

UNIVERSITY OF TWENTE.

THE SOCIO-SPATIAL SYNERGY IN LAND  
GOVERNANCE: A CASE OF INFORMAL  
SETTLEMENTS IN BAHIR DAR, ETHIOPIA

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FACULTY OF GEO-INFORMATION SCIENCE AND EARTH OBSERVATION



# OUTLINE

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- Background
- Methodology
- Case study
- Results
- Discussion
- Conclusions

# BACKGROUND

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Social  
Dimension

The social dimension refers to the actions of peoples when interacting with land.

Spatial  
Dimension

The spatial dimension refers to the space where the social processes are operating and decisions out of it are applied.

Socio-  
Spatial  
Dimension

The dynamic relationships between social and spatial processes are key drivers of the economic, cultural and environmental conditions of the built environment



## BACKGROUND

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- It also affects land governance
- Land governance is defined as the “steering and coordination of interdependent (usually collective) actors based on institutionalized rule systems” ([Treib et al., 2007](#))
- Existing approaches for assessing land governance (e.g. Burns et al. ([2010](#))) focus more on the social dimensions of input, process and output indicators.
- Incorporating the spatial analysis component in the existing social focused approach could help to have an all-embracing evaluation of urban land governance



## INFORMAL SETTLEMENTS

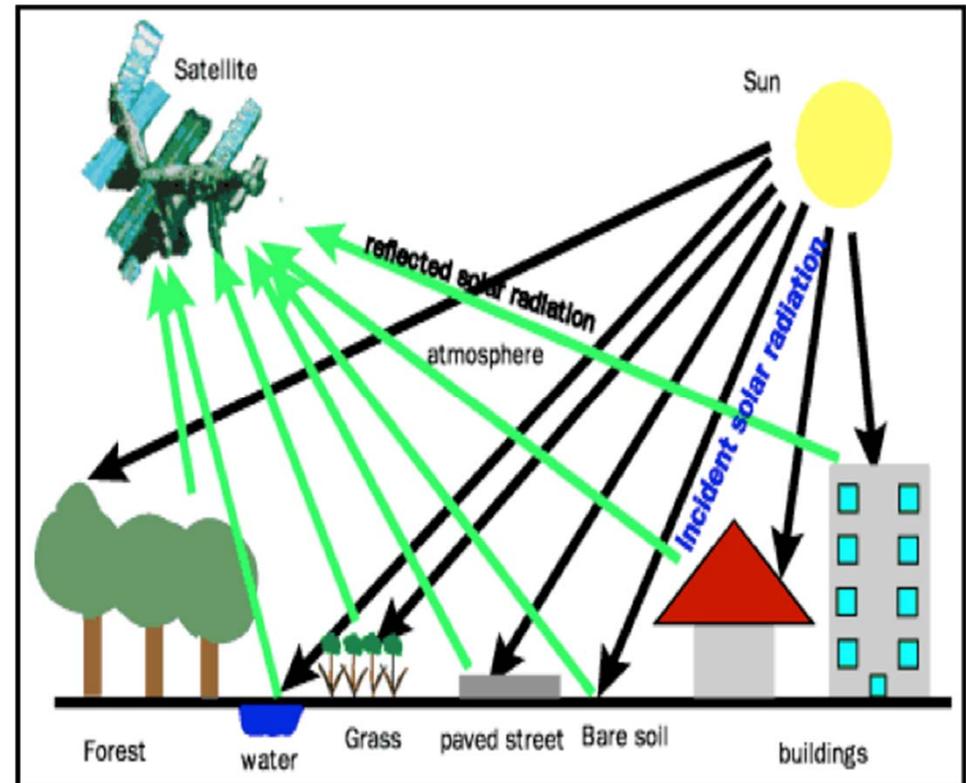
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- Informal settlements are defined as residential buildings built on planned and unplanned areas which do not have formal planning approval.
- The causes of informal settlements include urbanization, tenure insecurity, weak housing policy, less supply of land for the need and so on.



