



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'**

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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



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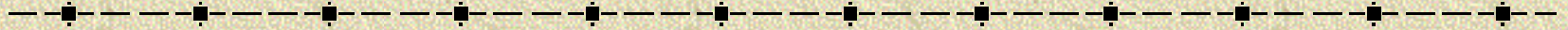


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Part I



Introduction to the research



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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 viewon the market value of residential property using CAMA and GIS



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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



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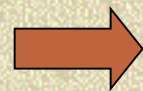
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What is the Fiscal Cadastre? – can it serve land tenure reform and land delivery?

✦ 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)



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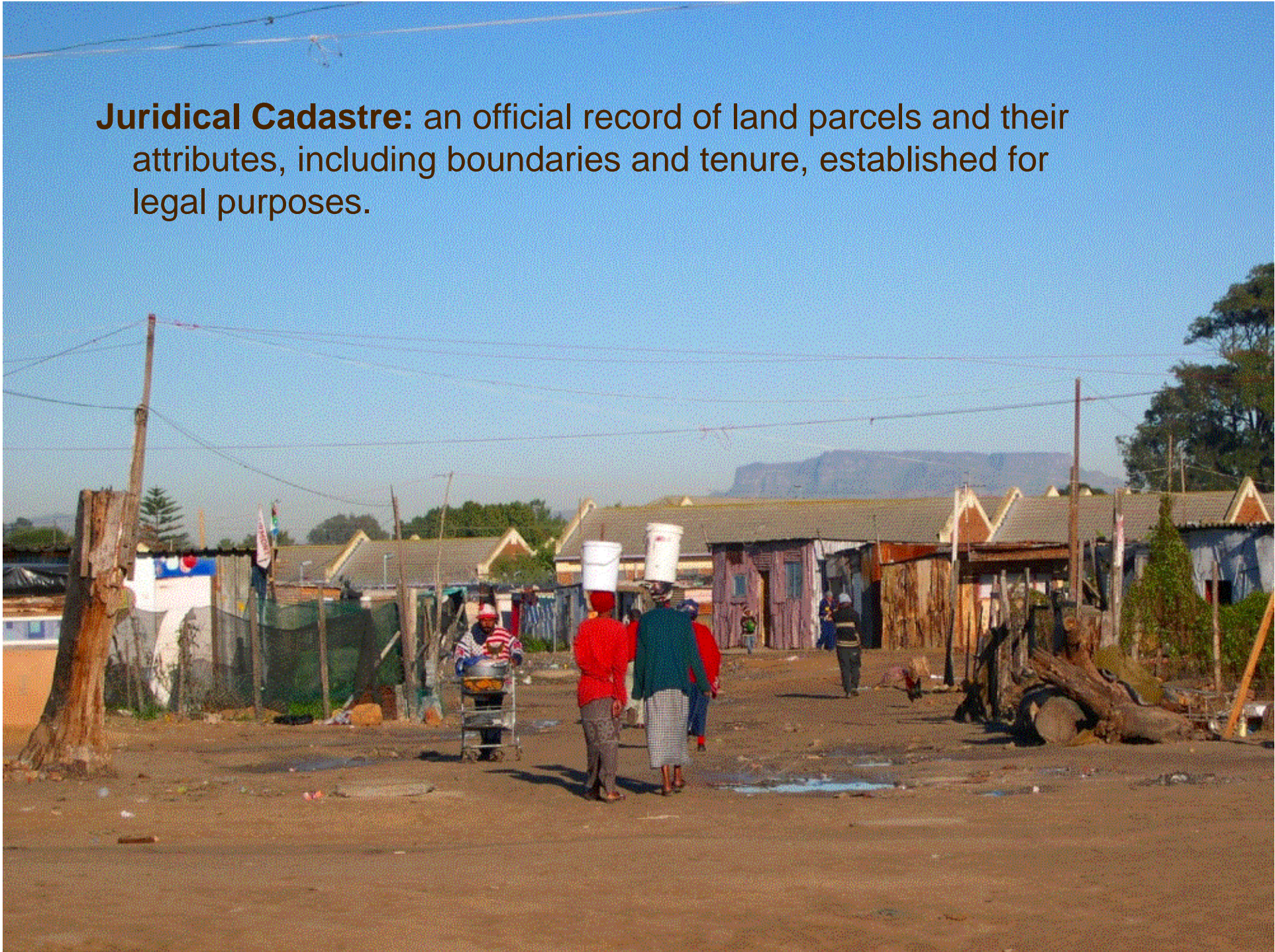


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Juridical Cadastre: an official record of land parcels and their attributes, including boundaries and tenure, established for legal purposes.



