



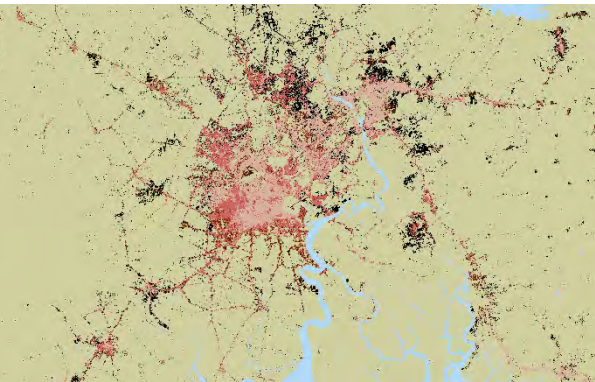
TOWARDS A NEW URBAN AGENDA



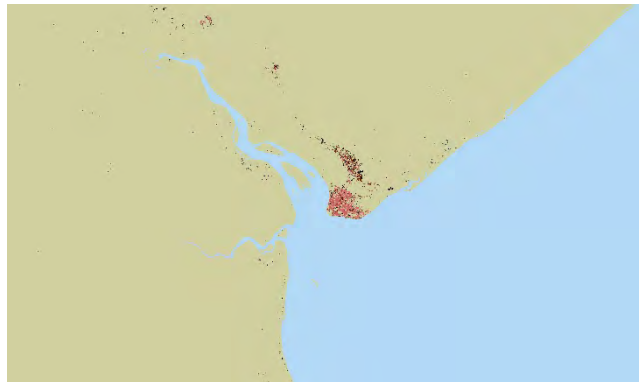
An aerial photograph of a coastal city, likely Mumbai, India. The city is densely packed with buildings, including many high-rise apartment complexes. A large body of water, possibly a bay or harbor, is visible in the upper right, with a long pier extending into it. A river or canal winds through the city, and there are areas of greenery and open land. The overall scene illustrates the proximity of urban development to water bodies, which is a key factor in flood risk assessment.

Urbanisation and flood risks

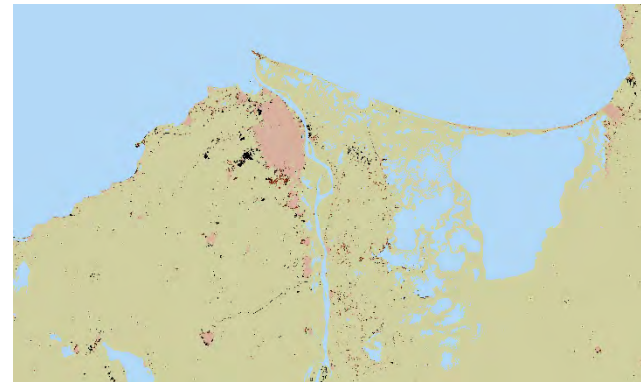
Image: T. Loster/ Münchener Rück Stiftung



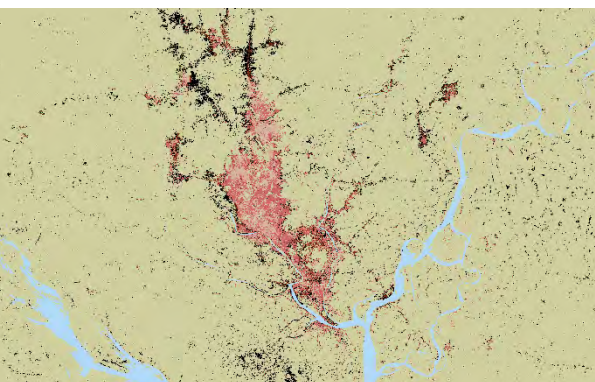
HCMC



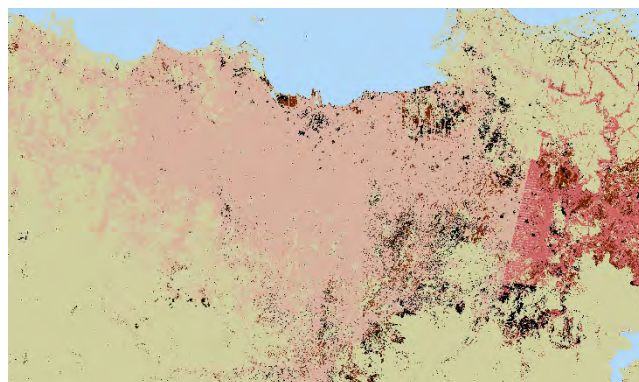
Beira



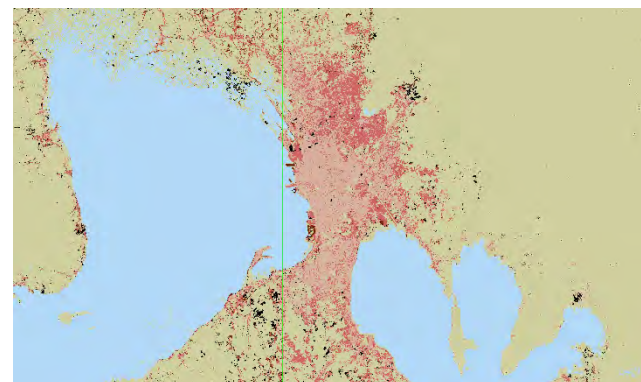
Barranquilla



Dhaka



Jakarta*



Manilla

* Data limitations

Urbanisation and Flood risks

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Flood risk

Informal settlement

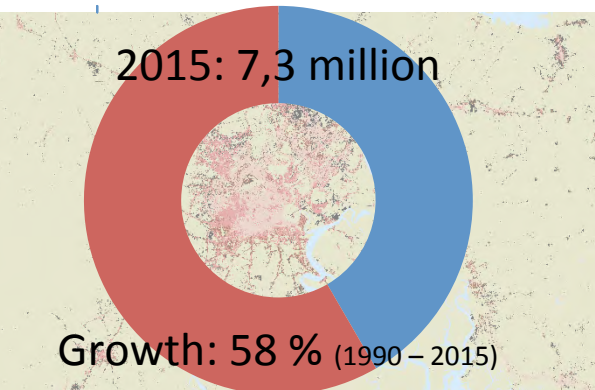
Understanding the urban fabric

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Discussion

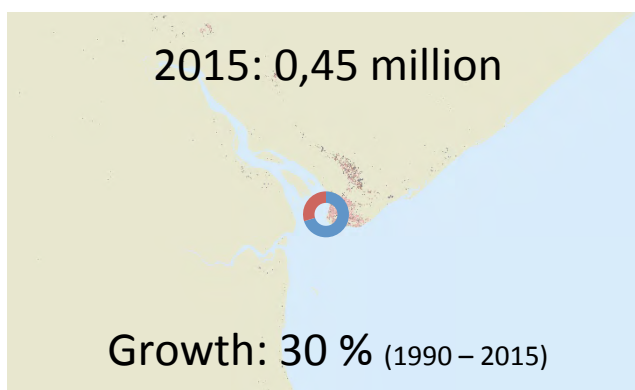
Constituting new partnerships

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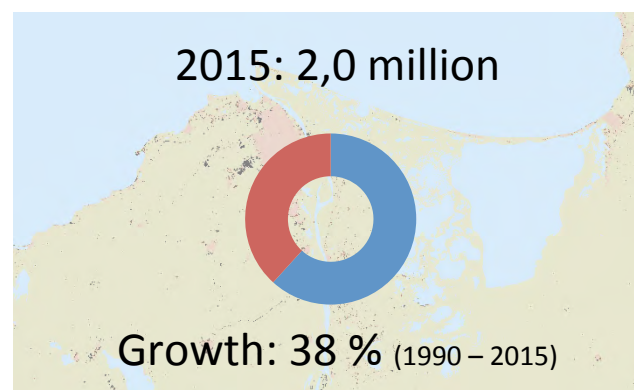


HCMC

Population 1990

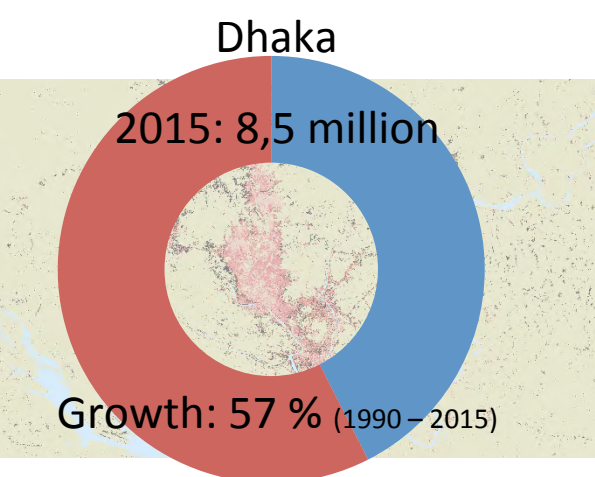


Beira

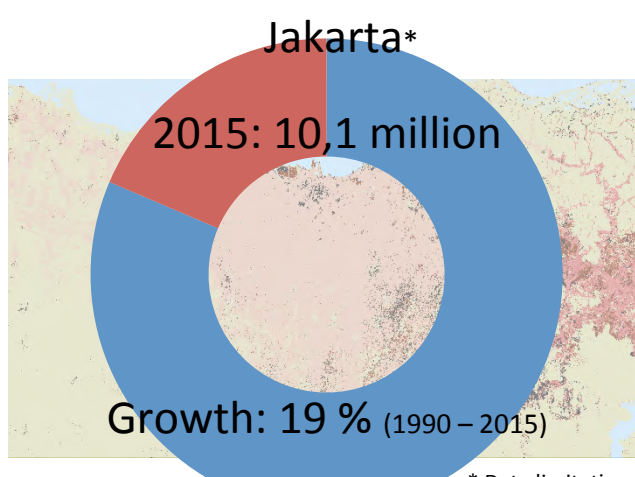


Barranquilla

Increase 1990 - 2015

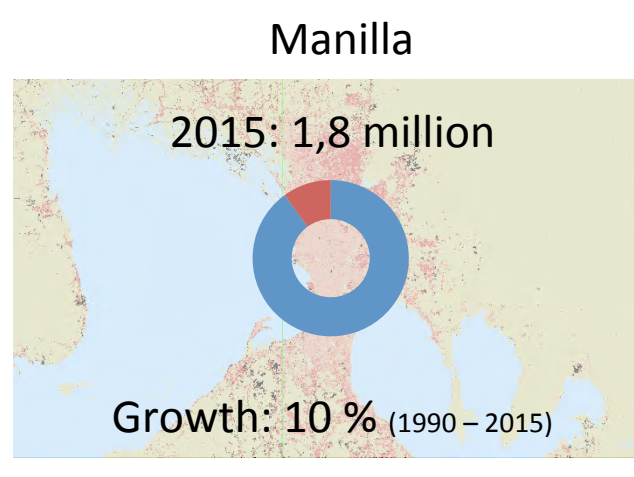


Dhaka



Jakarta*

* Data limitations



Manilla

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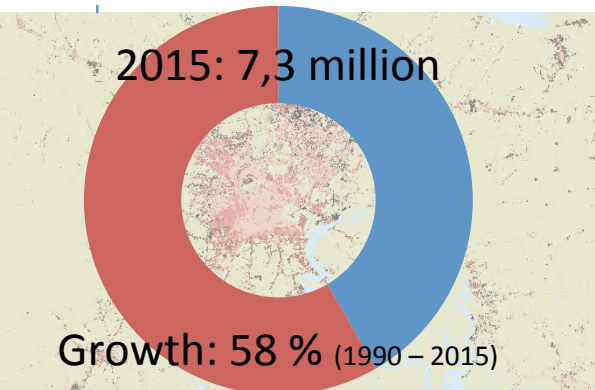
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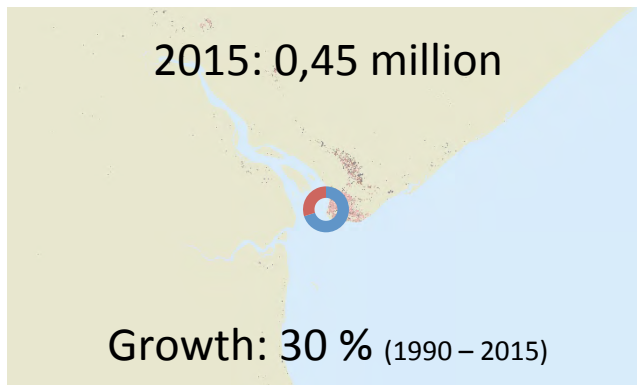
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Constituting new partnerships

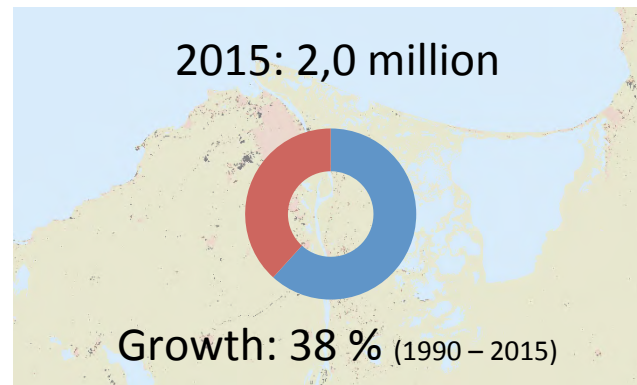
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HCMC



