

# Methodology for a sustainable urban regeneration

Urban cell as dissemination unit

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# Why do we need regeneration?

urban areas



Organisers:



International Co-owners:



Sustainable Buildings  
and Climate Initiative  
Promoting Policies and Practices for Sustainability



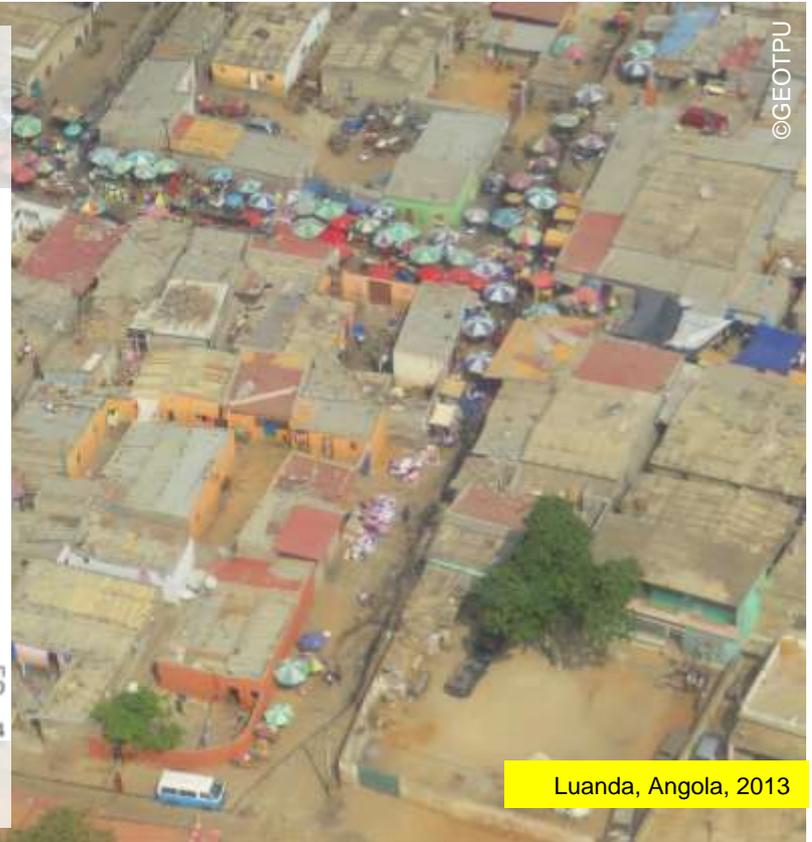
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# The informal settlements problem

Urban population living in slums, 2000 and 2014 in the world (%)



Source: United Nations, *The sustainable Development Goals Report 2016, 1st ed.*, United Nations Publications: New York, 2016



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Luanda, Angola, 2013



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**No regulation and inadequate housing**

**Public health issues**

- Potable water and sanitation
- Food insecurity
- Vulnerability

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**POLITICAL** - massive industry in a early stage  
**URBAN** - weak mobility network  
**BUILDING** – no sanitary conditions, low thermal comfort and no quality



Source: Geng, Y. et. al. Recent trend of industrial emissions in developing countries. Appl. Energy, 166, pp. 187-190, Mar. 2016



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***“(...) putting aside the low quality of the buildings, informal settlements might be the starting point to solve the problem through a self-building scheme and the available resources.”***

*Source: Steyn, G., Sustainable African settlement: Profiling a vision, Tshwane University of Technology, Pretoria, South Africa, 2003*

Pante Macassar, Timor-Leste 2017

The urban poor need to solve a difficult equation

**SHELTER + EMPLOYMENT**



**ECONOMY**



**DEVELOPMENT**



Luanda, Angola, 2013

# What forms does urban regeneration take?



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# Different perspectives on Regeneration

- Urban rehabilitation or urban renovation

Robert and Sykes (2000)

- Redevelopment, revitalization, replacement and rehabilitation

Sahin (2006)

- Fully dependency on State is no longer viable

Wekesa, Steyn and Otieno (2011), Keivani and Werna (2001), Mukhija (2004)

