

Water Affordability and Reducing Poverty in Post- Conflict Angola

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DEVELOPMENT WORKSHOP



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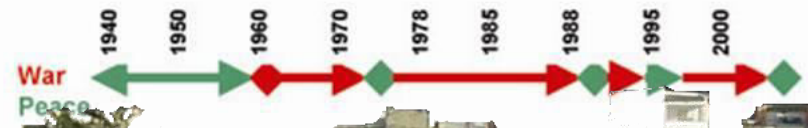
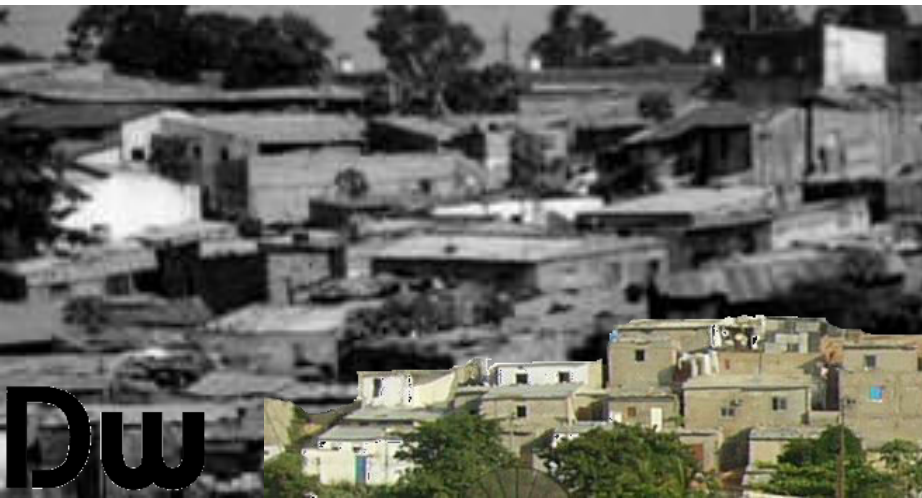
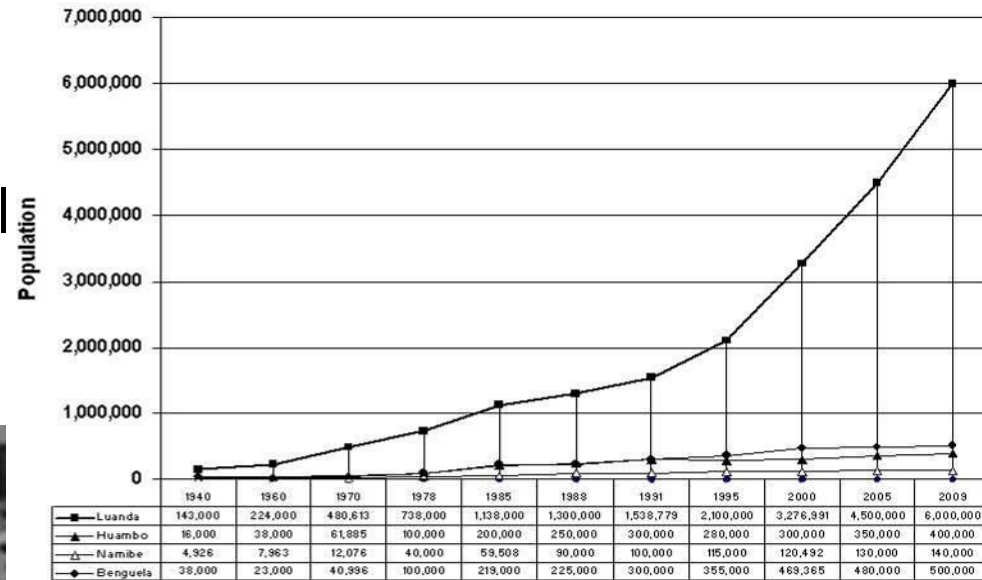


