

# The inclusive city

Seeking for new planning and design paradigms for urbanisation in weak institutional environments

Presentation prepared by Roberto Rocco, TU Delft  
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# Department of Urbanism

Research Theme #5

## International Planning and Developing Regions



# Planning and Designing for Development:

Spatial Strategies for Urban Development in Rapidly  
Growing Economies

Ana Maria Fernandez-Maldonado

Roberto Rocco

Marcin Dabrowski





Many people work with developing countries OR comparative studies in the department and in the faculty

# Urgency

in 2013, approximately one billion people (**one third of urban dwellers worldwide**) lived in informal settlements in conditions of serious deprivation, including lack of access to sanitation, fresh water, healthy living space, and public services.

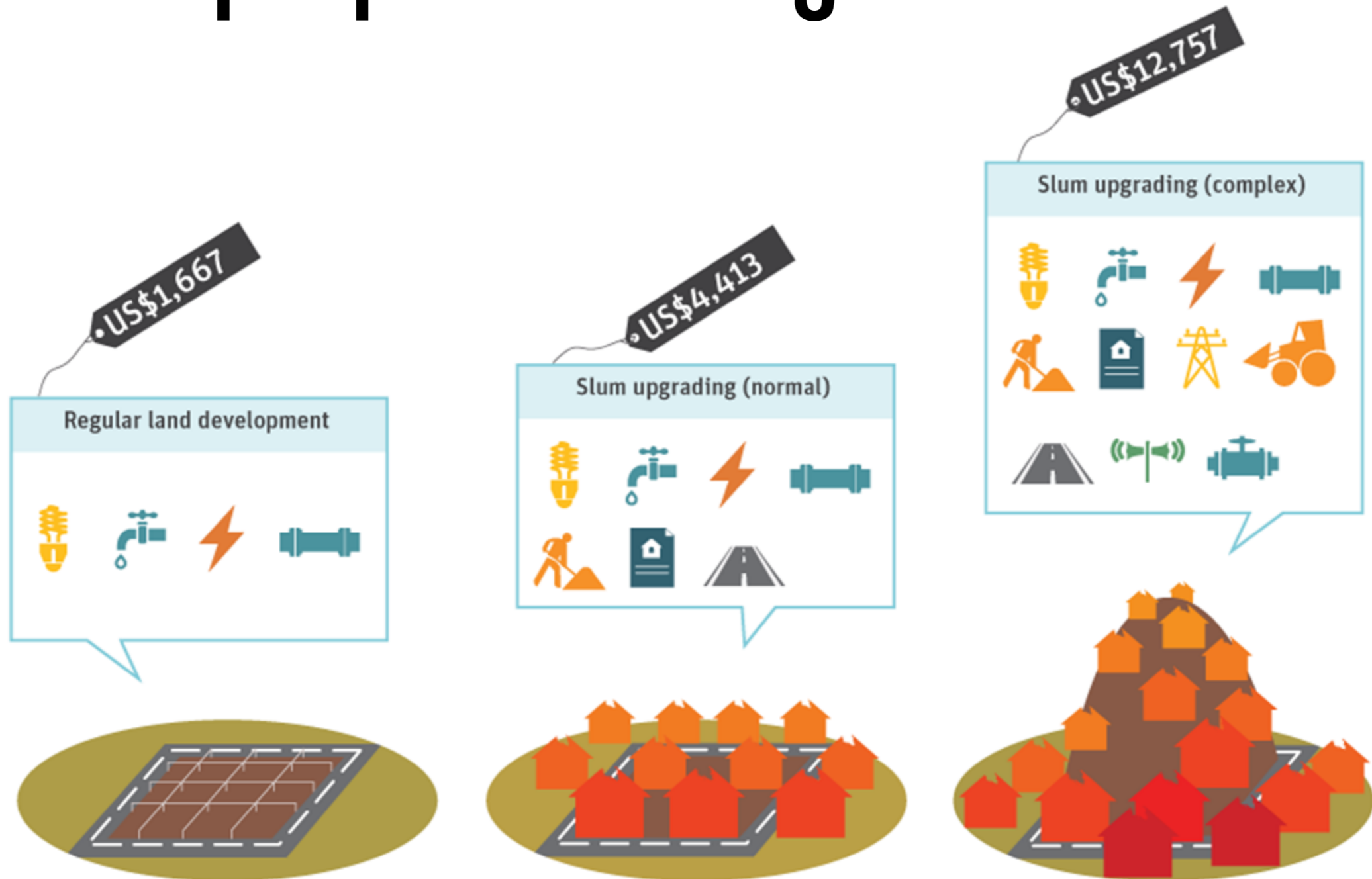
Meanwhile, millions of **new rural migrants** are added daily to **this pool**.

As informal dwellers often occupy land illegally or irregularly, their legal and political status is precarious. (Un-Habitat)

# **Sustainability issues**

- 1. The pattern of urban growth by informal urbanisation is not economically (and socially) sustainable**
- 2. The pattern of urban growth by one-family homes without proper access to fresh water and sewage is not environmentally sustainable.**
- 3. There is deficit of civil rights (the right to housing, to decent healthy environments, to sanitation, to safety, etc)**

# It is cheaper to prevent slums and provide proper housing than to fix one

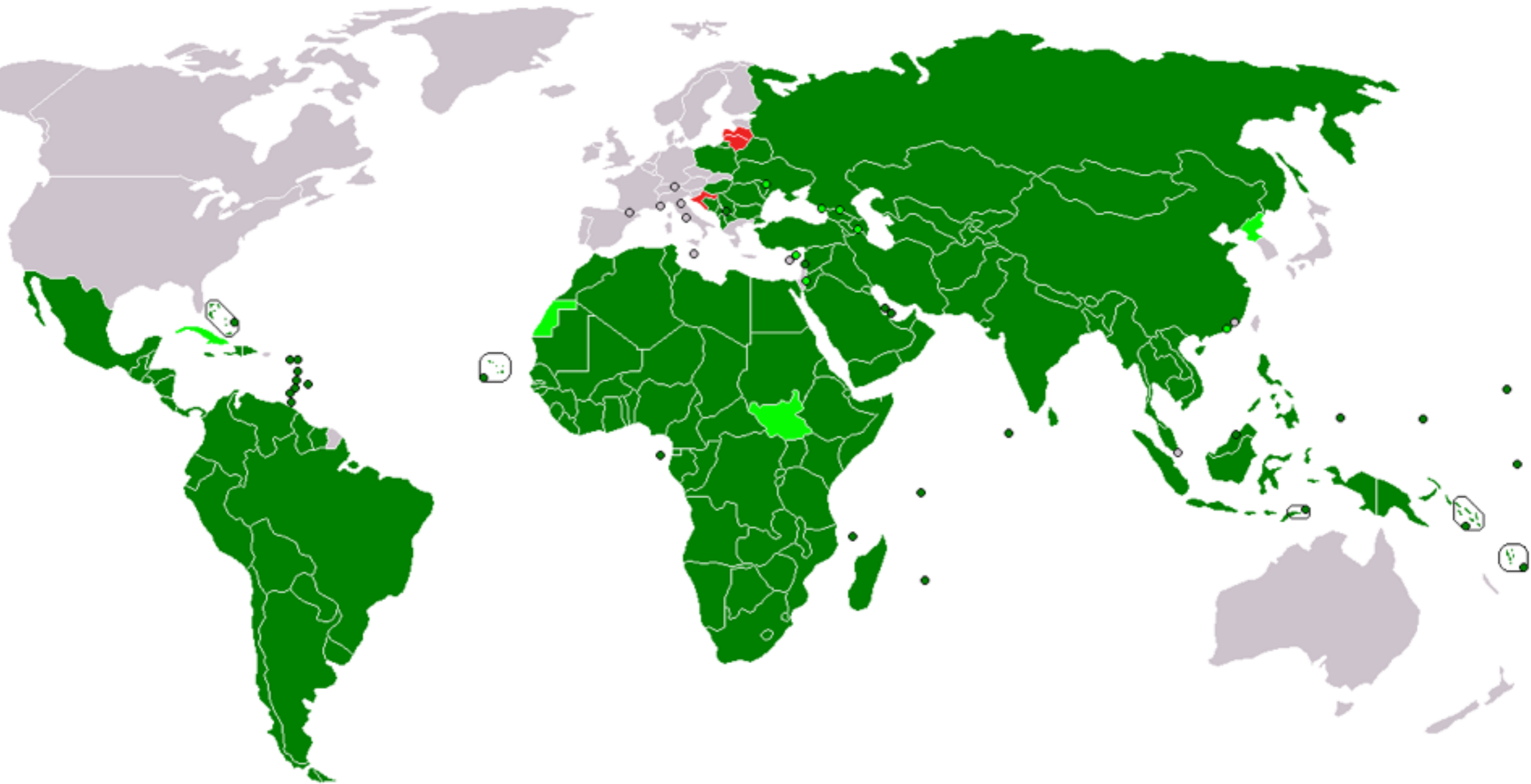


Note: cost in U.S. dollars per household.