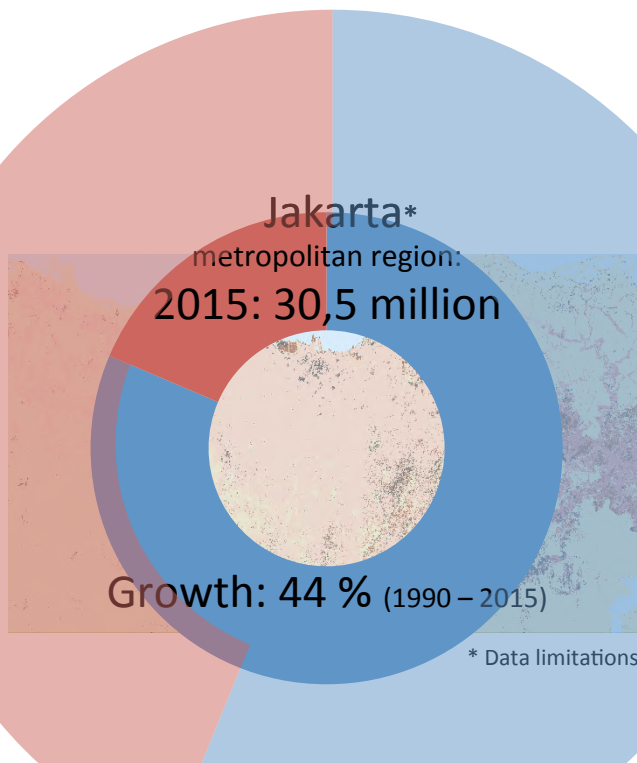
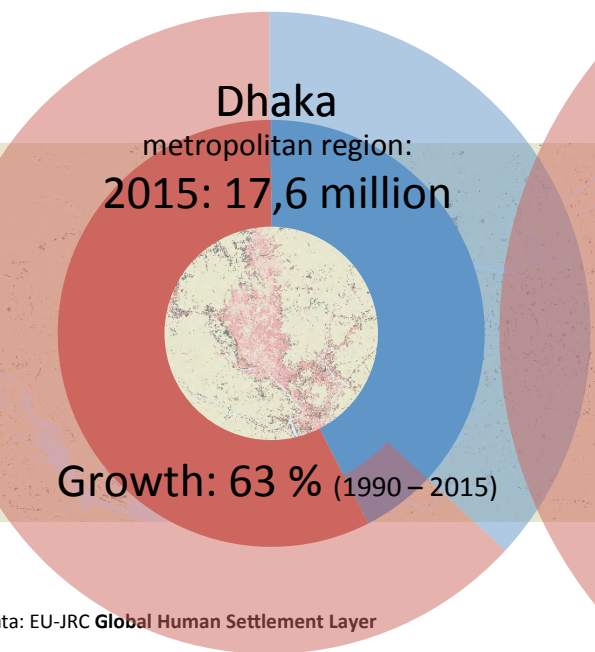
Beira



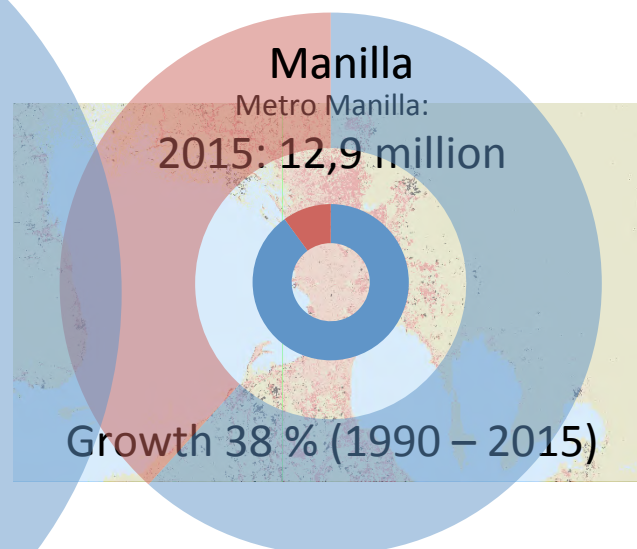
Barranquilla

Population 1990

Increase 1990 - 2015



* Data limitations



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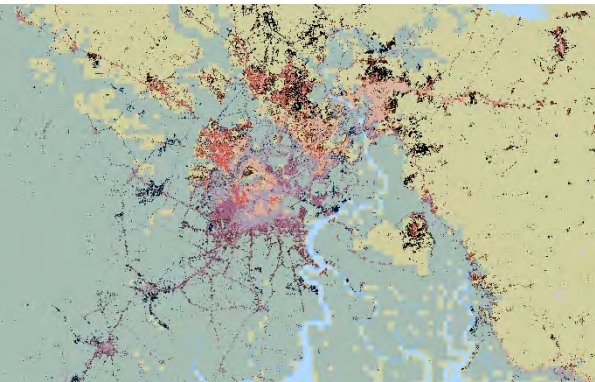
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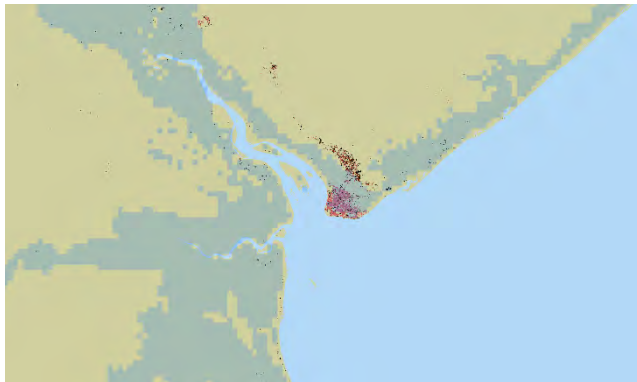
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Constituting new partnerships

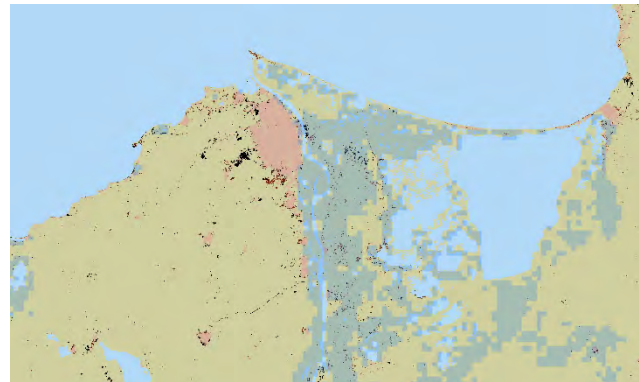
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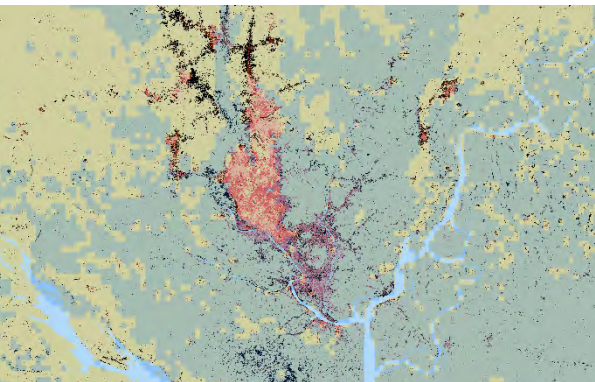
Beira



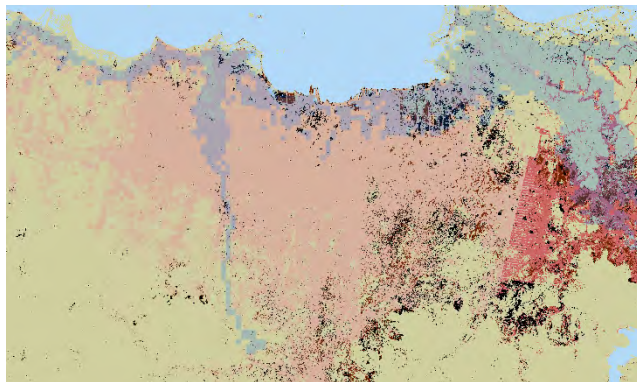
Barranquilla



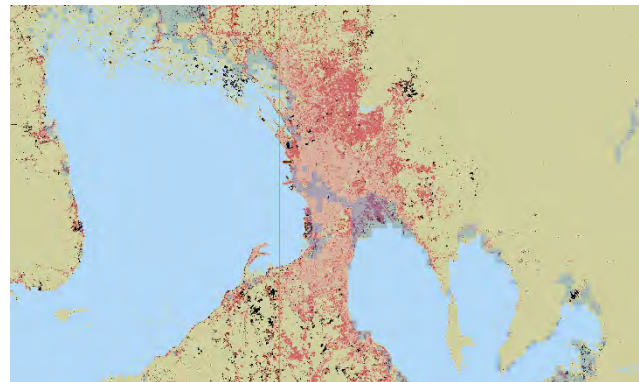
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Jakarta*



Manilla



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PBL Netherlands Environmental
Assessment Agency

Urbanisation and flood risks

understanding the urban fabric
and constituting new partnerships

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PBL Netherlands Environmental
Assessment Agency

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Three case studies



Barranquilla, Colombia
Around 1.2 million inhabitants
Pop. density: 7,000 people/km²

Beira, Mozambique
Around 600,000 inhabitants
Pop. density: 690 people/km²

Ho Chi Minh City, Vietnam
Around 8 to 10 million inhabitants
Pop. density: 3,800 people/km²

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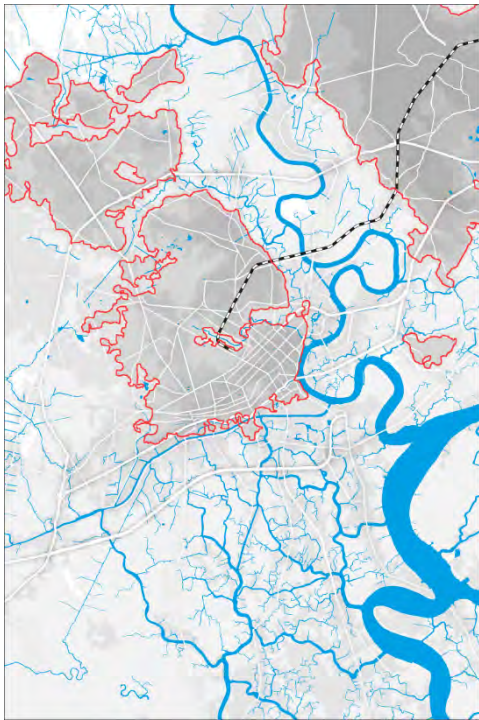
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Natural condition



HCM City

5 meter above sea-level
altitude



Beira



Barranquilla

Legenda naar onderen?

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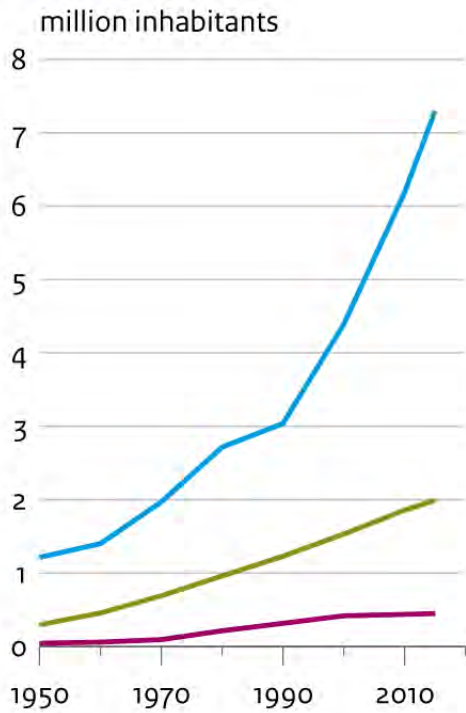
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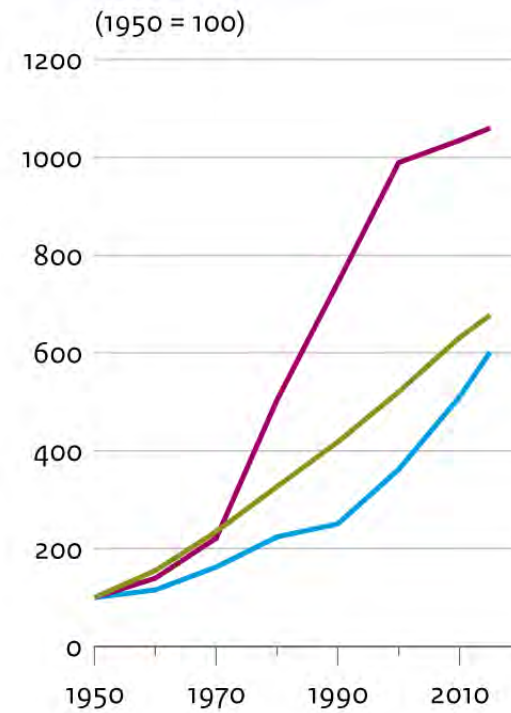
Urban growth

Population



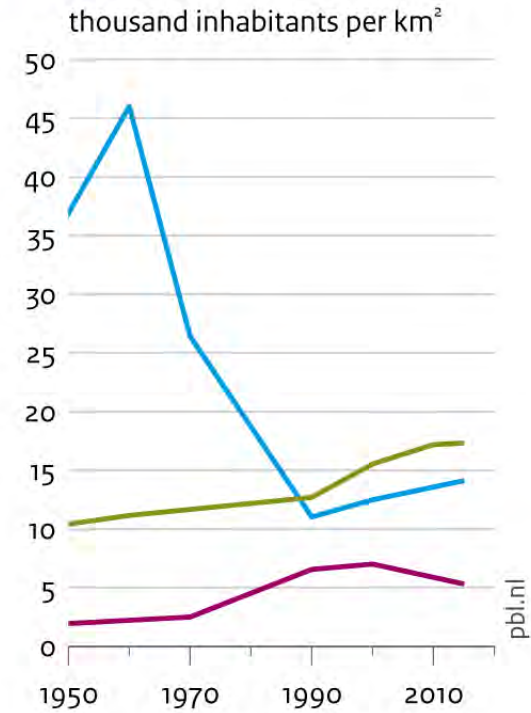
— HCMC

Indexed population



— Beira

Density



— Barranquilla

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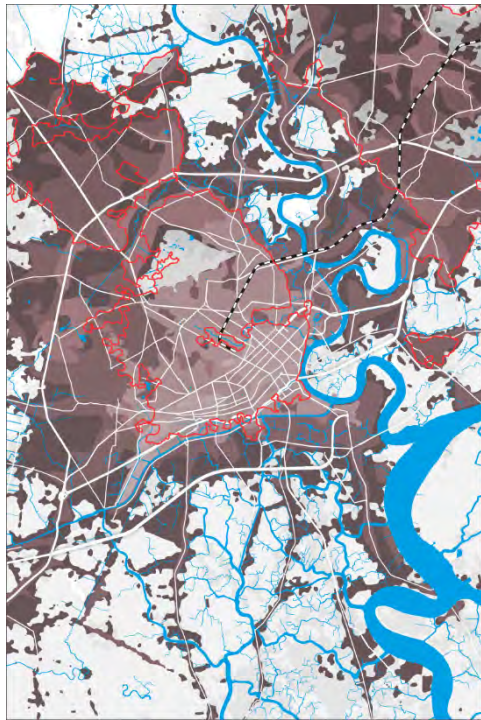
HCMC

