

Evaluating the award of Certificates of Right of Occupancy in urban Tanzania

Jonathan Conning¹ Klaus Deininger² Justin Sandefur³
Andrew Zeitlin³

¹Hunter College and CUNY

²DECRG, World Bank

³Centre for the Study of African Economies, University of Oxford

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Methodology workshop

Impact evaluation of land-related projects

World Bank

Outline

Policy context

Background: Residential Licenses

- Design and limitations of RLs

- Use of administrative data to examine program incidence

Evaluating Certificates of Right of Occupancy

- Impacts

- Pricing

- Group-based repayment

Conclusion

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Policy context

- Tanzania's Land Act and Village Land Act (1999) are an interesting case of potentially progressive laws, especially scope for decentralization of land administration on village lands;
- Implementation, however, has been slow. For example, between 1990 and 2001, approximately 8,000 parcels were surveyed and allocated in Dar es Salaam.
- Focus here is on urban areas, which are covered under the Land Act alone.
 - Unplanned settlements comprise approximately 400,000 out of a total 500,000 parcels in Dar es Salaam (Kironde 2006).
 - Poor infrastructure, limited provision of other public goods, etc.

Goal is to understand the impacts of Certificates of Right of Occupancy, and the way in which alternative delivery mechanisms affect both the breadth and depth of impacts.

Two property rights instruments

- MLHHSO has been working on two parallel types of right
 - **Residential Licenses** are a two-year derivative right, renewable but not transferable.
 - **Certificates of Right of Occupancy** represent leasehold status of up to 99 years.
- Biggest increases in formal tenure have come about through RLs. However:
 - RLs have had low take-up rates (fewer than half of eligible parcels);
 - Some economic benefits have not materialized: of more than 80,000 RLs by 2008, only approx. 150 registered mortgages.
- Current policy debate can be framed in light of this contrast: a low-cost but weaker form of right is considered against higher-cost alternatives, which may be required to achieve economic benefits.

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Design and limitations of Residential Licenses

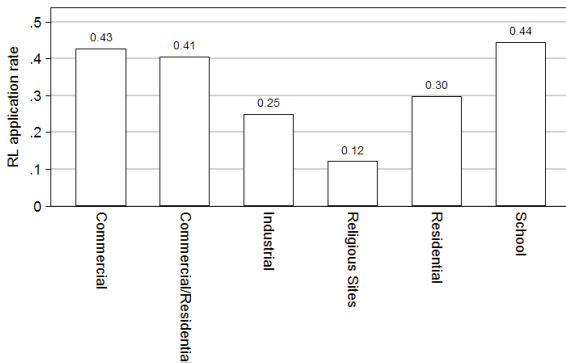
- RLs were issued on the basis of satellite photography. In first phase of activity, covered inner Dar es Salaam—an estimated 200,000 parcels in unplanned settlements. However, fewer than 100,000 parcels have applied for RLs.
- Cost of RL are Tshs 5,600 plus an annual land rent, averaging Tshs 3,000; in some cases issuance of RLs has also been tied to payment of property taxes or other local taxes (Kironde 2006).
- So if this is relatively inexpensive, why has demand been low? Some potential explanations
 - Concerns about the legal standing of the RL have limited its value in formal credit market;
 - Short duration of the RL limits the effective security that it creates;
 - Anecdotal evidence of popular concern that this is a Trojan Horse—a vehicle for taxation in disguise.



RL incidence

Variation by land use

We can get a partial answer to these questions by looking at the demand for RLs. Administrative data on applications can be combined with the Ministry's own socio-economic baseline questionnaire.

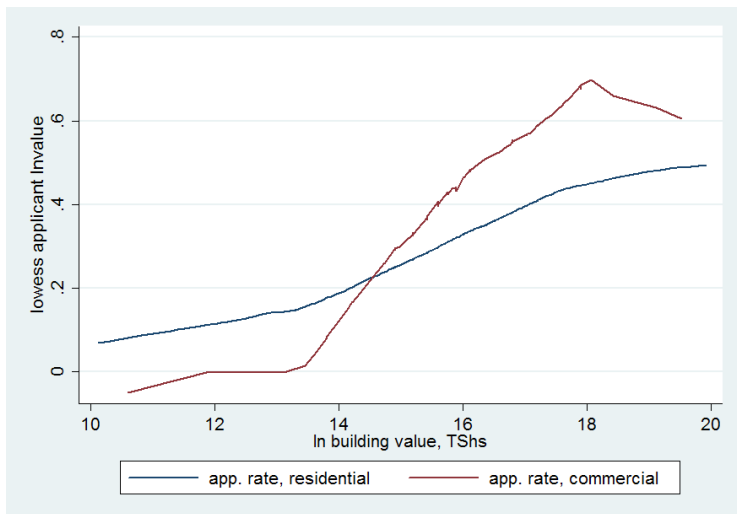


Source: MLHSD Socio-economic survey and RL applicant database



RL incidence

Land values and application rates



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Motivation

- In contrast to Residential Licenses, CROs represent a higher cost, higher return form of right.
- ⇒ Is there a feasible cost-recovery mode, with benefits that are well distributed across the population?
- Questions of interest to the Department of Policy and Planning
 - How should CROs be priced?
 - How should CROs be targeted in order to achieve both high rates of participation and high impacts?
 - Is there a model for delivery of CROs that would make use of civil society organizations to bridge the gap between the Ministry and residents of unplanned settlements?

