An Evaluation Framework for Urban Cadastral System Policy in Ethiopia

A Presentation for the Conference on Land Policy in Africa, CLPA-2019, Abidjan, Cote d’Ivoire

Solomon Dargie (PhD Candidate)

Nov 25-29, 2019

Abidjan, Cote d’Ivoire
Presentation Outline

- Introduction
  - Problem Statement
  - Research Objective
  - Theoretical Framework
  - Methodology
- Result and Discussion
- Conclusion and Recommendation
Introduction

- Land is the most vital resource on earth from which humankind derives almost all its basic needs.

- It plays significant role through *Economic, Social, Political and Cultural dimensions* (Murado, 2017).
  - Land is a basis for livelihood; a space for interaction; the source for power and a marker of collective identity.

- Thus, much effort is invested in order to administer and manage land, of which, *cadastral systems* are one of these efforts which are developed all over the world (Dale *et al*, 1989).
The United Nations and organizations such as the FIG, have for many years undertaken studies to understand and describe land administration systems and particularly the cadastral system (Ting et al., 1999).

Cadastral system is a formal sub-system of land administration that includes the organizational system (a set of professional actors with responsibilities responsible and accountable to carryout cadastral activities and maintain cadastral information systems), procedures and regulations which altogether ensure that the cadastral system is kept up-to-date (Walter, 2016).
Intro…Cont’d…

The establishment of urban cadastral system in developing countries is a means of providing security of tenure, by ensuring that people can live with certainty and safety on their own land (Silvaa and Stubkjaerb, 2002; De Soto, 1993).

According to Rajabifard (2019), to achieve sustainable development goals (SDGs) of 2030, countries require access to an effective, efficient and modern land administration system (LAS) based on a cadaster engine that contains spatially accurate land parcels and corresponding rights, restrictions and responsibilities.
De Soto argues that the lack of a reliable and efficient cadastral system can have serious implication for the social and economic welfare of a country (De Soto, 2000).

In order to determine the effectiveness and sustainability of the cadastral systems, performance evaluation is needed as systematic and objective as possible (Danida, 1999).

In recent years, there has been an increasing interest in the use of evaluation indicators by cadastral organizations to assess the outcomes of cadastral system performance.
Problem Statement

Many literatures have proved that the role of cadastral systems have been functioning as an engine for sustainable land administration system by monitoring their performance through systematic performance evaluation mechanisms.

However, the nature of systematic performance evaluation of cadastral system depends on the circumstance of specific country under investigation.

Standardized methods or a quality framework to measure and evaluate urban cadastral system around the world is still lacking (Ali, Tuladhar, & Zevenbergen, 2010).
Cont’d…

- Most literatures show that several evaluation frameworks focus on the different aspects of land administration and management (Steudler, 2002; Steudler *et al.*, 2004; Gebeyehu, 2014; Tuladhar & Zevenbergen, 2010), however, urban cadastral system seems to be a missing component.

- According to LGAF, the key difficulty for institutions is the absences of standardized frameworks which enable evaluate the performances of undertaking institutions (LGAF, 2016).

- In this respect, Ethiopia as an implementer of two types cadastral systems (urban and rural), **has no nationally accepted methodology** which can measure and evaluate the performance of cadastral system policy.
Research Objective

- This article is aimed to develop an evaluation framework to measure and evaluate the performance of urban cadastral system at policy level.

- It is also intended to present a set of good practices and their indicators to provide an objective basis that supports systematic evaluation of urban cadastral system in Ethiopia.
Methodology

- In order to achieve this aim, the study has employed a **desk review and case study research strategies** being qualitative approach is at the heart of the analysis.

- State of the art literatures (theories on cadastral system policies) are reviewed

- Existing laws and policies focusing on urban cadastral system are analyzed in order to understand the circumstance and context of Ethiopia.
Theoretical Framework

- Globally, there are variety of frameworks and methodologies that can evaluate, characterize, and assess cadastral systems in the world though they could not properly address local problems and situations of progressive cadastral systems in developing countries (Burns, 2007).