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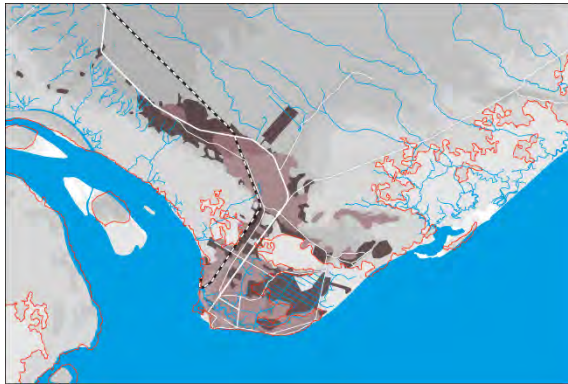
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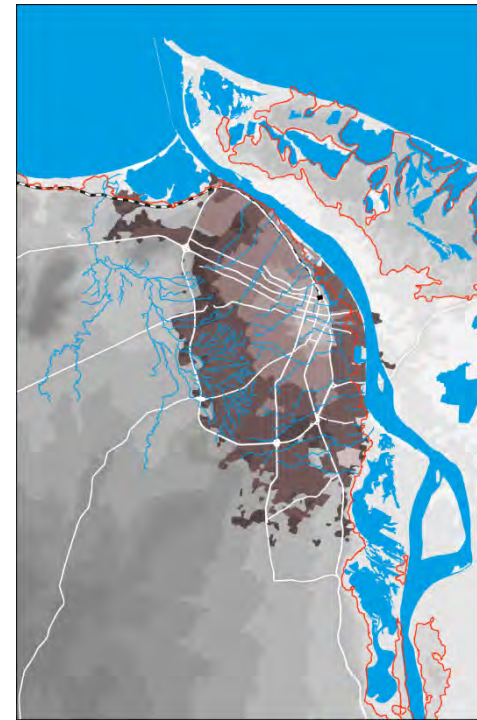
Urban growth



HCM City



Beira



Barranquilla

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HCM City



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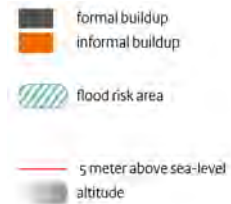
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Informal settlements



HCM City



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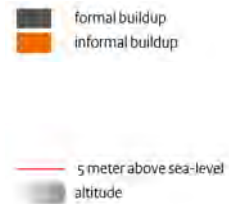
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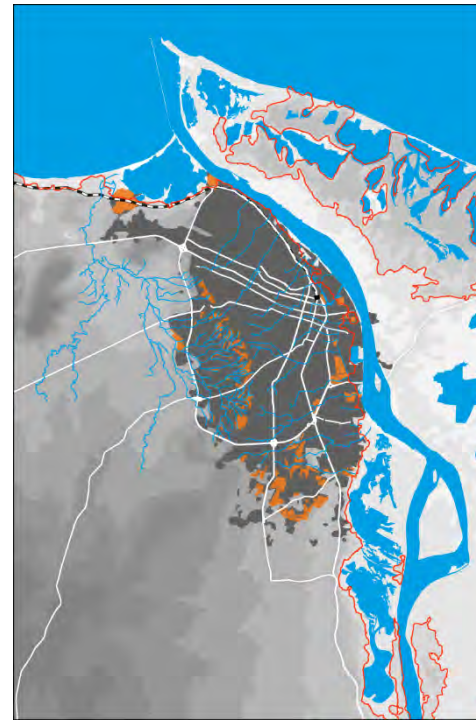
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Understanding the Urban Fabric

Ho Chi Minh City, Vietnam

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Looking at two neighbourhoods



Informal settlement

Thu Duc: unplanned growth

Formal settlement

Sunrise City: planned growth

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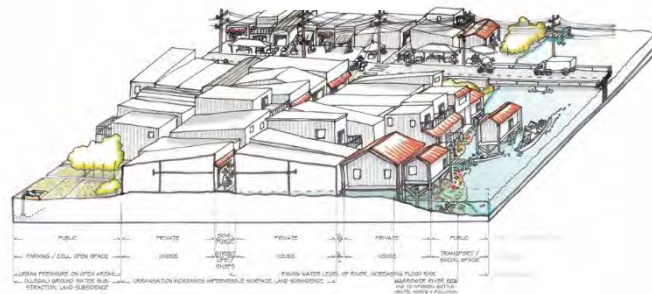
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Looking at two neighbourhoods

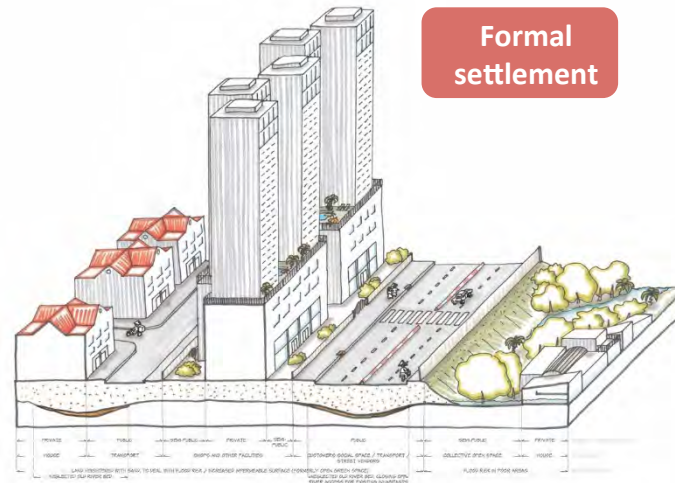
Informal settlement



The Duc: unplanned growth



Formal settlement



Sunrise City: planned growth



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Thu Duc: plot and dwelling types



Along land roads



In river beds



Along alleyways

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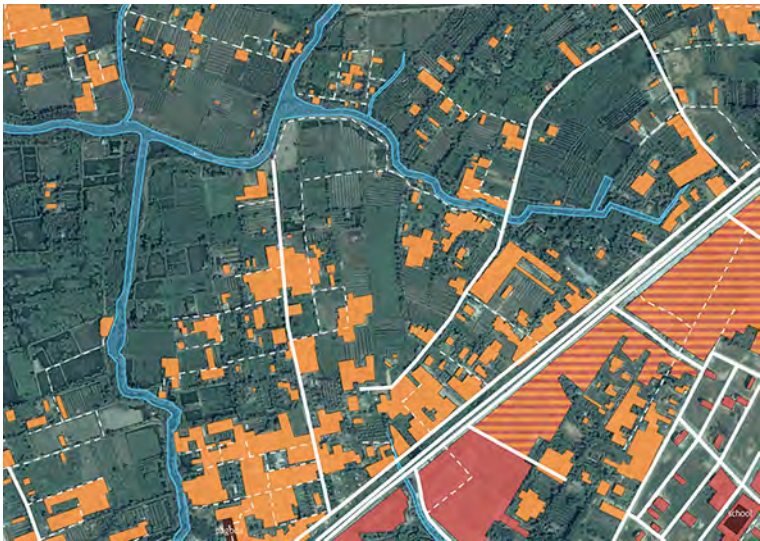
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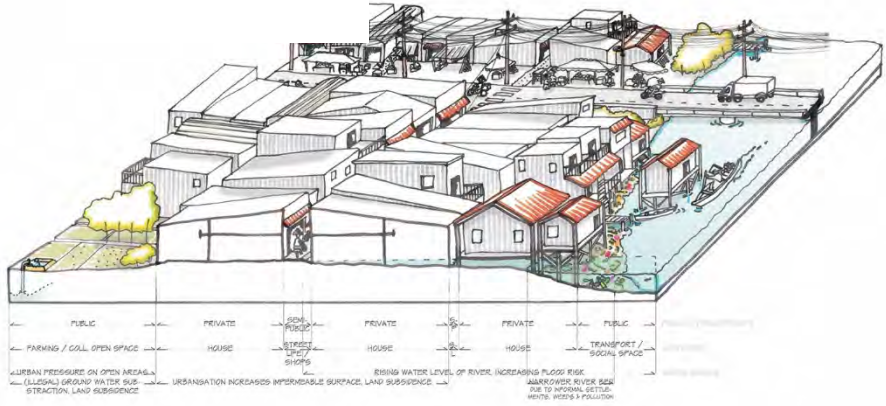
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Thu Duc: growth patterns



Built-up area 2004

Informal settlement



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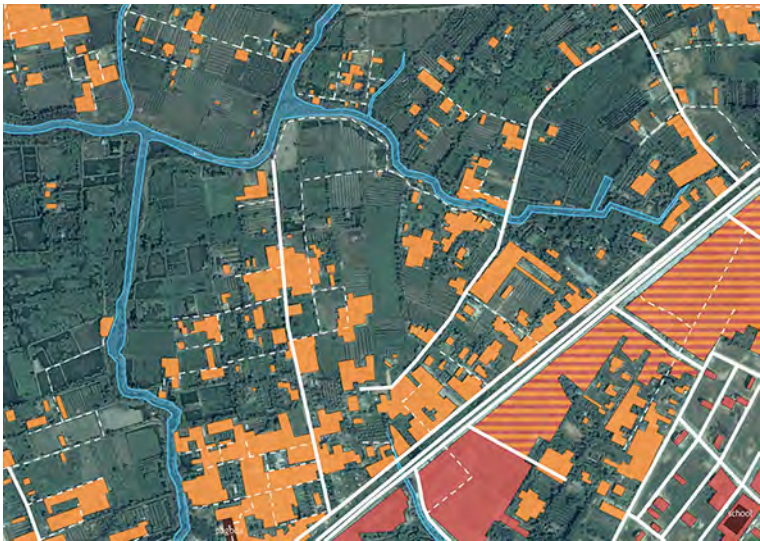
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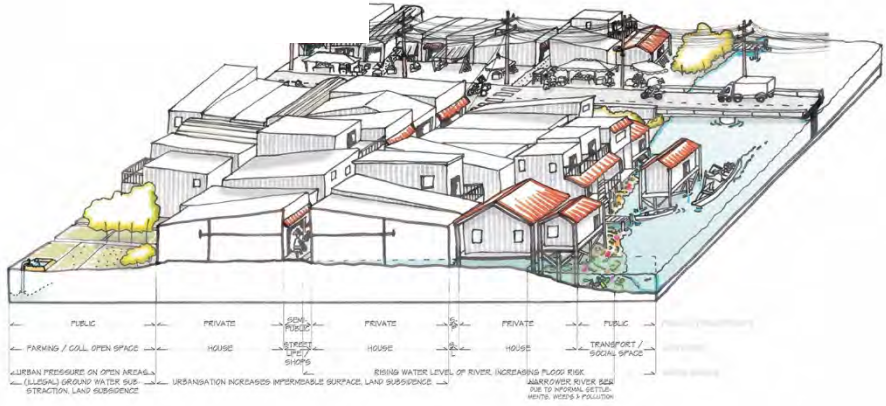
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Thu Duc: growth patterns



Built-up area 2004

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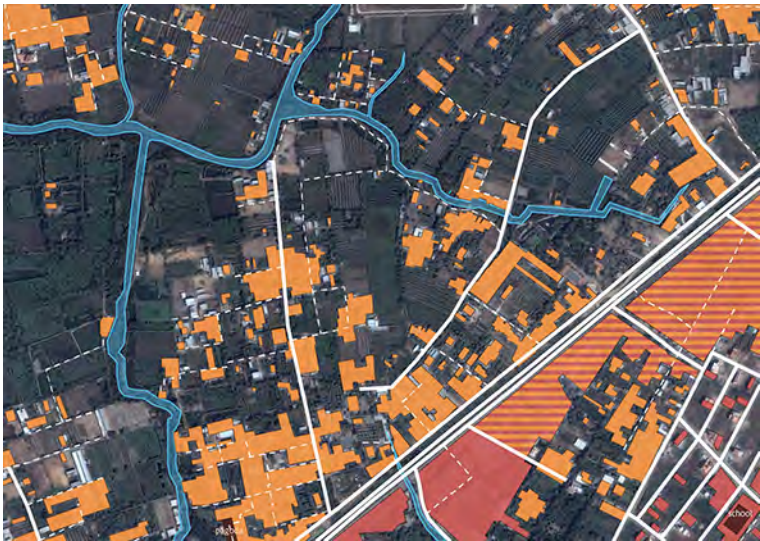
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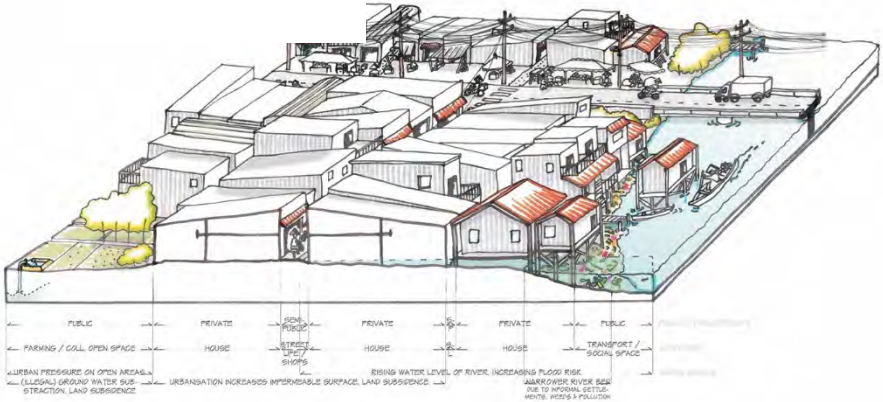
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Thu Duc: growth patterns



