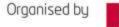


Zoning standards and compliance in the context of customary tenure system - A case study of west Ashiye, Adentan municipality in Ghana

Matey, E., Lengoiboni M., and Koeva M.

Surveying the world of tomorrow -From digitalisation to augmented reality







Land Tenure, Land Use Planning en Surveying the world of tomorrow -

Helsinki Finland 29 May – 2 June 2017

NG WEEK 2017

From digitalisation to augmented reality

Land Tenure

- Statutory tenure
- Customary tenure
- Legal pluralism (thus multiple land governance institutions e.g. state, customary)

Land Use Planning A responsibility of a government institution e.g. (municipalities, physical planning organizations, etc.)

Purpose: Promote efficient and effective management of land

Implemented through zoning standards, zoning plans

Basic components of land administration Source: Steudler, Rajabifard et al (2004)





Surveying the world of tomorrow - Helsi

Helsinki Finland 29 May – 2 June 2017

From digitalisation to augmented reality

Research Problem, Objective, Questions

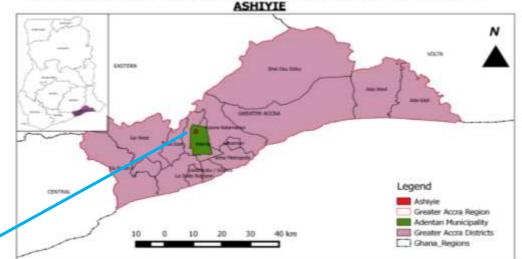
- **Problem**: Zoning regulations impose rules on how land may be used. Rules and standards may interfere with the freedom of residents to enjoy their land rights under customary tenure system
- **Question**: How is LU planning, a responsibility of a government institution organized, implemented and enforced where customary land institutions govern land?



This study: Implementing zoning plans in customary areas



ISTRICTS IN GREATER ACCRA SHOWING ADENTEN MUNICIPALITY WITH



Study area & context

- Customary institutions: administer land rights
- Government institutions
 - 1. (planning unit): enforce zoning standards
 - 2. (land registry): confer title certificates

Methods: Case study

- Interviews Residents, Key informants Land institutions
- Spatial analysis

Surveying the world of tomorrow -

Helsinki Finland 29 May - 2 June 2017

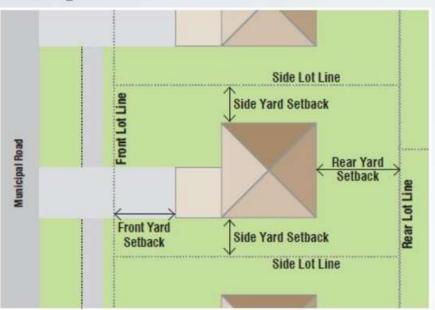
From digitalisation to augmented reality

Three sub-questions Focus: Residential standards

1) Factors influencing compliance with zoning standards

2) Effects of zoning standards on enjoyment of land rights under customary tenure

3) Spatial conformity between reality and local plan



- Building Types:Detached building, row houses compound house, chamber, hall
- Maximum Plot coverage: 60% 70%
- Minimum plot size: 320m²



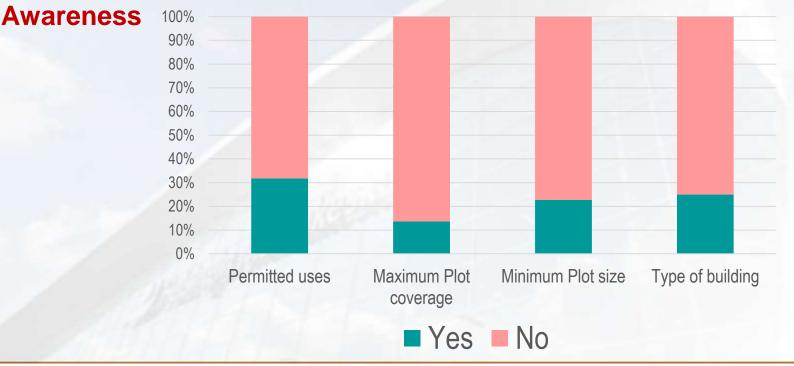


Surveying the world of tomorrow - Hel

Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

Factors influencing compliance with residential standards



Awareness of residential standards



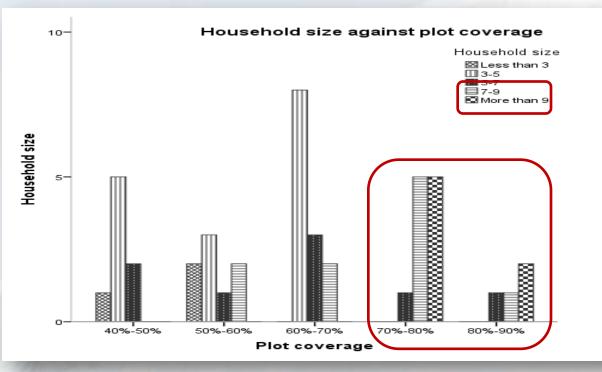


Surveying the world of tomorrow -

Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

Household Size



Larger households exceeded max plot coverage



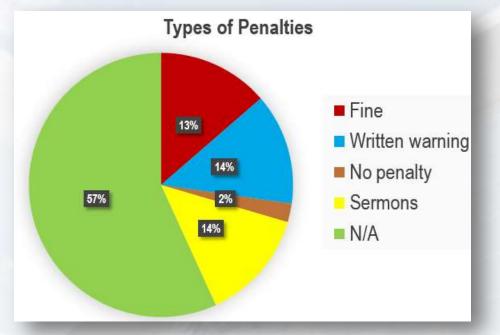


Surveying the world of tomorrow –

Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

Visits by enforcement teams, penalties



- About 60% had no building permits
 - absence of enforcement team
 - lengthy, costly processes
- Penalties are light
- Respondents possessed the indenture, which stipulates what the land is to be used for





esri



Surveying the world of tomorrow - Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

Building standards a burden? Perception of how the zoning standards interfere with the enjoyment of rights to land

Zoning standards do not affect enjoyment of their rights to land rights.