# GEO-INFORMATION

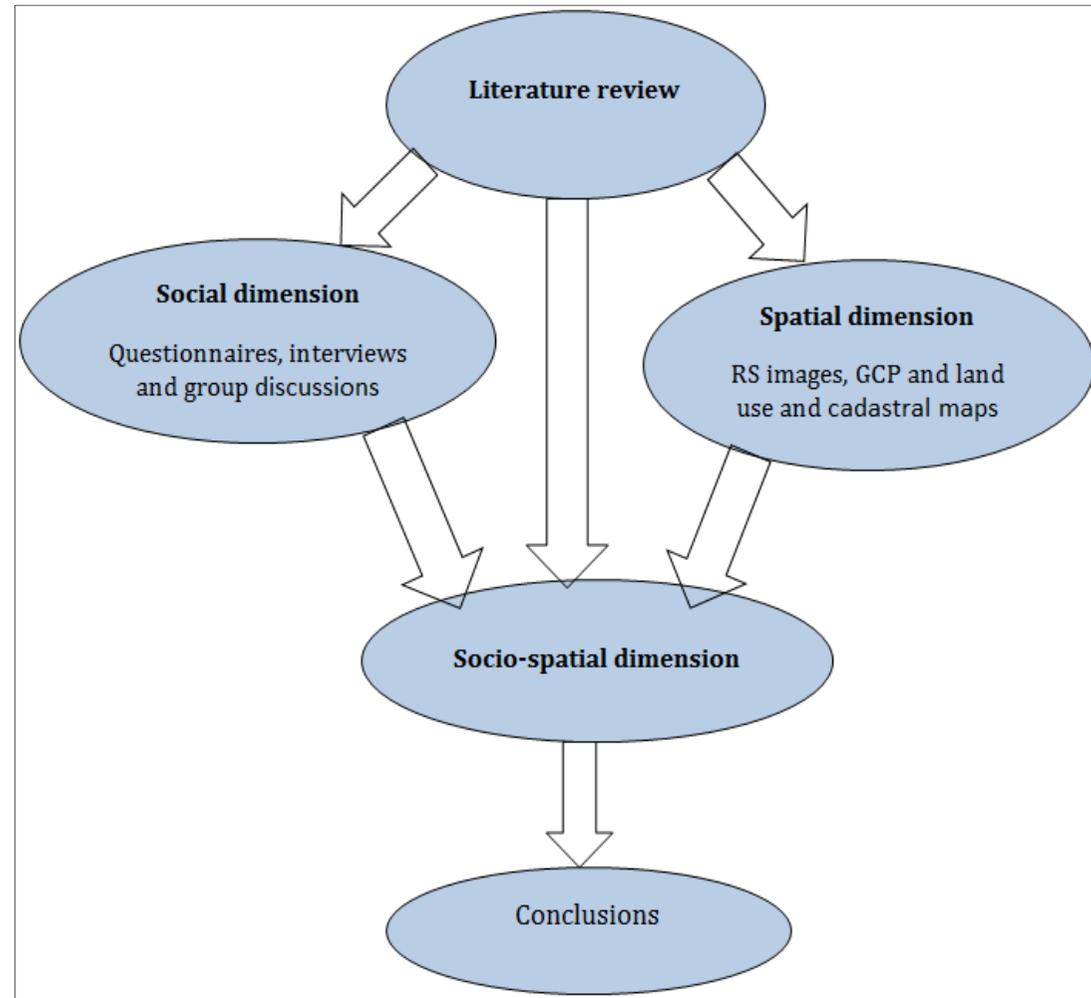
- RS facilitates the spatial and temporal understanding of people-land relations
- Suited for assessing urbanization and informal settlements.
- RS records human and natural artifacts that are caused by gov't policies, organizations, and land tenure characteristics.
- Spatial analysis is motivated by demands that are generated by social phenomena