Built-up area 2005

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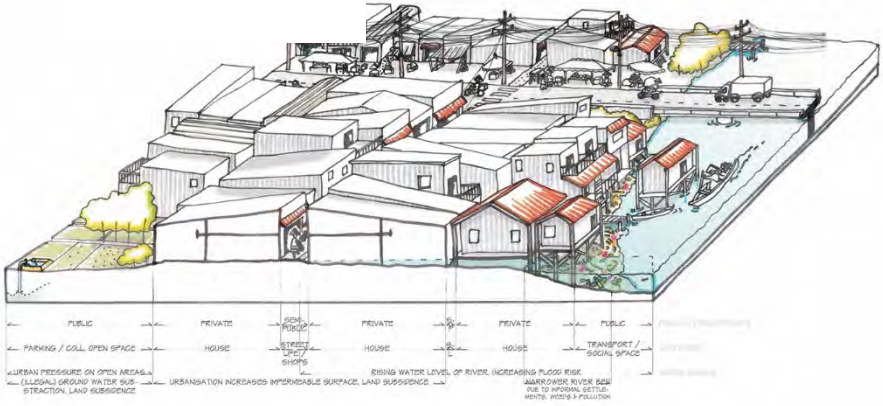
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Thu Duc: growth patterns



Built-up area 2010

Informal settlement



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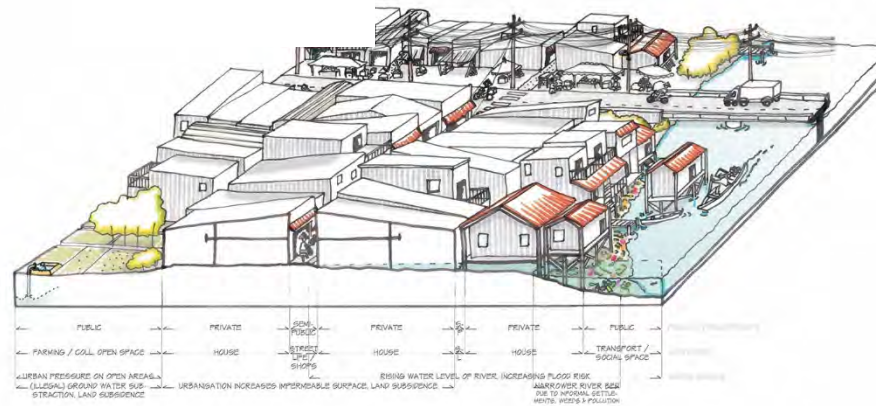
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Thu Duc: growth patterns



Built-up area 2011

Informal settlement



Thu Duc neighbourhood, HCM City

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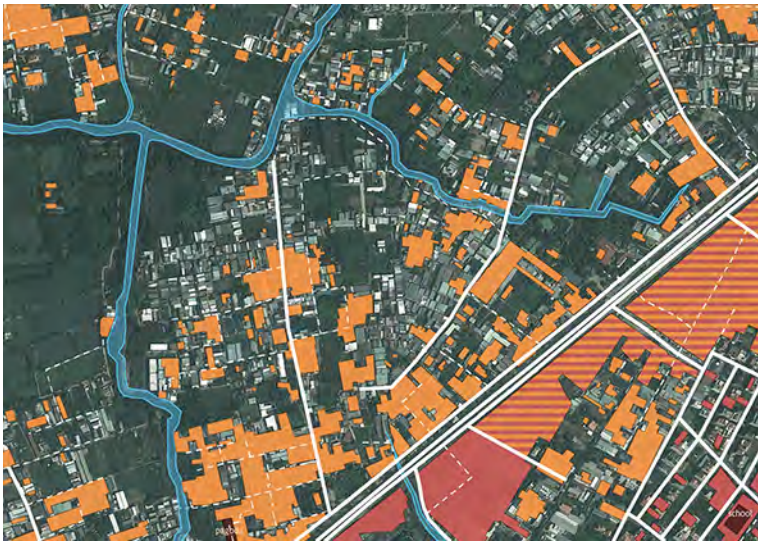
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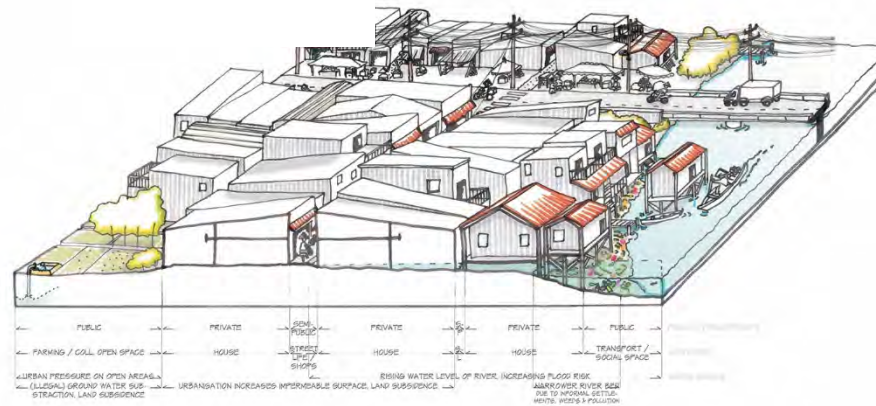
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Thu Duc: growth patterns



Built-up area 2013

Informal settlement



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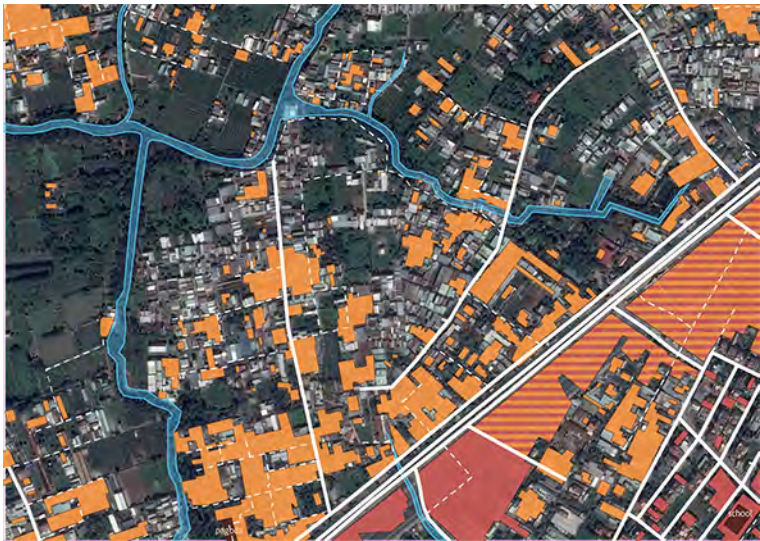
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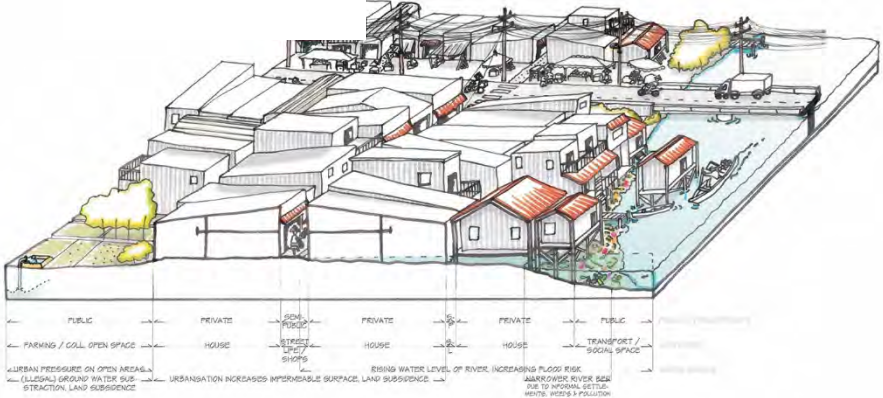
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Thu Duc: growth patterns



Built-up area 2014

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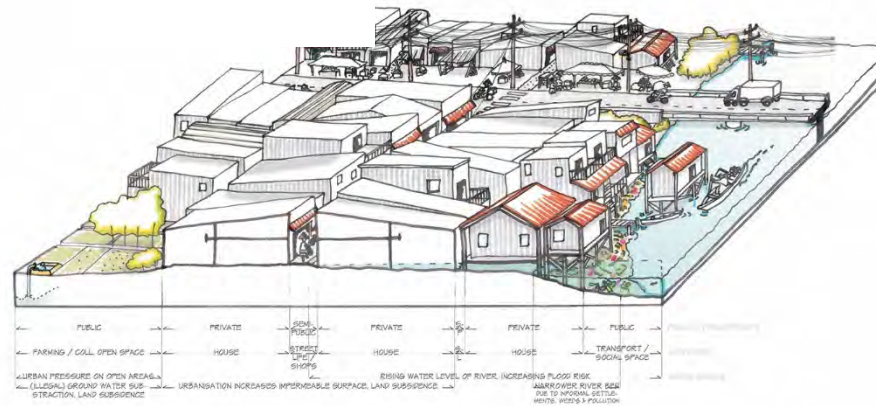
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Thu Duc: living standards



Built-up area 2015

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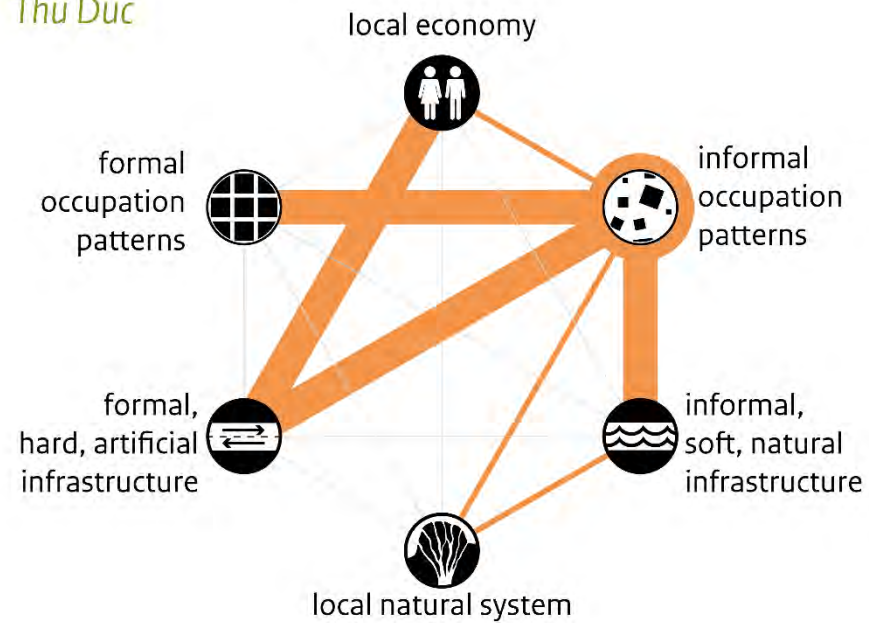
HCM City
Income
Life expectancy
Education

Low class

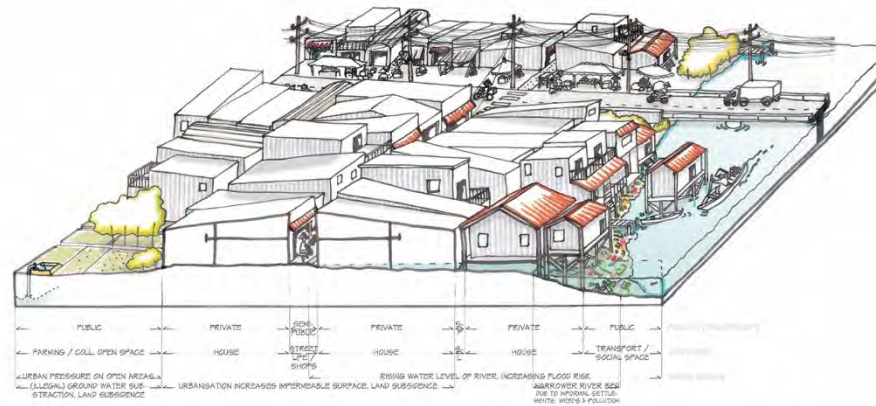


Thu Duc: spatial relations

Thu Duc



Informal settlement



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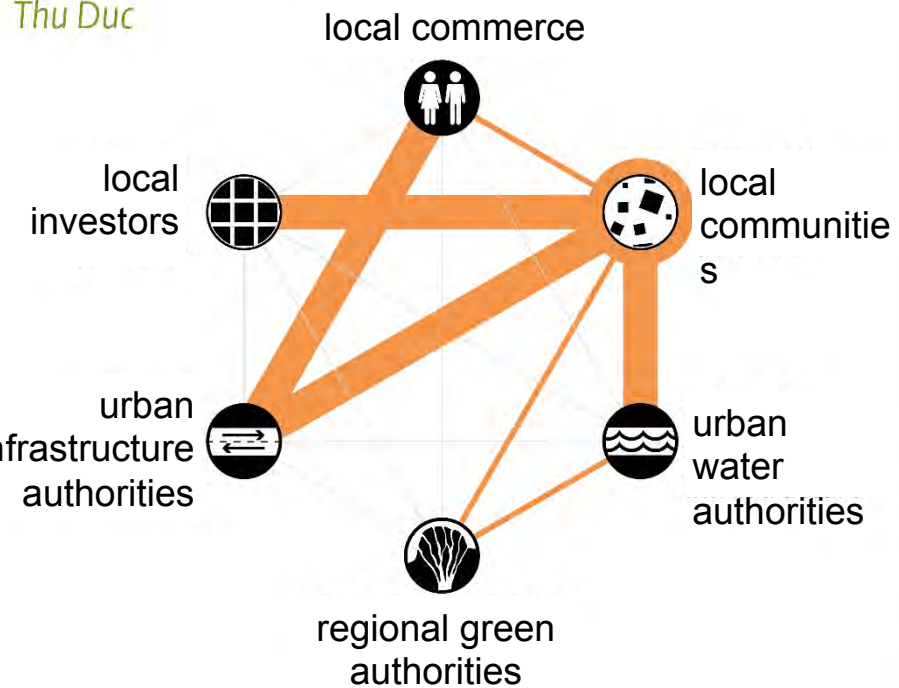
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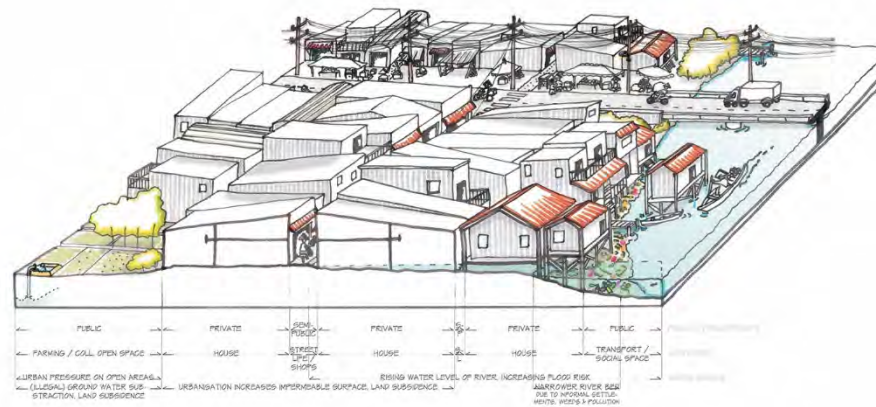
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Thu Duc: urbanization drivers

