



**Asia-Pacific
Economic Cooperation**

2014/SOM3/PD/006

APEC Cities – Urbanization and Economic Sustainability in Latin America: Chile, Mexico, Peru

Submitted by: UN–Habitat



**Policy Dialogue on Urbanization
Beijing, China
19 August 2014**








Urbanization, Innovation and Sustainable Economic Growth in Latin American Cities: Chile, Mexico, Peru

Marco Kamiya

APEC Policy Dialogue on Urbanization
Beijing – 19th August 2014



Economy and City Finance
UN HABITAT Urban Economy Branch



UN HABITAT: ACTIVITIES AND GLOBAL REACH

- Legislation and Government
- Housing and Slum Upgrading
- Risk Reduction
- Planning and Design Branch
- Basic Services
- Research and Capacity Building
- Urban Economy and City Finance

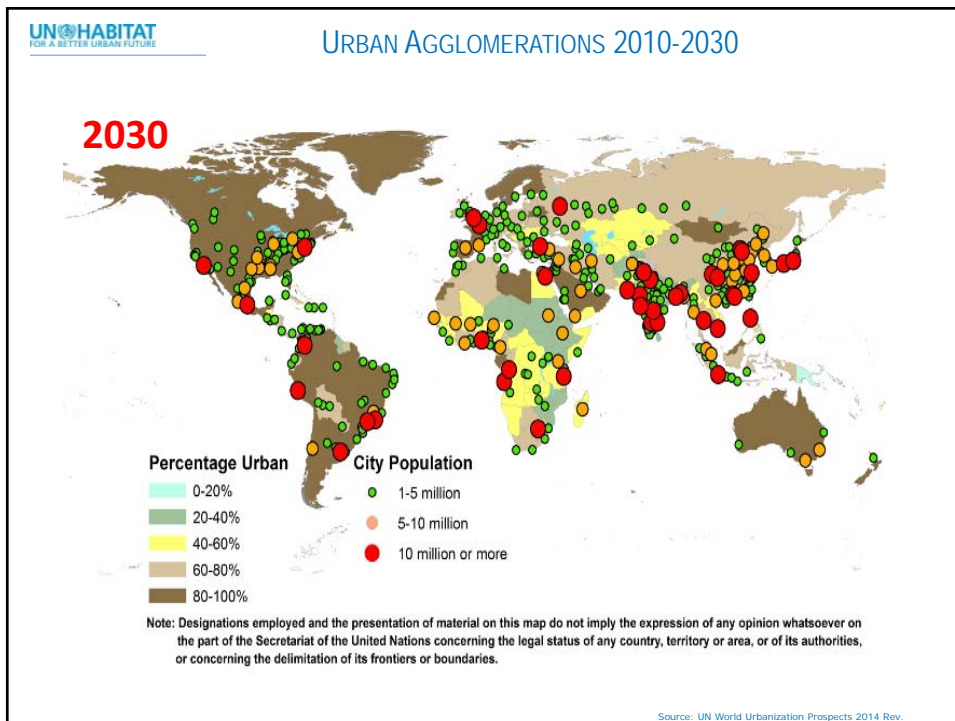


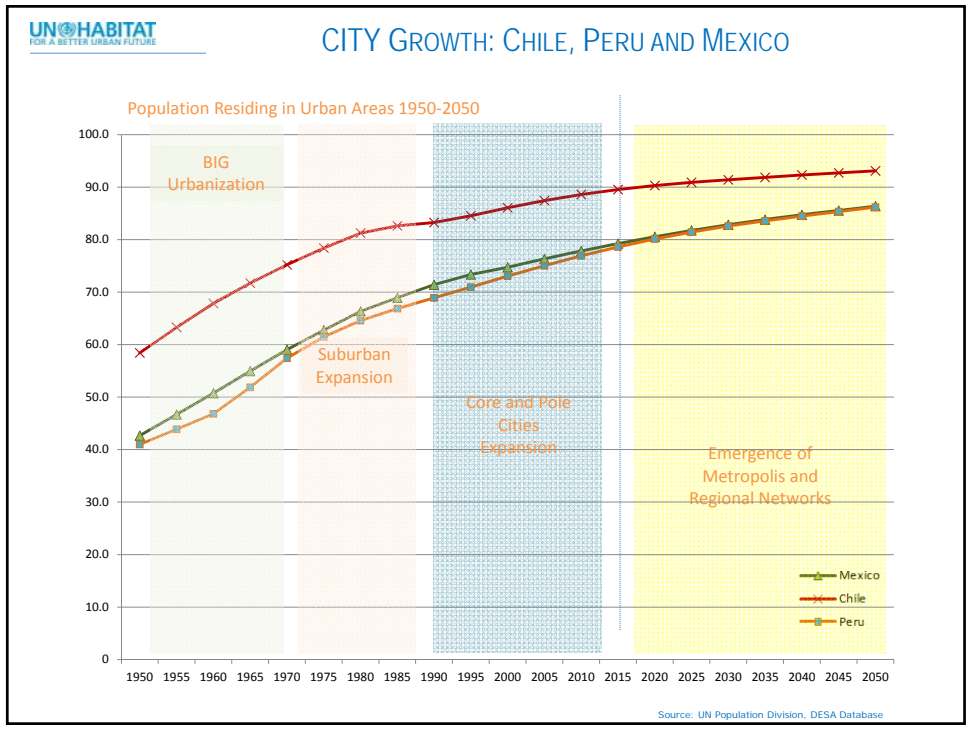
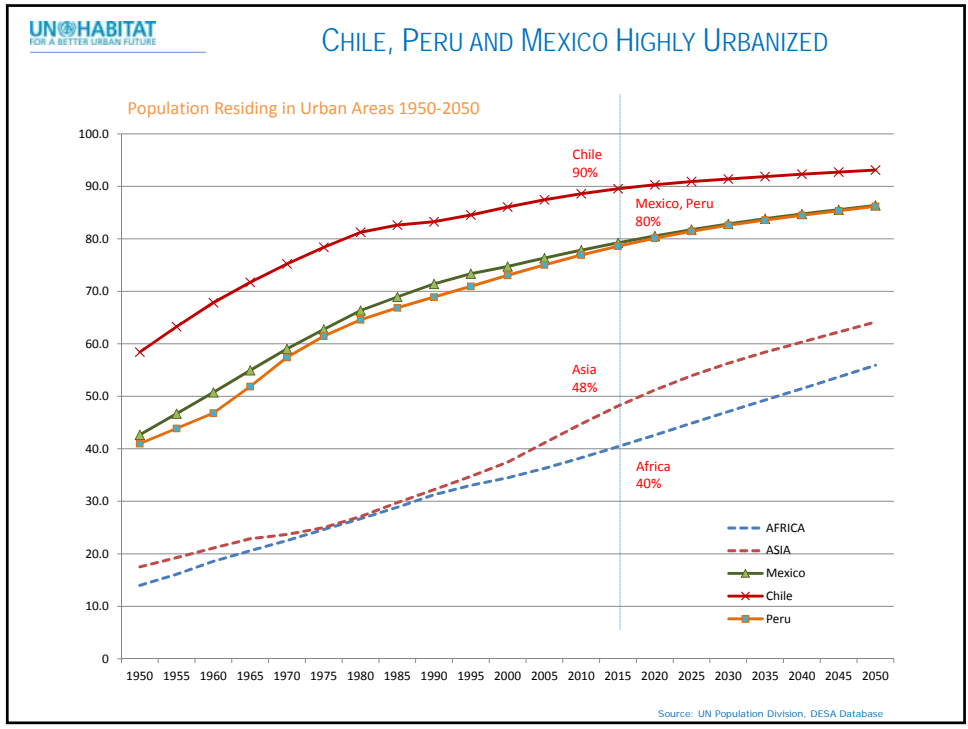
Source: UN HABITAT

UN HABITAT Headquarters in Nairobi, Kenya.