- In this article, EFQM Excellence Model (EFQM, 2012), Land Governance Assessment Framework (LGAF, 2016), Land Administration Evaluation Framework (Steudler, 2004), Statements on cadaster (Cadaster, 2014), and Cadastral template have been benchmarked.

- These frameworks are developed to guide the proper operation of land administration and management, particularly the cadastral system aspect. Guided by the above frameworks, contextualized and country specific policy evaluation framework for urban cadastral system is developed.
Result and Discussions

Urban Cadastral System Policy of Ethiopia

- Ethiopia’s urban cadastral system policy is enshrined and incorporated under the urban land development and management policy. This policy aspires a system where urban land is served as a driving force for political, social, economic, and environmental transformation through efficient and well-functioning cadastral system.

- To accomplish this vision, the federal government has formulated policies related to urban cadastral systems in order to modernize the system of land administration. Proclamation No. 818/2014 that describes about the urban land holding adjudication and registration is ratified to implement urban cadastral system of the country.
The overall objective of the scheme is to accelerate the social-economic and environmental development of urban centers by ensuring land holders’ security of holding and recognition of title to immovable property by certifying their right, restriction and responsibility through adjudication and registration. In line with this proclamation, Reg. No. 323/2014 and 324/2014 are issued to enact the proclamation.

To implement proclamation No. 818/2014, the government has incorporated the whole urban cadastral system processes in to its GTP.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Measurement</th>
<th>Target</th>
<th>Year (2008-2012 E.C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2008</td>
</tr>
<tr>
<td></td>
<td>No. of City</td>
<td></td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>No. of Parcel</td>
<td></td>
<td>1.6m</td>
</tr>
<tr>
<td>Registration</td>
<td>Number</td>
<td></td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>No. of Parcel</td>
<td></td>
<td>1.2m</td>
</tr>
</tbody>
</table>
Result… Cont’d…

Urban Cadastral System Policy Evaluation Dimensions

- Currently, there is an increasing demand for cadastral system, which supports economic development, environmental management and social stability in both developed and developing countries (Williamson, 2001).

- In-line with this increment, there is a need for performance measurement to assure the quality of cadastral system. The dimensions listed in the Table are indicators for the evaluation of urban cadastral system performance.
## Cont’d

<table>
<thead>
<tr>
<th>Level</th>
<th>Aspects</th>
<th>Performance Indicators</th>
<th>Good practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Political</td>
<td>Existence of political will in support of the cadastral system (y/n)</td>
<td>When there is clear political will to advance cadastral system of the country.</td>
</tr>
<tr>
<td></td>
<td>Policy</td>
<td>Existence of a government policy for cadastral system (y/n)</td>
<td>➢ When cadastral policy aspects are mentioned in the land policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are the identified visions and objectives SMART? (y/n)</td>
<td>➢ Specific, Measureable, Achievable, Realistic and Timely (SMART)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existence stakeholder focused strategy (y/n), if yes, what is the strategic approach that has been adopted to meet the objectives?</td>
<td>➢ There should be a strategic tool to know how to achieve mission, vision and targets. Excellent organizations implement their Mission and Vision by developing a stakeholder focused strategy [27].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency of revisiting objectives and strategies</td>
<td>➢ When there are progress monitoring mechanisms on the basis of objectivity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Existence of cadastral policy for:-</td>
<td>➢ When the cadastral system policy supports and contributes to the achievement of SDG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supporting agenda 2030 for SDG: indicator 1.4.2* (y/n)?</td>
<td>➢ When there is lodgement portal for loading digital cadastral information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digital cadastral data lodgement portal (y/n)?</td>
<td>➢ When there is special internet designed for this purpose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High speed internet for digital data lodgement (y/n)?</td>
<td>➢ While the policy fulfilling the current needs, there should be possibility for developing 3D cadastral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Developing in 3D digital cadastral system (y/n)?</td>
<td>➢ When the cadastral policy guides data preparation, sharing, IP, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data preparation, sharing, IP, etc. (y/n)?</td>
<td>➢ When there is base-map preparation and updating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Base-map preparation and maintenance (y/n)?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legal and institutional</td>
<td>Existence of legal basis, such as laws, regulations, standards? (y/n)</td>
<td>➢ Legal recognition through enabling legislation which covers all the details and standard procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uniformity of cadastral system policy throughout the country?</td>
<td>➢ When the legal aspects are suitable to cadastral system through protecting ownership rights that people have on land and property</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do regulations of cadastral system involve institutions with clear mandates as well as policy processes that are transparent and equitable? (y/n) if yes, explain.</td>
<td>➢ When there are institutions with clear responsibilities and easy processes in the cadastral system [20].</td>
</tr>
<tr>
<td>Policy level</td>
<td>Social</td>
<td>Economical</td>
<td>Environmental</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>✓ Does participation ensured in the cadastral system policy development such as stakeholders? (y/n) if not, why?</td>
<td>✓ Is the cadastral system policy cost recovery? (y/n) if yes, how and in what mechanisms?</td>
<td>✓ Does the cadastral system policy ensure sustainability of the environment? (y/n), if yes, in what aspects?</td>
</tr>
<tr>
<td></td>
<td>✓ Does the society benefited from and acknowledge the policy?</td>
<td>✓ Is there a well-functioning land and property market as a result of the cadastral system policy? (y/n)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Is there any mechanism for resolving disputes arising among landholders?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Cont’d