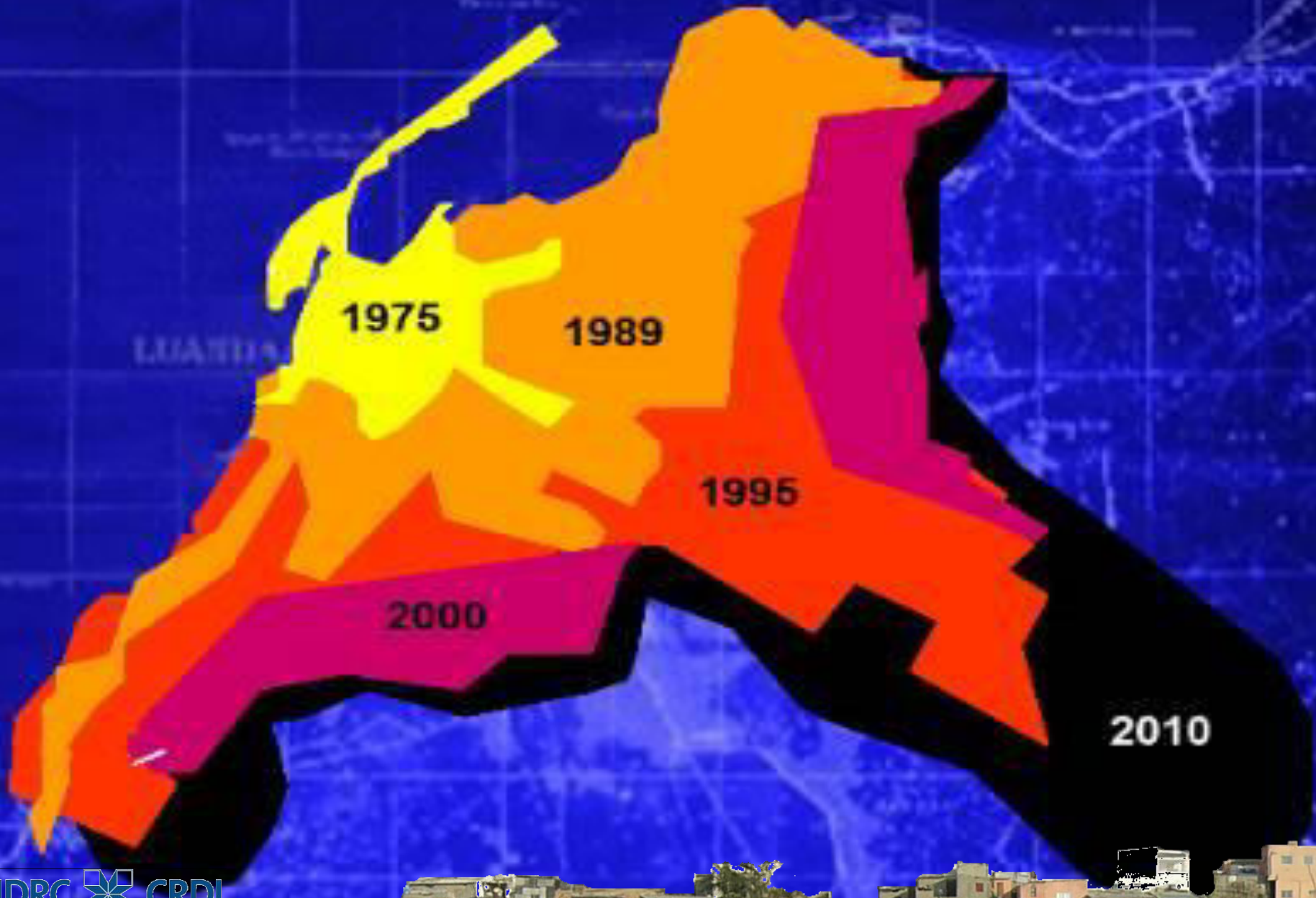
Post-War Angola

- In 27 years of civil war, millions of Angolans fled the countryside for the relative safety of the big cities and their crowded shantytowns.
- The war resulted in the destruction of infrastructure
- The water supply system could not keep pace with the 7% annual population growth.



Urban Population growth in War & Peace



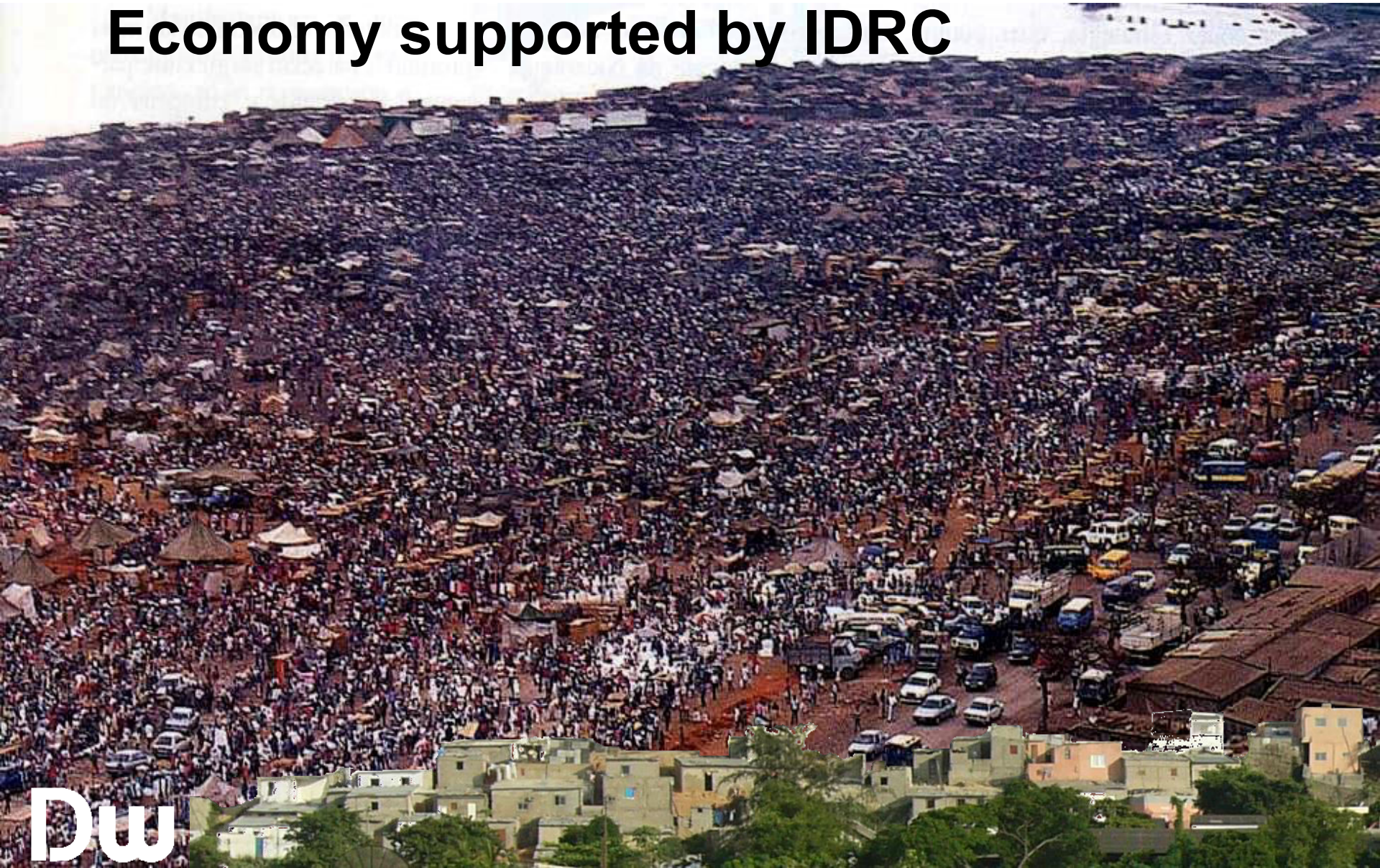


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Research Programme on Post-Conflict Transformations in Angola's Informal Economy supported by IDRC



Informal Water Market

- The formal para-statal water company can only deliver piped water to less than 50% of Luanda's population.
- An informal water market has emerged to fill the gap.



Research on Informal Water Market

Community water resource management – an enterprise or livelihoods approach

- How is the informal water economy changing in the post-conflict period?
- How does the informal water economy work?
- Who are the key actors and what are their relationships?
- What is relationship with formal institutions?
- Relationship between community and the private sector suppliers?
- Where is value-added? Where are profits made?
- How does the price for water vary across the city?
Factors that affect water prices?



