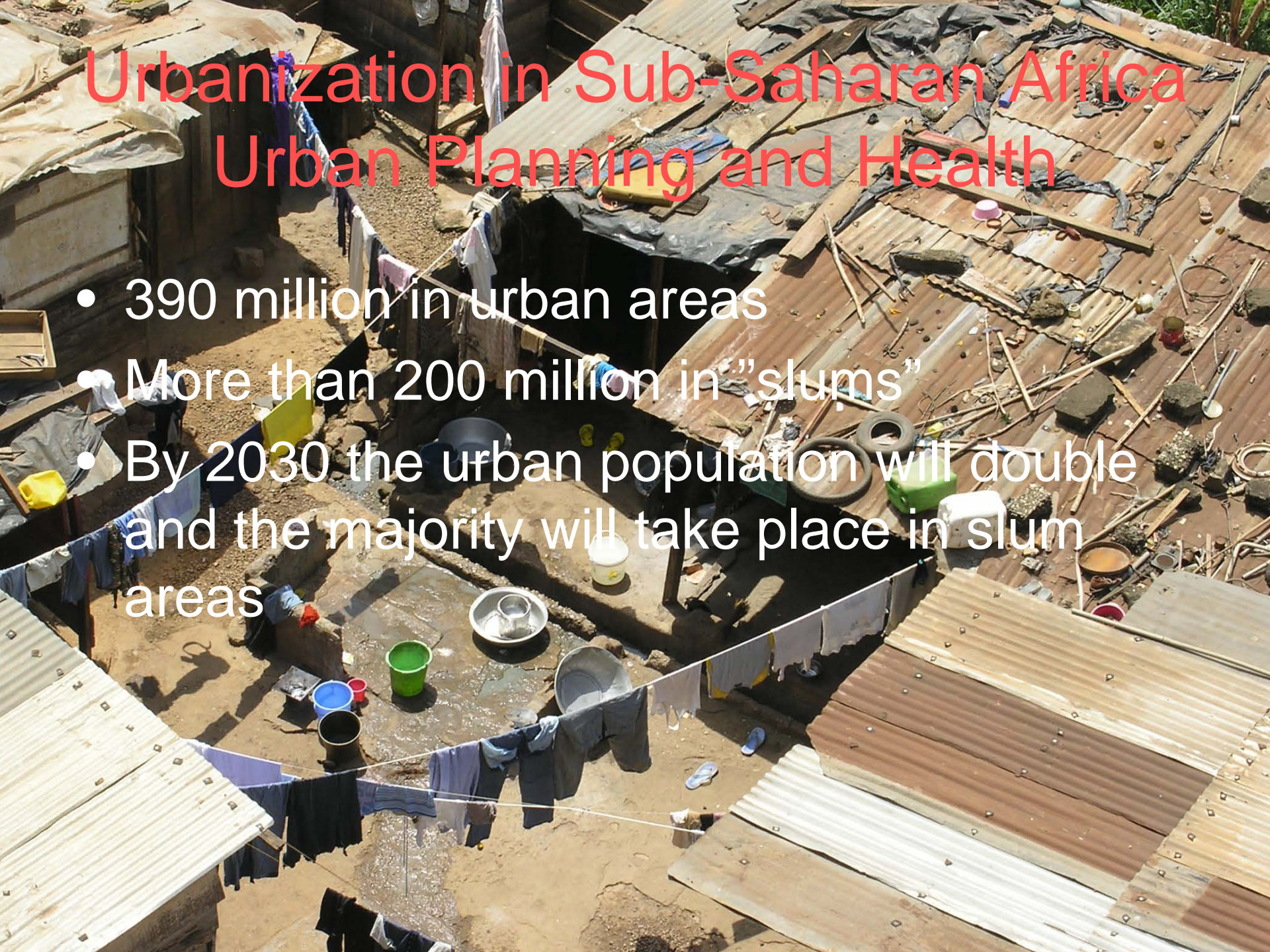


# Urbanization in Sub-Saharan Africa

## Urban Planning and Health

- 390 million in urban areas
- More than 200 million in "slums"
- By 2030 the urban population will double and the majority will take place in slum areas





# Urban growth primarily in the informal city

- Most growth as unofficially planned by landlords and others with influence
- Residents consider their homes as relatively secure in terms of tenure
- Residents improve their houses over time
- Few considers urban life as temporary
- Links to the rural hinterland is weakening and at times non-existent
- Many households are female headed



# Typical Informal Settlement

- Service provision is poor: Portable water is scarce and Sanitation as pit latrines
- Social infrastructure is poor with few primary and secondary schools
- Health institutions are few and not meeting the demand



A photograph of a narrow, unpaved alleyway in a slum. The walls are made of corrugated metal and wood. A person is walking in the distance. The ground is muddy and uneven. The scene illustrates the irregular and poor state of urban infrastructure.