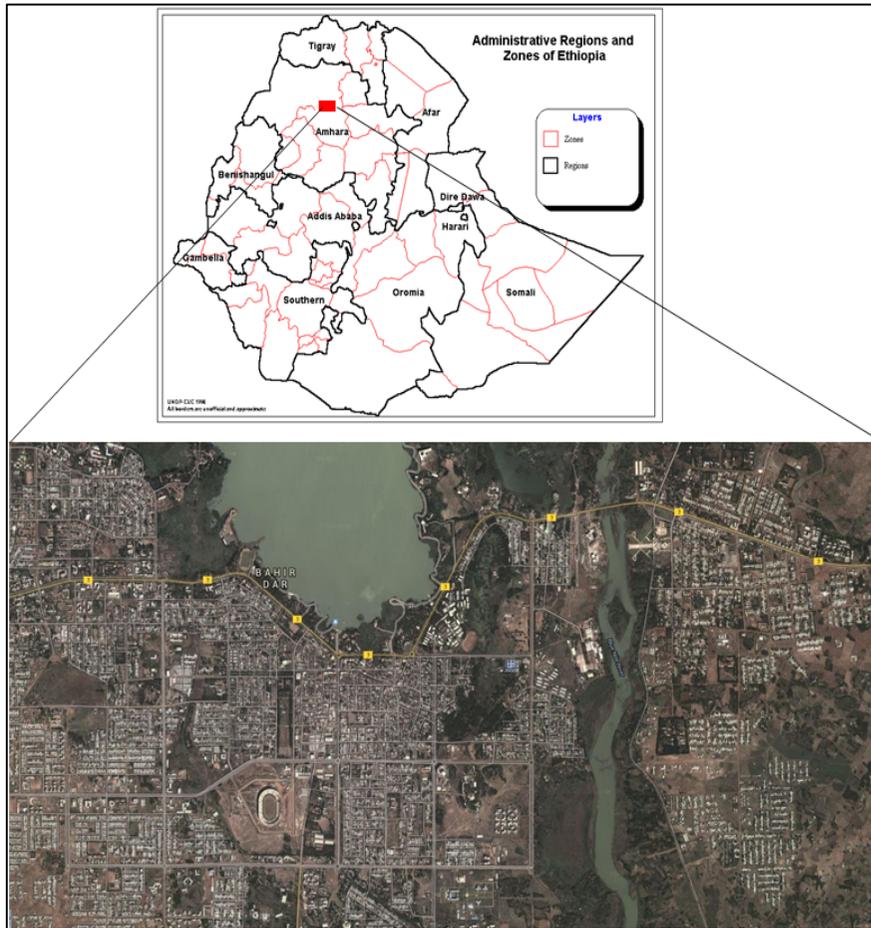
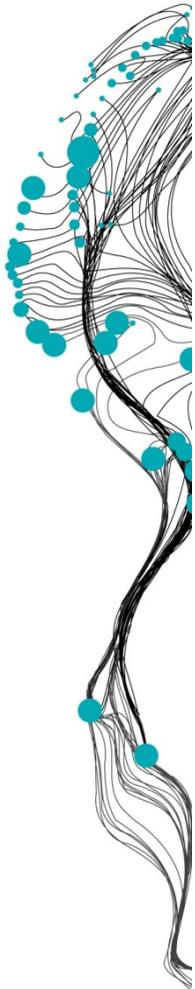