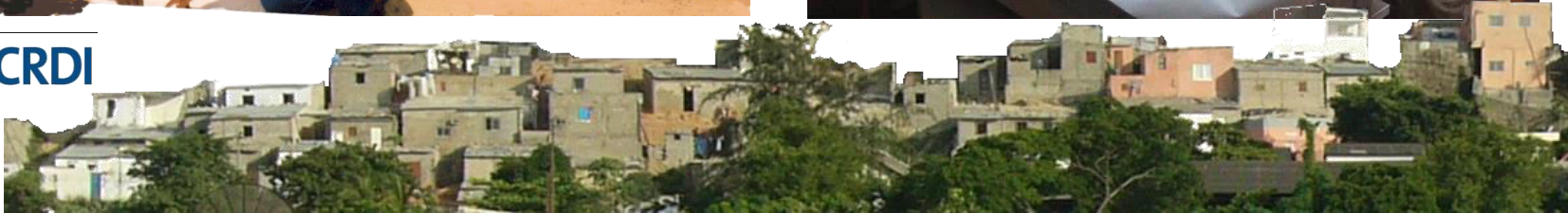
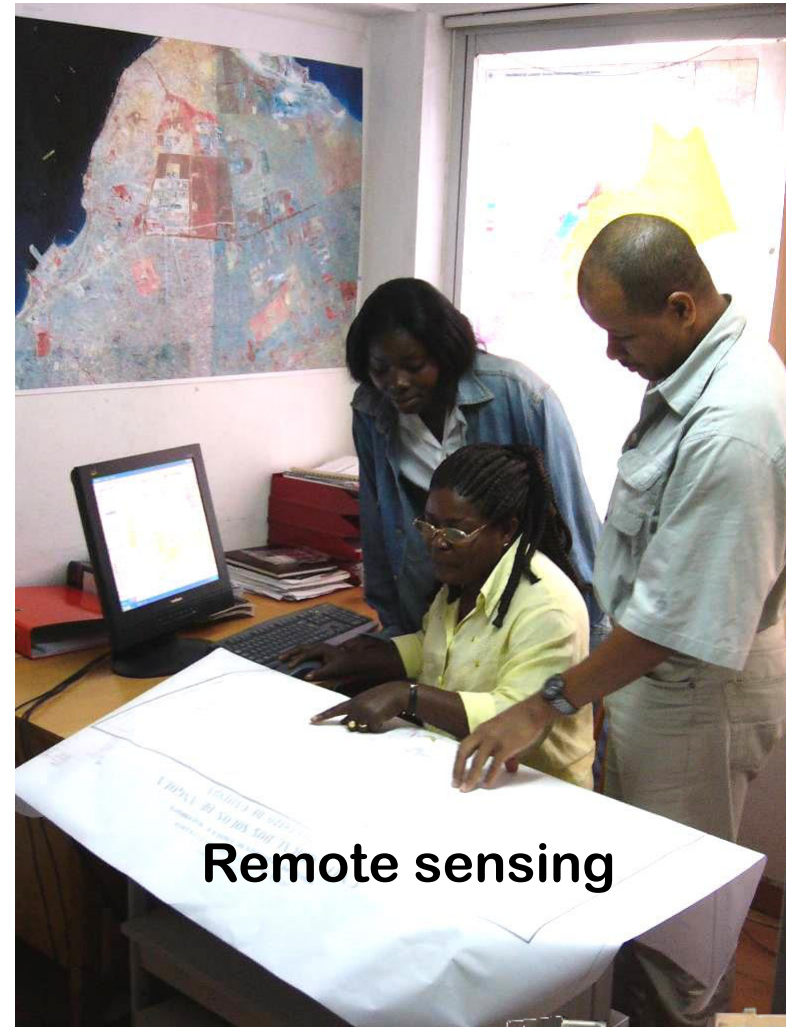
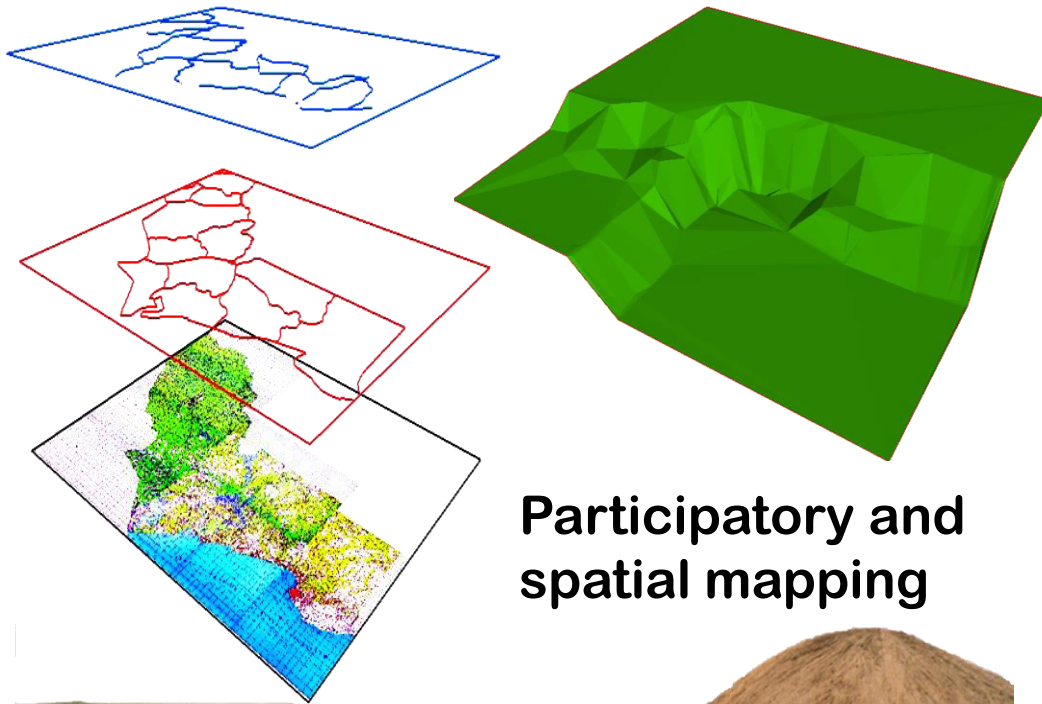
Informal Economy & Livelihoods Research Framework