## Urban patterns are irregular

- Access roads are few and in a poor state of maintenance
- Public open spaces are few and in a miserable state



# Infrastructure

- Investments in building roads/drainage and water supply are insignificant in the informal settlements





No informal settlements are served with sewer and hence simple pit latrines are used as toilets in most informal settlements





Improved pit latrines have been a relative success





Pit latrines have been banned in some cities and hence public toilets are the only option





Public toilets are often in appalling hygienic conditions and a serious threat to health





Waste management is poor and often non-existent







Waste and poor drainage is a dangerous cocktail





Poor rental housing  
Toilets as "flying toilets"





Poor drainage filled with "Flying Toilets"



# Substandard housing in unhealthy environments

No water provision, no drainage, no sewerage, no pit latrines, no security of tenure, no nothing...





Settlement located on marginal land with heavy air pollution





Indoor air pollution due to cooking with wood/charcoal





Women and children are daily at risk from exposure to fire and smoke

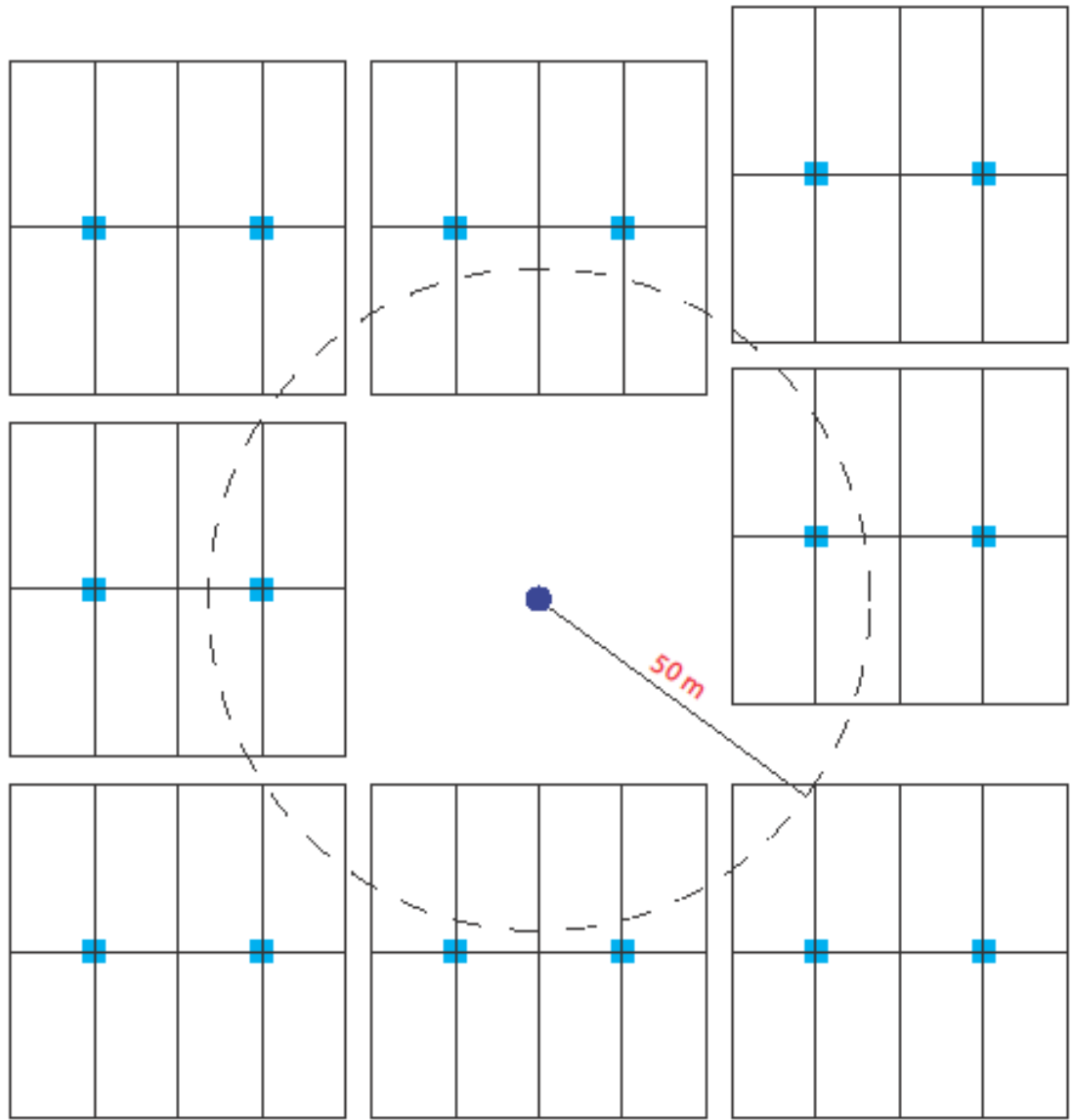




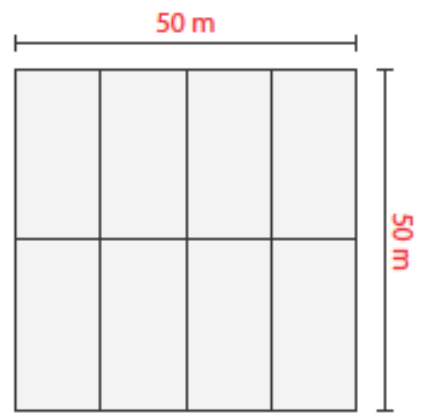
# Site & Service Scheme Mozambique

- Many of the communal land reserves have been grabbed by the local elite
- Water provision is left to private providers
- Drainage and tared roads still remains
- Private minibuses are servicing the area
- Some schools and health institutions have been built