According to residents:

- Land rights from customary authorities.
- By registering their rights (title certificate) at the lands commission, respondents obtain greater security of tenure. Respondents believe that verification of the title document (search at Land Title Registry) prior to acquiring the land was important.
- Planning authority fine for non-compliance, not influencing land rights.



Surveying the world of tomorrow –

Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

According to key informants:

It is the responsibility of individuals obtain zoning standards before acquiring land through any of these 3 methods:

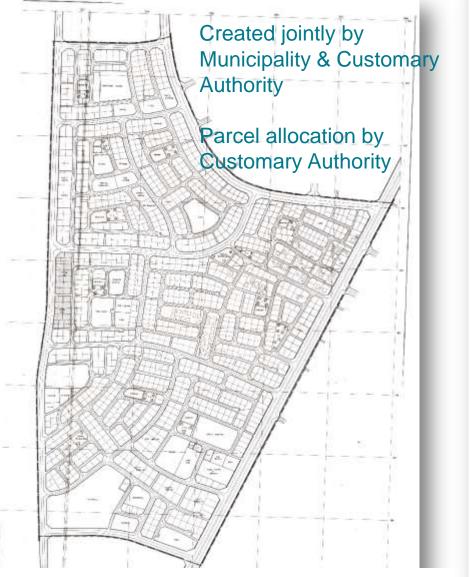
- 1. Customary authority: provide indenture (showing LU type & plot size), and zoning standards if one asks
- 2. Notice boards at the Assembly: details on zoning standards are posted there
- 3. Monthly awareness meetings at the Assembly representative: participation optional



Platinum Sponsors:

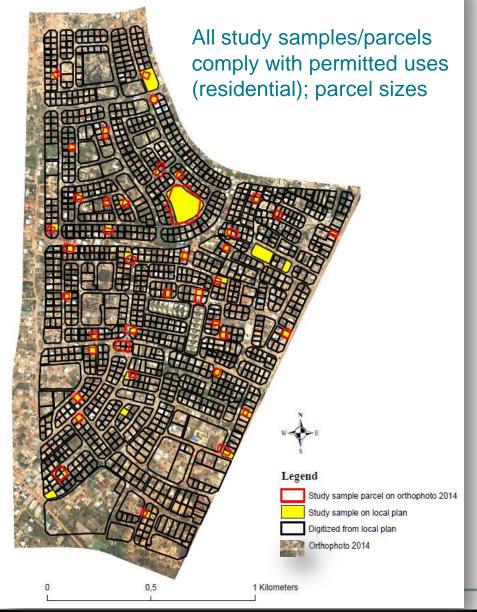
esri

Spatial analysis for assessing conformity and compliance between zoning plan and reality

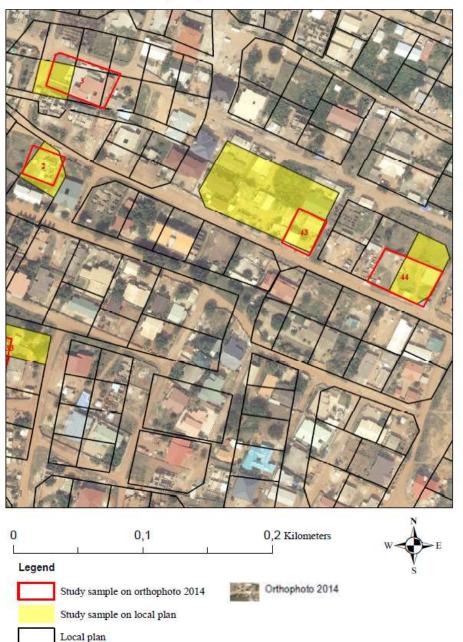


Local plan of West Ashiye 1990, updated 2010

Differences between vector data extracted from the local plan (2010) and orthophoto (2014)



Changes in plot boundaries



All parcels (study samples) misalign with the local plan

Four main types of non-conformity:

- 1. Orientation of the parcel boundaries
- 2. Shapes of plot boundaries
- 3. Plot sizes
- 4. Houses constructed on the boarder, or straddle parcel boundaries.

Municipality aware, believes about 50% compliance with residential standards; and about 30% conformity with parcel boundaries and planning with the local plan

Surveying the world of tomorrow - Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality

Conclusions & Recommendations

- Zoning standards exist, but are distant from the residents
- Unclear procedures and coordination between multiple institutions municipality, customary authority and lands commission. Resident's own responsibility.
 - When citizens encounter multiple institutions, they learn to assert which is most relevant for them. Citizens prioritize the security tenure—in paying ground rent to customary authority and registration at lands commission, rather than the Municipality – to implement the zoning standards
- How could procedures from formal and customary institutions be synchronized to effectively govern land?



Surveying the world of tomorrow - Hels

Helsinki Finland 29 May - 2 June 2017

From digitalisation to augmented reality