Thu Duc



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Sunrise City: plot and dwelling types



Main road



District roads



Residential areas

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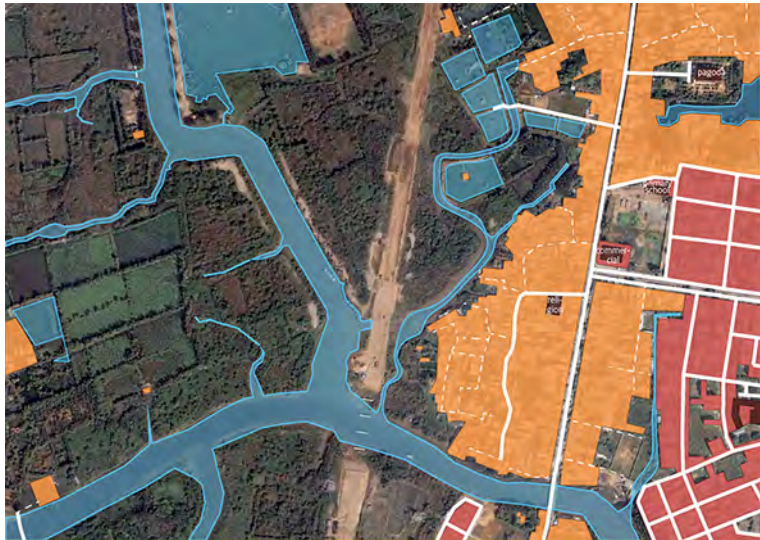
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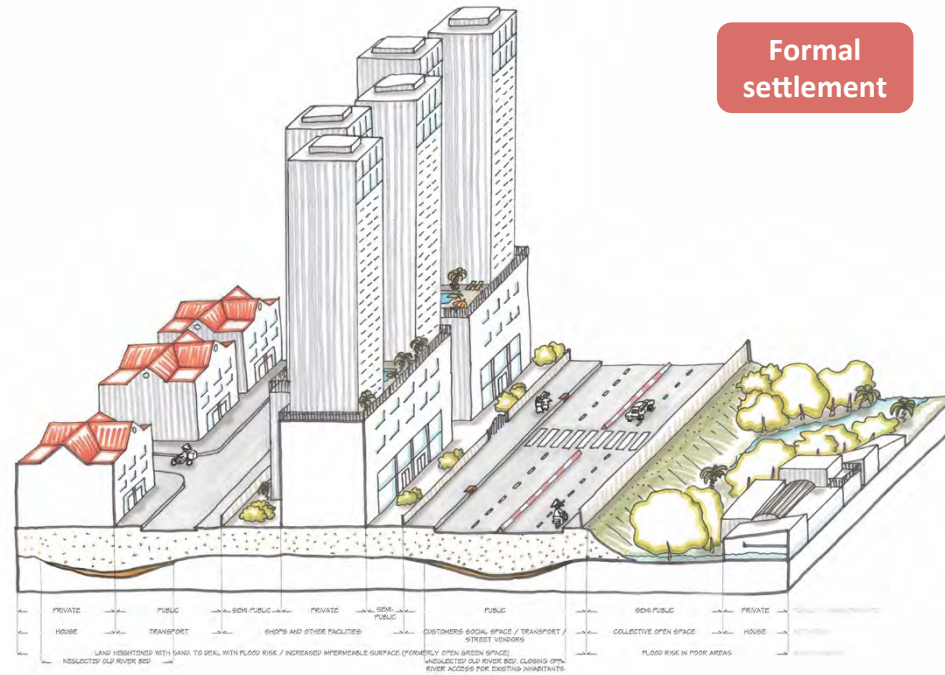
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Sunrise City: growth patterns



Built-up area 2003

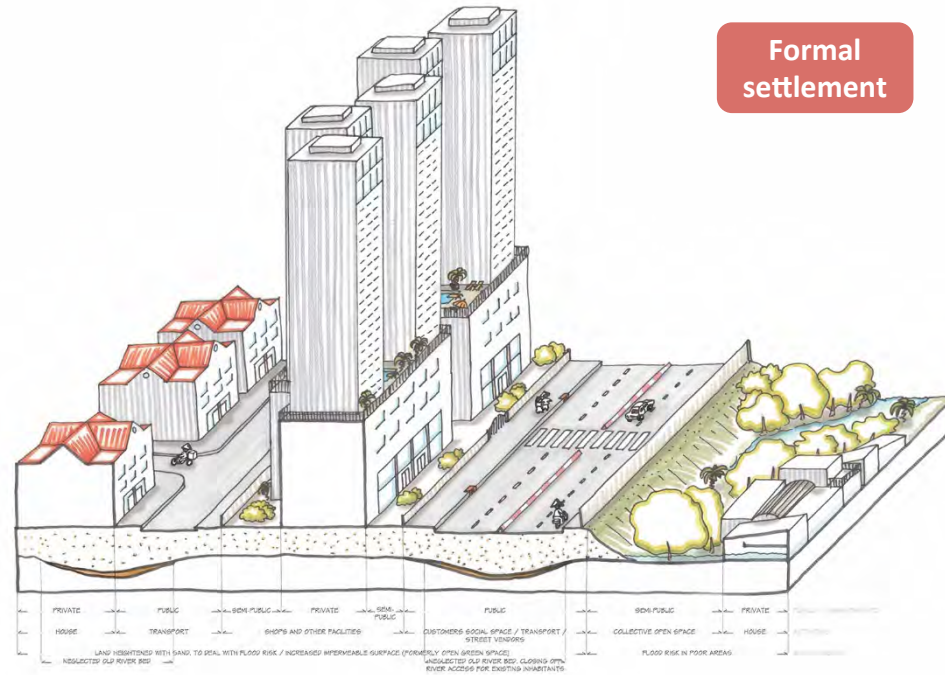


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Sunrise City: growth patterns

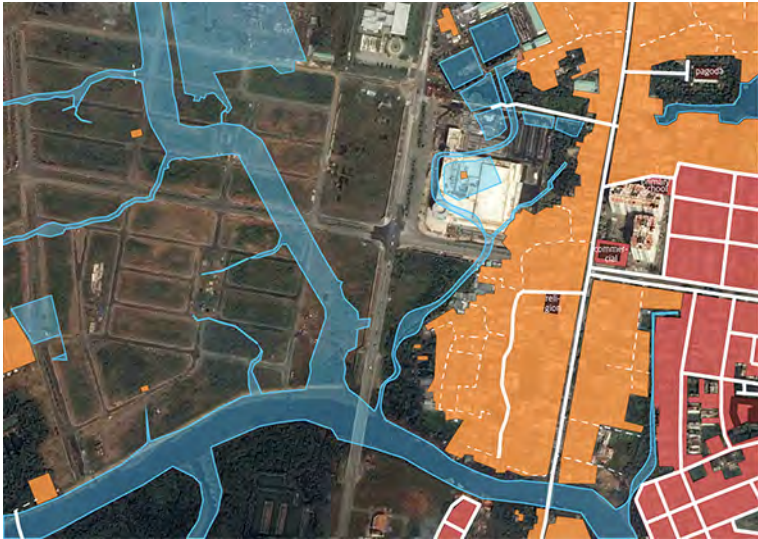


Built-up area 2006

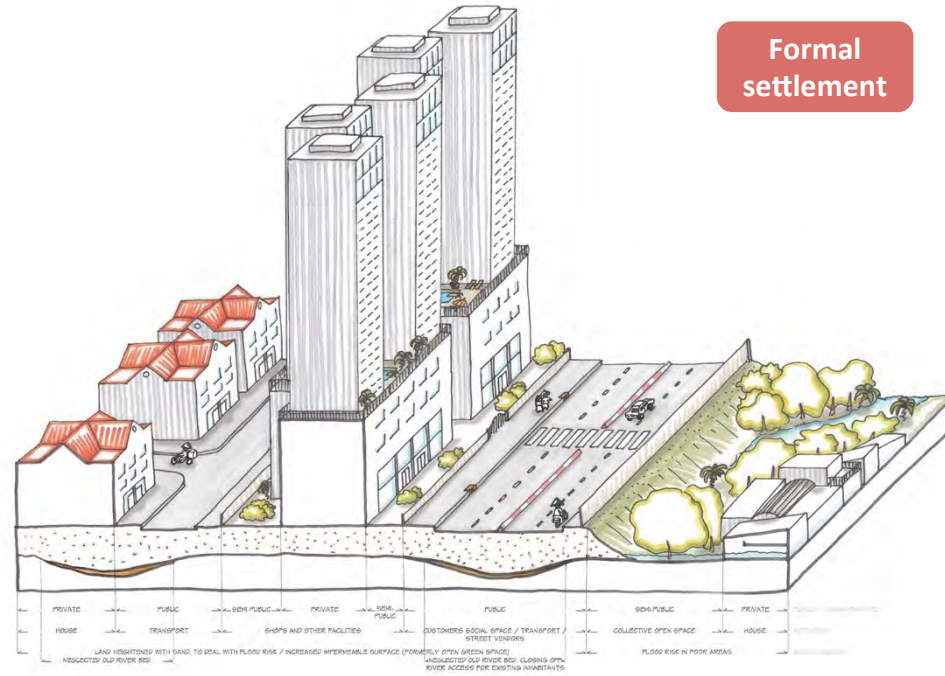


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Sunrise City: growth patterns



Built-up area 2008



Formal settlement

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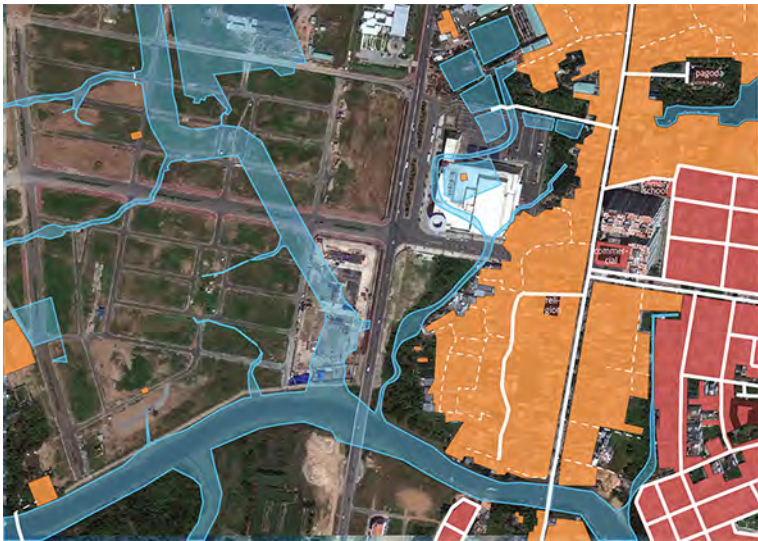
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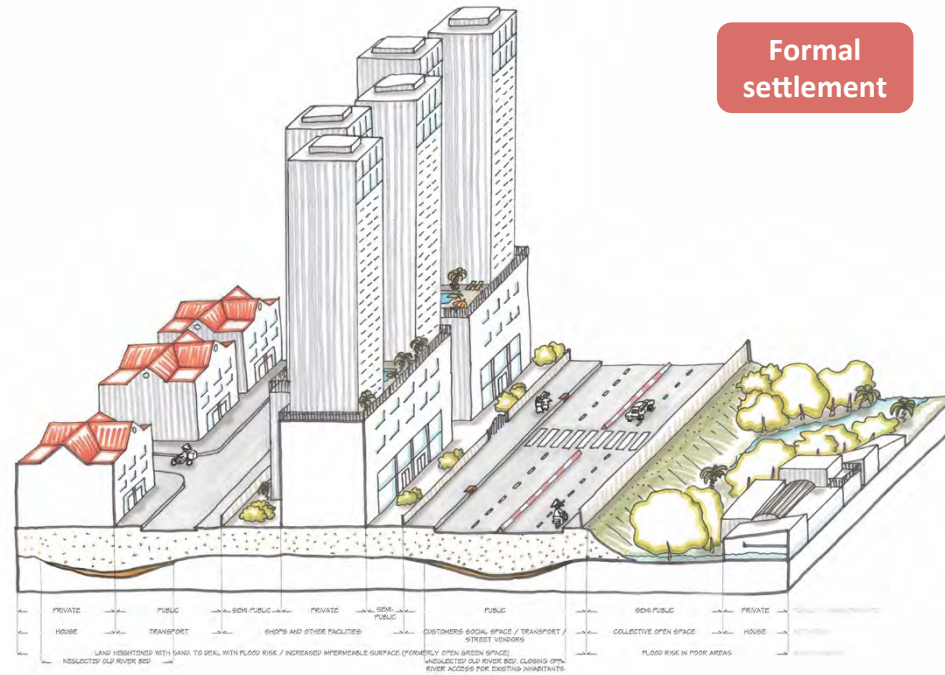
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Sunrise City: growth patterns



