Fiscal Cadastral Reform and the Implementation of CAMA in Cape Town: financing transformation

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Policies and Innovations
Expert Group Meeting on Secure Land Tenure: ‘new legal frameworks and tools’
Nairobi, Kenya, November 11-12, 2004
Outline of this presentation ....

Presentation is divided into five parts:
1. Introduction to the research
2. The legacy of apartheid and the need for fiscal cadastral reform
3. The case study – introduction
4. The case study – identification of risks, forces driving reform, and dispute resolution processes
5. Conclusions
Part I

Introduction to the research
Introduction to the research

Doctoral level research
- framework for analysis of fiscal cadastral reform to inform policy and process
- focus of this introductory, narrative paper

Masters level research
- Modelling of
  - location effects and
  - the effect of view
- on the market value of residential property using CAMA and GIS
Introduction to the research

Case study of fiscal cadastral reform in the General Valuation Project 2000 of the City of Cape Town

Involves identification of:
- predominant forces driving reform
- key variants, especially risks
- the role of Computer Assisted Mass Appraisal (CAMA) in fiscal cadastral reform
- the mechanisms to resolve disputes
What is the Fiscal Cadastre? – can it serve land tenure reform and land delivery?

An essential element of the cadastral system:

Dale and McLaughlin (1999): land administration has four key components:

- Juridical: land parcel definition and ownership
- Regulatory: land use etc
- Fiscal: value of land and improvements
- Information management: provides the link

→ a multipurpose cadastre (McLaughlin: 1975)
**Juridical Cadastre:** an official record of land parcels and their attributes, including boundaries and tenure, established for legal purposes.
**Fiscal cadastre**: an official record of values of land parcels and their improvements established for fiscal reasons; often called the valuation roll. Functioning of the fiscal cadastre is

- the basis for property taxation
- key to local government independence
- critical for service delivery
- key to transformation in the South African context
Some more working definitions …

**Fiscal Cadastral System:**
- the **input** required in order to determine the value of land and improvements,
- the **processes** of valuation and taxation
- the **output** of income generation.

A range of elements are identified in a *systemic approach*.

**Fiscal Cadastral Reform:** occurs when one or more aspects of the fiscal cadastre or its immediate context (e.g. enabling legislation) is subject to substantial change in any one cycle.
Part II

The legacy of apartheid and the need for fiscal cadastral reform
The City of Cape Town

- City land area 2100 km² at the tip of Africa
- Mountains, sea, business, residential – patchwork mix of natural and built environment
- Over 3 Million people
- Urban duality:
  - concentrations of poverty and wealth
  - legacy of racial, and hence economic, spatial segregation – skewed settlement patterns
  - poor infrastructure and public services in former marginalized areas
  - formal and informal residential areas
The City of Cape Town

Urban duality:
- > 16% population live in informal settlements (shacks)
- housing backlog in 2005 = 345 000 dwellings, 190 000 sub-economic
- formal, wealthy property values = 1000 times value of entry level housing
- international property market in wealthy suburbs
- HIV/Aids, poverty, and unemployment

social transformation challenges demand adequate finance for local government
Urban wealth duality is better than singular poverty – “Robin Hood” approach is possible - tax the wealthy to service the poor
The State of the Fiscal Cadastre – need for reform

In the 8 yrs following democracy in 1994:

- **Structural**: municipal boundaries changed
  - Merging of former municipal structures defined along racial lines
- **Political**: change @ local government
- **Legislative**: Municipal Ordinances – non-uniform
- **Data**: Valuation rolls inconsistent, incomplete, out of date (1979), incorrect
- **Fairness**: Inequity in property valuation and taxation – regressive – rich pay less, poor pay more than their “fair share”
Fiscal cadastral reform is necessary

- to **increase the income** generated through property taxation through increasing the effectiveness of the fiscal cadastral system
- to **narrow the gap** between current fiscal cadastral performance and its goals, and
- to **transform** the system to adhere to various underlying **principles**

Land reform and land tenure delivery can be serviced by a good fiscal cadastral system.