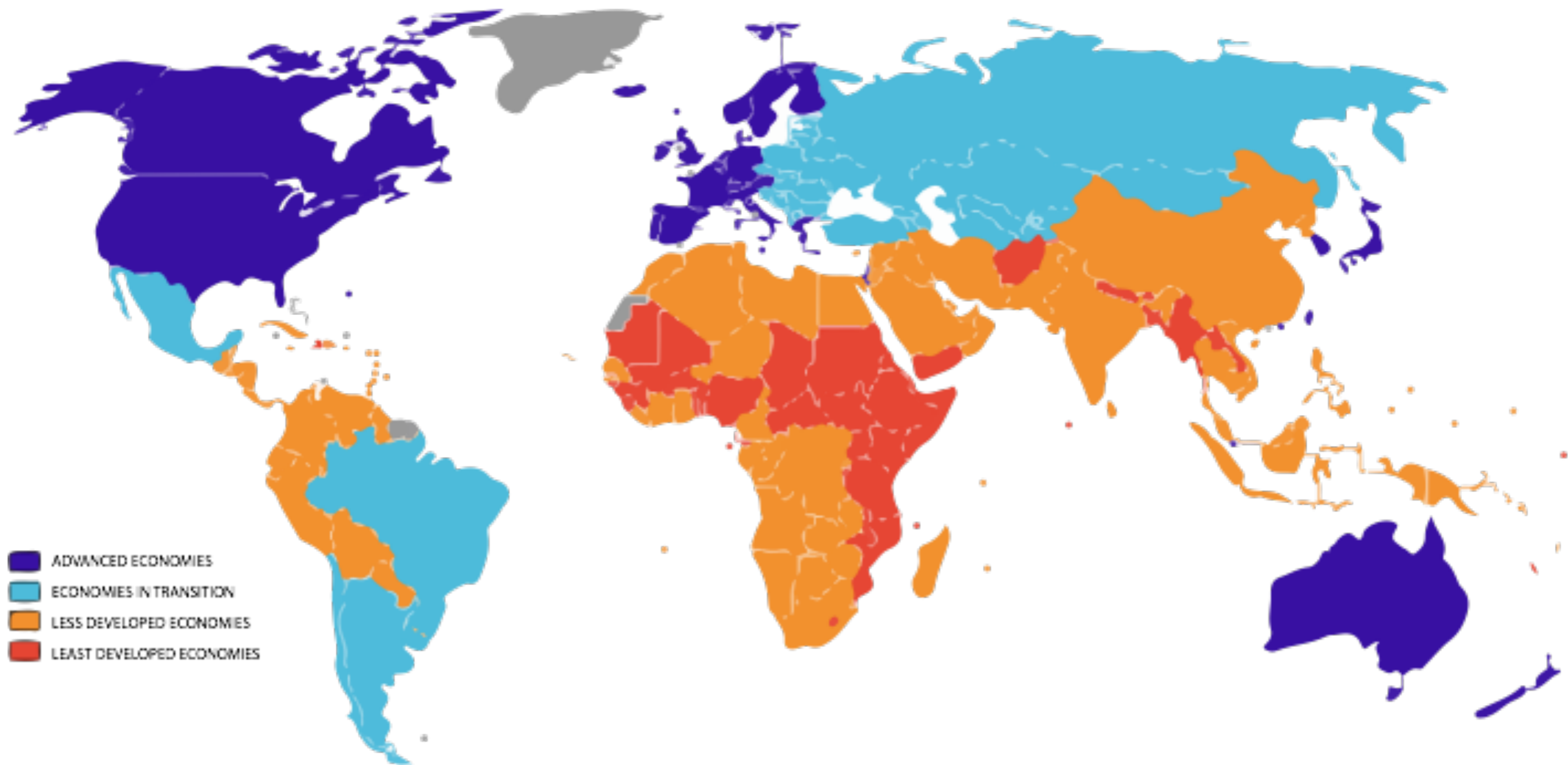
# Development

In the context of international urban studies, the term 'development' refers to the processes of economic, social, and political modernization and growth, often associated with high urbanization rates, taking place in developing countries (Potter et al., 1999).

# The 'Global South'

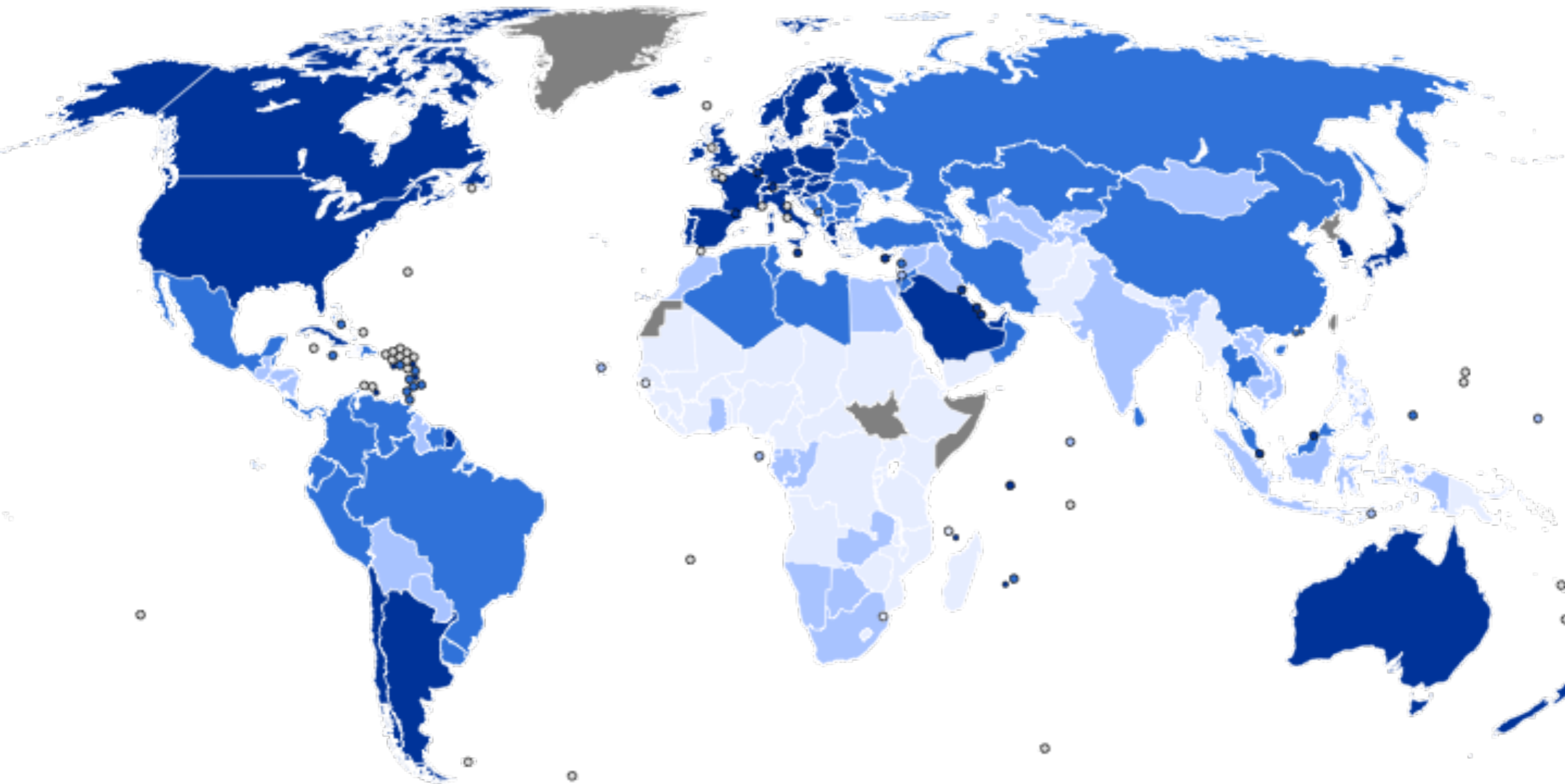


# Economic Development

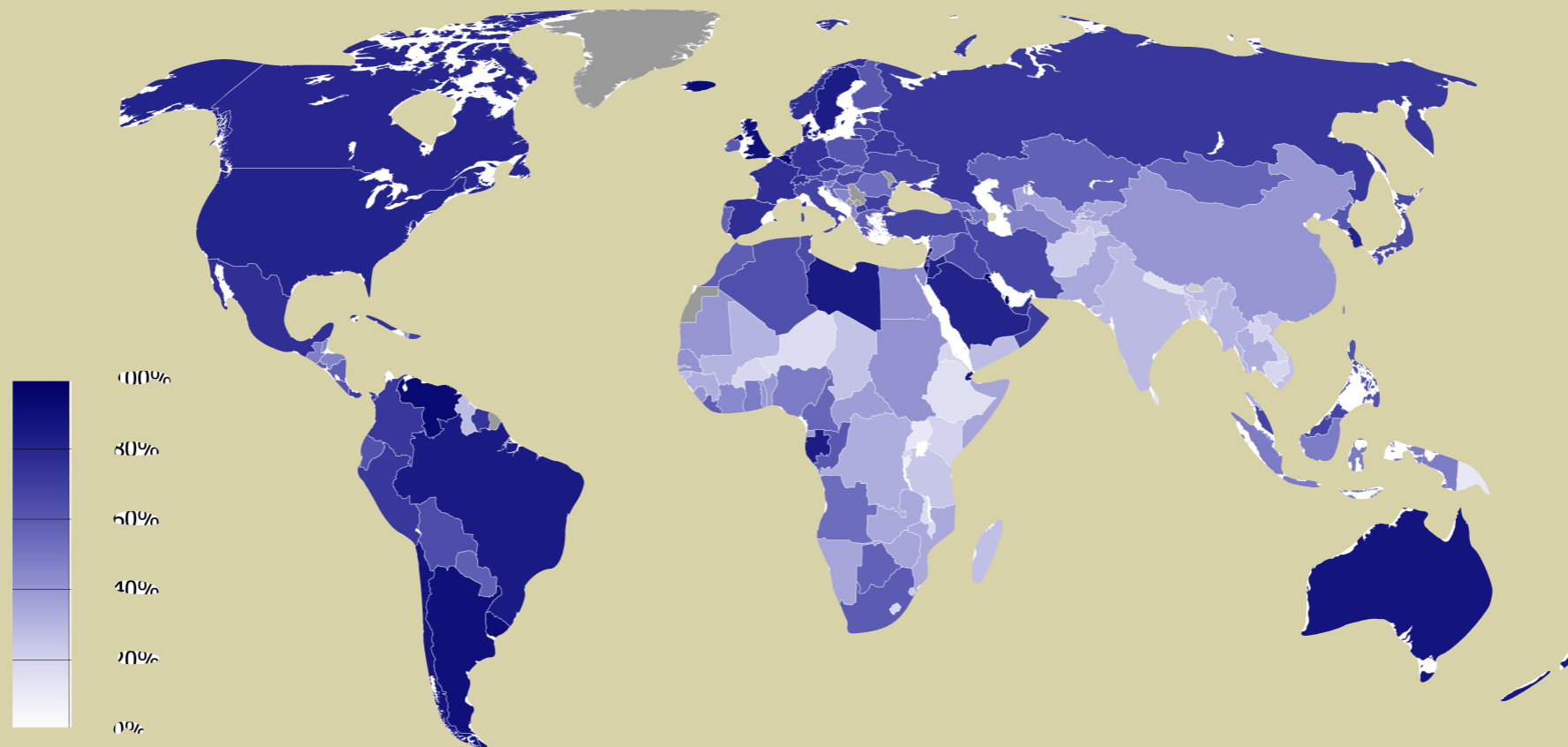
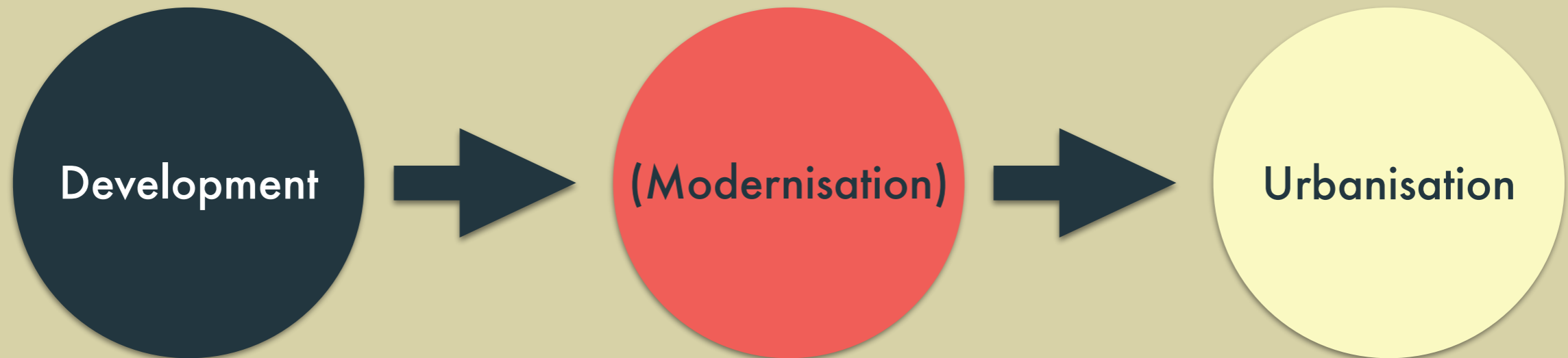