400 core staff, 2000 project personnel, more than 20 UN liaison offices, and 4 regional offices: Latin America and the Caribbean; Asia and the Pacific; Arab economies and African economies.

THE BIG PICTURE





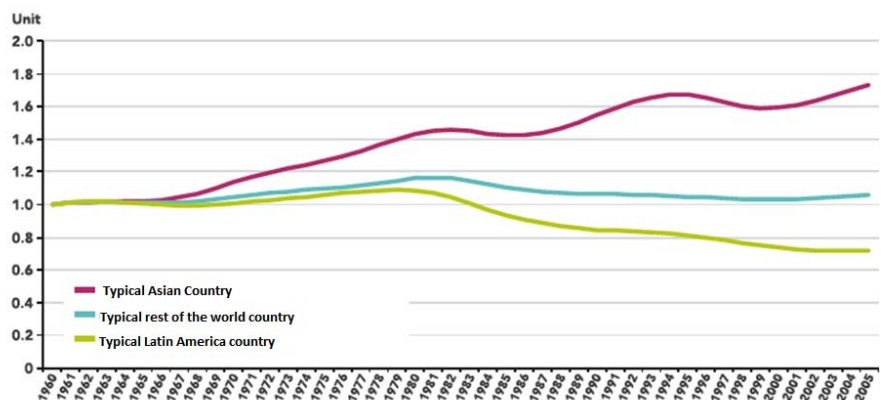
Not good news ...

- Inequality and “Dual Cities” is a serious problem
- Insecurity and crime is a main concern
- Productivity and competitiveness lower than needed

...but improving!

- Better technical capabilities in urban and economic planning
- Respect for rule of law improving
- More countries support democracy and market economies

Total Factor Productivity in Asia and Latin America in comparison to United States, US in 1960=1



Source: IADB 2010 "The Age of Productivity"

UN HABITAT FOR A BETTER URBAN FUTURE

URBAN PLANNING AND PRODUCTIVITY: WHAT ARE THE LINKS?

Region	Trips / Habitant / Day
Cities in high income countries	3.6
Latin America -OMU	2.0

1 Amsterdam, Berlin, Chicago, Los Angeles, Nueva York, San Francisco, Sidney y Tokio.
Source: CAF Development Bank of Latin America Observatory of Urban Mobility

Transmission channel:
People's **Mobility** and poor interactions

Transmission channel:
Expensive **Supply Chain** and weak or inexistent **Production Networks**