Built-up area 2009



Formal settlement

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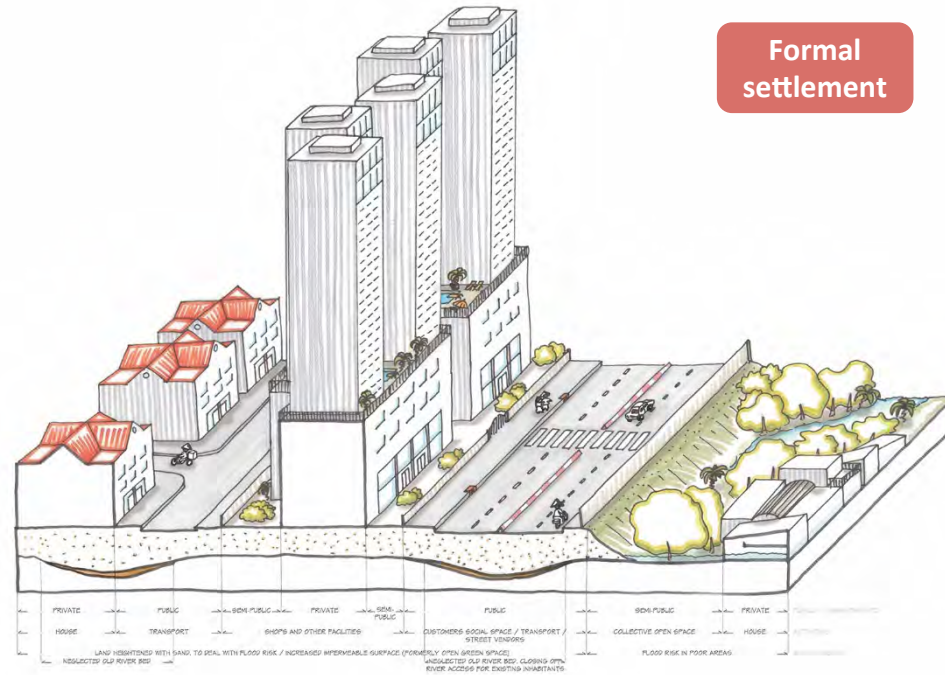
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Sunrise City: growth patterns



Built-up area 2012



Formal settlement

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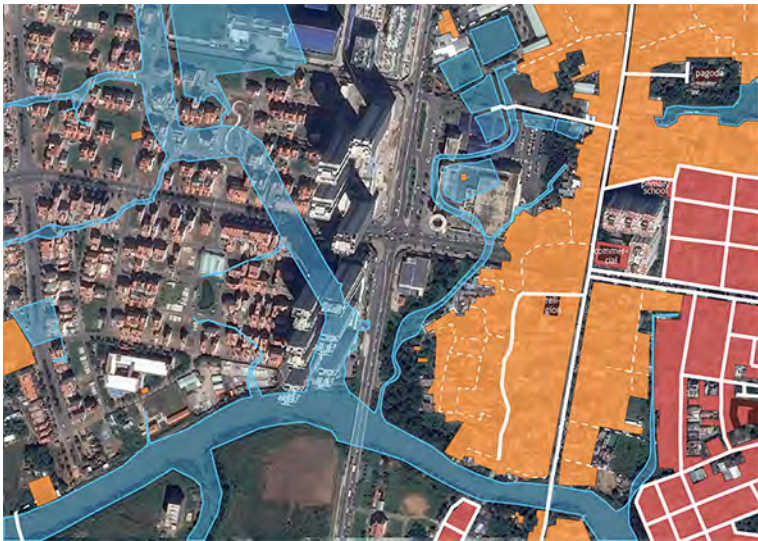
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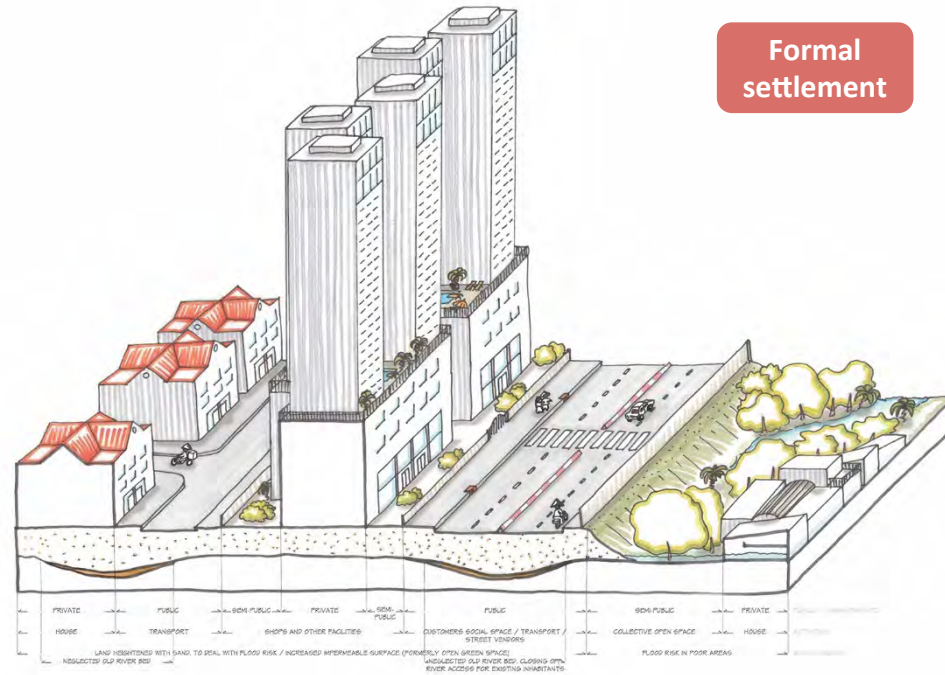
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Sunrise City: growth patterns



Built-up area 2014

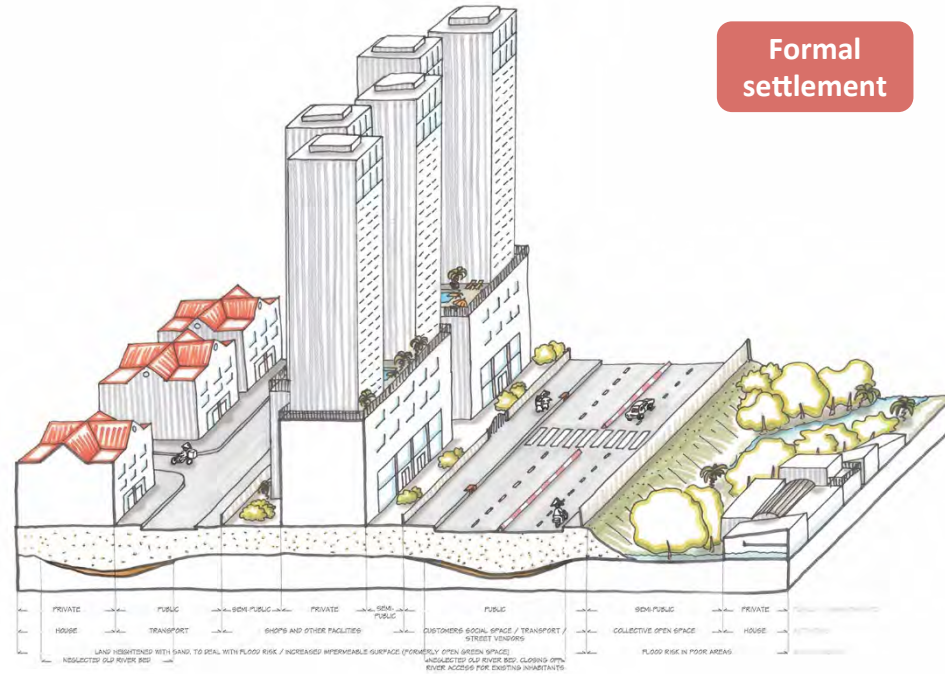


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Sunrise City: living standards



Built-up area 2015



Formal settlement

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HCM City
Income
Life expectancy
Education

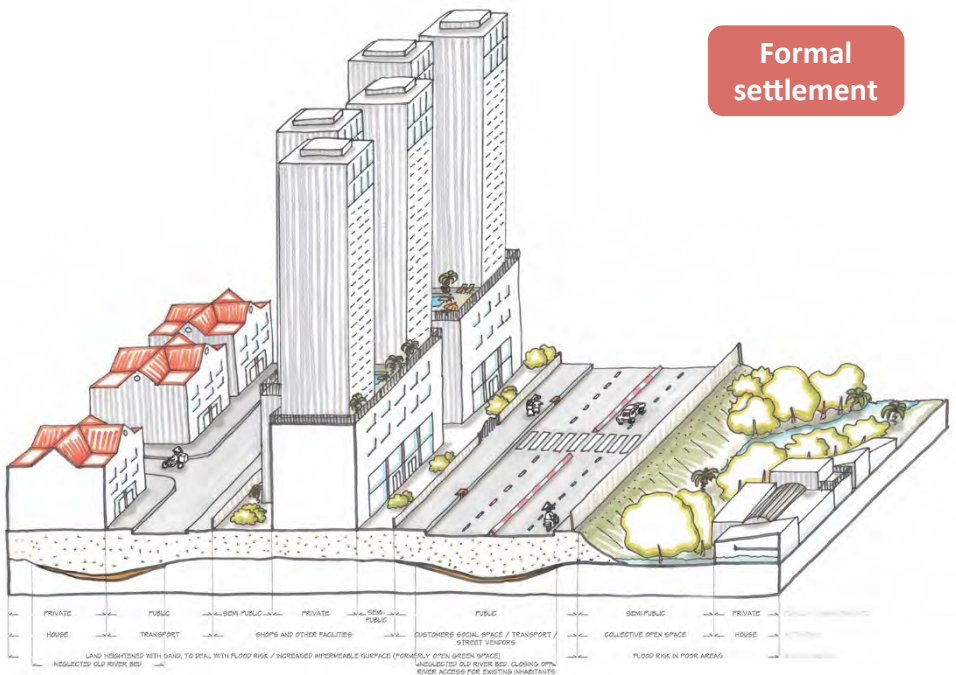
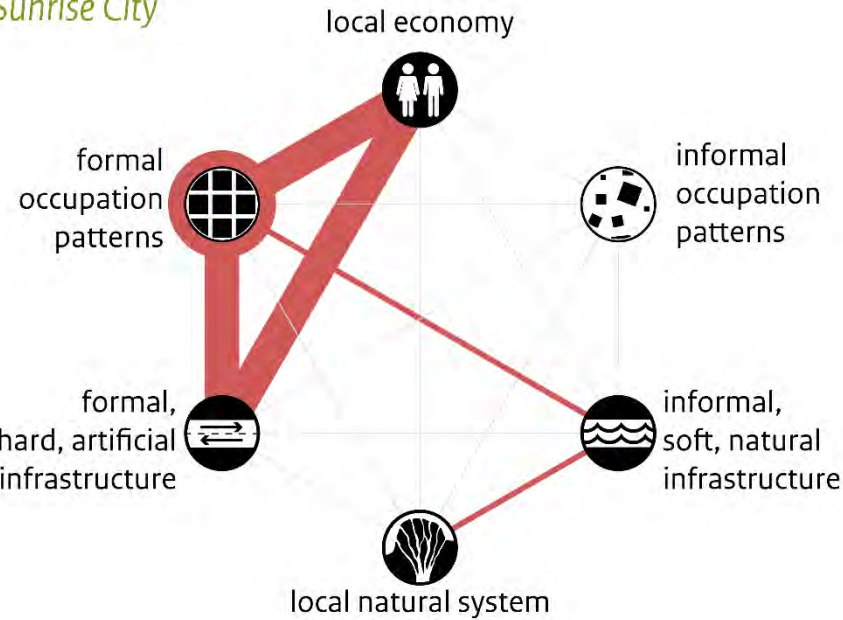
High class