**SOURCE: IMF 2014**

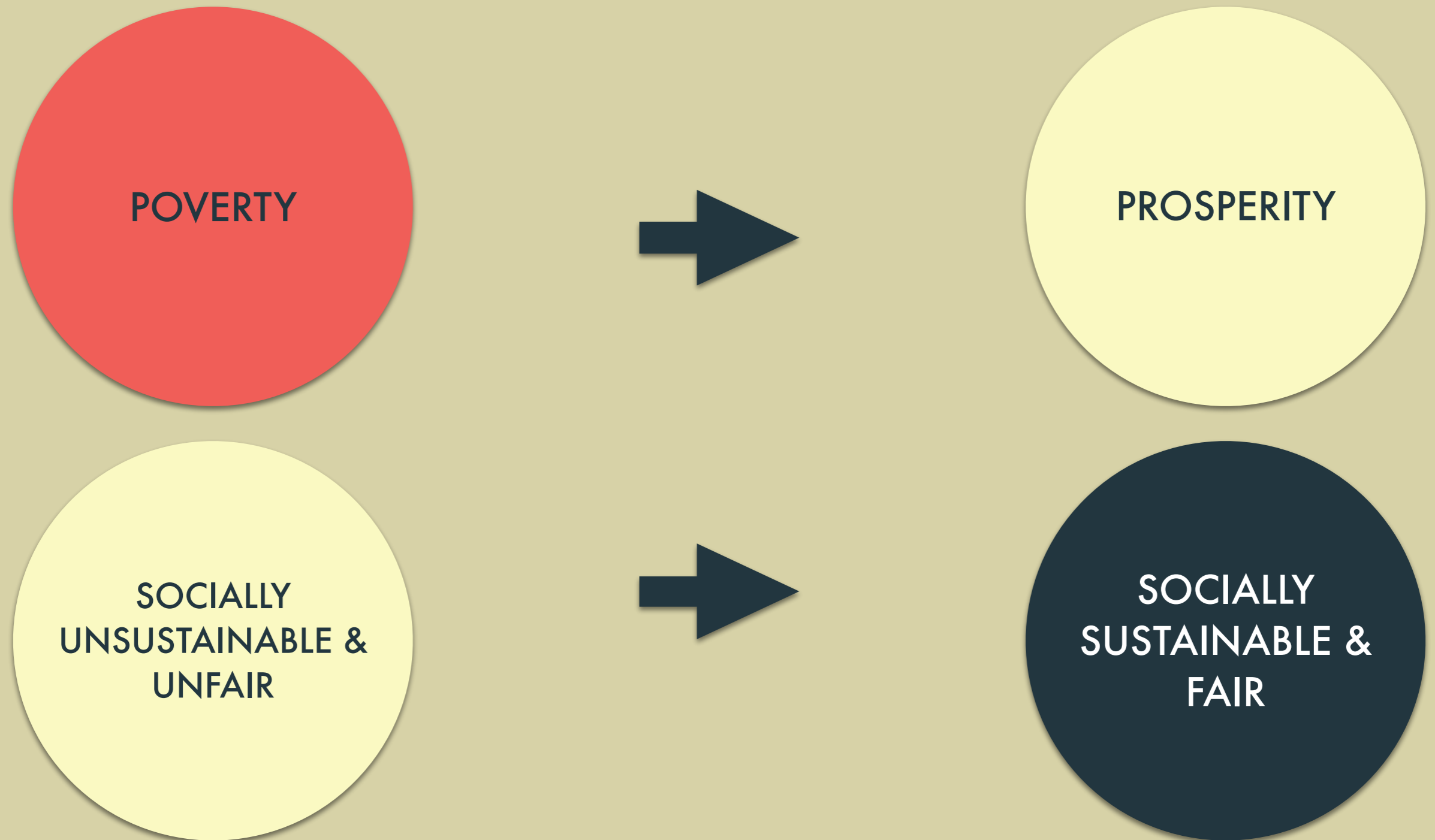
# Human Development Index 2014



# Development



# Paradigm of Development

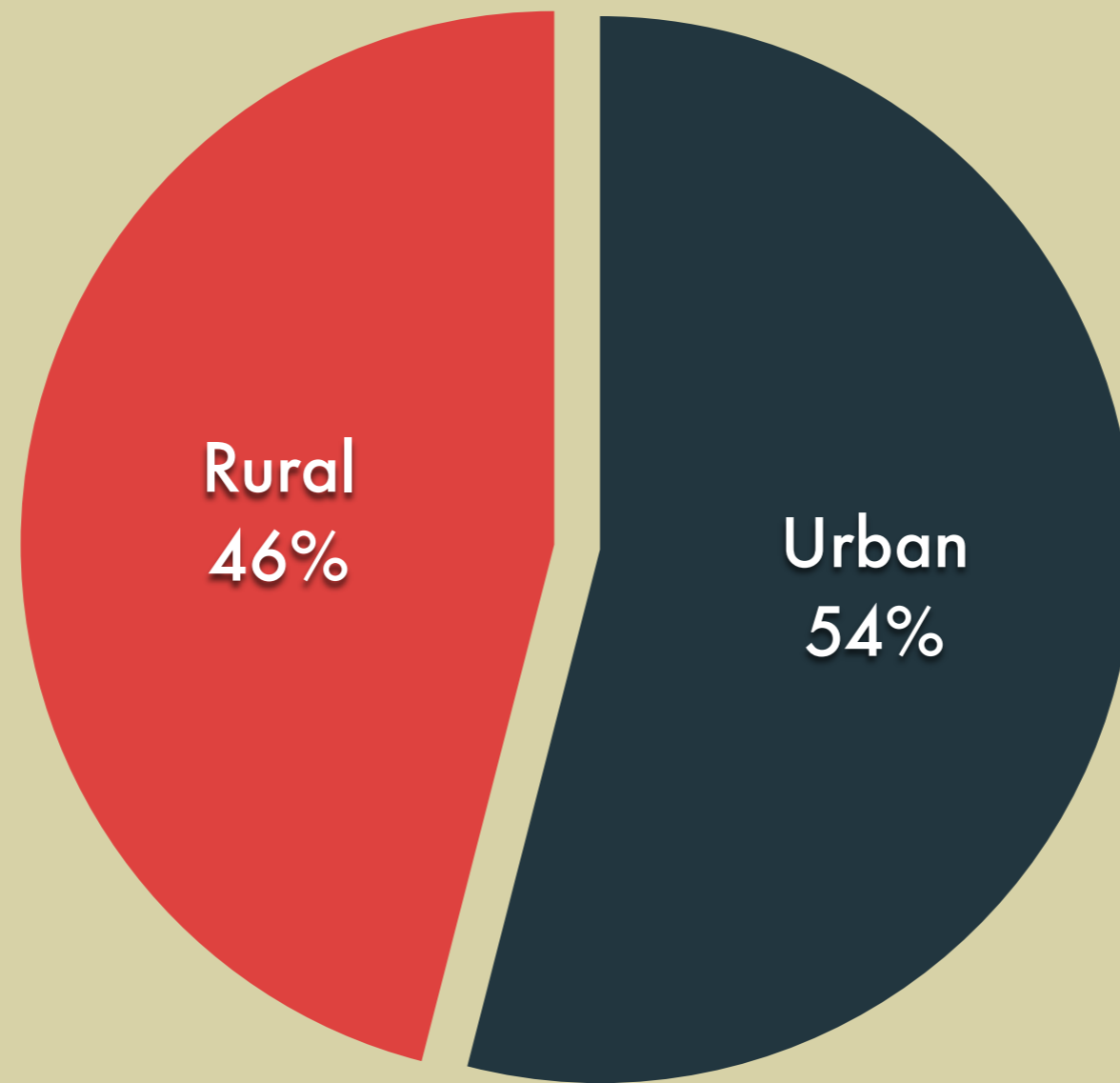




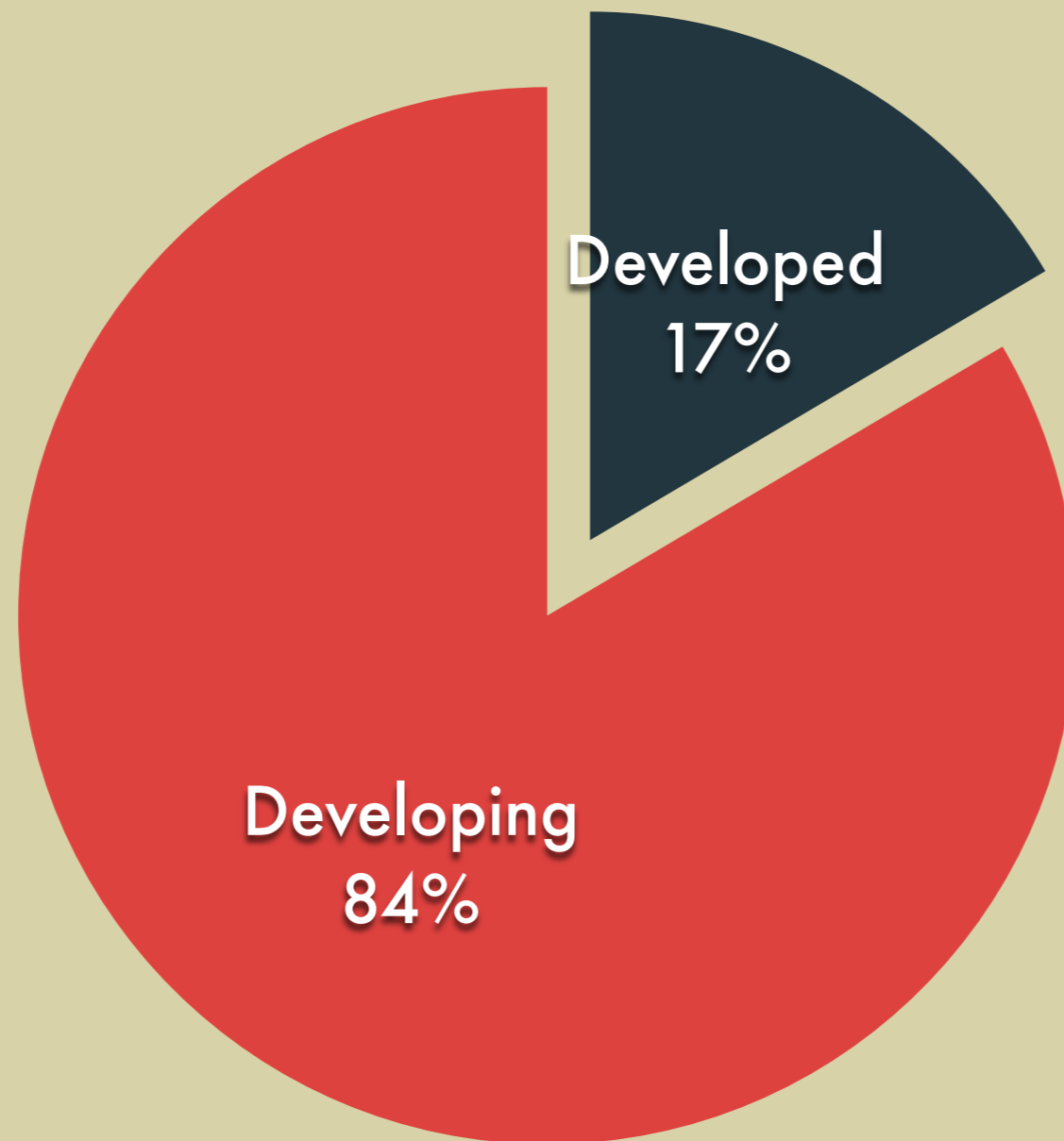
# World Population

7,3 billion

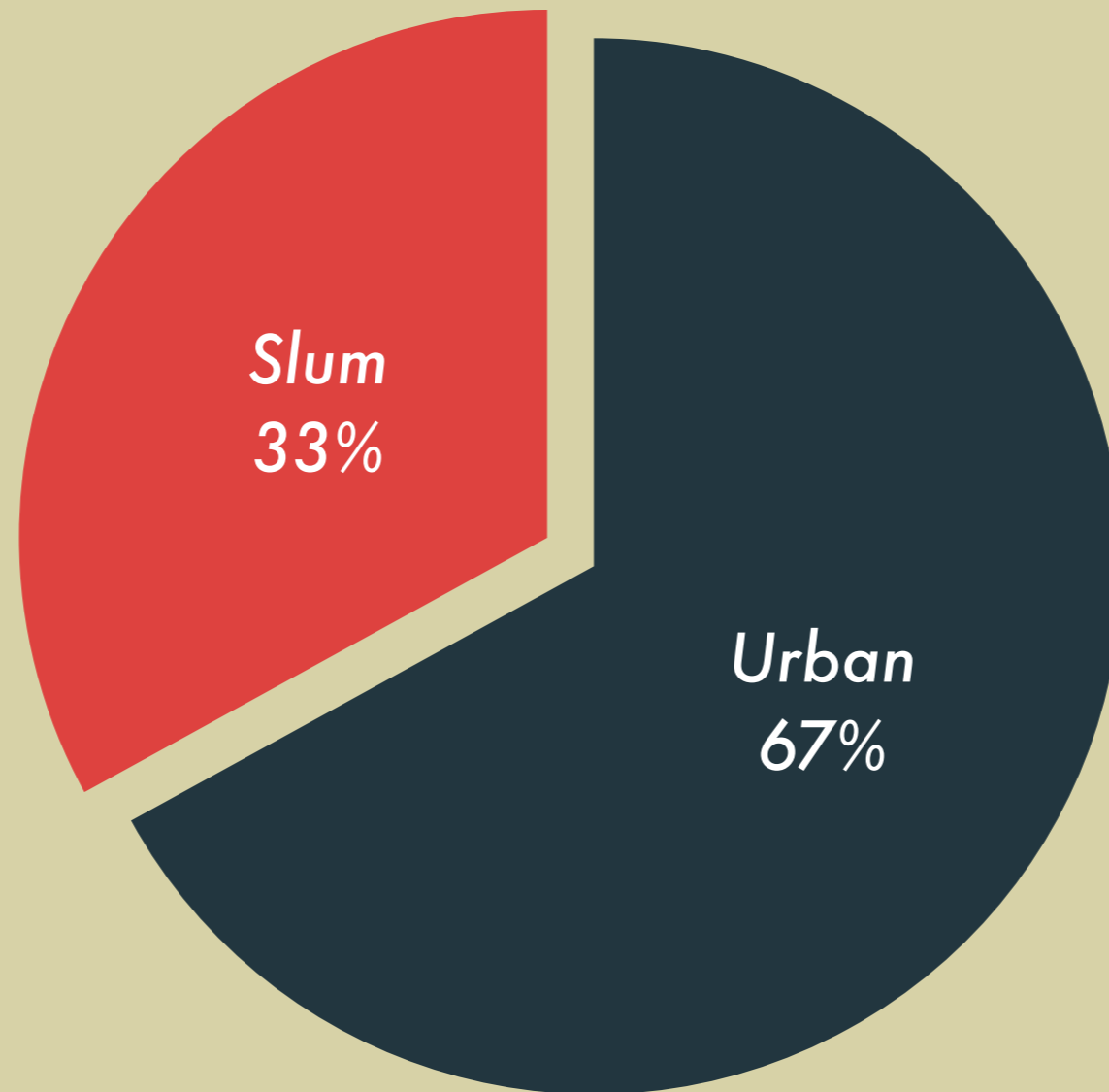
# People living in cities



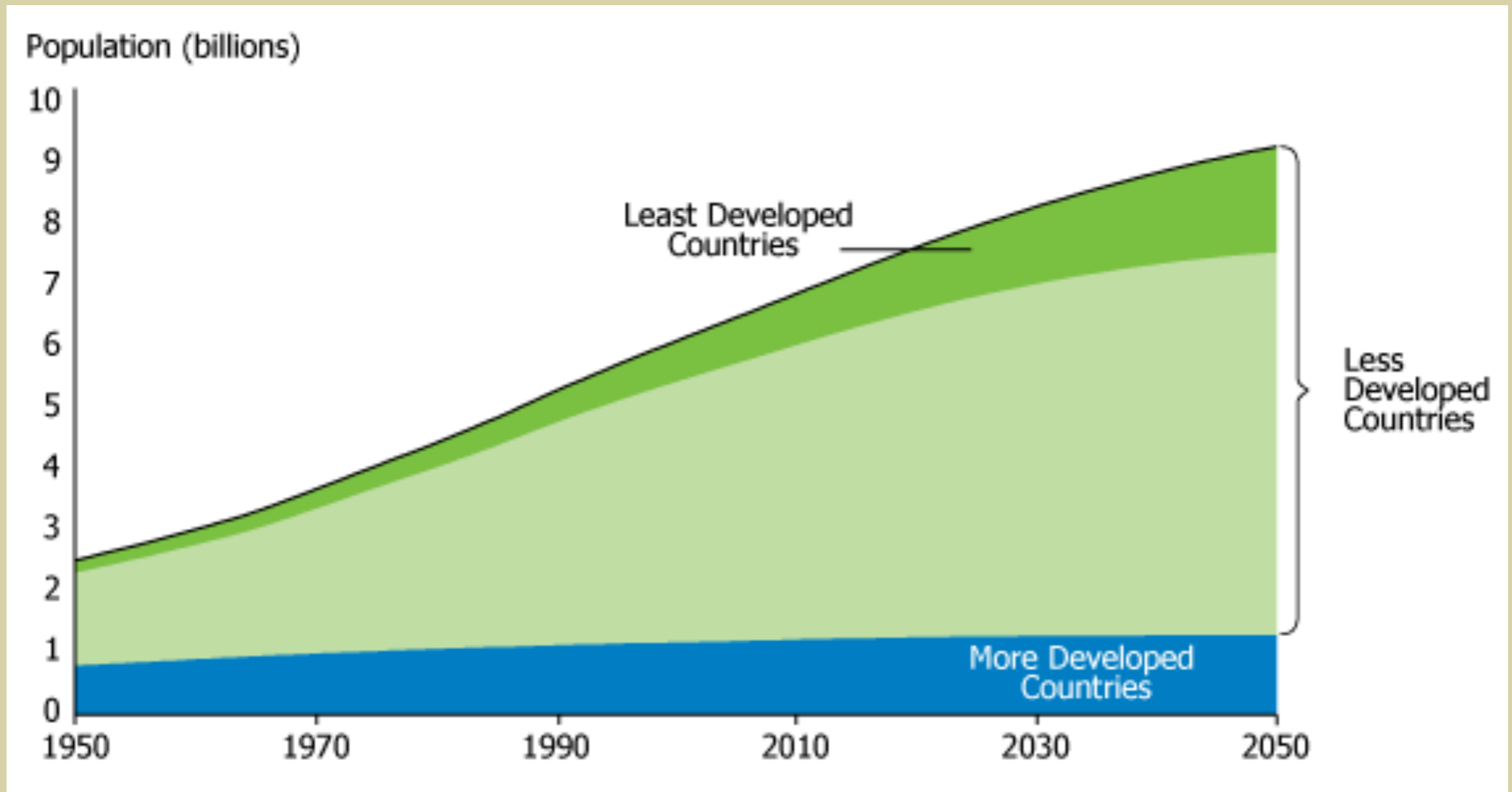
# People living in developing nations



# +900 million people in slums (UN Habitat)



# Foreseen population growth



Source: United Nations Population Division, World Population Prospects: The 2010 Revision, medium variant

# Spain X Tanzania

|   | Tanzania    | Spain      |
|---|-------------|------------|
| Population (2012)                             | 48 million  | 46 million |
| Projected Population (2050)                   | 138 million | 48 million |
| Lifetime Births per Woman                     | 5.4         | 1.4        |
| Annual Births                                 | 1.9 million | 483,000    |
| Percent of Population Below Age 15            | 45%         | 15%        |
| Percent of Population Ages 65+                | 3%          | 17%        |
| Percent of Population Ages 65+ (2050)         | 4%          | 33%        |
| Life Expectancy at Birth                      | 57 years    | 82 years   |
| Infant Mortality Rate (per 1,000 live births) | 51          | 3.2        |
| Annual Number of Infant Deaths                | 98,000      | 1,600      |
| Percent of Adults Ages 15-49 With HIV/AIDS    | 5.6%        | 0.4%       |

Even though Tanzania and Spain have almost the same population size today, Tanzania is projected to more than double its population from 48 million to 138 million in 2050. Spain's population will only slightly increase, from 46 million today to 48 million by 2050. The cause of this enormous difference is lifetime births per woman. Tanzania's total fertility rate of 5.4 children per woman is almost four times greater than Spain's rate of 1.4.