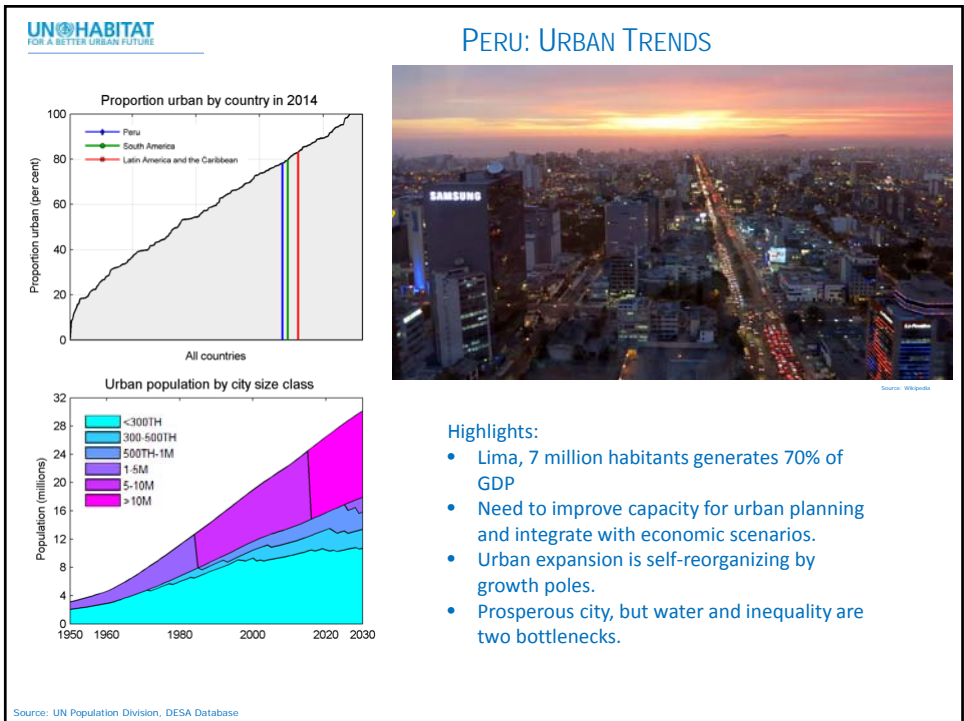
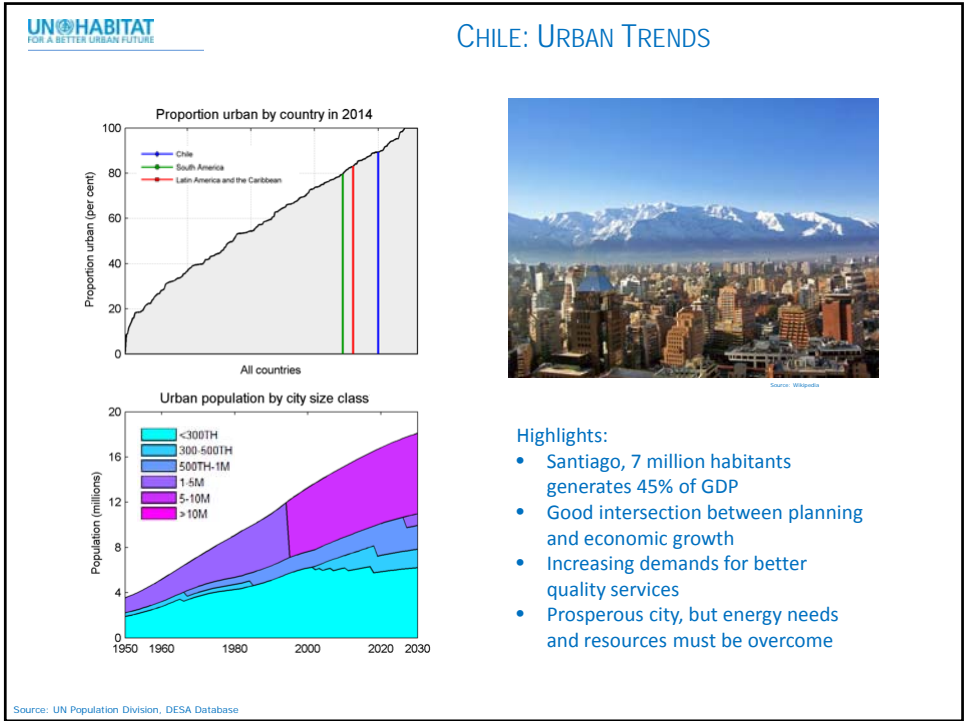
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