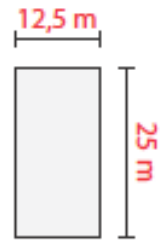




Neighbourhood layout with 8 blocks and with a total of 64 plots

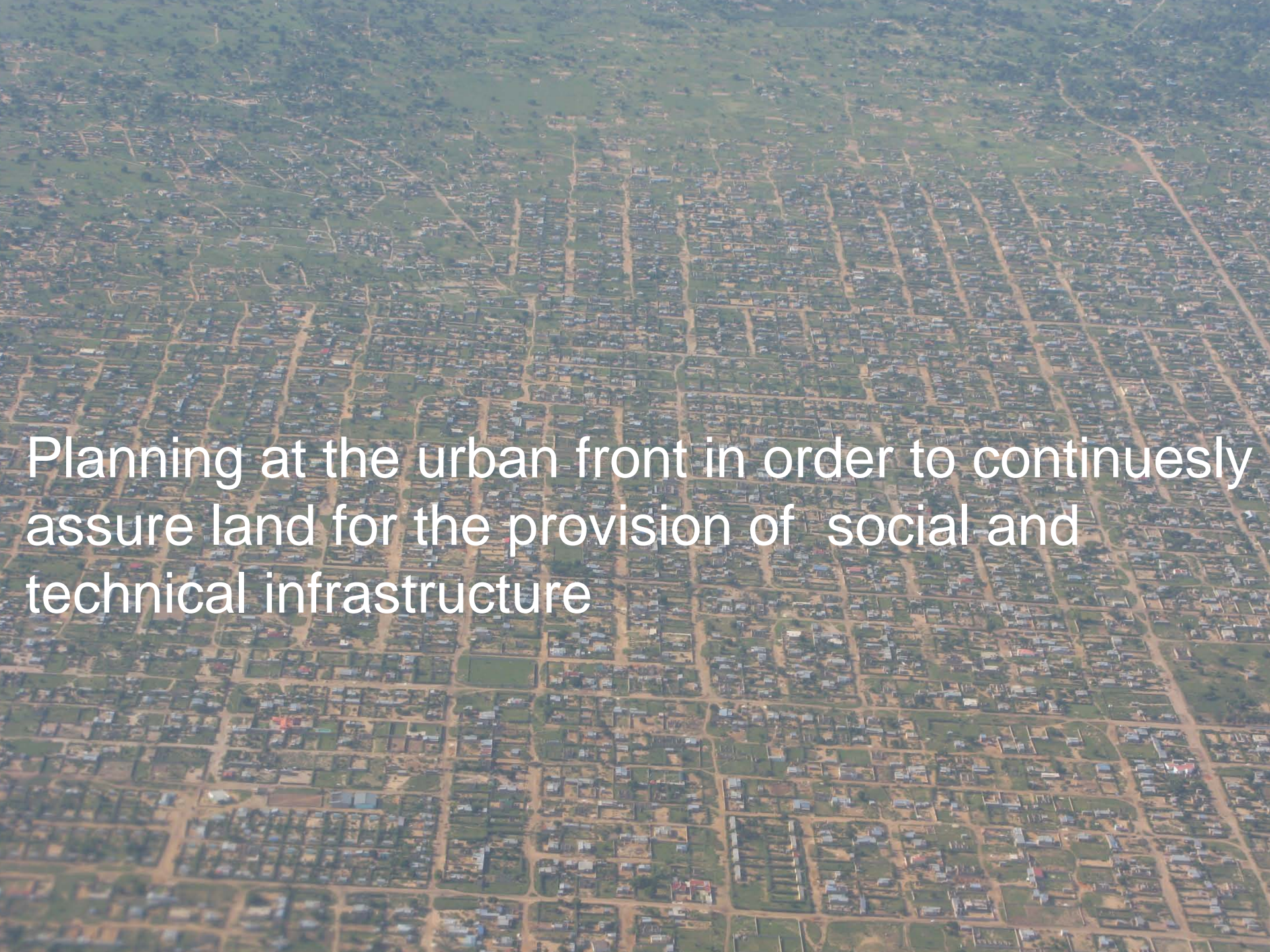


Block with 8 plots



Plot





Planning at the urban front in order to continuously assure land for the provision of social and technical infrastructure





# Maxaquene A

Plano Parcial de Urbanização  
Distrito Urbano 3 | Município de Maputo | Moçambique

