





**Urban Management Land Information System (UMLIS)  
project in Ghana**

**Presentation at  
FIG**  
TS 1 F Property Taxation

**Sydney, Australia  
12 April 2010**

**Linda Johansson / Kofi Yeboah**

Urban Management Land Information System




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TS 1 F Property Taxation

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12 April 2010**




**Stephen Djaba / Ola Wennerby**

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➤ Population: 23 million inhabitants (June 2009)  
 ➤ Capital: Accra (1,7 million inhabitants) more people during the day  
 ➤ Land area 173 km sq

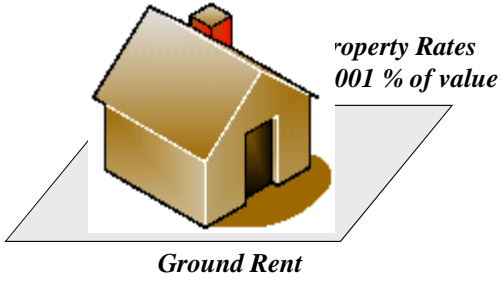




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**Land Administration in Ghana**


➤ Customary Land (80 %) and Governmental Land (20 %)  
 ➤ Leasehold /Freehold/Informal  
 ➤ Land sector agencies  
 ➤ Local authorities




*Property Rates*  
 001 % of value

*Ground Rent*

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### Current Situation of Local Authorities

- Urbanisation
- Expanding municipal activities
- Poor & isolated record management
- No geographical reference
- Low revenue collection rates (about 35 %)
- Poor infrastructural development

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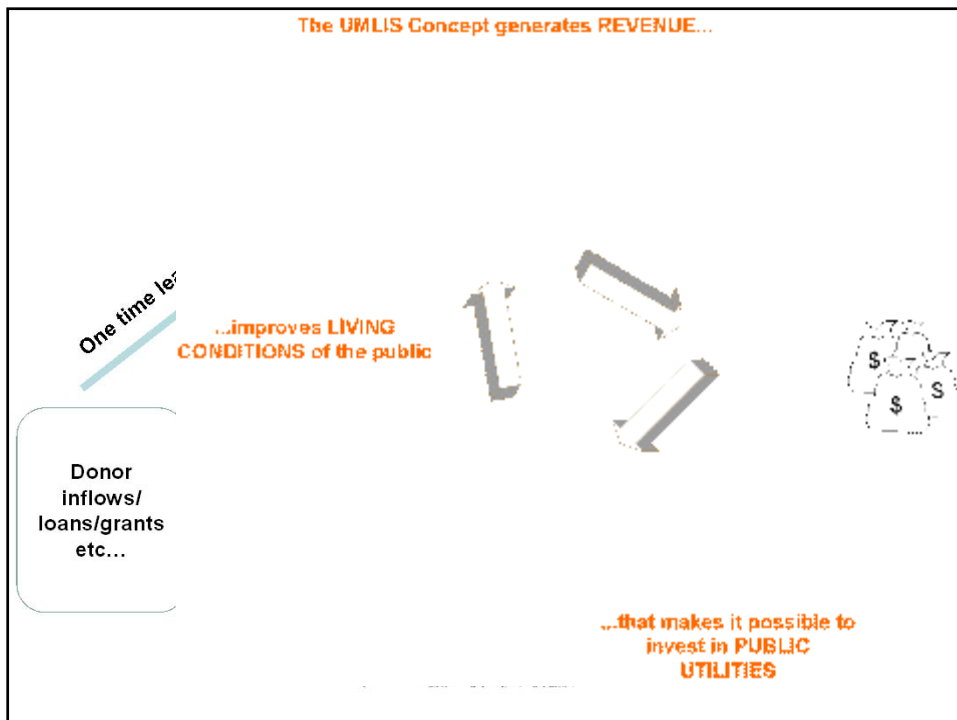
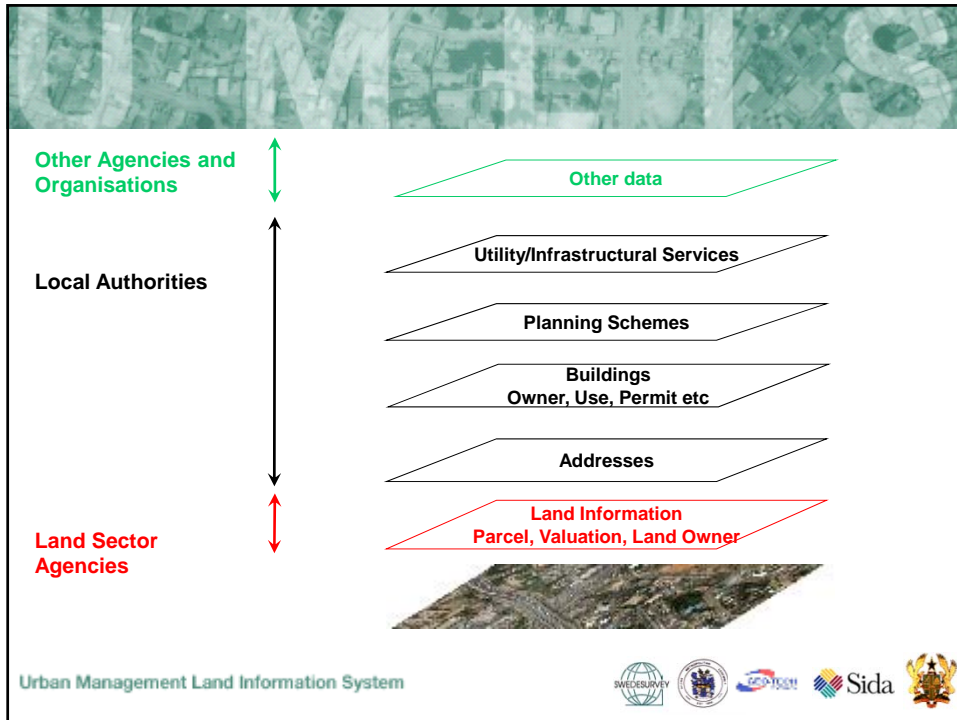
### Typical Situation of Property Owners