# METHODOLOGY

- The socio-spatial methodology



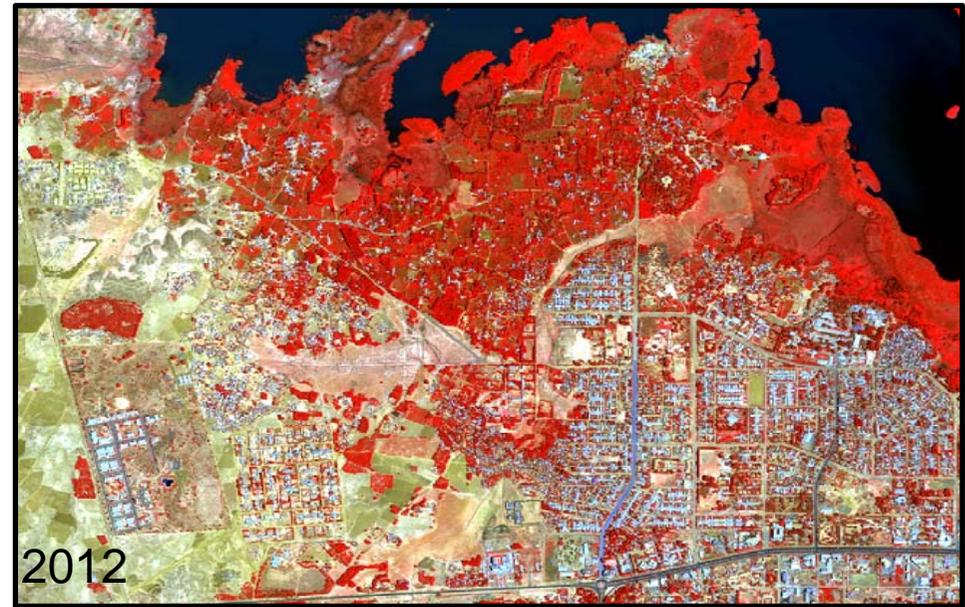
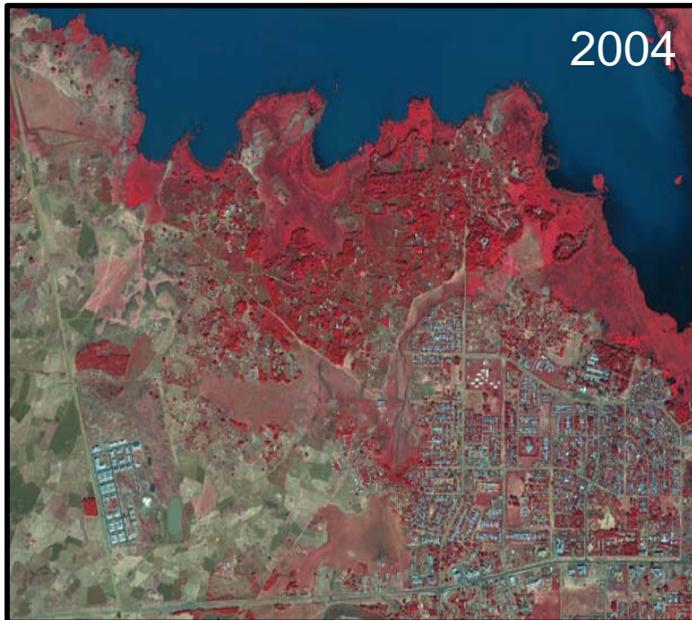
# CASE STUDY



## Bahir Dar city

- The