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.



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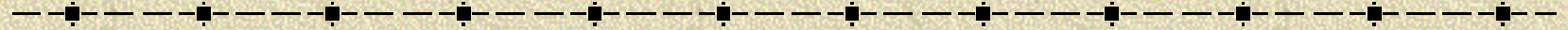


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Part II



The legacy of apartheid and the need for fiscal cadastral reform



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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



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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



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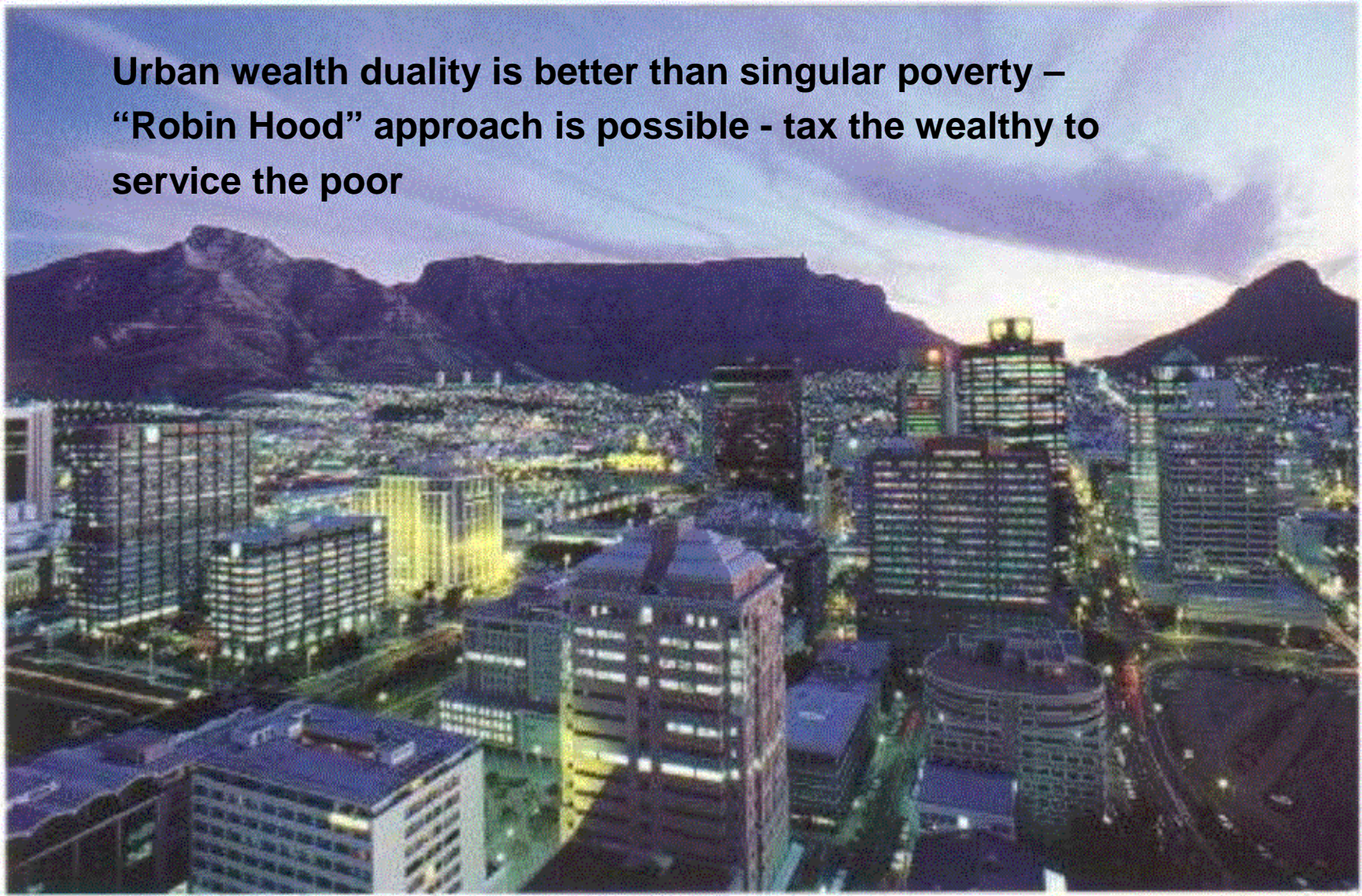