15 de Fevereiro de 2011



Associação  
Moçambicana para o  
Desenvolvimento  
Concertado



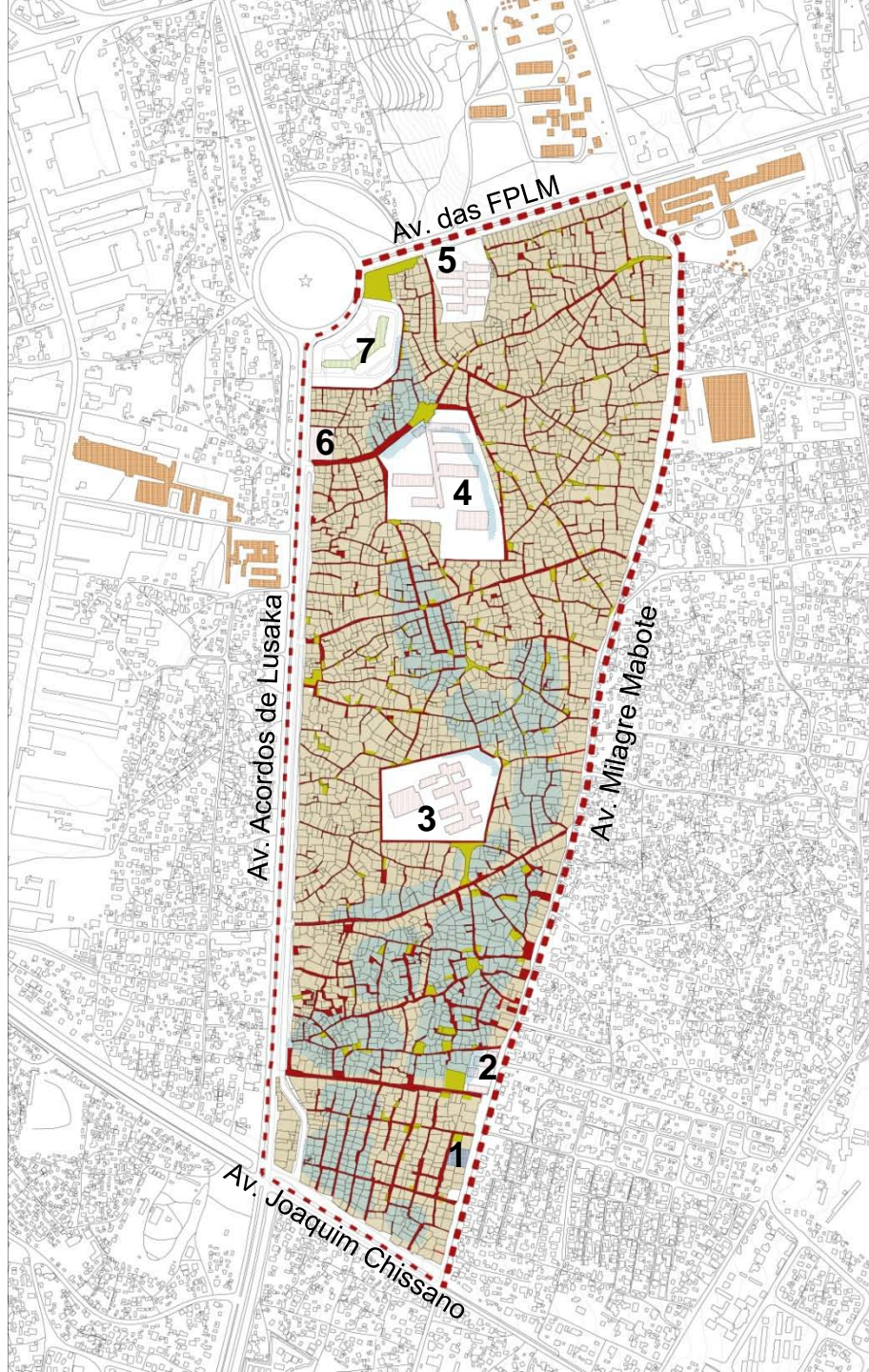
Enginyeria  
Sense Fronteres



Centro de Estudos e  
Desenvolvimento do Habitat FAP  
UEM

**WSUP**  
Water & Sanitation  
for the Urban Poor





**legenda:**

- limite do bairro
- vias de acesso internas
- espaços livres
  
- Espaço Urbanizável
- zona residencial de média densidade
  
- Equipamento Público
- equipamentos de educação
- Ministério da Agricultura
- Secretaria do bairro
- Outros equipamentos (envolvente)
  
- 1. Secretaria do bairro
- 2. Escola Unidade 24
- 3. Escola Secundária Noroeste II
- 4. Escola Noroeste I
- 5. Escola FPLM
- 6. Creche
- 7. Ministério da Agricultura
  
- Espaço afecto à Estrutura Ecológica
- Zonas Húmidas
- zona susceptível a inundações