- Poor community service development
- Informal ownership of property
- Insecurity of land tenure
- Difficult to find financial means
- Non-transparency of property collection
- Poor information on person

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## Objectives of the UMLIS Pilot Project, 2005 - 2009

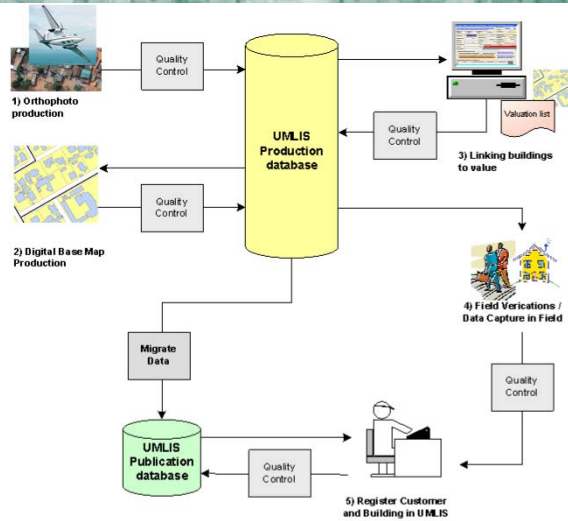
- Develop and test UMLIS in a pilot scale
- Develop a platform for Urban Management at AMA
- Develop an application for collection of property rates
- Support and strengthen AMA through capacity building



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## Data Capture



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## UMLIS

### Involving Local People

- Community leaders meetings
- Property owners sensitization
- Collection of information
- Showcase of the system



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## UMLIS

### Experience 1 - Owners are Important!


- The names on the property rate bill need to be correct.
- The owner has to be unique in the system.