- When participation is ensured, implementations are possible when Public-Private sector partnership cooperates and increases achievability of missions and objectives.
- And society should be benefited from and acknowledge the need of the cadastral system policy.
- Good practice is when there is a hierarchical dispute resolution mechanisms (negotiation, arbitration).
- Cadastral system procedure should be self-financial and should ensure cost recovery.
- Cadastral system policy should support a well-functioning land market.
- Cadastral system policy needs to support duties such as environmental protection, monitoring of land resources, zoring, etc.
- Private sector is the indispensable partner of the public sector in terms of its capability in using and adjusting high technologies. Thus, a good practice is when there is partnership of public and private sectors under the condition of well-determined limits of both parts' duties and responsibilities.
- When cadastral systems follow international standards so as to share information, taking into account international standards.
- When the cadastral policy adopts and customizes international technical standards.
Conclusion

- The paper has contributed an evaluation framework with a set of qualitative and quantitative indicators and their good practices that can evaluate the performance of urban cadastral system, which is not currently available in Ethiopia.

- It is believed that the framework provides a basis for evaluating urban cadastral systems in a more standardized and comprehensive approach.

✓ The cadastral system success is driven by the level of political will and commitment which take into account the social, economic, and cultural contexts and makes the necessary resources available (Murunga et al., 2013). Although all dimensions (Table 2) have their own contribution to the successful implementation of cadastral system, Enemark (2015), has highlighted most importantly, strong political will and leadership as a fundamental requirement at national level.
Recommendation

✓ Cadastral system policies could include principles on the roles and responsibilities of the various cadastral related activities such as: land surveying, mapping, and land registration. These principles could be included in the national cadastral system policy.

✓ In-line with this, there should be a strategic tool to know how to achieve mission, vision and targets. Excellent organizations implement their mission and vision by developing a stakeholder focused strategy. These strategies should be designed in a SMART way: i.e.

- **Specific**: objectives are detailed, focused, well-defined, straight-forward, and emphasizes action;
- **Measurable**: the standard used for comparison, it answers the question of quantity;
- **Attainable**: objectives need to be realistic, possible, and achievable;
- **Realistic**: what results can realistically be achieved, given available resources;
- **Time bound**: the deadlines to meet the objectives.
Cadastral system policies with a set of performance indicators have to be defined in depth on how to evaluate their performances subject to well defined frameworks which are country specific.

In order to determine the fulfillment of objectives, effectiveness and sustainability of the cadastral system implementation, performance evaluation is needed as systematic and objective as possible, of on-going or completed projects.

Thus, the organization operating urban cadastral system should follow the proposed framework to evaluate the performance of urban cadastral system policy of Ethiopia.
Thank You for Your Attention