Carl Haub is a senior demographer at the Population Reference Bureau, and co-author of PRB's *2012 World Population Data Sheet*.

**The way urbanisation is happening in developing nations is socially, economically and environmentally unsustainable**



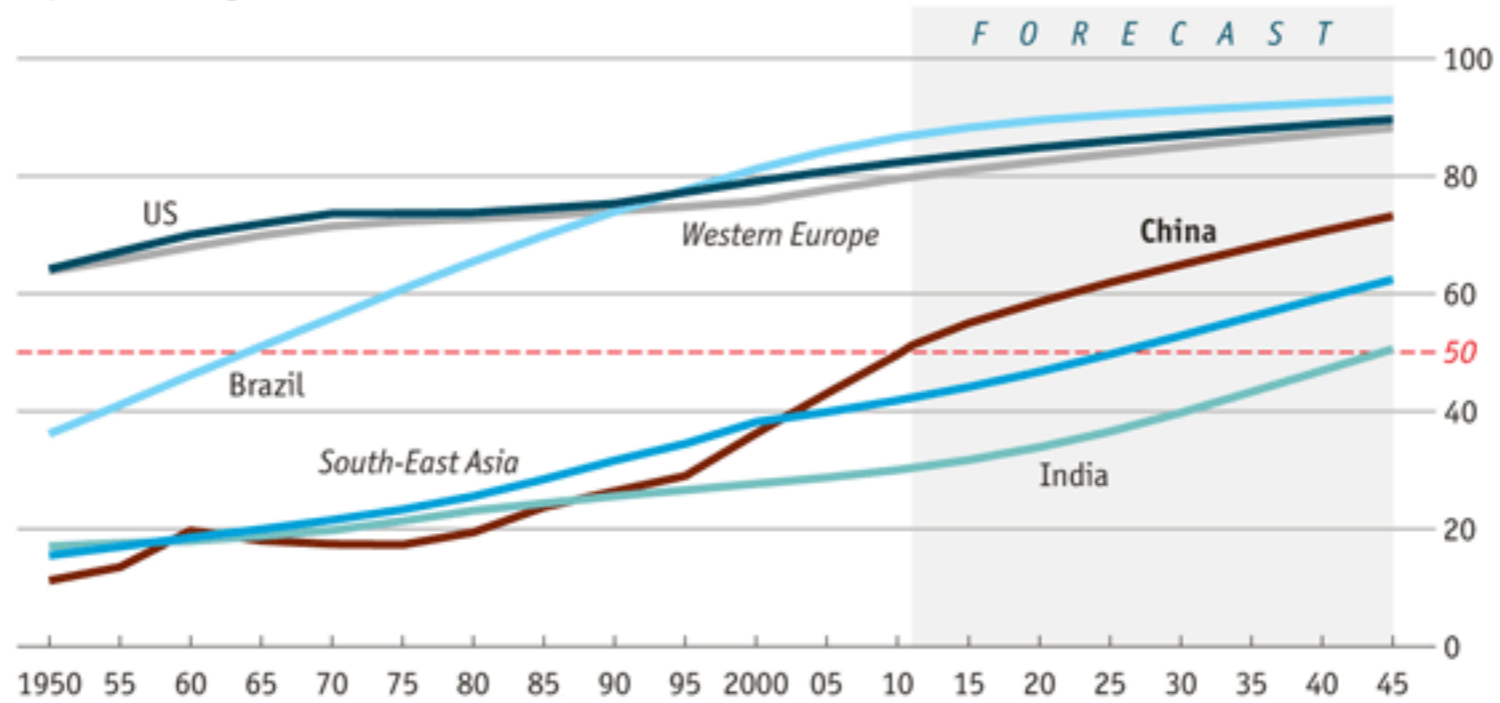
Photo Roberto Rocco

**It is unstoppable**



## Urbanisation

Population living in urban areas, % of total



Sources: CEIC; UN Population Division; *The Economist*

# Why do people move to cities?

## “Stadluft macht frei”

### **Pull factors**

- increased life chances (education/jobs/opportunities)
- increased living and health standards
- modern lifestyles/consumption
- culture and freedom

### **Push factors**

- lower life chances (lack of opportunities)
- extremely low incomes
- mechanisation of agriculture/lack of incentives for small producers
- oppressive traditional practices/oppressive lifestyles

**It is unsustainable\***

**(socially economically and  
environmentally)**

Sao Paulo political dimension of sustainability



Image © 2014 CNES / Astrium  
Image © 2014 DigitalGlobe

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Imagery Date: 4/29/2014 23°45'04.97" S 46°36'17.08" W elev 779 m

Sao Paulo political dimension of sustainability

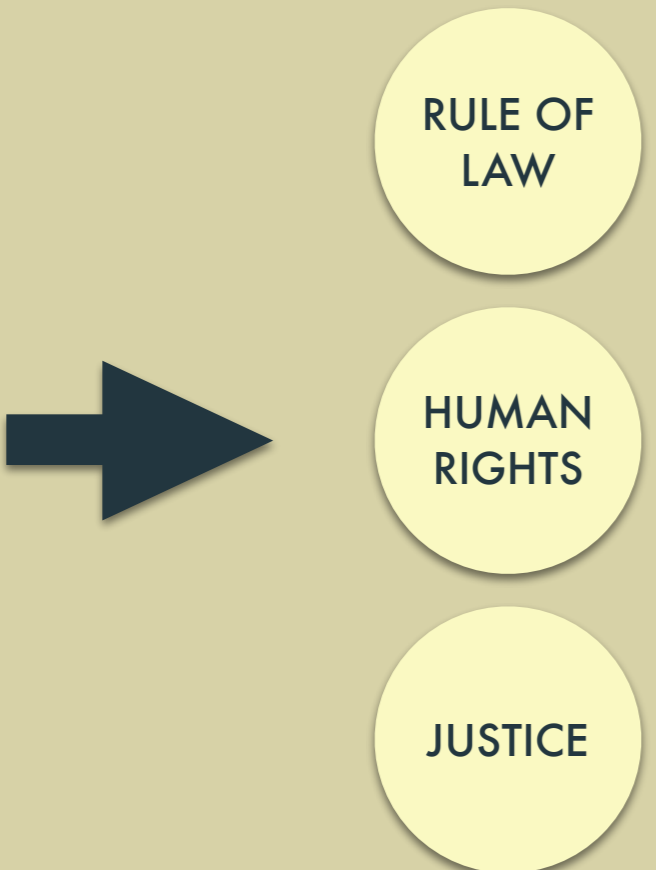
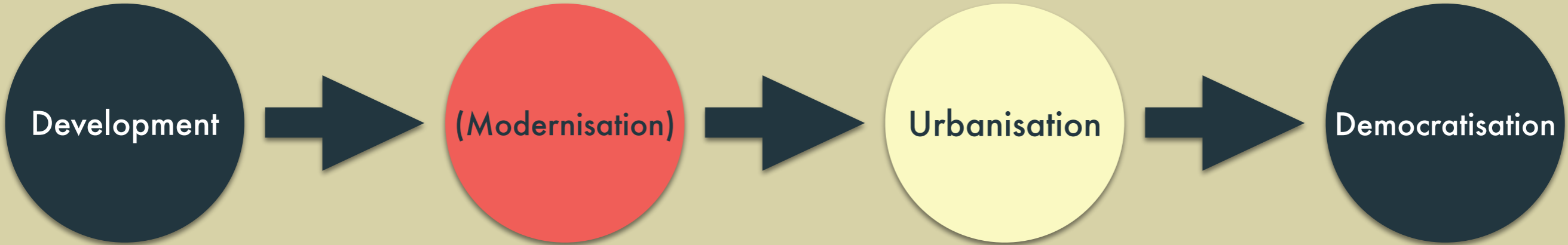




People wait in line to fill containers with drinking water supplied by a mobile water vehicle in a slum area in Hyderabad, India. Photograph: AFP/Getty Images

# Sustainable urbanisation is key to successful development

(...) a successful urban planning agenda will require that attention be given to urban settlements of all sizes. If well managed, cities offer important opportunities for economic development and for expanding access to basic services, including health care and education, for large numbers of people. Providing public transportation, as well as housing, electricity, water and sanitation for a densely settled urban population is typically cheaper and less environmentally damaging than providing a similar level of services to a dispersed rural population. Source: <http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html>



# The obstacles

**OPPRESSION**

**CORRUPTION**

**CLIMATE  
CHANGE**

**INEQUALITY**

**CRISIS**

**CONFLICT**

# Development > Modernisation > Westernisation

## Desertion of vernacular/traditional forms of urbanisation



Migrant labourers work at a demolished residential site in downtown Shanghai, on September 5, 2012. (Reuters/Aly Song)

# Several paths to development

there are competing interpretations of the terms 'development' and 'developing countries'.

Also, there are an enormous variety of paths to, and degrees of, development and therefore, multiple models of urbanisation.