**espaço a melhorar** | planos de pormenor

perfil existente





1.50

4.00

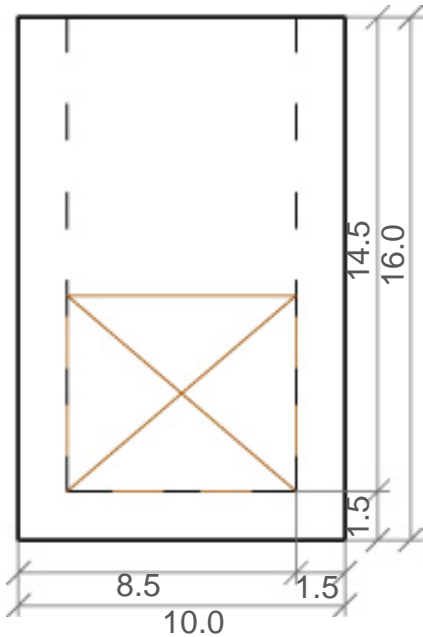
1.50

7.00

espaço a melhorar | planos de pormenor

perfil proposto





parcelas de 10x16 m

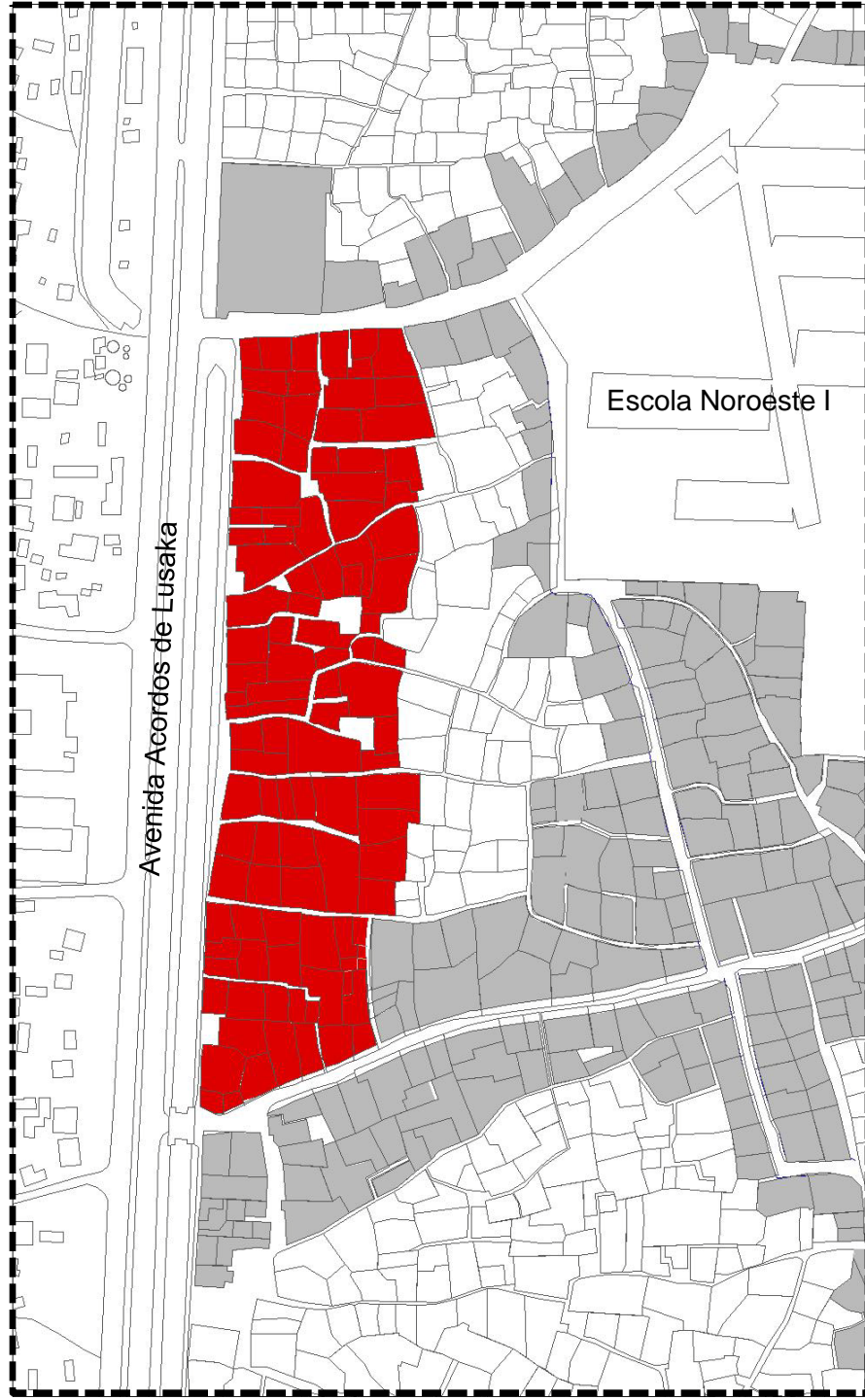
coeficiente de implantação da construção de 0,5

afastamento de 1,5 m

cércea de 7m (2 pisos)