# Some current methods

- Public initiatives (only public investment)
  - Economic premises > cheaper land > urban dorms > social exclusion > poverty
- Site-and-service (indirect public investment)
  - Public provides land and infrastructure and people build within self-building context
  - Need coordination between stakeholders otherwise there is a risk of creating urban dorms and speculation of land prices
- Upgrading informal settlements
  - Application of “site-and-service” concept to the existing urban settlements instead of new settlements

# Public actions

- Public sector needs to be a supporter instead of a provider. How can this be achieved?
  - Provide land
  - Investment on major infrastructure
  - Policies
    - Management and monitoring of housing market
    - Tax relief
    - Legislation (lower standards)

# Case study: Luanda, Angola



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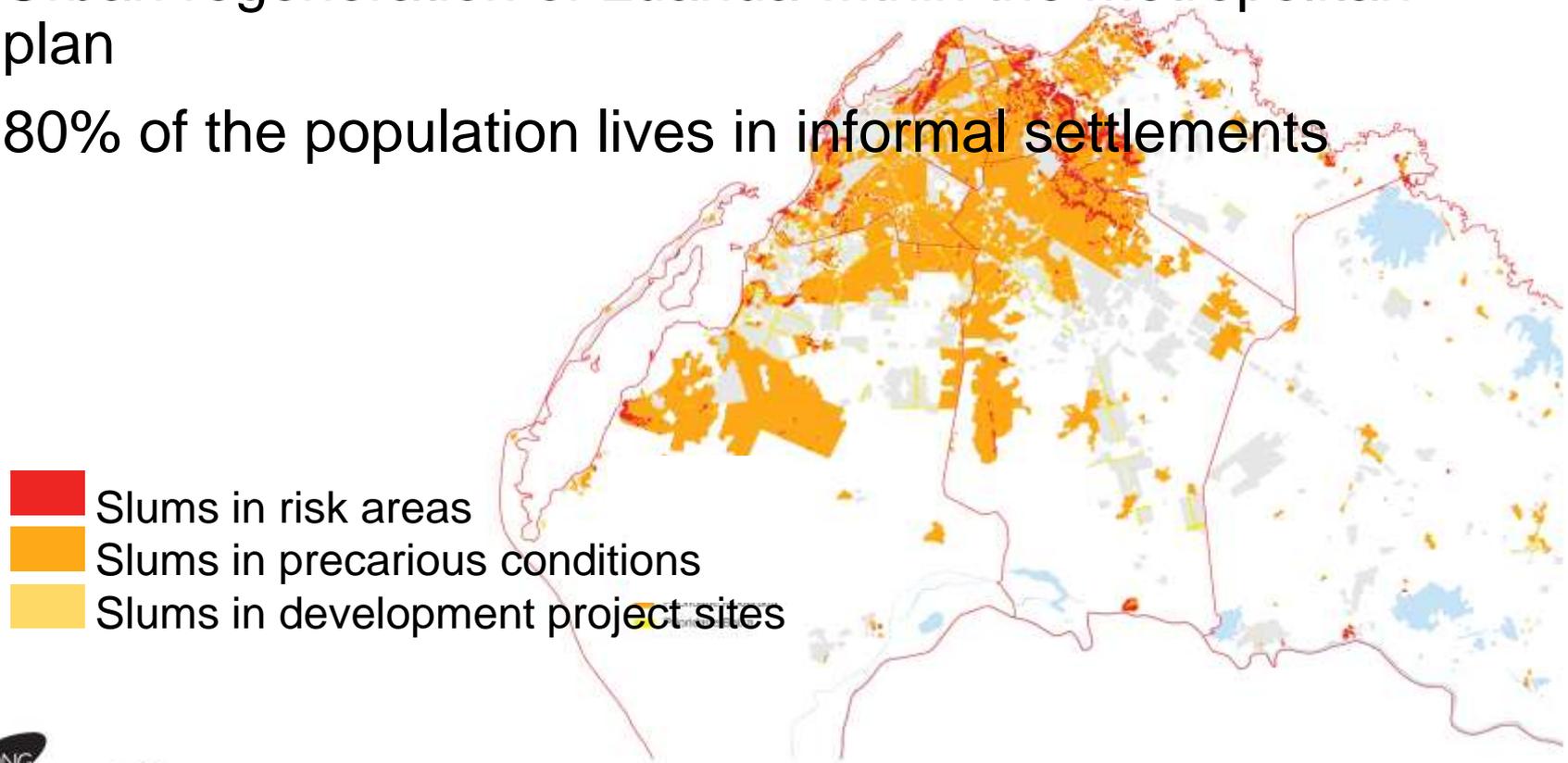