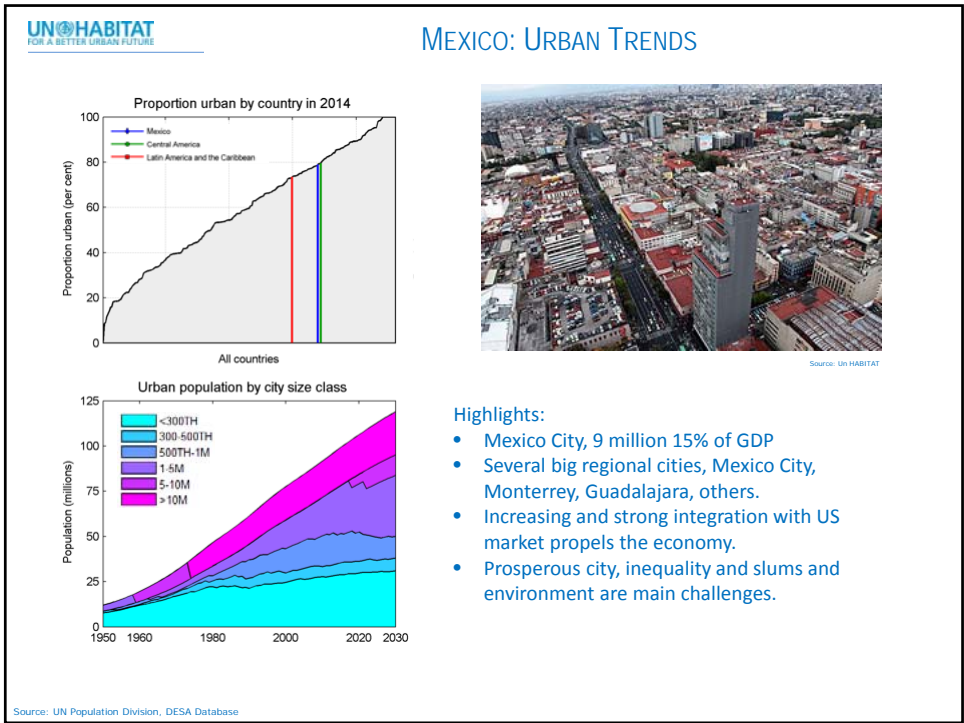
WHERE DO LATIN AMERICAN CITIES COME FROM?

