slums are located to build tenement housing, part of which was provided free to residents, and part of which was sold at market rates to finance the construction. While there is scope for misappropriation of low cost housing, this approach has been used in Mumbai for several years, and has buy-in from urban local bodies and slum dwellers.

- Another in-situ case in Ahmadabad, widely cited in the housing policy literature, illustrates the promise of a partnership between government bodies, non-governmental organizations, a microfinance provider, and slum residents in carrying out slum upgrading. Residents contributed partially to the cost of individual toilets and sanitation services and were in turn connected to the city sewage and drainage system, and guaranteed tenure for 10 years in the same area.

Dharavi - Mumbai

- Occupying over 525 acres, Dharavi is Asia's largest slum containing tens of thousands of small businesses and hundreds of thousands of residents of different religions, castes, languages, provinces, and ethnicities. Its enterprises include food, garments, leather products, pottery, printing, jewellery and recycling, with a rough turnover estimated at over Rs. 2000 crores a year.

CO-OPERATIVE HOUSING SOCIETIES
CHAWLS
NAGARS
AMBIGUOUS CLUSTERS
SLUM REHABILITATION AUTHORITY (SRA) BUILDINGS
PRIVATE LANDS

(most of the base material used for this study is available in the public realm, and any details would require further verification on site)

SECTOR IV
PLAN OF ALL AREAS COMBINED

Dharavi residents have organised themselves into groups to adopt a common rehabilitation programme as an alternative to the original official alternative redevelopment plan.

Dharavi - Mumbai

- The Dharavi Redevelopment Project was initiated by the government through a partnership with the Society for the Promotion of Area Resource Centres (SPARC, 2003) to rehabilitate housing for over 50,000 slum-dwelling families.

- The policy is confronted by a number of challenges - insufficient supply of land, insufficient data, lack of co-ordination among agencies, lack of resources and rigid planning norms, to name a few.

- A focused attempt at improving land supply, infrastructure, information systems, management and repair of existing house stock, public awareness and participation would help overcome these obstacles. The policy has been proved useful in cases where rehabilitation is necessitated by vital infrastructure projects. Under the current policy, around 100,000 houses have been constructed so far, and an equal number are under construction
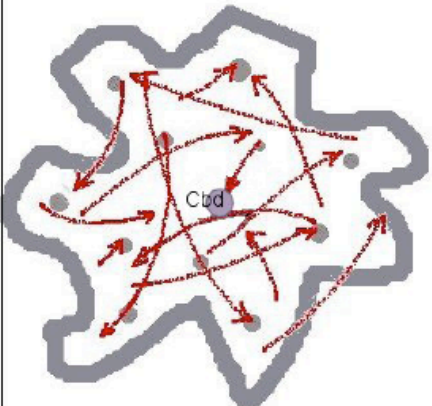
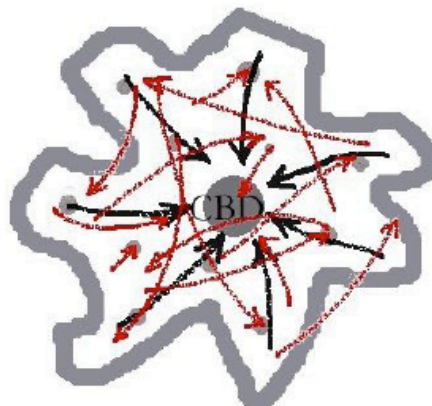Schematic Representation of Trips Patterns Whithin a Metropolitan Area
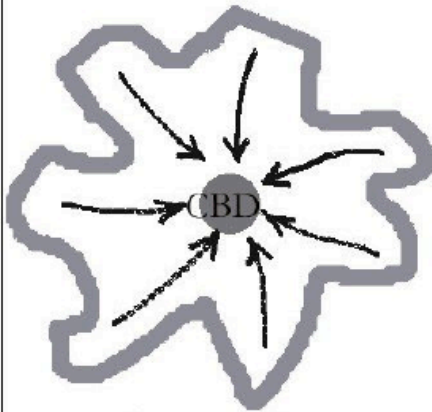
(a) The monocentric model
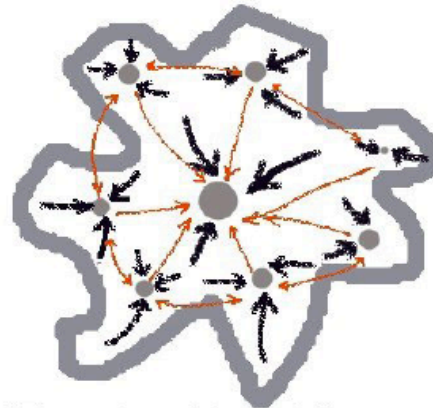
(b) The polycentric model: The urban village version

(c) The polycentric model: The random movement version

(d) The mono-polycentric model: Simulateous radial and random movements

- - -> weak links
━━━► strong links

Urban_models2.psp

A person walking up to 12 minutes can easily reach any point in an area of 100 hectares (ha).