**Solution**


- More detailed information about owners was collected and stored in UMLIS.
- Control functions.
- The system supports storing of former owners




I am Kofi Yebosh




I am also Kofi Yebosh



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**Experience 2 - Not all Rateable Buildings are Valued**

- 40 % of the buildings in the digital map has not been valued.
- Some areas have not been valued

**Solution**

- Unvalued buildings have been identified.
- Unvalued property lists and maps have been sent to the Land Valuation Division

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**Experience 3 - Conflicts in Building Boundaries and Parcels**


- 18 % of the buildings have been constructed without being within the boundary of a parcel.

**Solution**

- Bringing building and parcel together identify inconsistencies in land information.
- Buildings are uniquely correctly identified using the parcels.

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**Experience 4 – Unauthorised buildings**



- 18 % of the buildings have been constructed without being within the boundary of a parcel.

**Solution**

- Unauthorised buildings can be identified using UMLIS.



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**Experience 5 – Manual Procedures and few Controls**

- Valuation block/units are drawn manually and not referenced
- No link between computerised systems.
- Difficult to track payments.


**Solution**

- Digital platform with controls.
- Link between systems

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## Experience 6 – Poor Feedback to Citizens

-Poor feedback to citizens and infrastructure provision and this makes them unmotivated to pay their bills.

**Solution**

- Citizens know how much a community/block is paying in relation to the service they require.


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## Conclusion

- System development needs to be carried out in close cooperation with the client.
- The information in the system needs to be of good quality in order to increase the revenues from property rates.
- Cooperation between the land sector agencies and the local authority is a prerequisite for the success of UMLIS.
- Accurate information on persons are required for a complete secure system.

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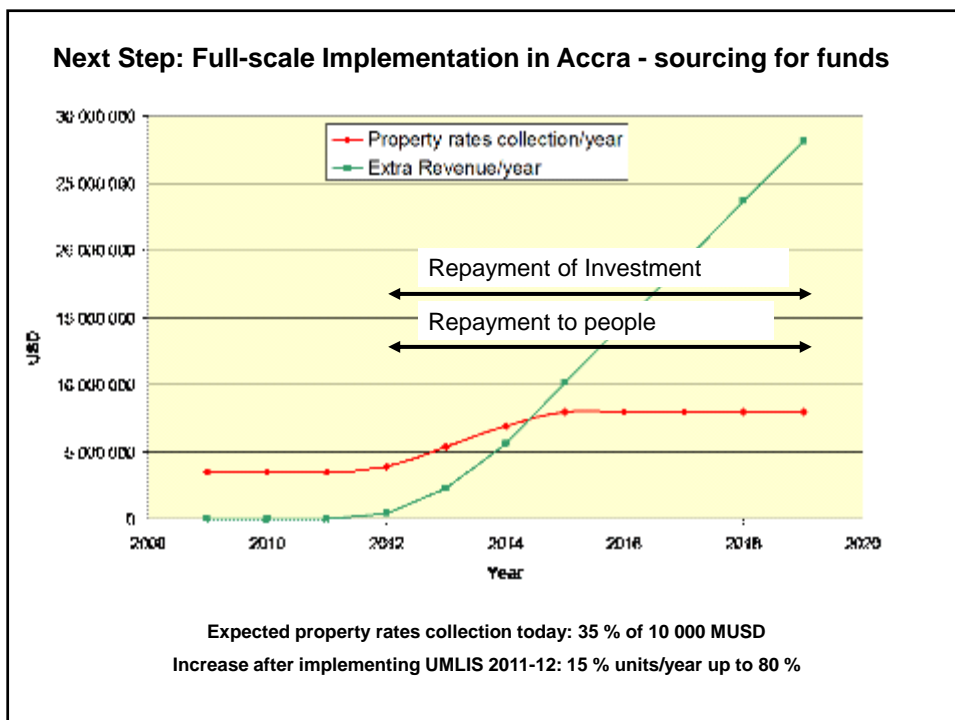