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**Urban wealth duality is better than singular poverty –
“Robin Hood” approach is possible - tax the wealthy to
service the poor**



CAPE TOWN
South Africa

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”



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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

Part III – Introduction to the case study: The General Valuation Project 2000

- ✦ 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



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Part IV

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

(change management)**



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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



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FORCES IN FISCAL CADASTRAL REFORM

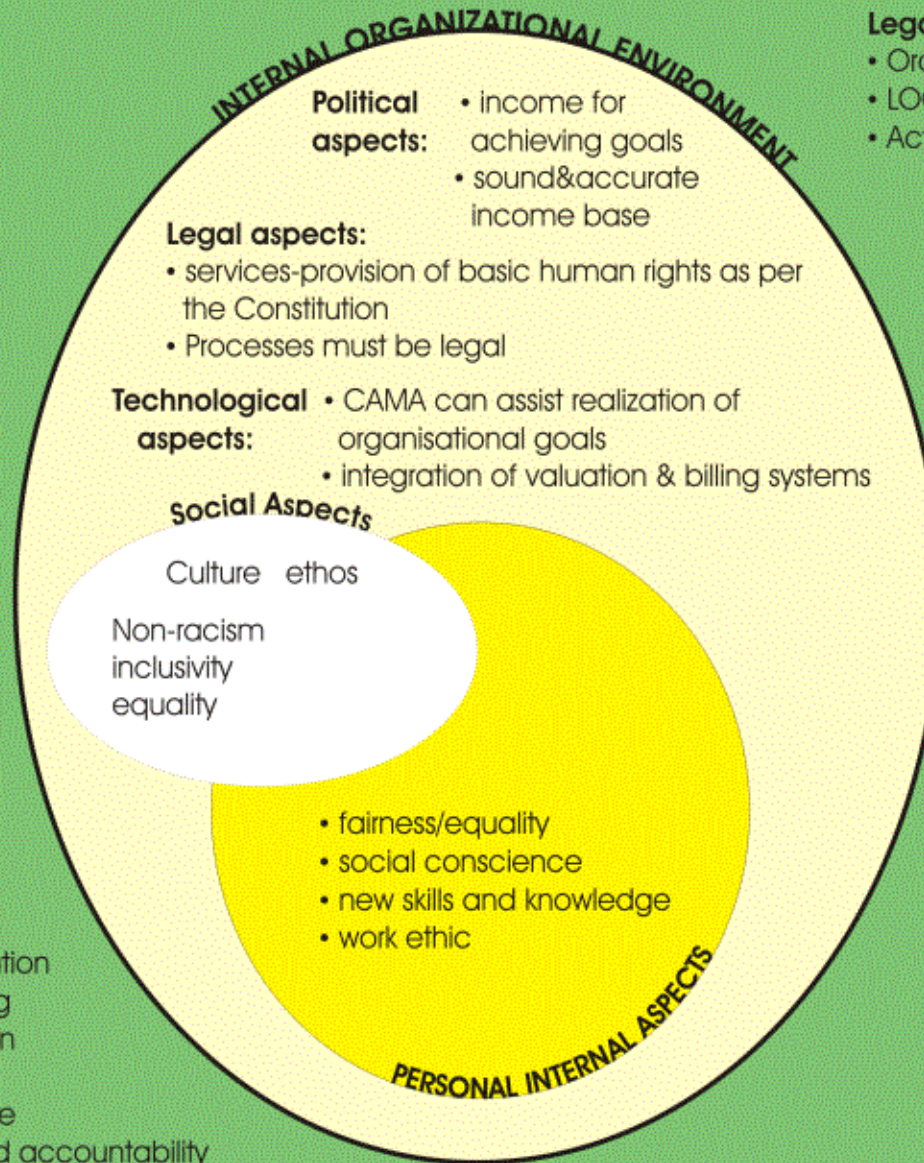
EXTERNAL ORGANIZATIONAL ENVIRONMENT

Social Aspects:

- demand for greater income for City's transformation
- equality of service delivery
- demand for expanded social services

Legal Aspects:

- Ordinance: regular general valuations
- LOGRA case: market value
- Acts: CAMA, valuation processes taxation



Political Aspects:

- regressive -> progressive taxation
- local government restructuring
- demand for equity in valuation and taxation
- demand for equality of service
- demand for transparency and accountability