A job or a shop located in an area with a density of 10 people per ha (typically density of a US suburb) can be reached by 1,000 people without requiring motorized trips, but 30,000 people can reach the same job within the same walking time if the density is 300 people per ha (typical density in Asian city central business districts).
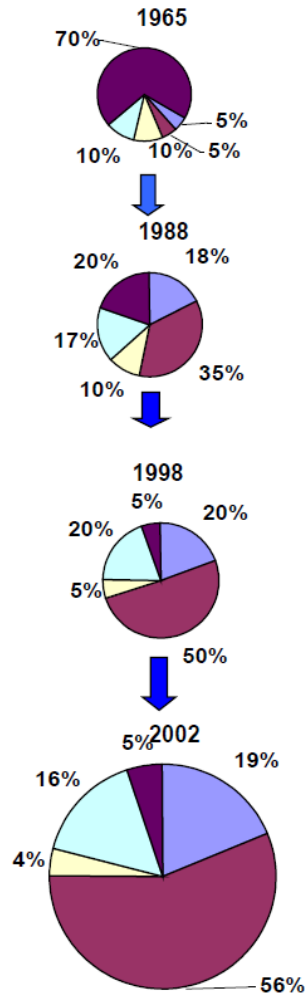
Bertaud (2003)

Apart from density, how streets are connected to one another also matters for transport sustainability – hierarchical disconnected networks with cul-de-sacs are much harder to support public transport and walking than connected networks like Hausmann's Paris, above left.
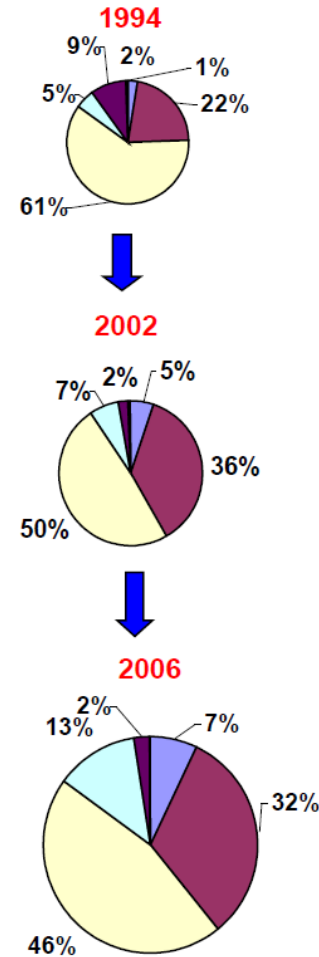
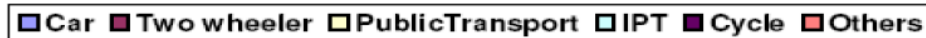# DECLINING TRANSIT RIDERSHIP   BEST BUS SYSTEM CITY -BANGALORE

Figure 3 Mode split vehicles& Mode split Person Trips
Source (CRRI,RITES, CDP-2006)

Automobilised Cities versus Sustainable Transport

Automobilised Cities

- Subsidies for motor fuel, parking, road use
- Focus on capacity expansion of roads; neglect of local street and sidewalk maintenance
- Motor vehicle traffic and parking displaces cyclists, pedestrians, public transport, parks

Sustainable Transport

- Subsidies for public transport, cycling, and affordable housing close to public transport
- Modernization of roads with real-time traffic management and operations
- Road space protected for pedestrians, cyclists, public space

Automobilised Cities versus Sustainable Transport

Automobilised Cities

- Public transport in developing countries is often overcrowded, poorly maintained, unsafe, and slow

- It is also inadequate in industrialised countries, where urban space has become automobile-friendly but unsuitable for walking

- Unmanaged sprawl and urbanisation

- Weak governance structures for transport and land use policy/planning/management

- Little attention to equality of access among different social and economic groups

Sustainable Transport

- Bus rapid transit or rail in high-demand corridors, with performance-based contracting

- Public-transport-oriented development

- Stronger governance structures for transport and land use policy, planning, and management

- More equitable access for the poor, disabled, young, and old