Capital of Amhara Regional State
- Over 250,000 inhabitants
- Fast growing city

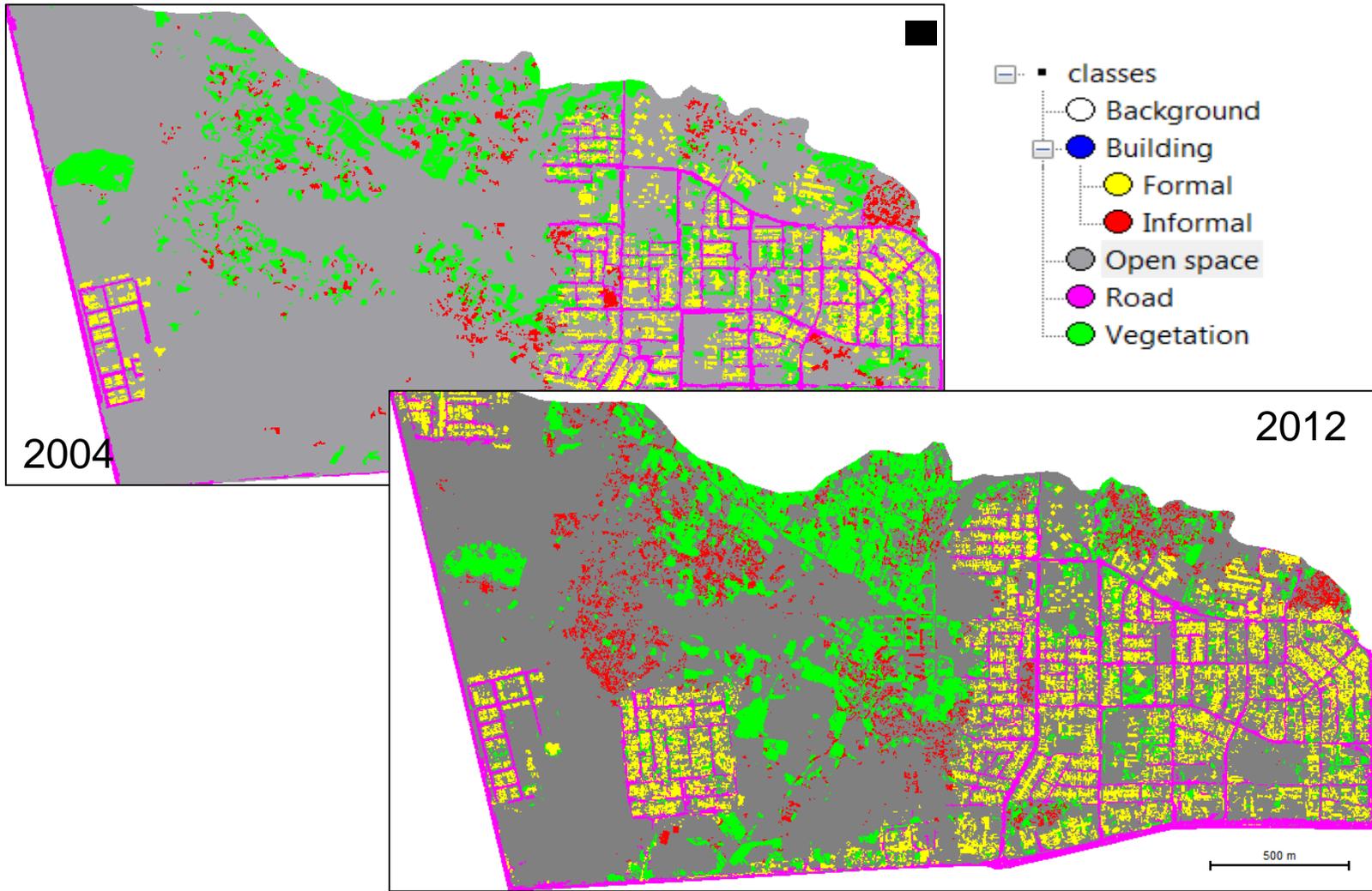
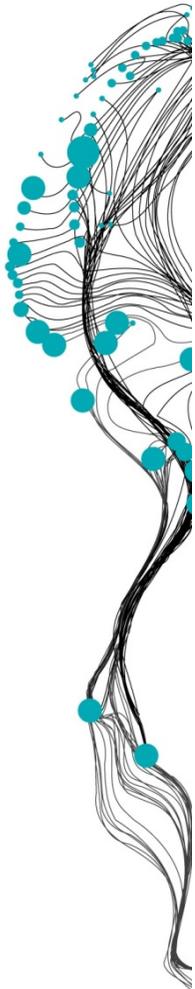
# WURAMIT KEBELE