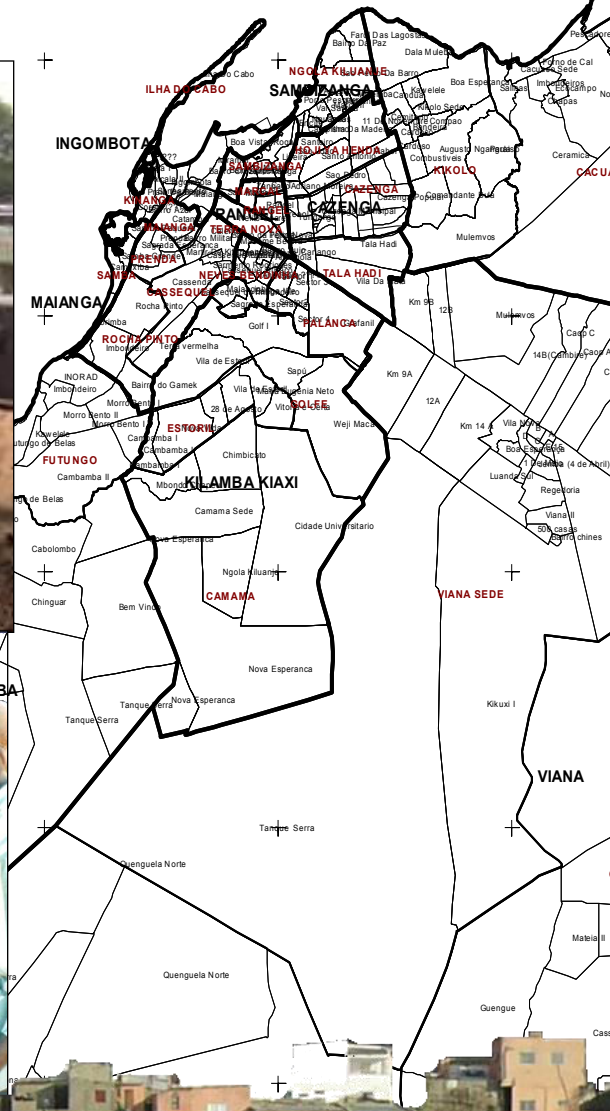
		1. Sub-Sectoral Studies		
		Informal Water Marketing	Informal Agriculture Food Commodity Marketing	Informal Housing Rental Market
2. Cross-Sectoral Studies	Street Vendors			
	Home Based Enterprises			
	Peri-Urban Marketplaces			
	Reconstruction of Rural-Urban Informal Trade Linkages			
3. Informality and Governance		Fostering Public Policy, and Social Advocacy		