The WAT model

A Tanzanian NGO, Women's Advancement Trust – Human Settlements Trust (WAT) has developed a model for facilitating applications for CRO.

They have applied this approach in Hanna Nasif, site of a WB-funded infrastructure upgrading program.

- WAT pre-financed the systematic surveying of 1,000 house plots.
- Owners make payments to WAT over time; certificates issued only after repayment is complete.
- Preliminary successes: residents have repaid approx TShs 15 million toward cost of obtaining CROs (while delays at district and ministry levels mean the actual certificates are still not available).

Research team and Ministry will work with WAT to conduct a RCT evaluating variants of this approach.

Specific questions for evaluation

1. What are the impacts of CROs for those who receive them—and how are these achieved?
2. How does pricing affect the breadth of participation?
3. Can the organization of payment for CROs in groups improve participation rates?

Understanding impacts

Our basic objective is to understand whether the issuance of CROs has meaningful economic and social impacts.

- This will be tested using pre- and post-intervention household survey data on both
 - **final outcomes** of interest: including household incomes, land expropriation, and the effectiveness of women's and children's inheritance claims; and
 - **intermediate outcomes**, such as credit access, labor supply, and investment decisions

Understanding impacts

Mechanisms

We are particularly interested in understanding the mechanisms by which CRO impacts are attained.

Suggest three ways to go about this:

- Intermediate outcomes show relative importance of the credit channel;
- Data on changes in *perceived* constraints (e.g., risk of expropriation) may provide suggestive evidence
- Examine evidence of heterogeneous treatment: are investment effects (if any) stronger for landlords or households with female-run businesses (suggests expropriation risk at inter or intra-household levels, respectively, constrains investment); for commercial vs residential properties; etc.

Understanding impacts

Identification

- Our basic strategy for understanding impacts is to randomize the (initial) financing activities of WAT.
- Randomization will take place at the **block level**. These are planning units contained within the *mtaa*—the smallest official political unit.
- This is an **encouragement design**:
 - we will compare households in blocks where WAT pre-finances with. . .
 - a randomly selected subset of blocks in the same *mtaa* that do not receive financial assistance in the first instance (but who have gone through the planning process);
 - and a set of households in adjacent *mitaa*, who have not gone through the planning process.

Understanding impacts

Basic unit of intervention



- Typical block (illustrated) contains approx. 50 parcels.
- Estimated 2,000 eligible parcels per *mtaa* \Rightarrow 40 blocks.

Source: Senje 2007, as reproduced in Kyessi (2008)

Pricing

Motivation

The question of how to price CROs is an important one to MLHHSD.

- Estimated cost to end users under a full cost recovery model is *at least* Tshs 70,000. This exceeds, e.g., monthly informal-sector incomes of women.
- Given that not all eligible residents will be willing to pay for CROs priced at full cost recovery, cost recovery objective may do better by reducing the price (if demand is highly elastic).
- Further tradeoff between cost-recovery and social objectives of maximizing benefit incidence.

While willingness-to-pay data can shed some light here, fear that respondents' reports may be biased if they are understood to affect subsequent prices of services.

Pricing

Methodology

Experimental approach will be used to provide information on the relationship between pricing and demand.

- Survey team will distribute (non-tradable) vouchers redeemable at WAT for partial repayment of the cost of CRO.
- Value of voucher varied randomly across selected individuals (see Cole et al. 2007 for a similar approach to insurance)
- To address concerns for equality, gifts of comparable value will be given to those not receiving vouchers.
- By looking at variation in payment rates across different levels of vouchers, can map out the demand curve, and can see how this varies across a rich array of characteristics.

Group-based repayment

Motivation

Given the low participation rates of the RL program, alternative mechanisms *for a given price* are of interest.

- Consider **group-based repayment schemes**: CROs are not released until a sufficient number of parcels from a pre-defined group have been paid in full.
- May make use of social pressure, along lines of group-based microfinance.
- **Cross subsidization** a Ministry objective, though typically thought of as operating between larger geographical units. If repayment groups have heterogeneous WTP, those with high demand may subsidize those with low demand.

This has to be balanced against threat of **coordination problems** that may be induced.

Group-based repayment

Methodology

To investigate the usefulness and design of a group-repayment model, we can...

- Compare group-based with individual-based repayment: which creates broader program incidence?
 - Assign parcels to groups of varying sizes or varying repayment thresholds.
- ⇒ Effect of these design parameters on demand would inform implementation in subsequent geographic areas.

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Conclusions and directions at this (early) stage

- Administrative data—combined with baseline information—can provide some insight into targeting, scope and mechanisms for impact.
- Turning to CROs, the (randomized) encouragement design allows us to estimate impacts *on the subpopulation who are induced to obtain CROs but would not have otherwise*.
 - If effects are heterogeneous, this will capture the impacts of the WAT intervention but not effect of making CROs available through other means.
 - In our design we face a tradeoff between comparability of treated and control blocks and risk of contamination/externalities.
- By varying design parameters on an experimental basis, we can provide information on how to broaden access and impacts.

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