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



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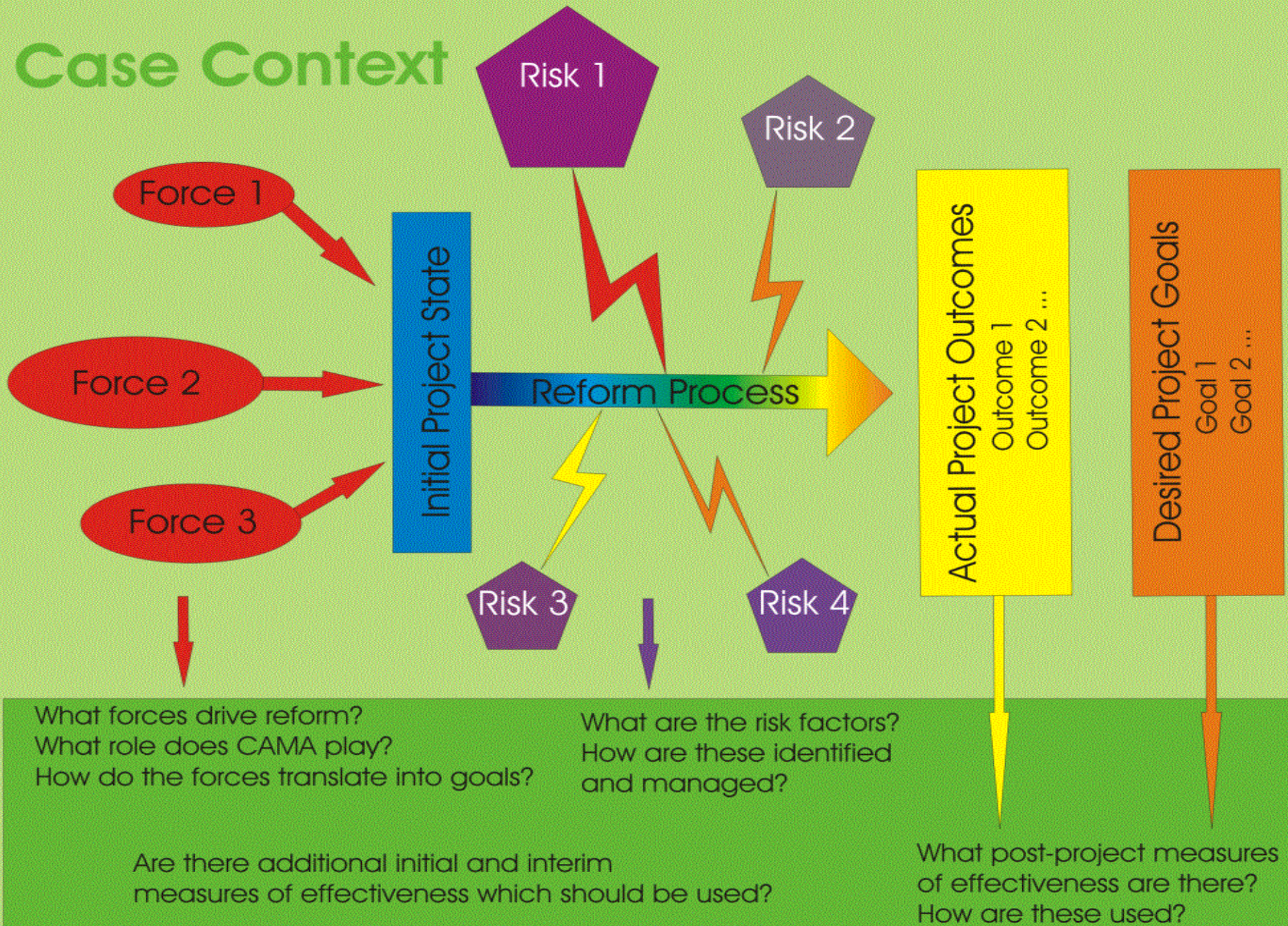


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Case Context



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)



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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



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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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City of Cape Town

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



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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



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Dispute Resolution Processes

✦ Formal Appeals:

- ◆ 31 433 appeals, 764 discarded as invalid, rest to appeal boards

✦ Valuation Appeal Boards:

- ◆ 30 669 cases
 - 3276 withdrawn
 - 2032 still outstanding, of which 1849 are City objections
- ◆ 1344 cases in the additional valuations
 - 109 withdrawn
 - 111 outstanding

✦ Ordinary Courts ...



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