NL

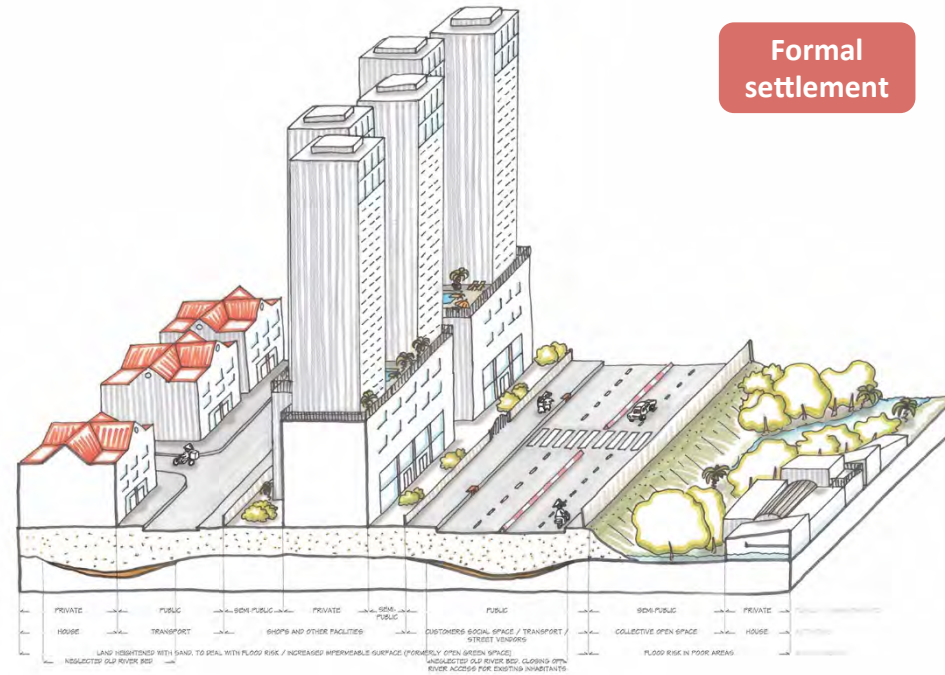
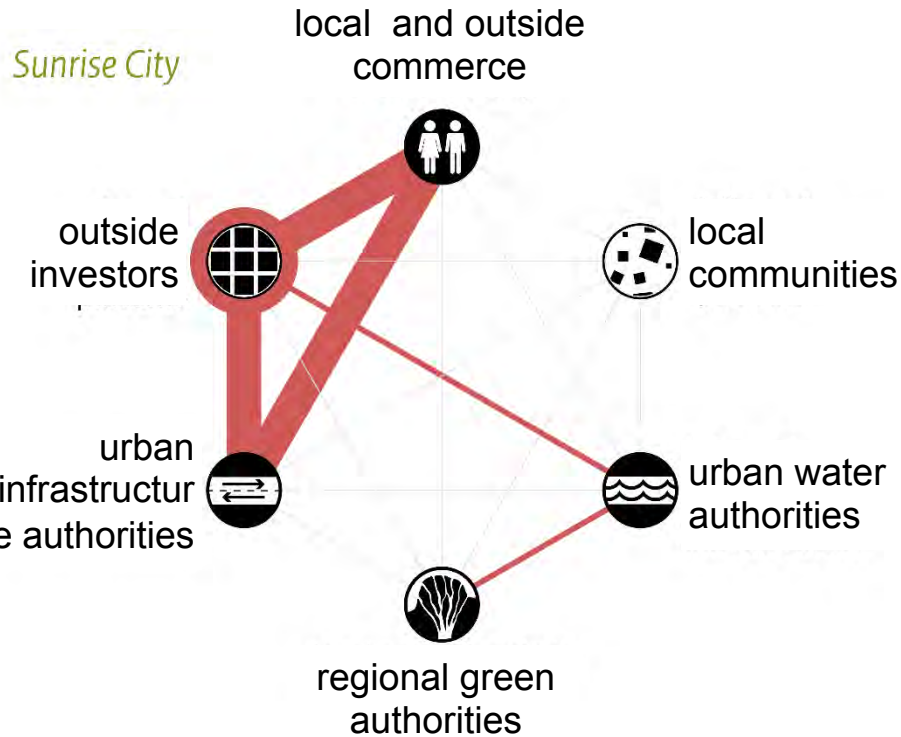
Sunrise City: spatial relations

Sunrise City



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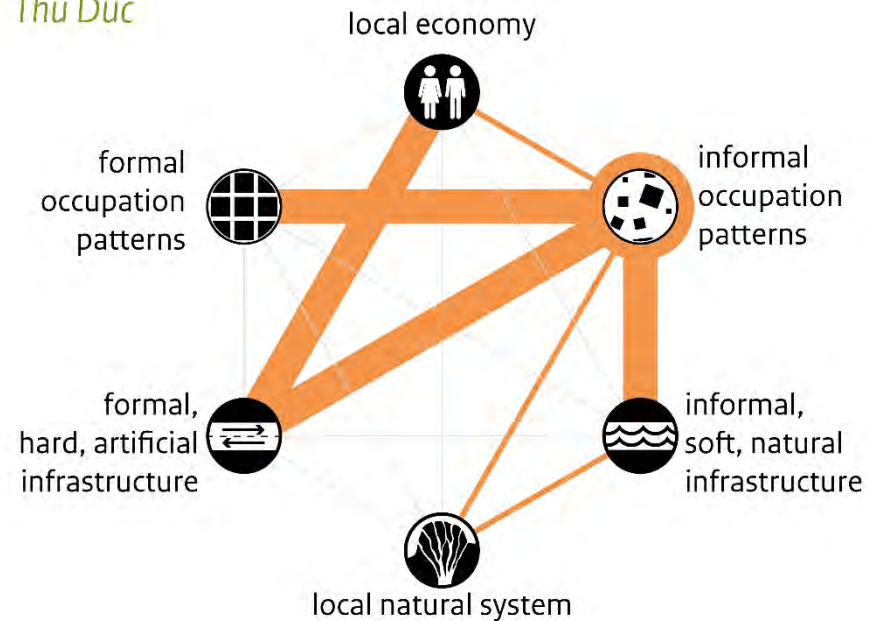
Sunrise City: urbanisation drivers



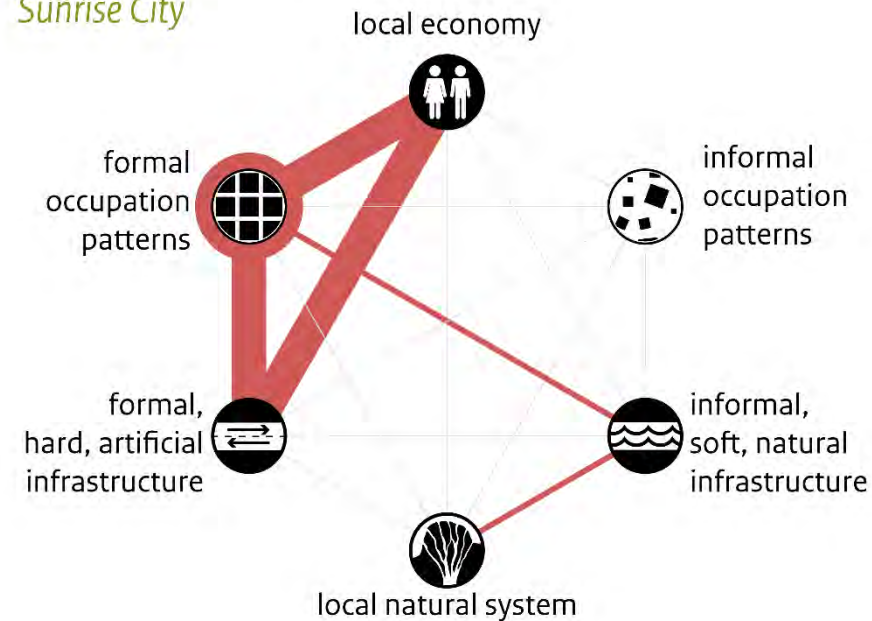
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Unraveling the urban fabric: the hexagon model

Thu Duc



Sunrise City



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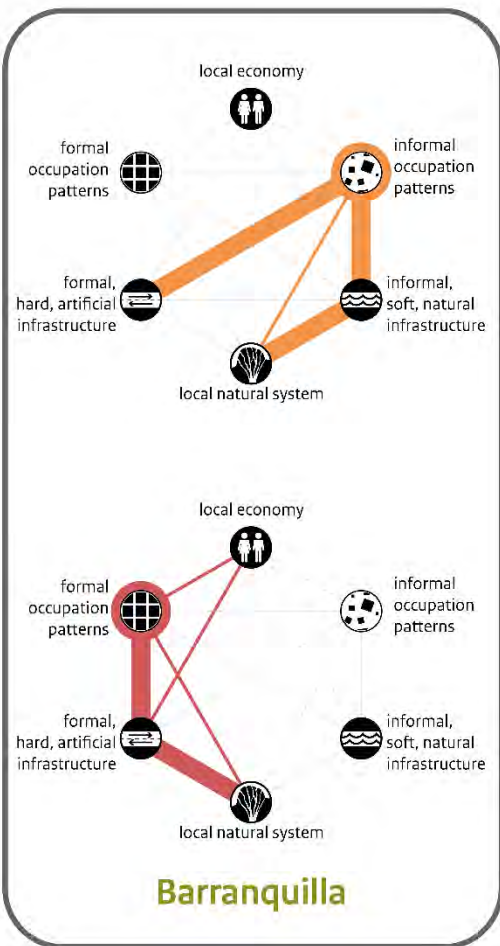
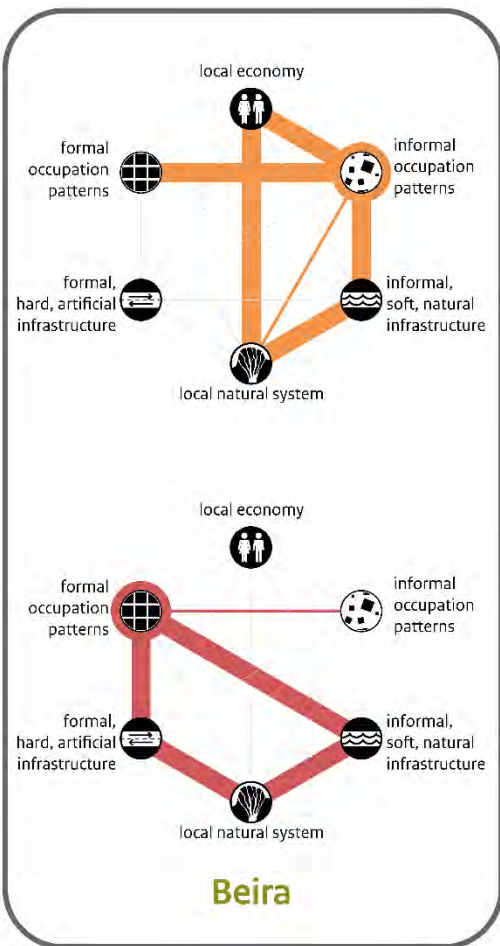
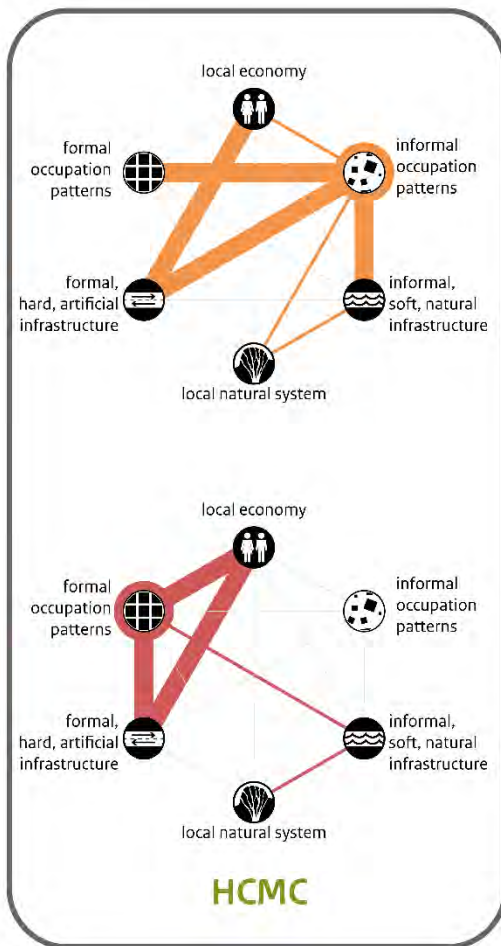
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Different interdependencies

Informal settlements

Formal settlements



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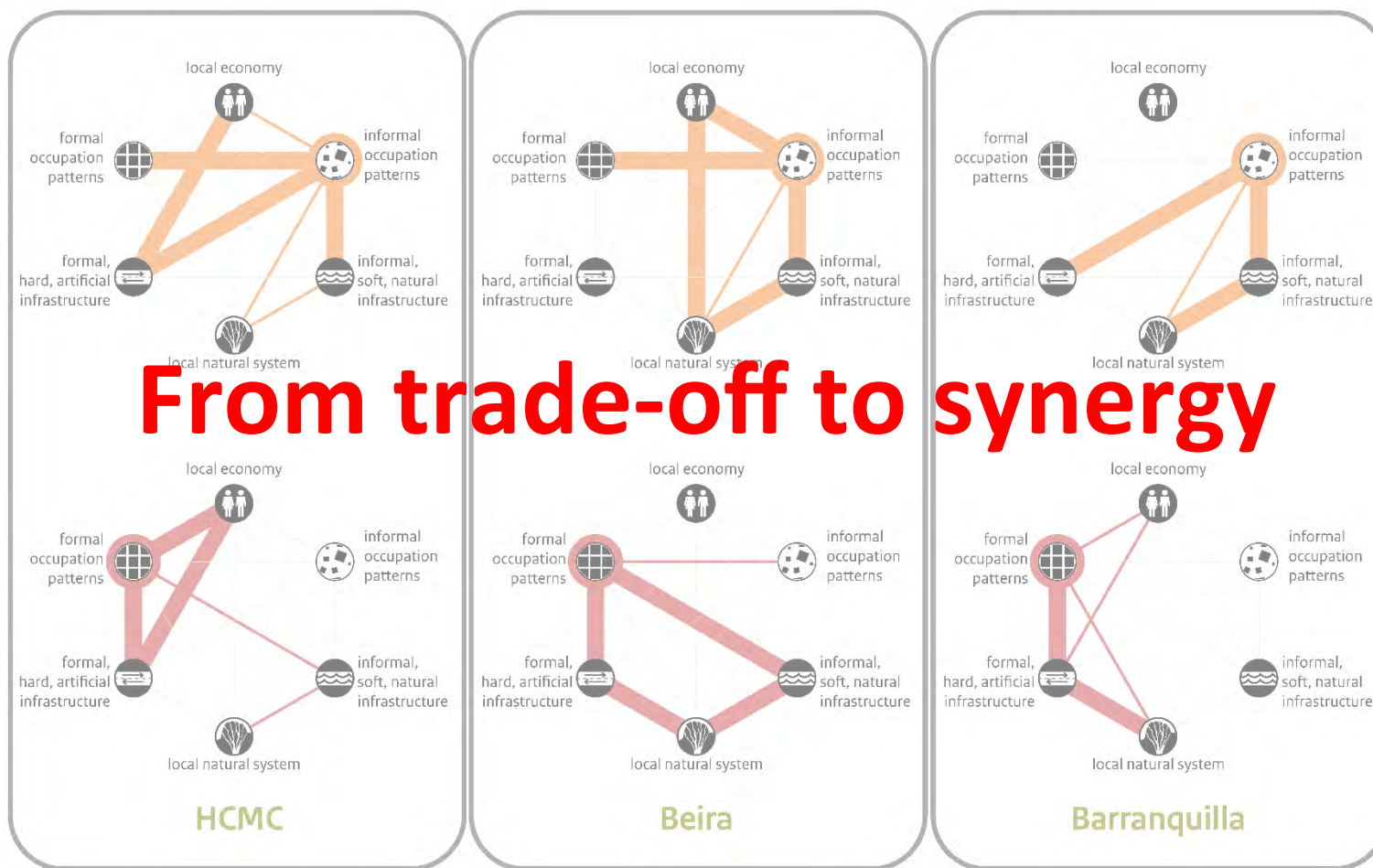
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Different interdependencies



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Discussion topic

What are in your case positive and negative interdependencies between planned/formal and unplanned/informal urbanization?