Basic City Planning
Squared and plotted.
Main square with Church, Municipality, School, then houses and commercial zones

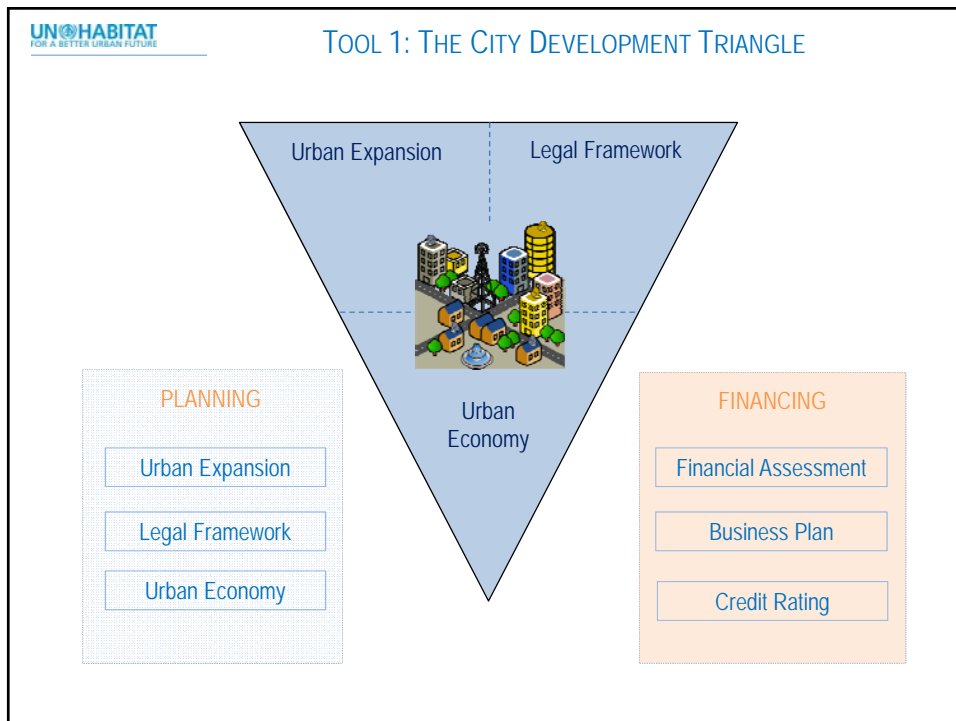
Basic Map
Mexico City 1624

Law of the Indies
Spanish's Law of the Indies set the base for City Planning





TOOLS FOR URBAN AND ECONOMIC PLANNING



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FOR A BETTER URBAN FUTURE

TOOL 2: HABITAT'S PRINCIPLES OF CITY PLANNING


Principle	Formula	Unit
Principle 1	$\frac{\text{Street Land-use}}{\text{Total Floor Area}}$	30-45%
Principle 2	Population Density	15-60 k people /km ²
Principle 3	$\frac{\text{Economic Floor Area}}{\text{Total Floor Area}}$	40-60%
	$\frac{\text{Residential Floor Area}}{\text{Total Floor Area}}$	30-50%
Principle 4	$\frac{\text{Single Tenure Residential Floor Area}}{\text{Residential Floor Area}}$	0-50%
	$\frac{\text{Affordable Housing Residential Floor Area}}{\text{Residential Floor Area}}$	20-50%
Principle 5	$\frac{\text{Single Function Block Area}}{\text{Neighborhood Area}}$	0-10%

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CITY LAYOUT AND BOTTLENECKS TO GROWTH


	City Core			Suburban Areas		
	Land allocated to Street	Street Density	Intersection Density	Land allocated to Street	Street Density	Intersection Density
IDEAL VALUES	30-40%	15-60 k/ km ²	>100 inter.	30-40%	15-60 k/ km ²	>100 inter.
China, Beijing	19.1	17.1	104.7	6.1	4.3	12.8
Kenya, Nairobi	11.5	7.3	36.0	5.0	2.6	5.9
Japan, Tokyo	28.8	30.2	323.8	12.4		
US, New York	36.0	26.3	173.3	12.3	11.4	72.3
Spain, Barcelona	33.0	23.8	181.7			
LATIN AMERICA						
Colombia, Bogota	24.0	17.2	106.1			17.2
Mexico City	23.4	21.8	138.9	10.3	10.0	68.0
Brazil, Sao Paulo	19.5	16.1	94.6	9.5	7.8	39.5
Bolivia, La Paz	15.3	21.4	179.8	6.6		


Source: Habitat (2013) "Streets as Public Spaces and Drivers of Urban Prosperity"



TOOL 3: CITY PROSPERITY INDEX

- Productivity**
 - The productivity index is measured through the city product, which is composed of variables such as capital investment, formal/informal employment, inflation, trade, savings, export/import and household income/consumption. The city product represents the total output of goods and services (value added) produced by a city's population during a specific year.
- Quality of Life**
 - The index is a combination of three sub-indices: education, health sub-index, **safety & security, public space**.
- Infrastructure Development**
 - The index is a combination of the following sub-indices: connection to services (piped water, sewerage, electricity), communication services (ICT, mobile), housing, **mobility, transportation; street connectivity**.
- Environmental Sustainability**
 - This index is made of the sub-indices: air quality (PM 10), **CO2 emissions and indoor pollution, waste, energy**.
- Equity and Social Inclusion**
 - This index combines statistical measures of inequality of income/consumption, (Gini coefficient) and **inequality of access to services and infrastructure, gender inequality**.
- Legislation and Governance**
 - This index is a combination of the following sub-indices: **Legal, Land and governance (TBD)**.





Main findings of on-going project:

- Inequality emerges in Latin America as a very serious problem.
- Safety is a major concern in Latin America
- Spatial inequality and dualism is a main problem
- ICT seems to be a transversal indicator

THE ROAD AHEAD

POLICY AGENDAS IN LATIN AMERICA

- Integral agendas (social, infrastructure, competitiveness) are needed
- Services –good quality- are demanded by middle class
- Services' access are demanded by poor income population
- Inequality must be fought with Urban and Economic Policies
- Cities require Urban Planning and Economic analysis to plan scenarios

- Mexico, Chile and Peru requires:
 - City Extension Plan with a horizon of 20 and 30 years (urban and economic)
 - Legal Framework to support city extension (land readjustments, informality)
 - Urban Finance to meet target scenarios (complex financial products)
 - Prosperity: to advance simultaneously on a holistic city growth agenda