# Real Socialism



"Bundesarchiv Bild 183-1987-0128-310, Berlin, Marzahn, Neubaugebiet, Wohnblocks" by Bundesarchiv, Bild 183-1987-0128-310 / CC-BY-SA 3.0. Licensed under CC BY-SA 3.0 de via Commons -

# The welfare state

And the many spin-offs and adaptations  
in the developing world

"Gooiord, Bijlmer" by Hilton1949 at en.wikipedia. Licensed under CC BY-SA 3.0 via Commons - [https://commons.wikimedia.org/wiki/File:Gooiord,\\_Bijlmer.jpg#/media/File:Gooiord,\\_Bijlmer.jpg](https://commons.wikimedia.org/wiki/File:Gooiord,_Bijlmer.jpg#/media/File:Gooiord,_Bijlmer.jpg)

# Regulated free market with strong rule of law

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# Lax free market with weak rule of law



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# Post colonialism

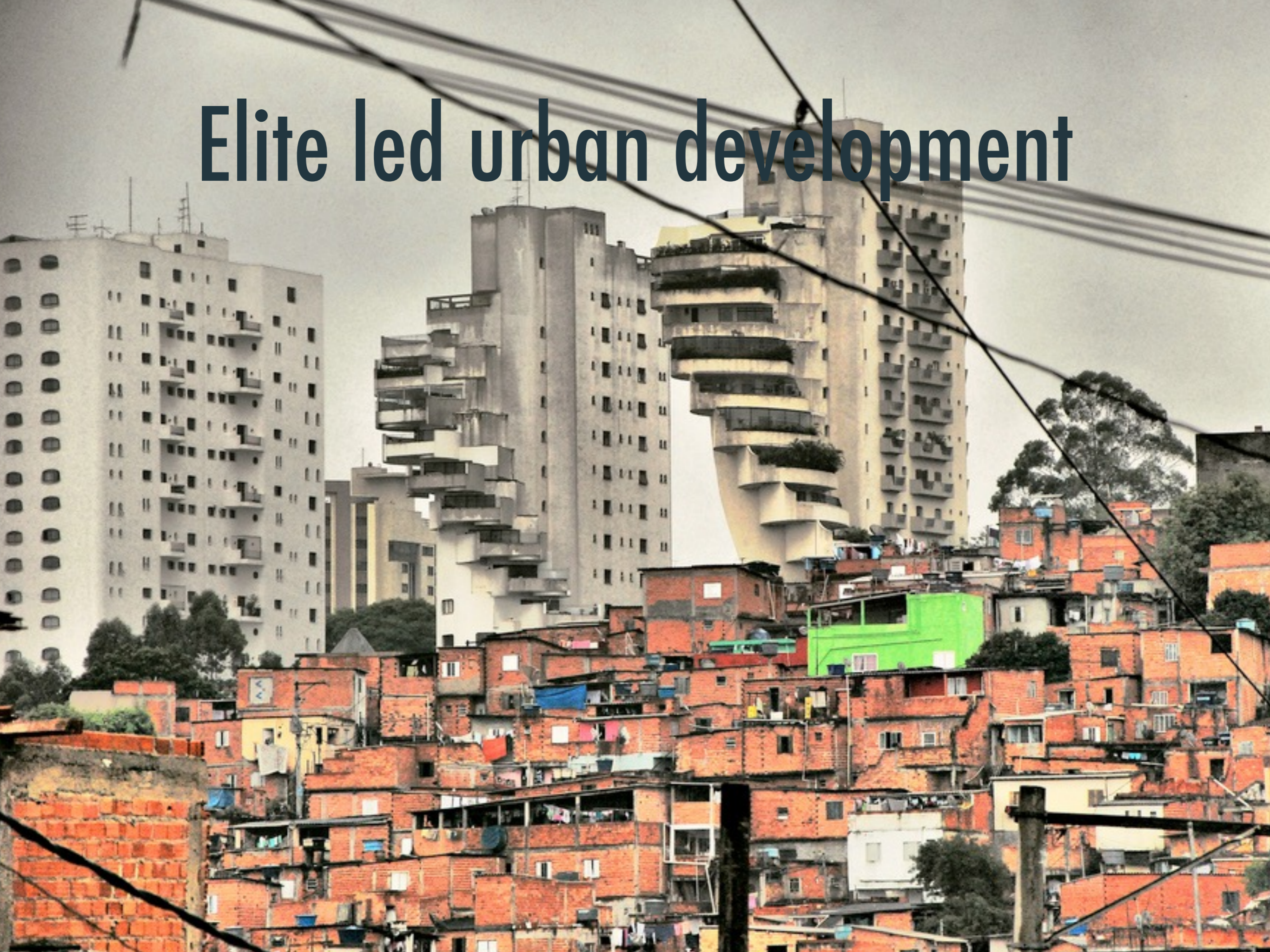


# State led capitalism



"PudongSkyline-pjt" by Pjt56 . Wikipedia Commons.

# Elite led urban development



[http://www.amnesty.nl/sites/default/files/public/rap\\_kenia\\_the\\_unseen\\_majority.pdf](http://www.amnesty.nl/sites/default/files/public/rap_kenia_the_unseen_majority.pdf) and <http://www.kibera.org.uk/facts-info/>

# Nairobi 60% slum dwellers

A family sits in front of their makeshift home in Kibera, Kenya's largest slum and home to more than 1 million people, 4 May 2005. Credit: EPA/STEPHEN MORRISON



# Mumbai: 54% to 65% slums dwellers

<http://infochangeindia.org/poverty/news/54-of-mumbai-lives-in-slums-world-bank.htm>

**Sao Paulo: 6% to 10% slum dwellers  
25% in informal urbanisation**



# Theoretical points

(to help us understand the task for planning and design)

1. Informal settlers seek **THE RIGHT TO THE CITY** which implies inclusion in citizenship and civil rights structures: the **RIGHT** to have **RIGHTS**
2. The **RIGHT TO THE CITY** implies participation in the elaboration of public policies and access to **POSITIVE RIGHTS** rather than **NEGATIVE RIGHTS** only

**3**. Positive rights and spatial justice can only be achieved through the existence and promotion of **PUBLIC GOODS**

**4**. Public goods are the product of **COLLECTIVE UNDERTAKINGS** that must be organized **POLITICALLY, INSTITUTIONALLY** within legal and procedural structures and **PROCEDURALLY** through planning

**5**. Spatial Planning is one of the **MAIN TOOLS** to organize, promote and maintain public goods and ultimately ensure **SPATIAL JUSTICE** and the **RIGHT TO THE CITY**

# **Main challenges**

# Urbanisation in the context of rapid growing economies



# Housing, liveability and sustainability in rapidly growing cities

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BAYCREST - [OWN WORK](#)

# Land management: use, regulation, and taxation of land: URBAN REFORM



# resilience to climate change in developing contexts



[HTTP://WWW.GETINTRAVEL.COM/VISIT-MEKONG-DELTA-VIETNAM-THE-NINE-DRAGONS/](http://www.getintravel.com/visit-mekong-delta-vietnam-the-nine-dragons/)

# resources management at metropolitan and regional level



[HTTP://TOPICOS.ESTADAO.COM.BR/REPRESA](http://topicos.estadao.com.br/represa)

# sustainable infrastructures in the context of development



Sao Paulo

Environmental sustainability X informal urbanisation



Mexico

# Housing X poor planning & design capabilities



<http://photography.nationalgeographic.com/photography/photo-housing-development-mexico/>

Mumbai



Photo by Rohan Varma

# Planning and design

Based on interactions among actors are regulated by:

- formal rules (laws, planning regulations) and
- informal rules (customary rules, traditions, but also informal power relationships, patronage, corruption, clientelistic relationships)

**How can planning and design explore  
new paradigms that deal with  
informal rules and customs?**

**How can we deliver realistic  
solutions?**

# Crucial theoretical questions

1. Why is “informal urbanisation” a problem?  
How useful is this term? (in contexts where informality has become the norm, for example)
2. Why should **GOVERNMENTS ACT** and not leave urban development to take care of itself?

# Crucial theoretical questions

4. Where does planning meet informal urbanisation? Do we need a new paradigm of planning to deal with mushrooming growth in weak institutional environments?
5. How does informal urbanisation contribute to the political emancipation of the urban poor? And for the building of civil rights? (how is informal urbanisation embedded in local politics?)

# Crucial theoretical questions

**6. What is the meaning and the role of informal urbanisation for the general processes of urbanisation?**

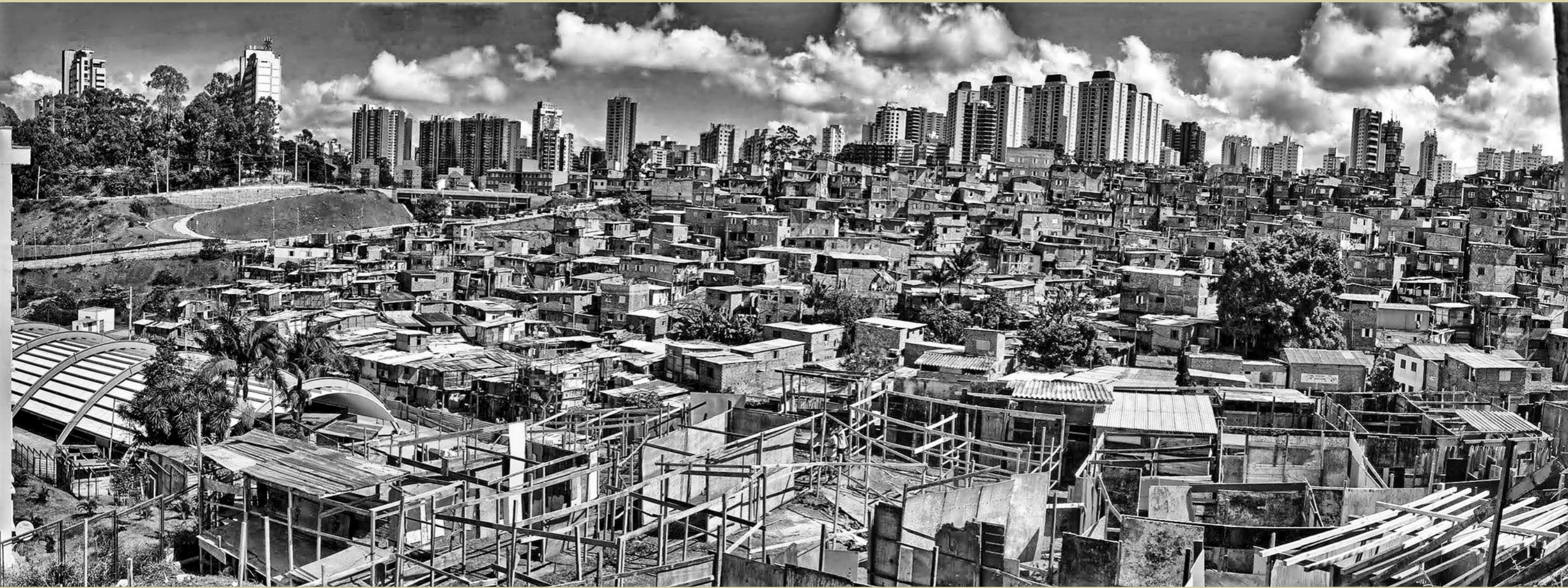
# Graduation possibility

Favela Paraisopolis: Sao Paulo

# By following this cluster you will:

- Be able to design a strategic plan, accompanied by/based on the sustainable design of the physical environment
- Be able to experience a dynamic interaction with different stakeholders in a developing context and to incorporate their views in your plan and design. You will get experience in interaction.
- Be able to get acquainted with and use advanced and innovative planning tools to achieve sustainable and fair urban development
- Develop both practical (planning and design) and theoretical skills (research and writing)

# Paraisopolis



<https://youtu.be/dwelAFdvs3A>

A satellite image of a region in Brazil, showing a mix of green forested areas and brownish-grey cleared or urbanized land. A red location pin is placed on a small cluster of buildings in the cleared area, with the label "Paraisópolis" below it. The terrain appears hilly with some shadows cast by the vegetation.