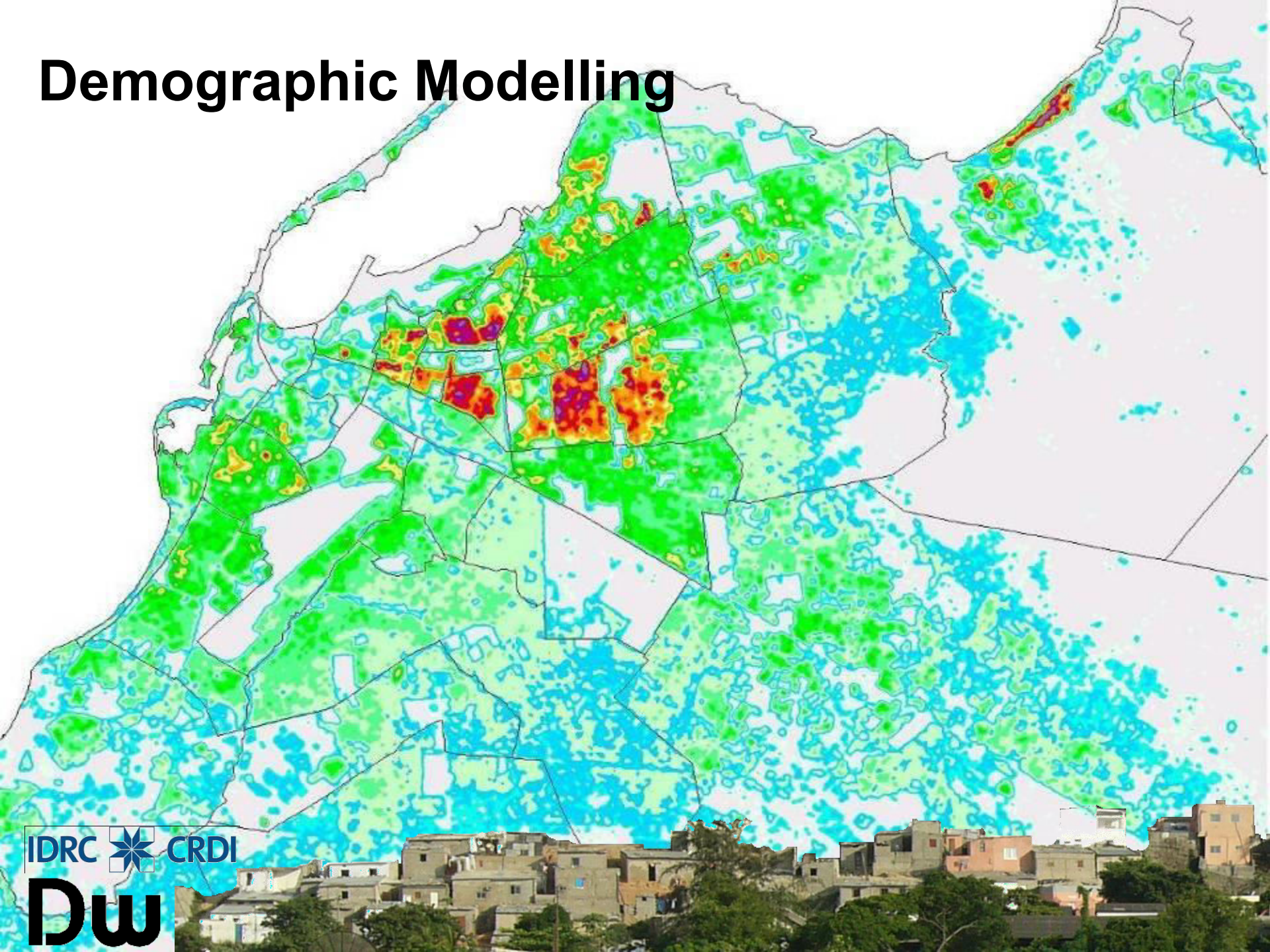
Geographic Information Systems



Participatory Water Mapping



Demographic Modelling



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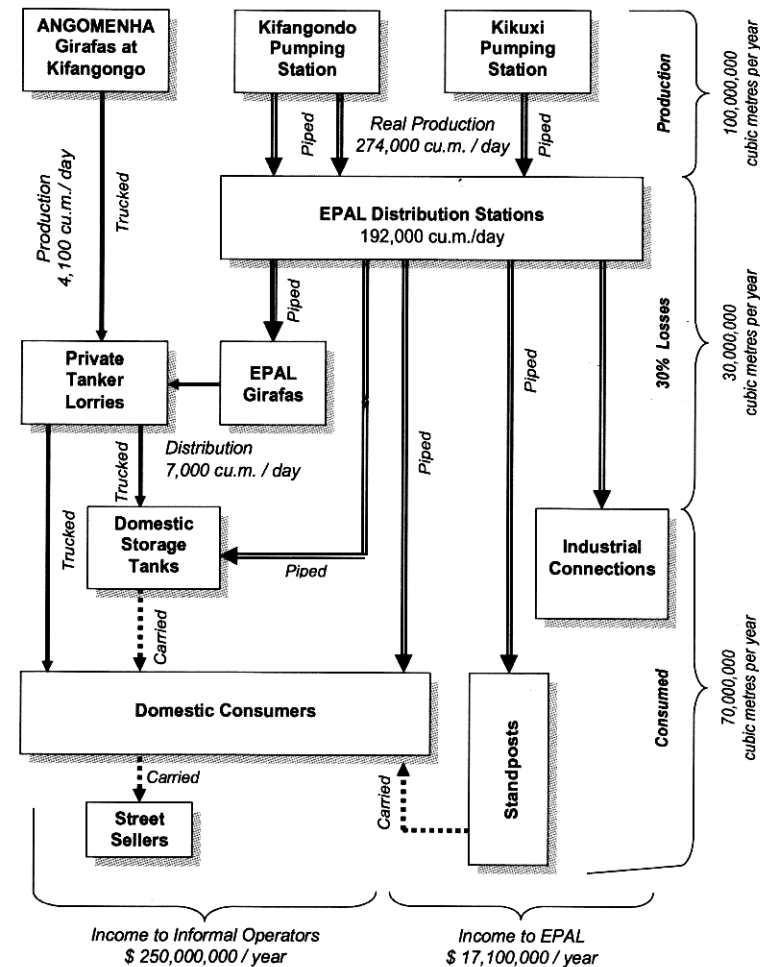
Informal Water Market

A complex multi-actor water market has emerged in Luanda as a response to the failure of the state and formal sector to meet basic water supply needs.

Actors include:

- River water pump owners
- Treated water bulk suppliers (girafas)
- Tanker truck bulk suppliers
- Private bairro-level cistern owner re-sellers
- Community water enterprise associations
- Ambulant water street sellers

Value Chain Model of Luanda's Water Supply System (DW 2008)



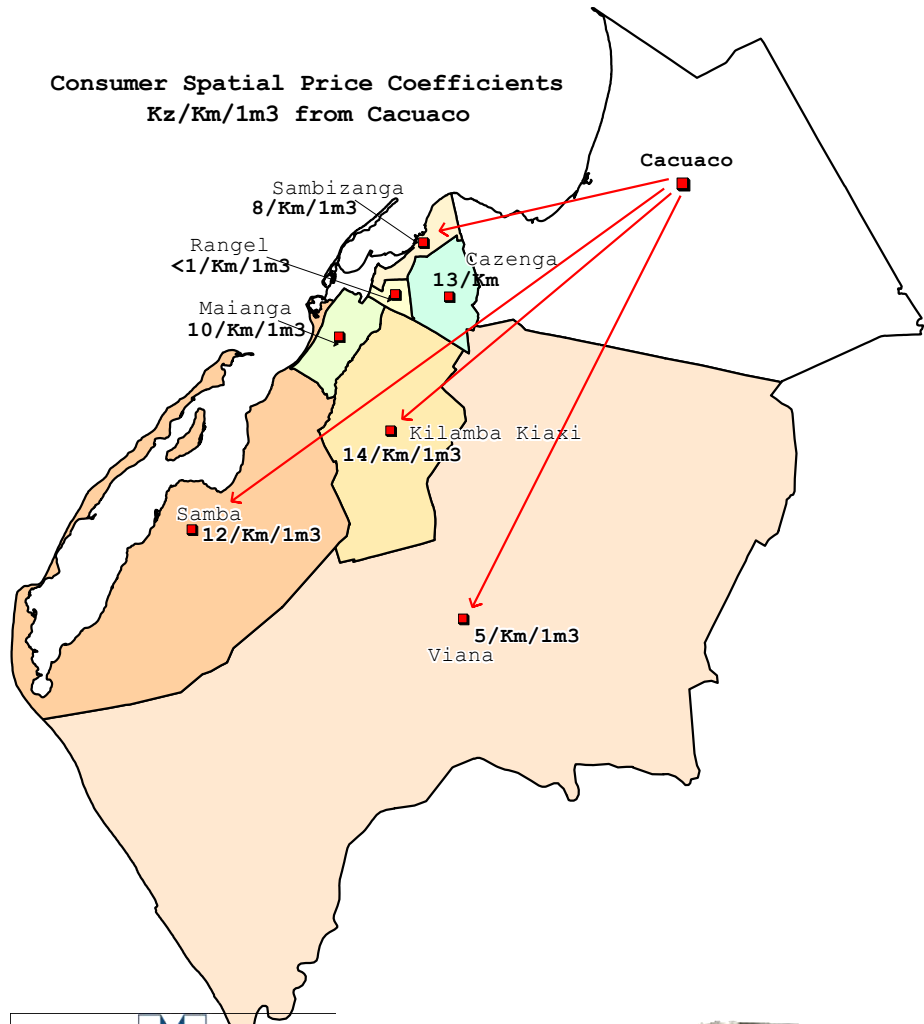
Water Price Mapping

- The commercial retail price of water varies by bairro from \$0.15 to \$0.60 per 20 litre bucket
- The bulk wholesale price of water when sold by tanker truck varies between \$6 to \$18 per cubic meter
- Price to the retailer and consumer depends on:
 - distance from the source
 - quality (untreated river water or treated water from the treatment plant)
 - Current demand / shortage / season