- Valuation of 550,000 formal residential properties
- Computer Assisted Mass Appraisal (CAMA) used for the first time
- CAMA = Computer Assisted Mass Appraisal
  - It includes all aspects of data analysis and valuation modelling
  - based on the principles of mathematical modelling - dependant variable (market value) = function {independent variables (the property characteristics)}
  - frequent and rapid property valuations on a large scale, particularly in urban residential contexts increases property tax revenue
Part IV

The case study – identification of risks, forces driving reform, and dispute resolution processes

(change management)
Implementation of Sustainable Technological Solutions in the African Context

Avoid technological imperialism …

Minimize risk of failure, aim for a sustainable solution

Dalcher (2004) advocates:

- Holistic approach – systems perspective – identification of political, social, legislative, economic, organisational factors
- Inductive approach – meaning derived from the elements and the context, overall patterns can emerge
- Flexible boundary setting, and investigation beyond the boundaries of the system
- Naturalistic enquiry – observation of phenomena in their natural setting
FORCES IN FISCAL CADASTRAL REFORM

EXTERNAL ORGANIZATIONAL ENVIRONMENT

**Social Aspects:**
- demand for greater income for City’s transformation
- equality of service delivery
- demand for expanded social services

**Political aspects:**
- income for achieving goals
- sound & accurate income base

**Legal aspects:**
- services-provision of basic human rights as per the Constitution
- Processes must be legal

**Technological aspects:**
- CAMA can assist realization of organisational goals
- integration of valuation & billing systems

**Social Aspects:**
- fairness/equality
- social conscience
- new skills and knowledge
- work ethic

**Technological Aspects:**
- CAMA used internationally
- improved speed of delivery possible
- integration of data possible
- improved efficiency possible
- improved equity through greater objectivity possible
Key Variants

- **Key variants** in the process have the power to change process outcomes
  - favourable variants yield better results
  - neutral variants yield results of similar desirability
  - *risk* variants yield worse results

- **Identification and management of risk** is important in change management
Case Context

What forces drive reform?
What role does CAMA play?
How do the forces translate into goals?

What are the risk factors?
How are these identified and managed?

Are there additional initial and interim measures of effectiveness which should be used?

What post-project measures of effectiveness are there?
How are these used?
Dispute Resolution Processes

- **Use** of, and **outcomes** from, dispute resolution processes indicate the success of fiscal cadastral reform.

- **Processes** range through informal review (non-legislated), formal objection, hearings at the Valuation Appeal Boards, and finally, the ordinary courts (Cape High Court).
Dispute Resolution Processes

**Ordinary Courts - Cape High Court - 3 cases:**

- **illegal** i.t.o. the legislative framework
  - interdict (May 2004) on the City in the levying of property taxes based on a provisional property valuation roll (is in effect until all appeals have been resolved)
  - Case referred to the Constitutional Court
  - Interdict suspended for 1 year after that Court’s judgment

- The use of property value to **recover service delivery costs** (sewerage/refuse) is upheld

- Use of market value of property as a basis for taxation is recognized as a “wealth tax” and is upheld
Part V
Conclusions

Implementation of CAMA shows:

- Interesting mix of driving forces
  - CAMA being the main catalyst driving reform implementation and the main technology used to meet goals

- High level of risk
  - Uncertain outcomes due to urgency of the outcomes and timing in the context of broad reaching legislative, structural, societal, and political transformation
  - Low level of management control on the effects of exogenous forces such as legislative changes and dispute resolution processes

- Formal dispute resolution processes used extensively

The project, and reform of the fiscal cadastre, has been largely successful.
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Acknowledgements:

Dept of Geomatics Engineering
University of Calgary

School of Architecture, Planning
and Geomatics University of
Cape Town

Lincoln Institute of Land Policy

City of Cape Town

International Federation of Surveyors
Risk Factors

Risks identified at the outset:

- Legal implementation of CAMA
- Changes to the system in the midst of legislative reform -> uncertainty
- Political will
- Public opinion
- Resource provision: human and technical resources insufficient - timely provision, retention
- Misaligned data
- Permanent staff and overtime
- Management and/or political decision making – timeliness
- Computer system amendments - timeliness
Risk Factors

**Additional risks identified in the research:**

- Security situation
- General wariness of the process, lack of support for local government
- New municipal structures not in sympathy with existing legislation leading to confusion of powers and responsibilities
Dispute Resolution Processes

- **Formal Appeals:**
  - 31,433 appeals, 764 discarded as invalid, rest to appeal boards

- **Valuation Appeal Boards:**
  - 30,669 cases
    - 3,276 withdrawn
    - 2,032 still outstanding, of which 1,849 are City objections
  - 1,344 cases in the additional valuations
    - 109 withdrawn
    - 111 outstanding

- **Ordinary Courts ...**