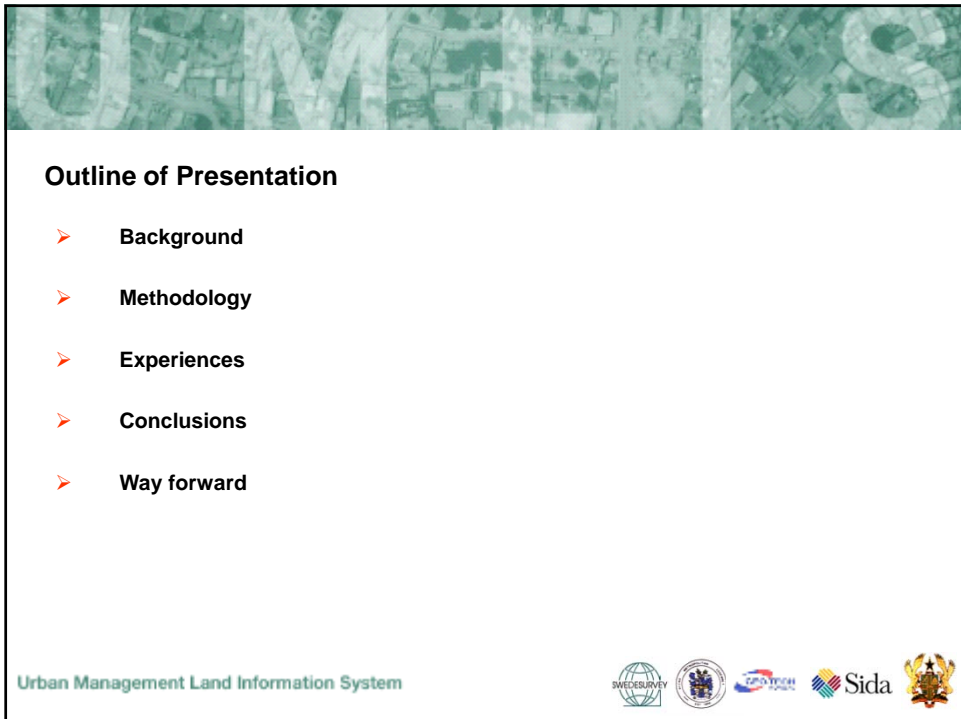
### Gradually Changes


- Quality of data will increase
- Transparency in property taxation
- People will start paying property rates
- Banks and other agencies will begin to rely on the data
- Infrastructure development will commence



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## Implementation Strategy

- **Develop UMLIS and test in a pilot scale** **2005-2009**
- **Full scale implementation in Accra, including an address register**
- **Replicate UMLIS to other municipalities**
- **Additional functionalities**

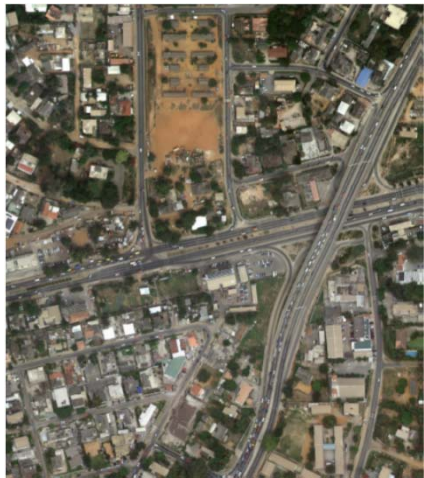
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## Information on Land for Co-ordinated Urban Management