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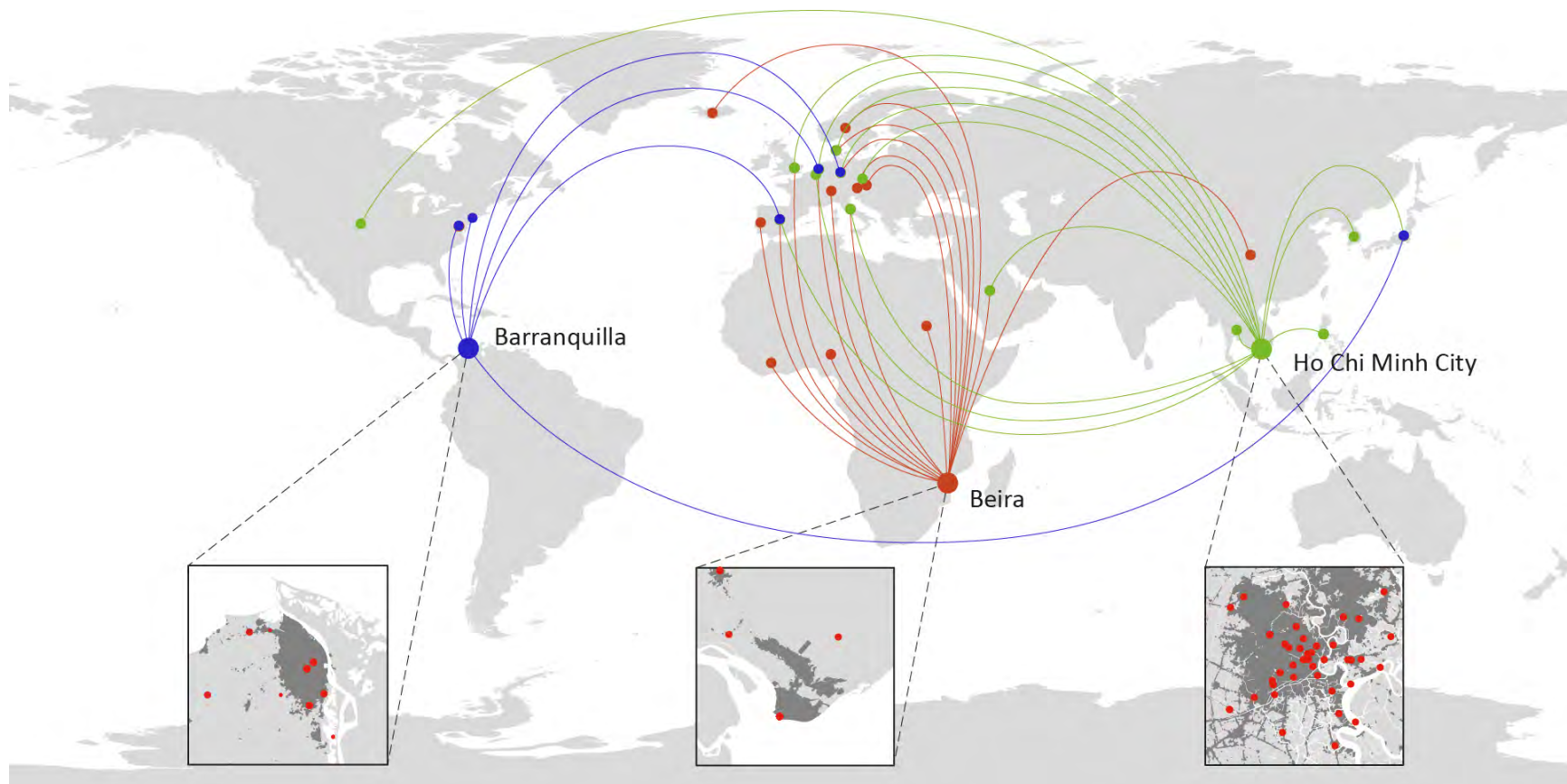
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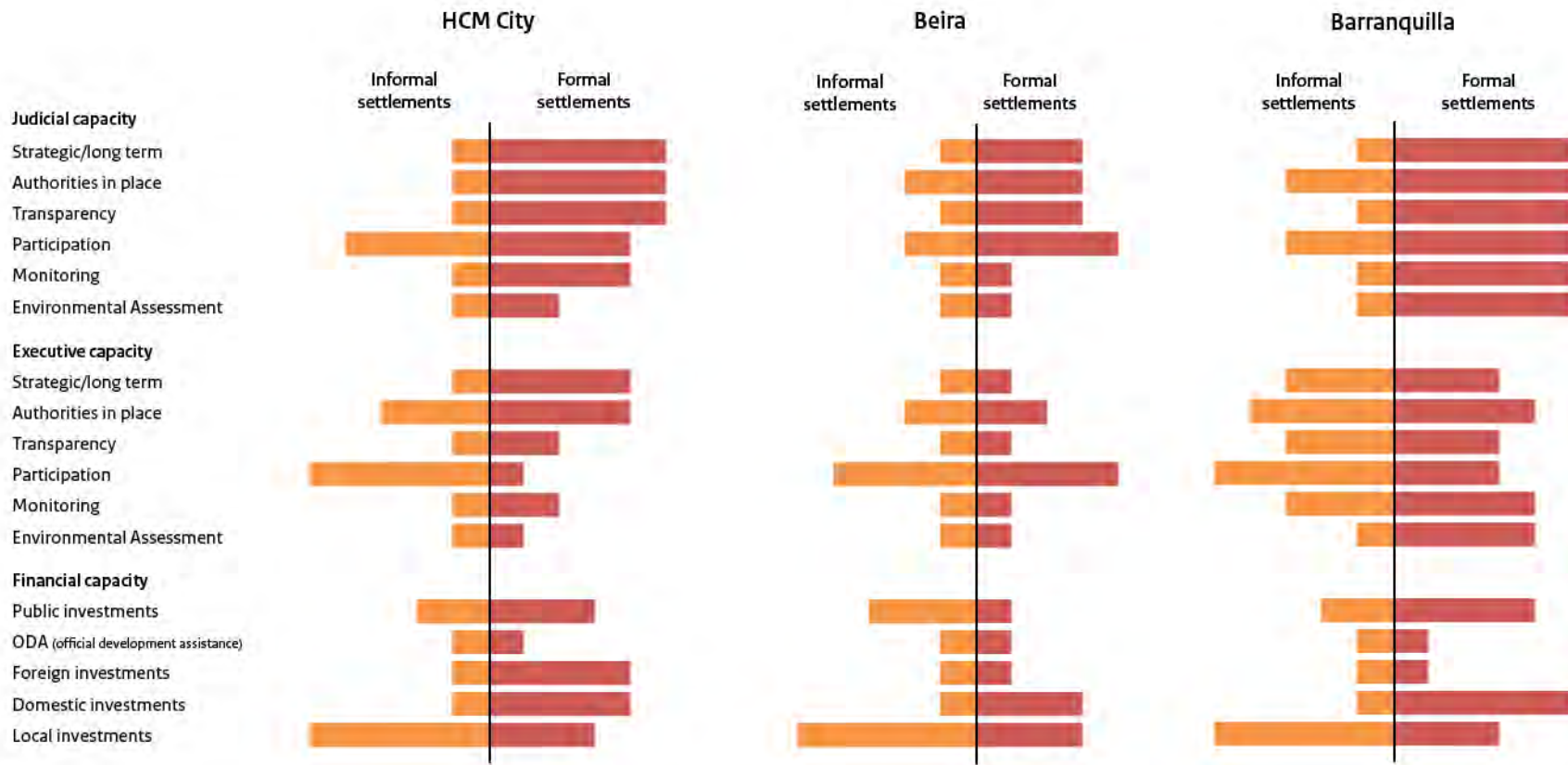
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Governance DNA settlements



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Governance DNA infrastructure



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Building capacities ...



Fostering Sustainable Urbanization

Ensuring that East Asia's high-density urban areas are well located, planned, and coordinated allow them to contribute to sustainable outcomes. The density of East Asian cities gives a valuable comparative advantage and confers the potential to put East Asia on a less carbon-intensive urbanization path than other regions, by reducing the number and length of vehicle trips as well as other energy savings (Dodman 2009; Glaeser 2013; Glaeser and Kahn 2003). Planners, policy makers, and developers should foster density where there is demand for it by coordinating it with the location of jobs, services, and public transportation, and should design density so that it produces a walkable, livable urban environment.



Community planning for reconstruction in Yogyakarta, Indonesia.
Source: Nugroho Nurkawan Saepul / World Bank, CC BY 2.0, <https://creativecommons.org/licenses/by/2.0/legalcode>



Masons work at a new condominium at Sao Bartolomeu, a low-income neighborhood in Salvador, Bahia. Hundreds of families who were constantly exposed to floodings and landslides will be relocated to the new buildings.
Source: Mariana Ceratti / World Bank, CC BY 2.0, <https://creativecommons.org/licenses/by/2.0/legalcode>

Safety thanks to barrier-free reconstruction

After the earthquake early in 2010, Haiti had the opportunity to carry out not only a quakeproof but also a barrier-free reconstruction enabling persons with disabilities, restricted mobility or other physical impairment an optimum of independence and freedom particularly in access to their living areas and public institutions.



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Sources: World Cities Report 2016, World Risk Report 2014

.... by using interventions



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Cities as agents of change ...



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CITIES



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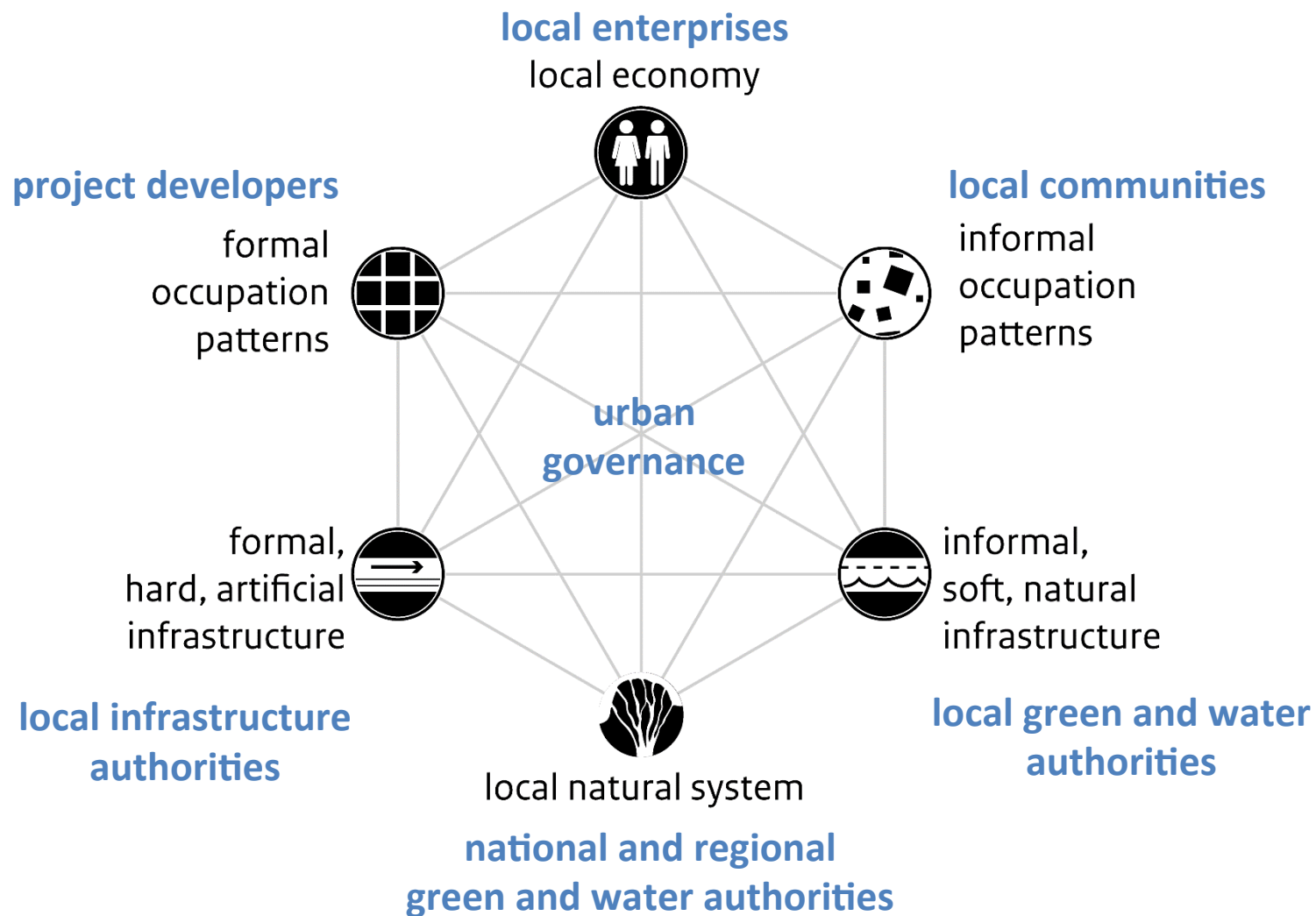
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.... by constituting new partnerships



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TOWARDS A NEW
URBAN AGENDA





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Discussion topic

Do you have examples of local projects who strive for a more inclusive or green approach?

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