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# Luanda, Angola

- Urban regeneration of Luanda within the metropolitan plan
- 80% of the population lives in informal settlements



-  Slums in risk areas
-  Slums in precarious conditions
-  Slums in development project sites

# Urban cell as a dissemination unit



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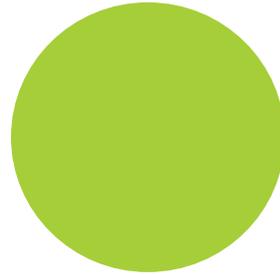
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# An inclusive approach

Physical-geographical  
approach to urban form  
and land use analysis



Fieldwork and local surveys  
developed between 2014-15  
(economic and social data)

Relationship between  
urban planning and  
housing deployment

# A partnership model

## PUBLIC SECTOR

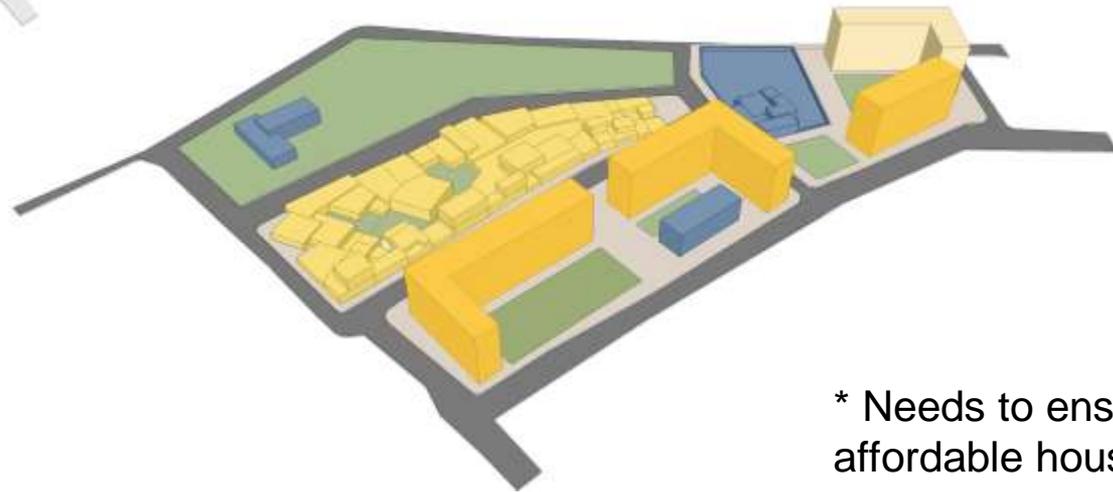
Land valorization

Tax benefits



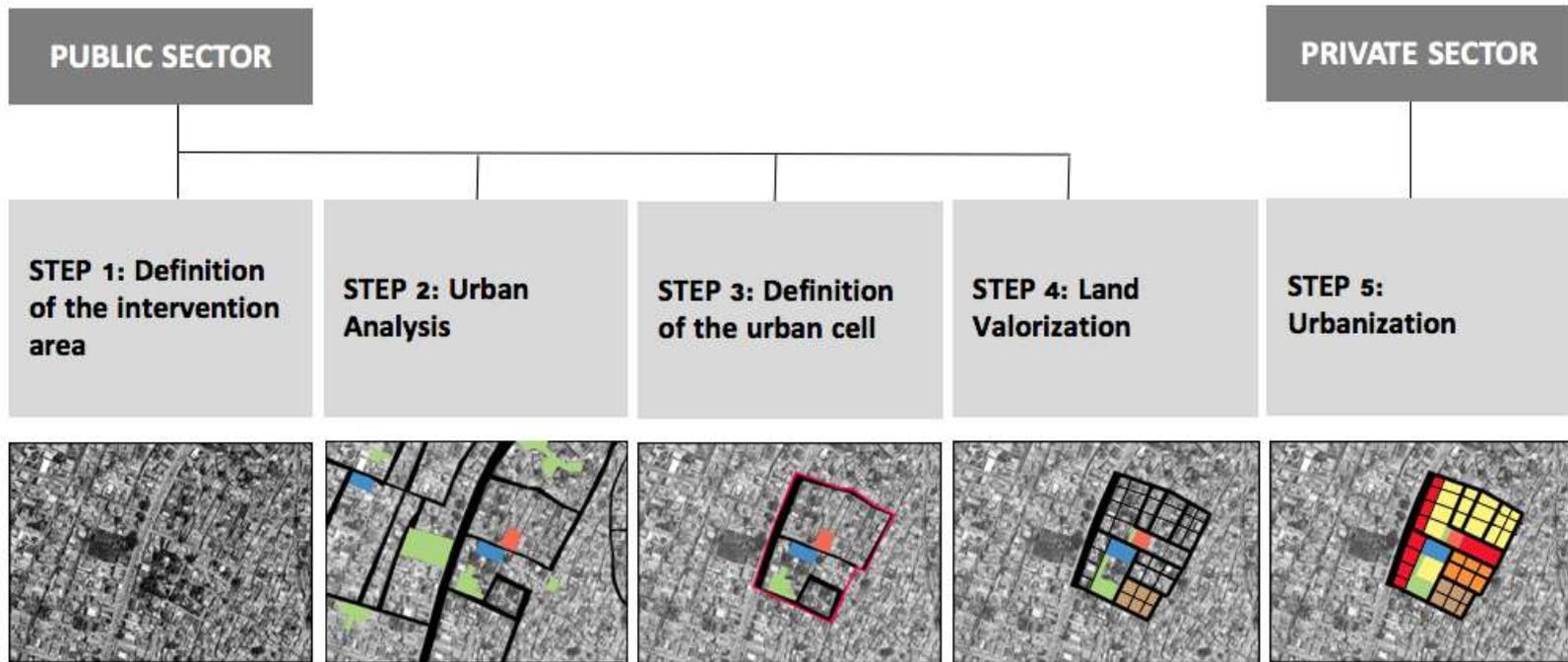
## PRIVATE SECTOR

Urbanization\*



\* Needs to ensure a % of affordable housing

# Methodology



# Step 1: defining intervention area

- Lead by the public sector
- Priorities: 1) Flood areas; 2) Development projects; 3) Precarious conditions
- A neighborhood unit size: 5000-10000 people (based on local densities)

- Roads
- Plot limits
- Facilities
- Heritage
- Available Land/Open Space
- Social Housing
- Affordable Housing
- Free-market Housing
- Mixed-use



# Step 2: urban analysis

- Definition of land tenure – to support rights transfer model and compensatory mechanisms
  - Parameters: existing roads, social facilities, cultural and historic heritage, commercial activities, agricultural area, vacant land



# Step 3: delimitation of the urban cell

- Urban cell to start the regeneration process
- Urban analysis criteria and physical parameters that might structure and organize an homogeneous neighborhood



# Step 4: land valorization

- Land valorization by the public sector – major infrastructure; social facilities and open space; management of the urban plots; social housing within the national housing programme



# Step 5: urbanization

- Public sector will give density bonus
- Private sector – services; commerce; free market; affordable housing
- % of private investment needs to aims affordable housing to help on housing deficit



# Conclusions

- Different **methods on urban regeneration** of informal settlements are presented
- An **inclusive methodology** is proposed and an incremental process is applied – dissemination urban cell, easier to be managed and monitored by the State
- A **partnership** is presented, where the State needs to be a supporter for private investment
- The **methodology** has 5 steps through physical actions and policies
- The city will gradually regenerate through these **cells**

# Thank you



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