QUANTIFYING URBAN GROWTH IN ACCRA METROPOLITAN AREA (AMA), GHANA AND EXPLORING CAUSAL MECHANISMS

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Structure of Presentation

• Introduction
• Methodology
• Findings
• Emerging Issues
• Conclusion

INTRODUCTION

• Urban Growth is a global Phenomenon
• Accra’s current population of 1.8 m at 4.2% ~ 2.2
• Accra is developing independently of any spatial planning can undermine its sustainable future

Aims/Objectives

• To quantify urban growth and its underlying causes using a time series of remotely sensed images
• Extrapolate the trend of urban growth and identify future growth options

Research Justification

• Rate of urban development far exceeds the capacity of planners to monitor urban growth
• Remote sensing and GIS, may be usefully applied and model for future planning
• Relevant decisions can be taken at the appropriate time to meet such challenges, with alternative growth options also being explored
METHODOLOGY

Rate and Pattern
Qualitative
Remote Sensing
Survey
Image Pre-processing
Change Detection Analysis
New Understanding
Integrating data sources
with GIS framework
Formulate approaches and techniques to develop a strategy and build scenarios, to guide future growth and management

Process and management
Quantitative
Remote Sensing and GIS Analysis
Questionnaire
Interviews
Focus Group Discussion
Role of customary land owners
Change Detection Analysis
Urban Growth/Management
Remote Sensing and GIS Analysis
Image Pre-processing
Change Detection Analysis
New Understanding
Integrating data sources
with GIS framework
Formulate approaches and techniques to develop a strategy and build scenarios, to guide future growth and management

Schematic Representation of Research Framework

Remote Sensing Analysis [Quantification]
Image Pre-Processing

Change Detection Analysis

EXPLORING CAUSAL MECHANISMS OF ACCRA’S GROWTH
FINDINGS

- Main Driver: Demand for and access to land (The Ghanaian Dream to own a house)
- The pluralistic land tenure system coupled with the duplication of roles by Government institutions has created a cumbersome process to land title registration
- Inadequate basic infrastructure

EMERGING ISSUES

- Complex Land Ownership schemes, slow bureaucratic procedures by officials encourage people to bypass these registration processes and develop their land. This mitigates against urban planning and management
- The limited role of civil society in urban management
- Compulsory Land acquisition by Government

CONCLUSION

- Land is a crucial resource that needs to be utilised efficiently, with long enduring consequences on the economic, social and cultural functioning of the city
- Remote sensing and GIS integration provides efficient ways to monitor land-use changes
- Public sensitisation, land reform and legal simplification to existing outdated land laws are suggested as ways to address the present problems identified
- Co-operation and collaboration between the stakeholders (1-stop-shop)

The success of the policies and strategies recommended depends on the knowledge, attitudes and perceptions of AMA residents with regards to urban growth and sustainable urban management.
• Rigorous LAW enforcement
- Land issues
- Attitudes towards the law
- Perception

• National interest should be considered in the face of politics
• Nepotism and favoritism
• Party affiliations (Lands sharing between party members)

SUGGESTIONS ARE EXTREMELY NEEDED

THANKS