Paraisópolis

Image © 2015 DigitalGlobe  
Image © 2015 CNES / Astrium

Imagery Date: 8/3/2015 23°36'56.77" S 46°34'55.75" W elev 743 m

GOOG

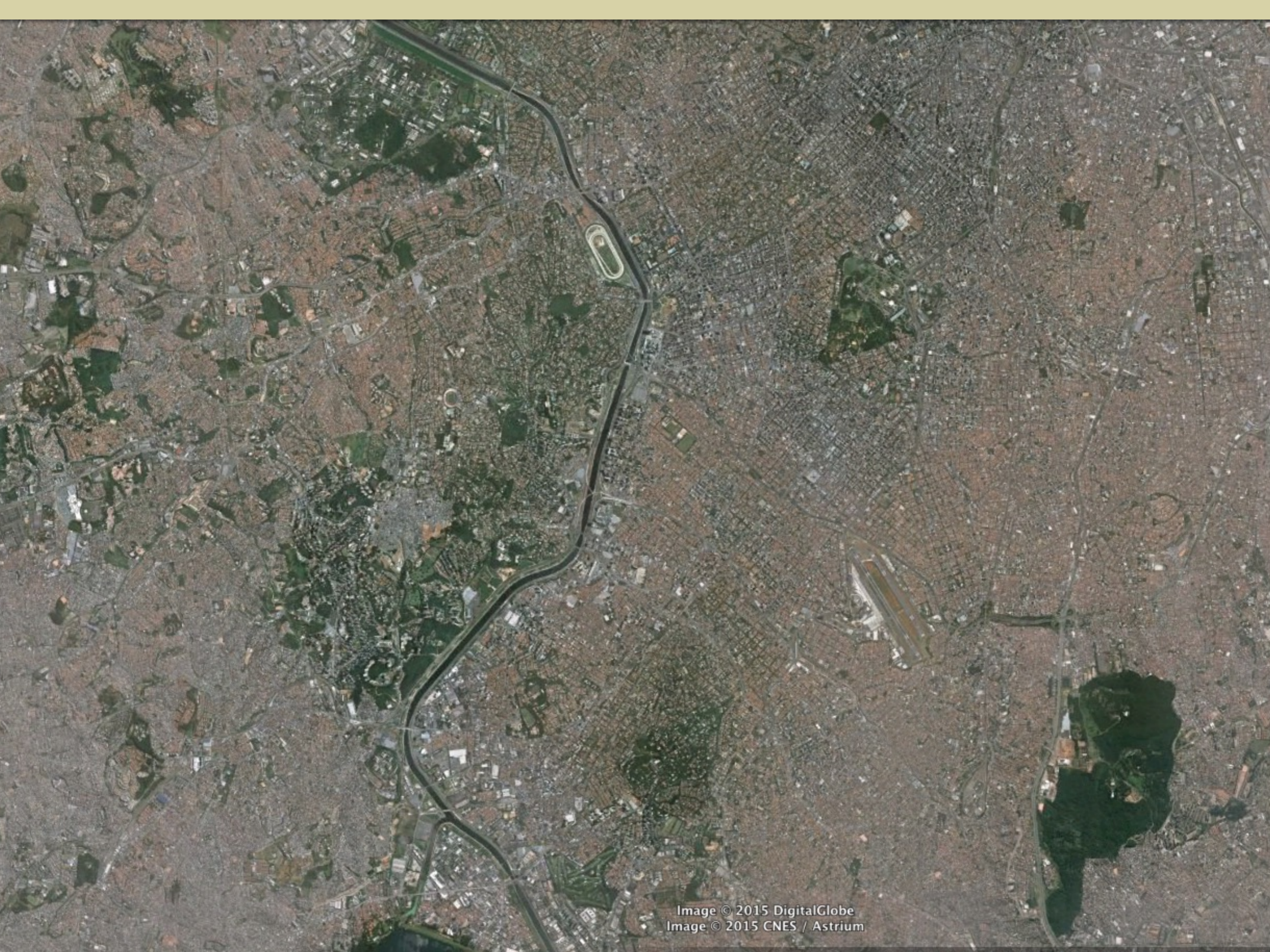


Image © 2015 DigitalGlobe  
Image © 2015 CNES / Astrium



Paraisópolis

Google

Imagery Date: 12/15/2008 23°37'06.15" S 46°43'28.21" W elev 792 m

2005



Paraisopolis



2005

Imagery Date: 12/15/2008

23°37'03.92" S 46°43'27.1



Google

Imagery Date: 12/15/2008 23°36'59.42" S 46°43'35.36" W elev 804 m eye a















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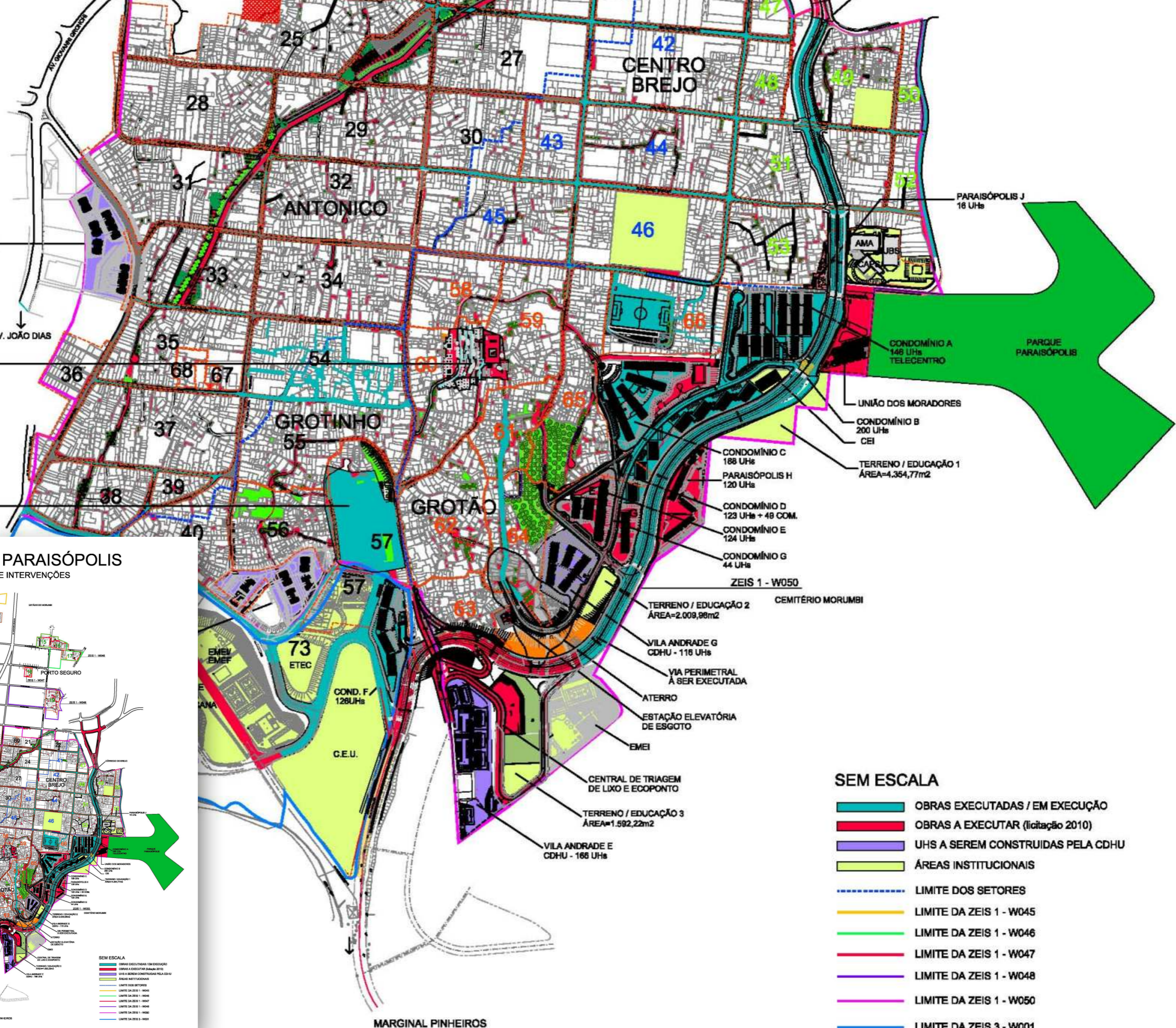
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VILA ANDRADE B  
CDHU - 172 UHs

AV. JOÃO DIAS

SETOR 90  
ESCOLA DE MÚSICA  
CENTRO COMUNITÁRIO  
21 UHs

GROTINHO 2  
8 UHs  
6 UCs

42  
CENTRO  
BREJO

32  
ANTONICO

55  
GROTINHO

62  
GROTÃO

PARAISÓPOLIS J  
16 UHs

CONDOMÍNIO A  
146 UHs  
TELECENTRO

UNIÃO DOS MORADORES

CONDOMÍNIO B  
200 UHs  
CEI

TERRENO / EDUCAÇÃO 1  
ÁREA=4.354,77m<sup>2</sup>

CONDOMÍNIO C  
188 UHs

PARAISÓPOLIS H  
120 UHs

CONDOMÍNIO D  
123 UHs + 48 COM.