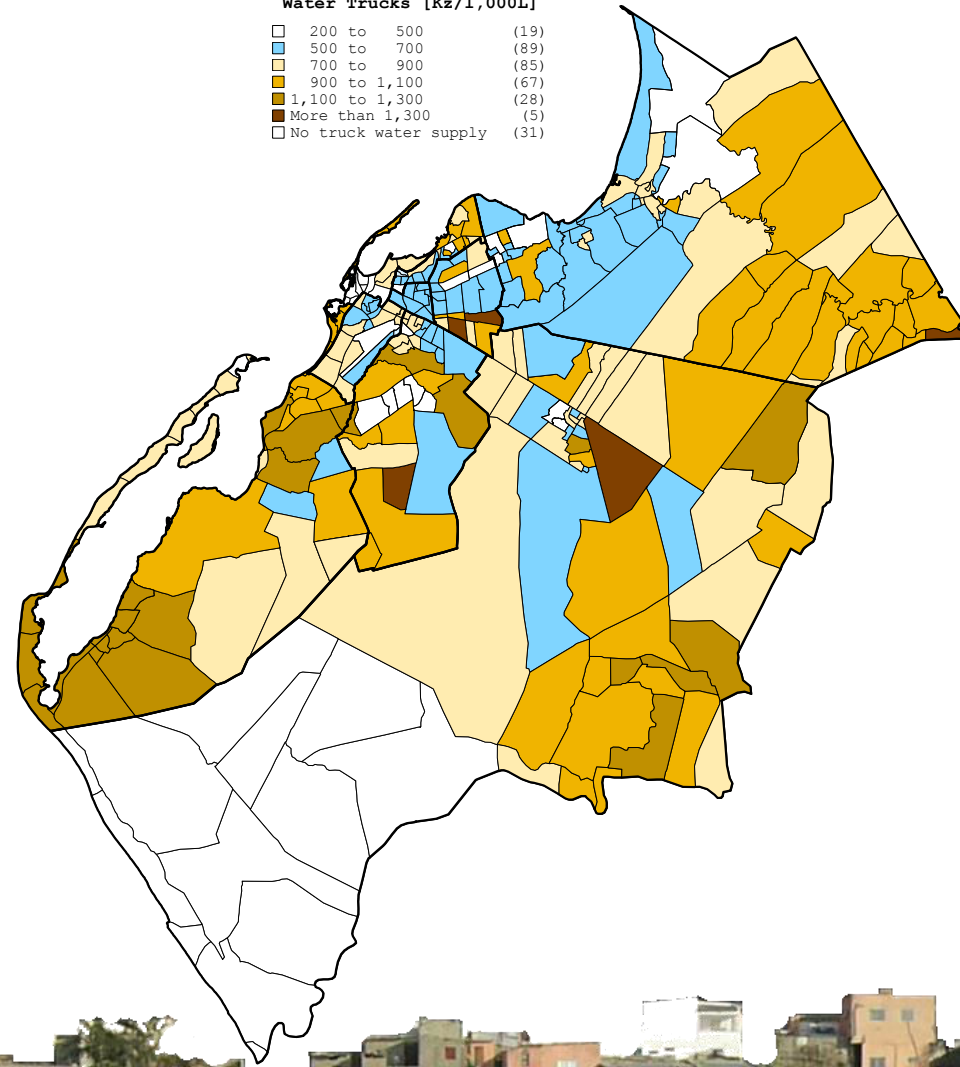
Informal Water Market

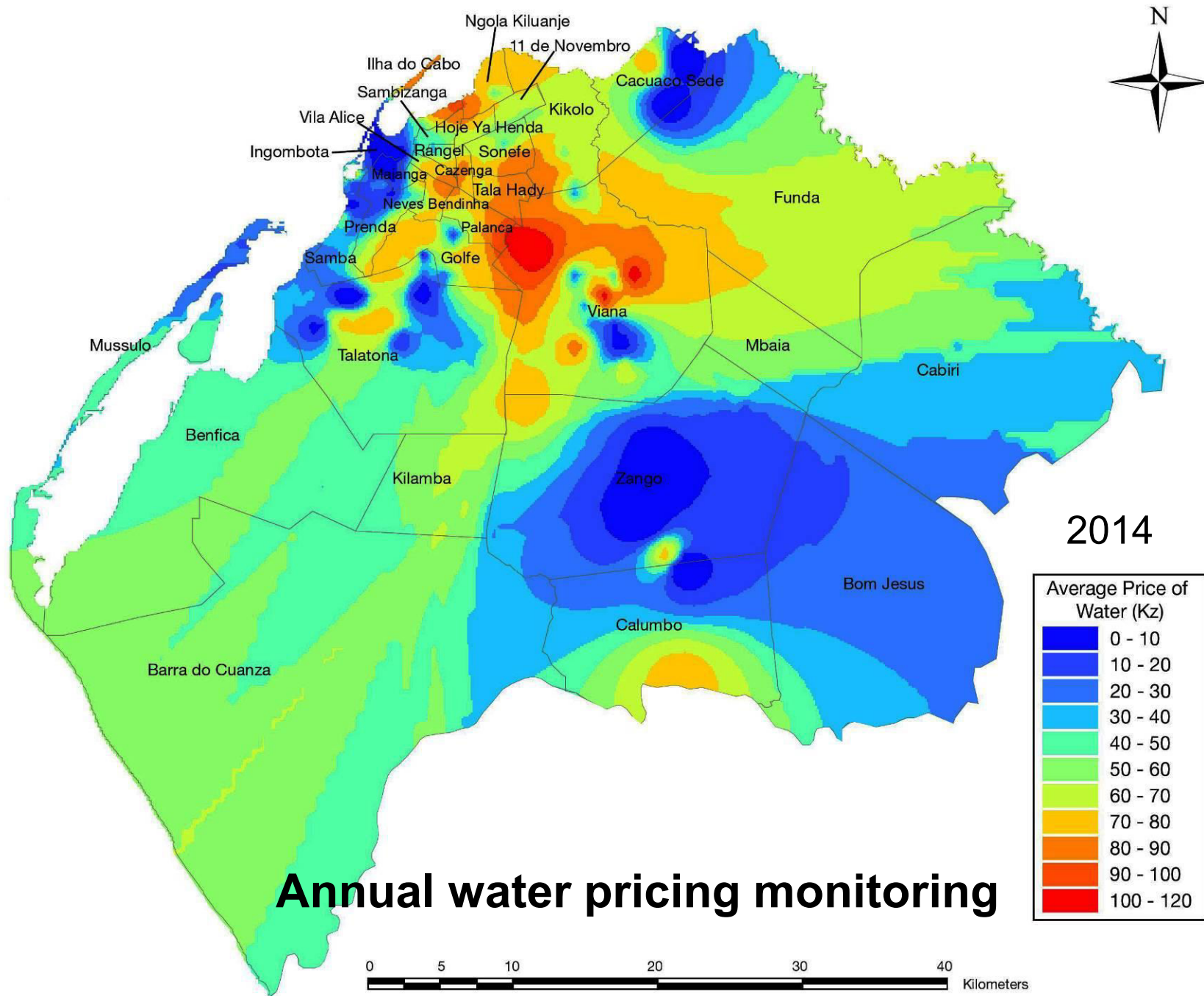
Consumer Spatial Price Coefficients
Kz/Km/1m³ from Cacuoaco