Most information has co-ordinate

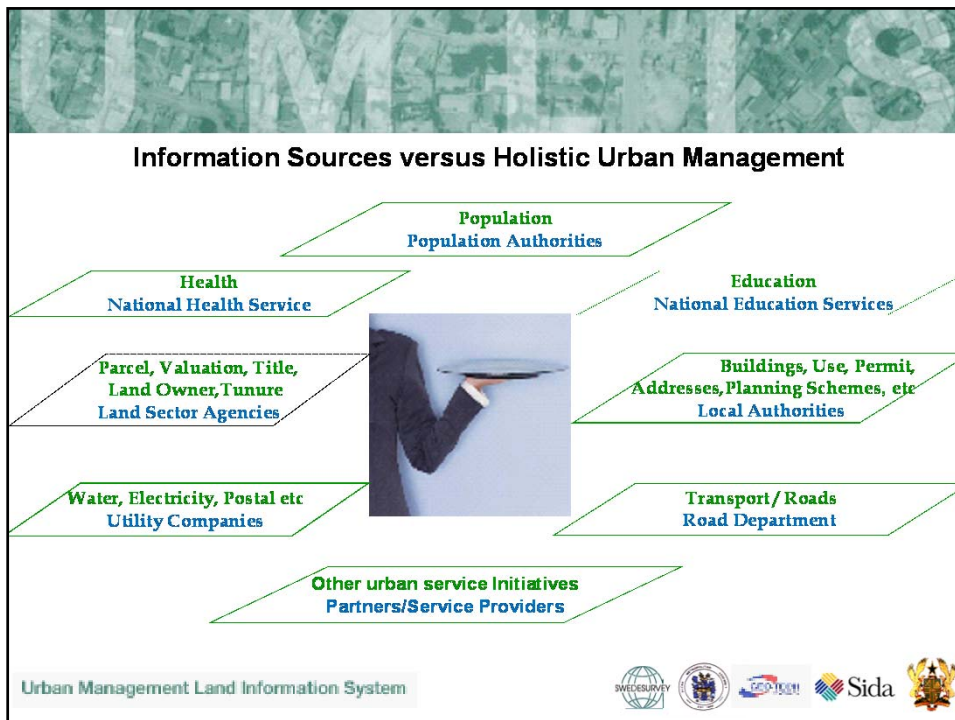
•Parcels	•Healthcare
•Addresses	•Education
•Sanitation	•Population
•Transport	•Housing/Real Estate
•Utility Services	•Commerce
•Land use	•Industry
•Revenue	•Housing etc...



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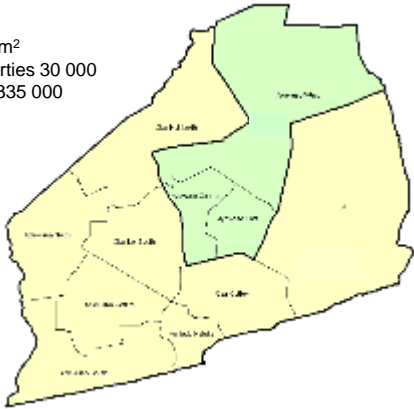
### Pilot Activities

- Project management
- Capacity building
- Data capture
- System development/pilot test

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### Pilot Area

**Ayawaso**  
 -Area 36.6 km<sup>2</sup>  
 -No of properties 30 000  
 -Population 335 000

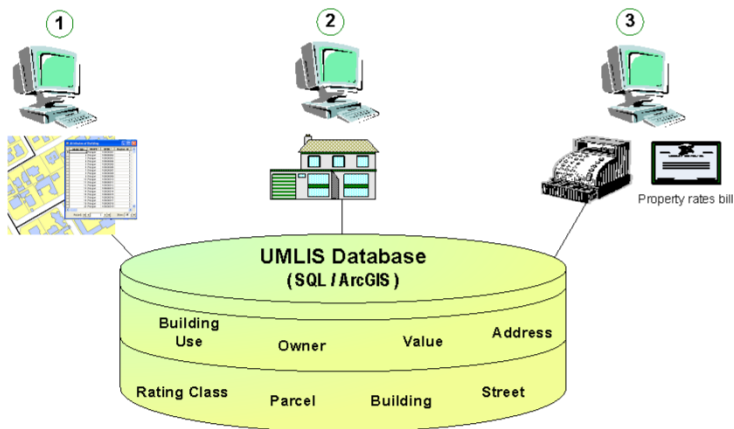


- Urban area
- Well defined
- Planned and informal settlements
- Public- and customary land tenure
- Movement in land (holding) owners
- Different land use

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### Design and Development



**UMLIS Database (SQL / ArcGIS)**



Building Use	Owner	Value	Address
Rating Class	Parcel	Building	Street

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**Pilot testing UMLIS in  
November – December 2009**

- 150 properties in planned and informal settlement areas
- Register customers and buildings
- Public awareness
- Print and deliver bills
- Register payments and do follow-ups



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