parâmetros urbanísticos





Escola Noroeste I

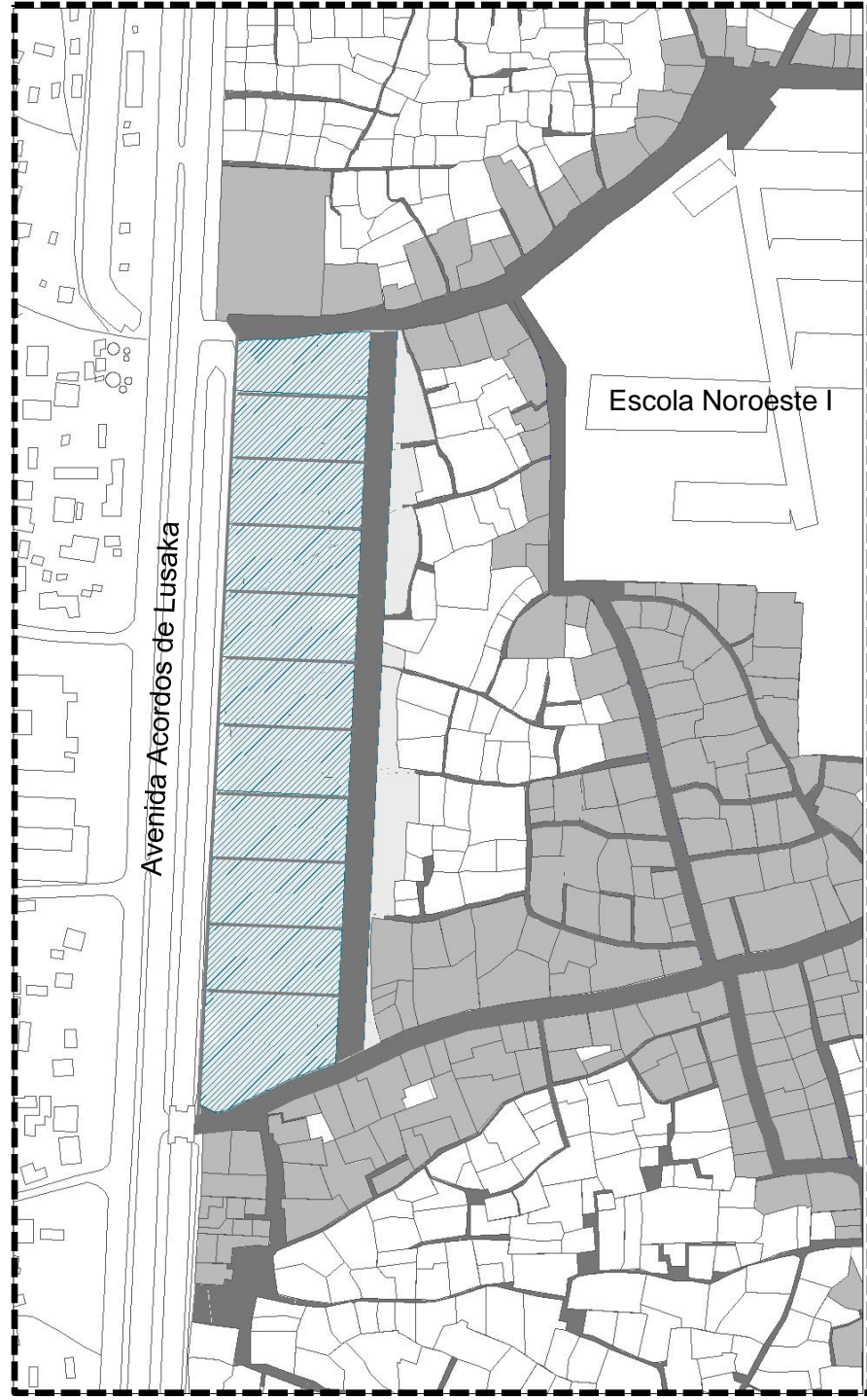
Avenida Acordos de Lusaka

**legenda:**  
área de simulação  
remoções

reordenamento da frente  
da Avenida Acordos de  
Lusaka - pelo menos  
**100 famílias afectadas**

**espaço a qualificar** | planos de pormenor  
**cenário a longo prazo (10 anos)**





**legenda:**  
área de simulação  
novos lotes

**espaço a qualificar** | planos de pormenor  
**cenário a longo prazo (10 anos)**



# Recommendations

- Providing affordable and appropriate **Land** for poor and low-income segments
- **Urban Planning** based on participatory approaches
- A well managed **Implementation** process
- Enforcement of **Development control** with less corruptive and laizie fair practices
- Secure comprehensive and cost effective **Urban Management Systems**