Water Trucks [Kz/1,000L]

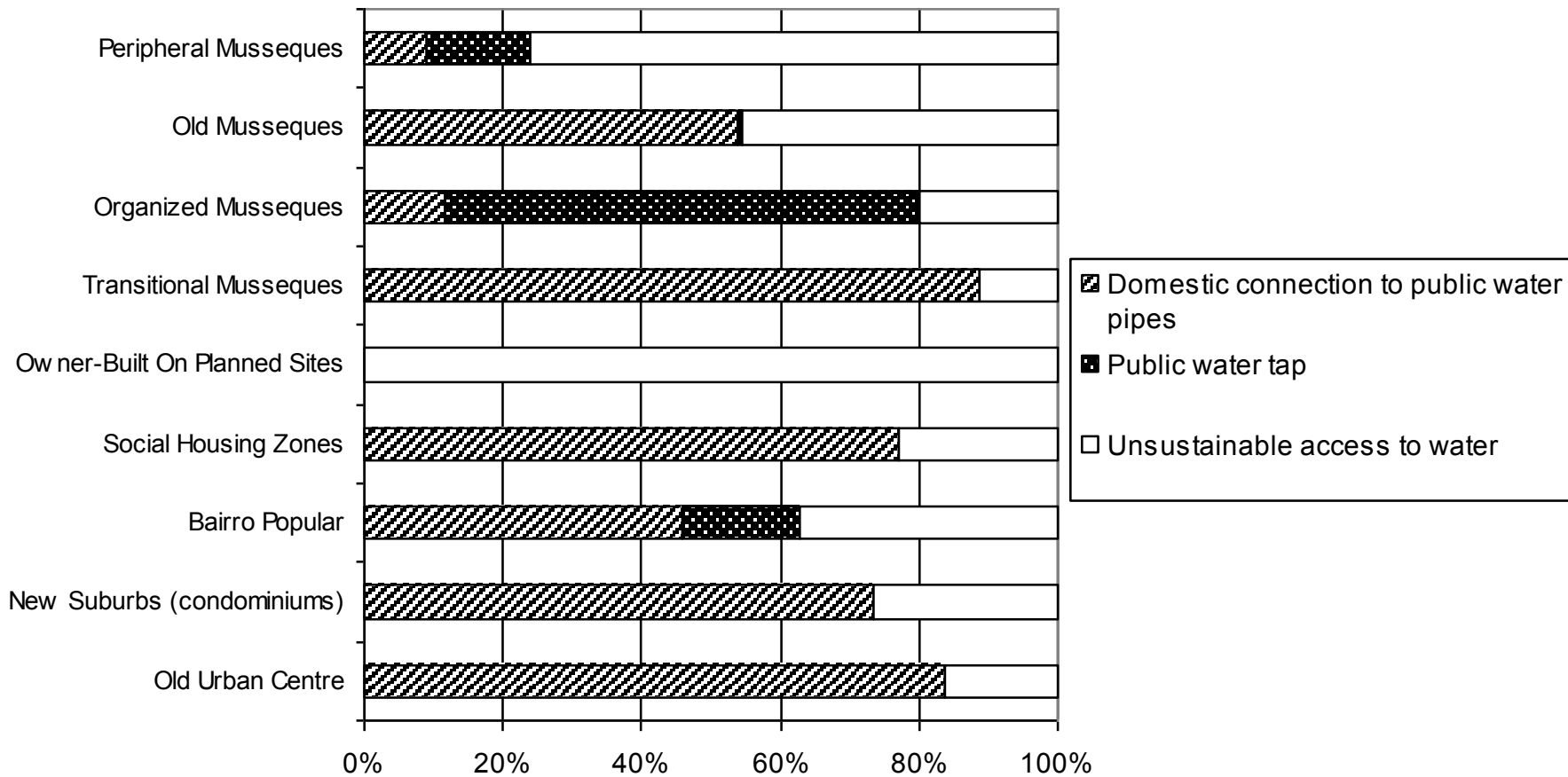
200 to 500	(19)
500 to 700	(89)
700 to 900	(85)
900 to 1,100	(67)
1,100 to 1,300	(28)
More than 1,300	(5)
No truck water supply	(31)