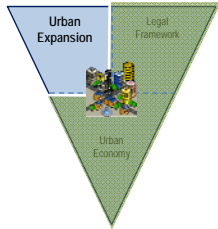
 UN HABITAT
FOR A BETTER URBAN FUTURE

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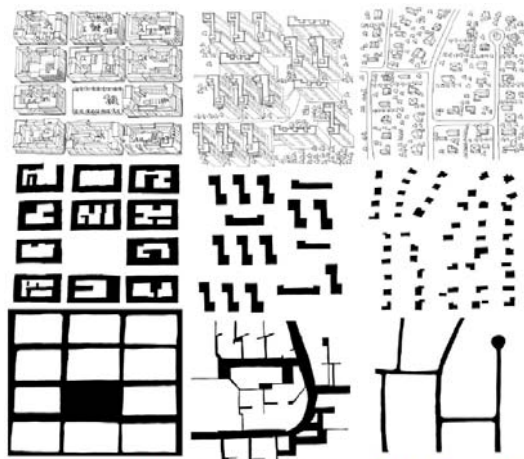
Urban Expansion



5 PRINCIPLES: URBAN DESIGN

1. Streets and public space
2. Mixed land use
3. Social mix
4. Adequate density
5. Limited land use specialization

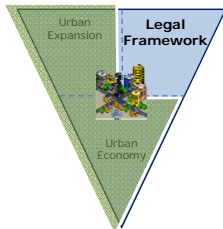
30-35% STREET
10-15% OPEN SPACE
50% BUILT AREA



Public Space: 39% Public Space: 20% Public Space: 11%

Source: Habitat Planning and City Extension Branch

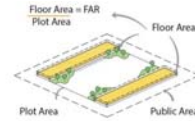
Legal Framework



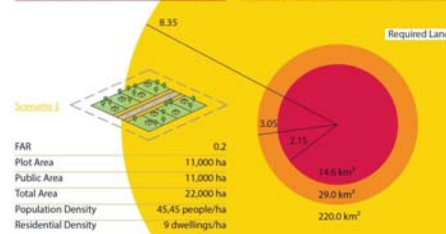
4 LEGAL PRINCIPLES

1. Legal protection of Public Space
2. The legal establishment of the buildability or development rights
3. Plotting rules and regulations
4. Building codes

Population	1,000,000
Family size	5
Dwellings	200,000
Dwellings size	60m ²
Residential Floor Area	12,000,000m ²
Other Floor Area	12,000,000m ²
Public services (schools, hospitals) Economic activity (business, industrial)	
Total Floor Area	24,000,000m ²



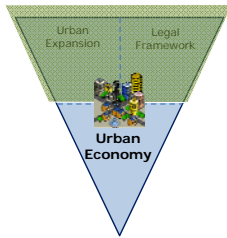
Scenario 1	Scenario 2		
FAR	3.0	FAR	1.5
Plot Area	733 ha	Plot Area	1,467 ha
Public Area	733 ha	Public Area	1,467 ha
Total Area	1,467 ha	Total Area	2,933 ha
Population Density	681.82 people/ha	Population Density	340.91 people/ha
Residential Density	136 dwellings/ha	Residential Density	68 dwellings/ha



Example: Kisumu, Kenya

Source: Habitat Planning and City Extension Branch

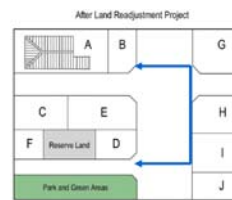
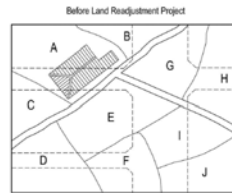
Urban Economy and Finance



5 FINANCIAL POLICY COMPONENTS

1. The acquisition of the public land.
2. Land Readjustment. Improved accessibility has an immediate impact on land value.
3. Infrastructure and Investment in Basic Services.
4. Maintenance of the Public Realm and Public Services.
5. Budgeting. Incomes and Expenditures.

Land Readjustment adds Value



Source: Habitat Planning and City Extension Branch