CONDOMÍNIO E  
124 UHs

CONDOMÍNIO G  
44 UHs

ZEIS 1 - W050

TERRENO / EDUCAÇÃO 2  
ÁREA=2.009,98m<sup>2</sup>

CEMITÉRIO MORUMBI

VILA ANDRADE G  
CDHU - 116 UHs

VIA PERIMETRAL  
A SER EXECUTADA

ATERRO

ESTAÇÃO ELEVATÓRIA  
DE ESGOTO

EMEI

CENTRAL DE TRIAGEM  
DE LIXO E ECOPONTO

TERRENO / EDUCAÇÃO 3  
ÁREA=1.592,22m<sup>2</sup>

VILA ANDRADE E  
CDHU - 166 UHs

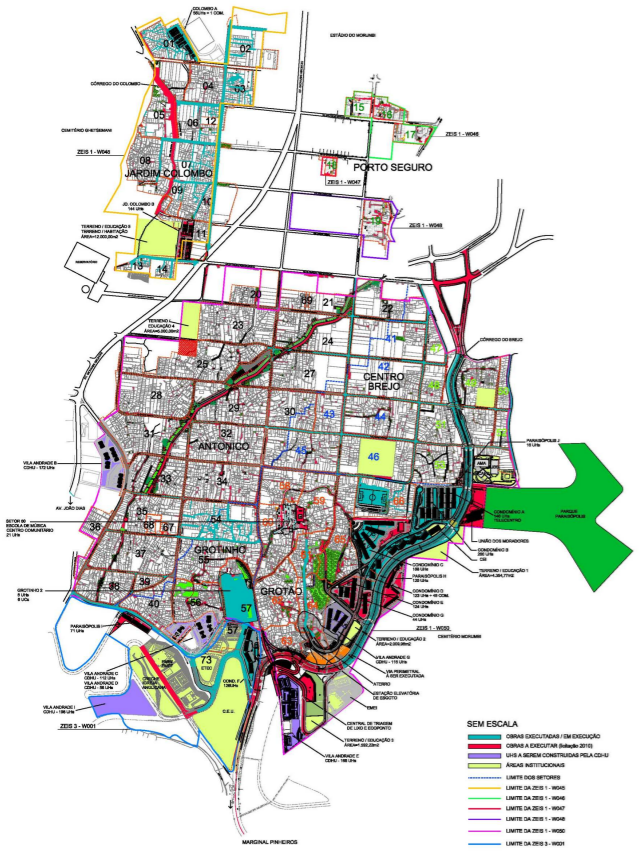
73  
ETEC

COND. F/  
128UHs

C.E.U.

MARGINAL PINHEIROS

**COMPLEXO PARAISÓPOLIS**  
MAPA DE INTERVENÇÕES



**SEM ESCALA**

- OBRAS EXECUTADAS / EM EXECUÇÃO
- OBRAS A EXECUTAR (licitação 2010)
- UHs A SEREM CONSTRUIDAS PELA CDHU
- ÁREAS INSTITUCIONAIS
- LIMITE DOS SETORES
- LIMITE DA ZEIS 1 - W045
- LIMITE DA ZEIS 1 - W046
- LIMITE DA ZEIS 1 - W047
- LIMITE DA ZEIS 1 - W048
- LIMITE DA ZEIS 1 - W050
- LIMITE DA ZEIS 3 - W001

SEM ESCALA  
 OBRAS EXECUTADAS / EM EXECUÇÃO  
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 LIMITE DA ZEIS 1 - W047  
 LIMITE DA ZEIS 1 - W048  
 LIMITE DA ZEIS 1 - W050  
 LIMITE DA ZEIS 3 - W001

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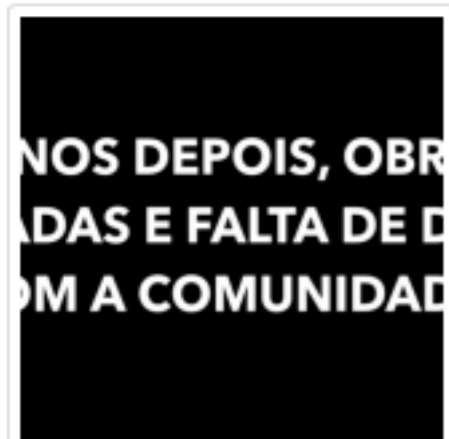
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## EU AMO PARAISÓPOLIS: Exigimos a retomada das obras de urbanização, do monotrilho e do hospital do hospital

Joildo Santos 14/04/2015



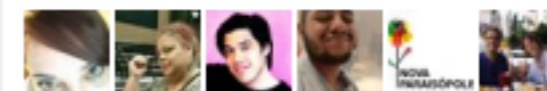
Exigimos a retomada das obras de urbanização, do monotrilho e do hospital  
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<http://paraisopolis.org>

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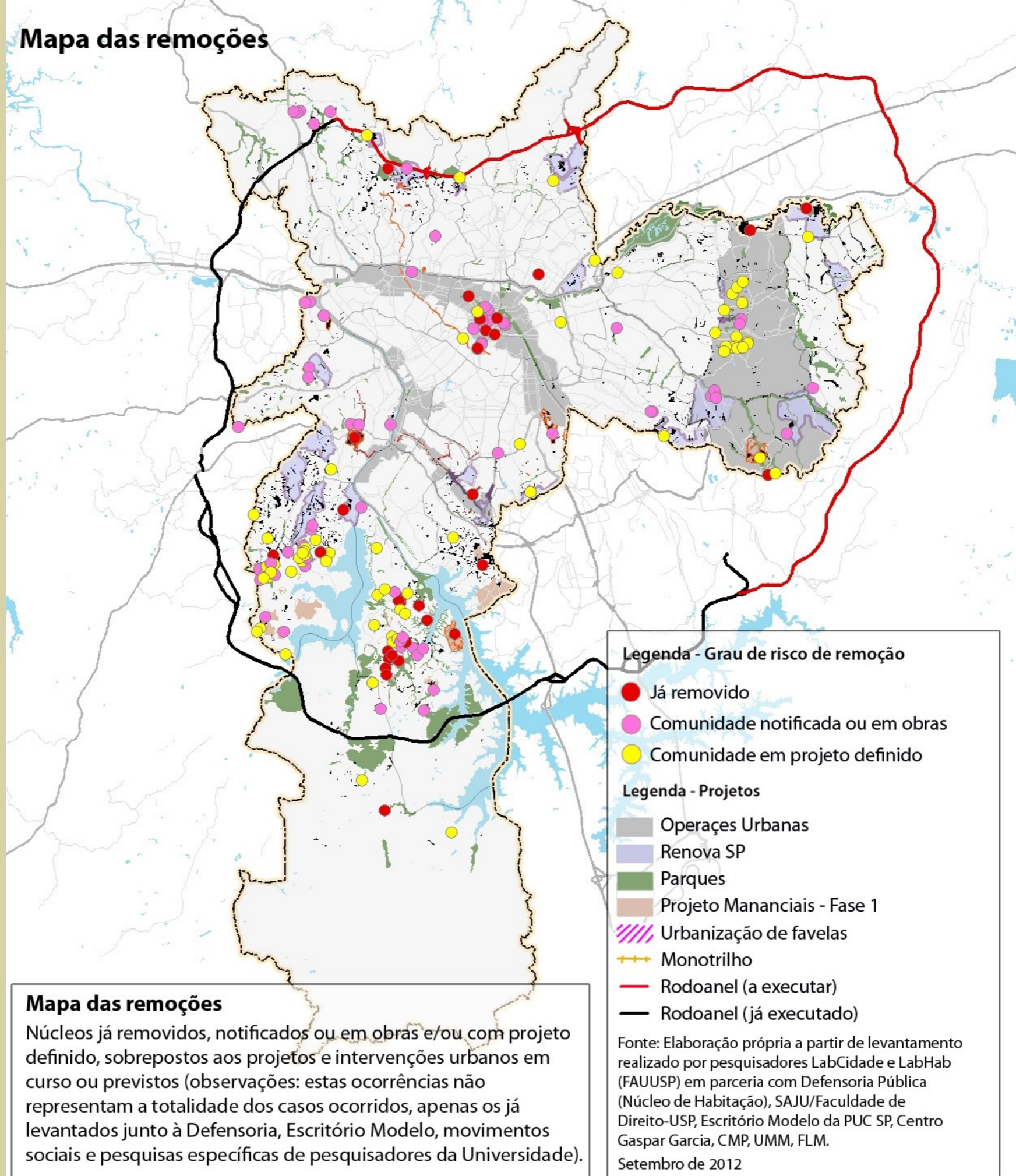
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urban dev. Geneva -Sept 21-25, 2015  
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## PARAISOPOLIS INSTITUTE OF URBANOLOGY

Posted on Friday, March 2, 2012 by matias



# (in)formality wanted!!!

Exploring the close connection between formal and informal social, economic and spatial structures in urban settlements in developing countries.

## WEDNESDAY 19 MARCH 2014

What: 14:00h-18.00h international guest lectures & debate  
18:00h-19:30h drinks & discussion

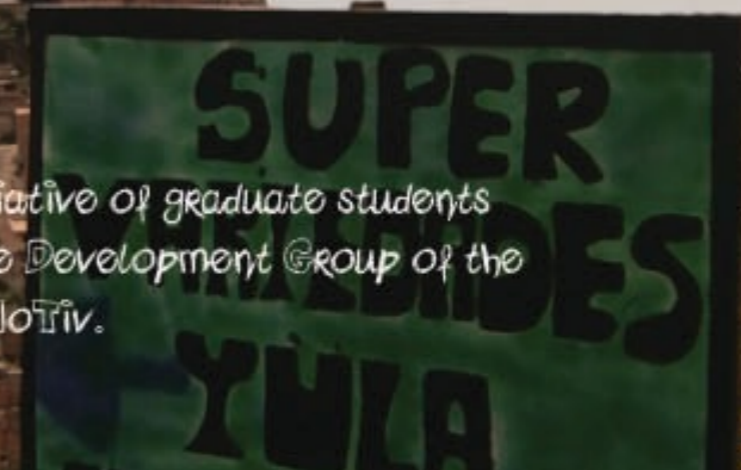
Where: Berlagezaal, Faculty of Architecture, Delft University of Technology

Who: Camillo Boano – UCL London, The Bartlett  
Marco Ferrario & Rakhi Mehra – Micro Home Solutions

With: Alexander Vollebregt – TU Delft (introduction)  
Roberto Rocco – TU Delft (moderator)

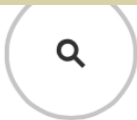
Please save the date.

A full program will be announced soon. The symposium is an initiative of graduate students of the ExploreLab and supported by the Faculty of Architecture, the Development Group of the Chair of Spatial Planning and Strategy and MoTiV.



<https://confrontinginformality.wordpress.com>

# CONFRONTING INFORMALITY



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## Confronting [In]Formality Symposium

Posted on [January 7, 2015](#)



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**Thanks for watching &  
listening!**

Should you have any doubts, please contact

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Sao Paulo

Economic prosperity X justice

Paraisopolis and Morumbi, by Tuca Vieira, 2008. Used with permission.

Sao Paulo

# Social sustainability



Photo Roberto Rocco