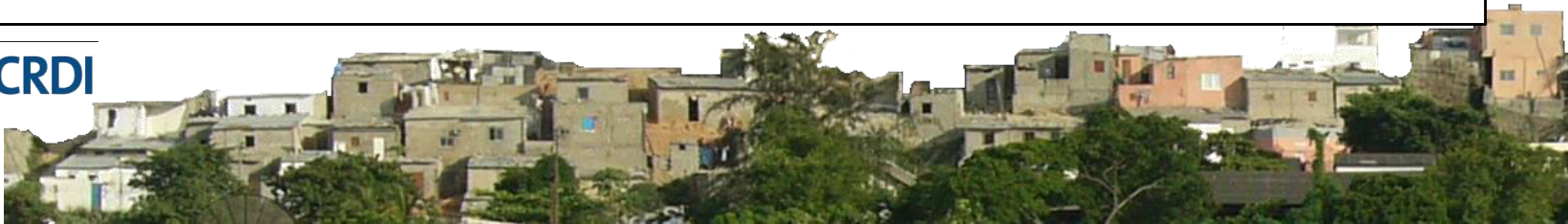
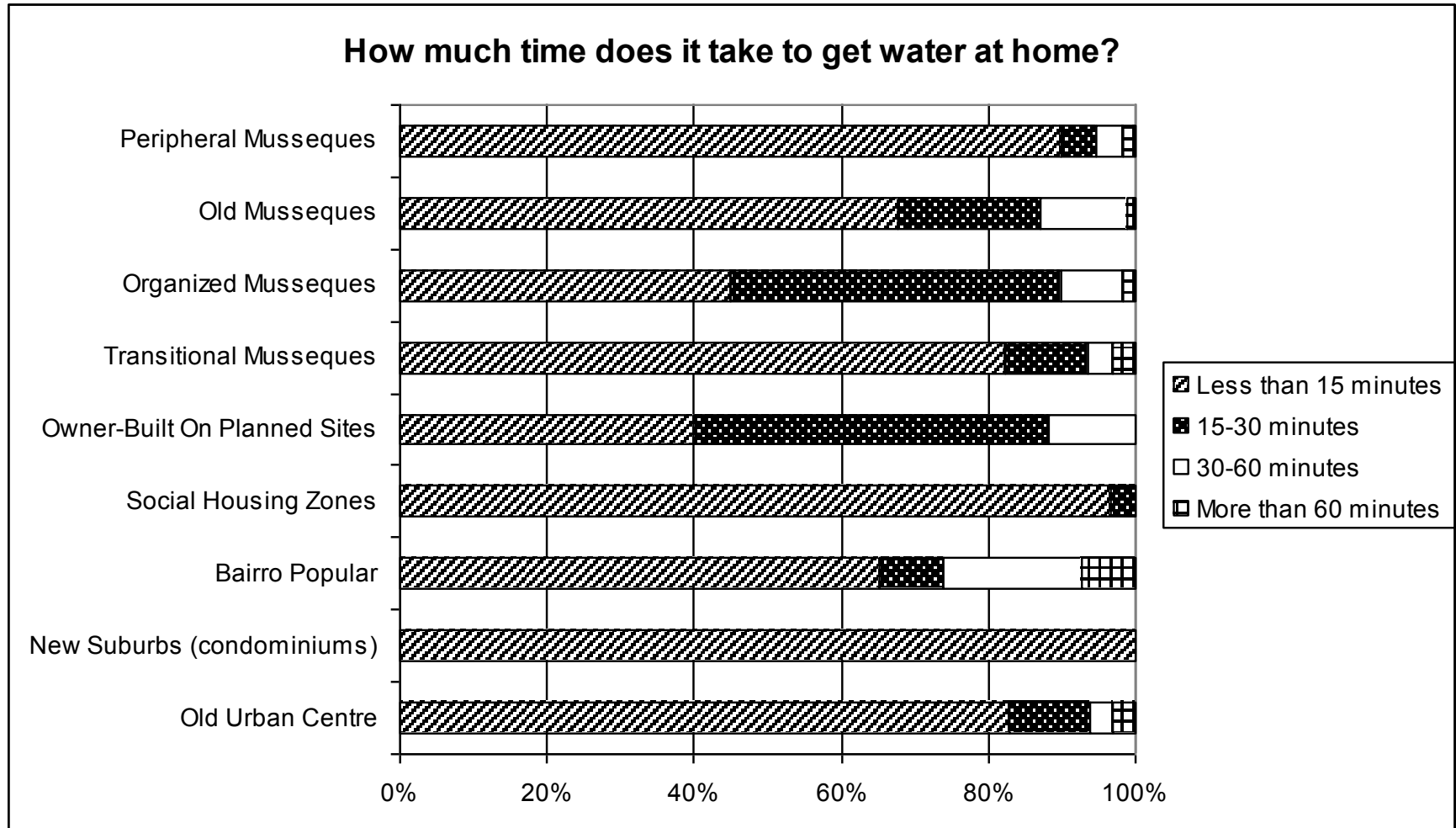


Water Adequacy - Source

What is the main source of potable water used by the household?



Water Adequacy – collection time used



Informal Water Markets

Findings

- The informal sector will supply important services to the poor in Luanda until the major state infrastructure projects can come on-line and begin to demonstrate results.
- Informal delivery of water by tanker trucks is very costly and difficult to control quality and should be replaced by piped distribution systems.
- The poor have demonstrated a willingness to pay for services if good quality and regular supply can be guaranteed.
- There is a potential for incorporating small scale operators and community based enterprises into the formal water delivery plans in the future.
- US\$250 million is transacted in Luanda annually for water.



Feeding the Public Domain

CEDOC monthly Media Scan

Fevereiro 2015

Extractos da
imprensa Angolana
sobre questões sociais
e de desenvolvimento

CEDOC Dw

Centro de Documentação e Informação
Development Workshop
Luanda - Angola

Extractos da Imprensa

CEDOC Development Workshop - Angola

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New Challenges of Water & Adaptation to Climate Change

Angolan urban coastal settlements that are confronted by the dual challenge of

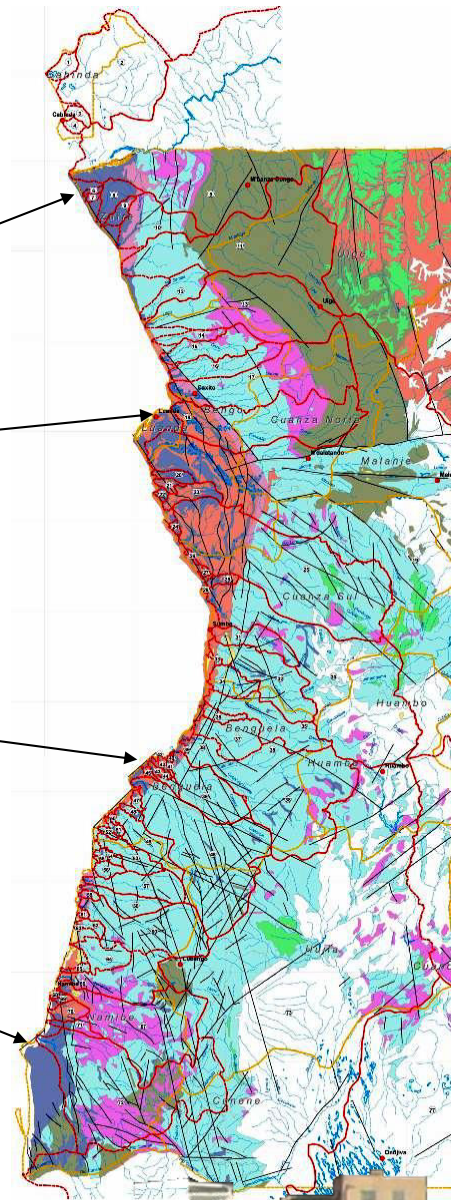
- supplying their populations (particularly the poorest) with adequate water supply
- while at the same time confronting new problems of adapting to the climate and environmental changes that are occurring in these highly vulnerable coastal areas.

Soyo

Luanda

Benguela

Namibe





Obrigado

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