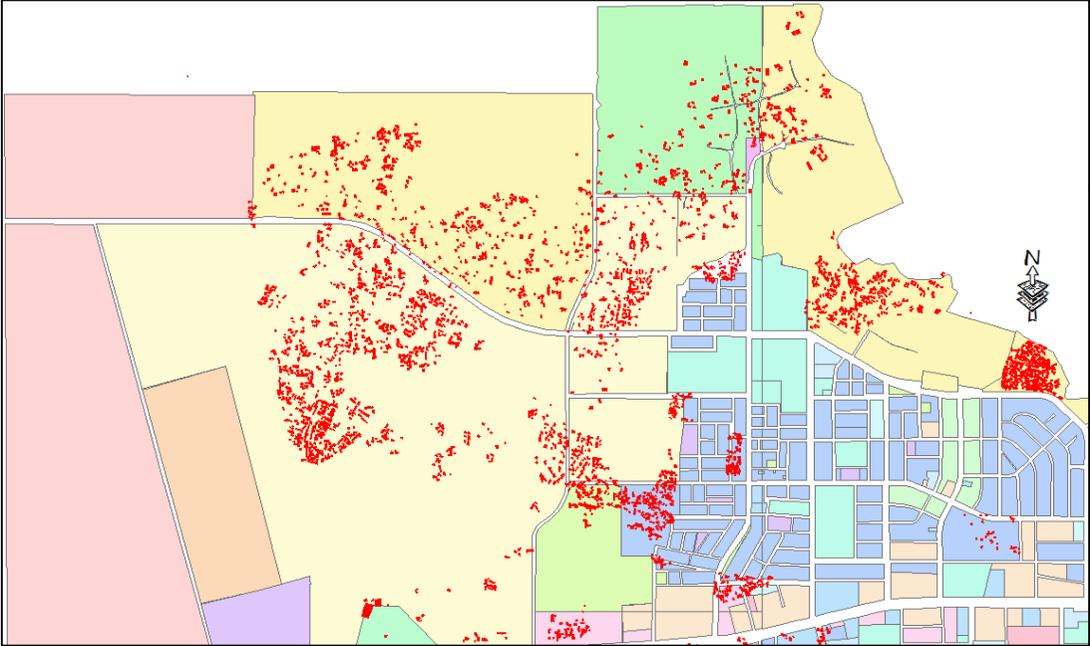


## Characteristics:

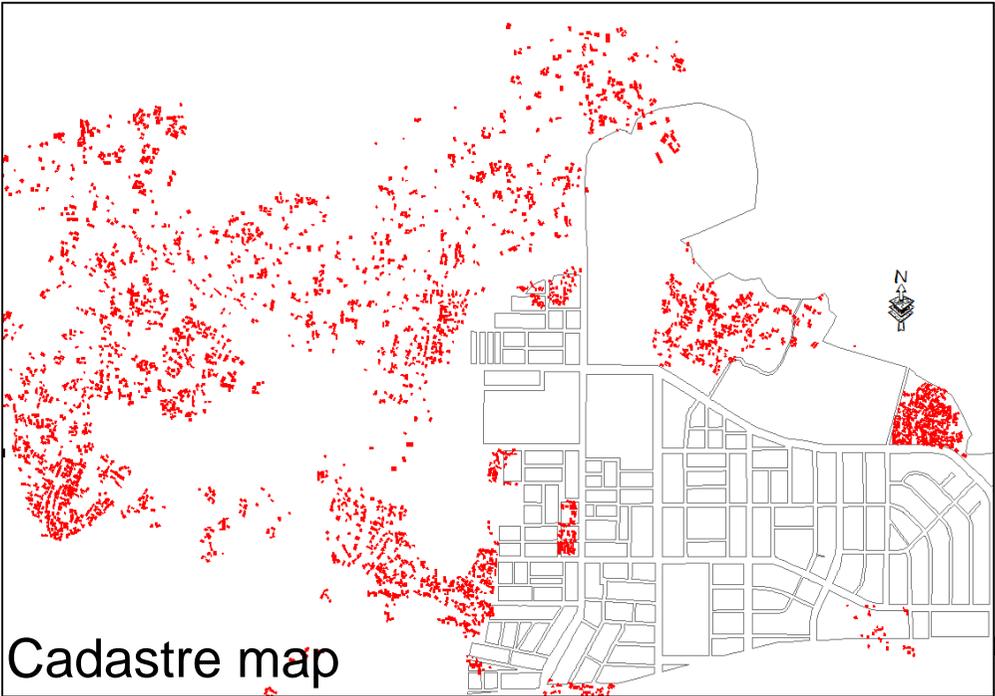
- Nearly 2000 households
- Average household size 6 people
- Almost 99% of the people are day laborers
- No access of water, power, health and road infrastructures

# SPATIAL RESULTS





Land use plan map



Cadastral map



# SPATIAL ANALYSIS RESULTS





# SOCIAL DATA ANALYSIS RESULTS

Causes of informal settlements	Responses (%)				
	Very high	High	Low	Very low	No effect
- Election time political uncertainties	24.3	31.3	24.3	9.6	6.1
- Economic crises	58.6	27.9	5.4	8.1	0
- In efficiency of local government	54.8	19.1	13.0	7.0	3.5
- Improper implementing land and housing policy	19.1	43.5	20.9	9.6	3.5
- Weak urban land use planning and cadastre system	23.5	49.6	13.3	6.1	6.1
- Low price of urban land in the informal land market	11.3	58.3	13.9	5.2	6.1
- Shortage of houses at affordable rental price	55.7	14.8	13.9	6.1	7.0



## IMPLICATION TO LAND GOVERNANCE

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- RS data are up-to-date as well as time series - improves the accuracy of decision making and service delivery.
- Independent views of the information going into decision-making, it could also help to improve transparency and accountability.
- The causes of the spatial and temporal expansion of informal settlements identified in this research are also weak land governance.



## CONCLUSIONS

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- Informal settlements are spatially and temporally increasing
- Recent formal and informal developments do not correspond with the *de jure* land use plan and cadastral map.
- The causes of informal settlement expansion are weak land governance
- The socio-spatial dimension enables understanding the extent of informal settlements and nature of urban land governance.
- The socio-spatial dimension is a synergy in land governance that can be harnessed to aid monitoring of the post-2015 global developmental agenda.

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MANY THANKS.  
QUESTIONS?



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