

# Chapter 44

## Understanding the Weak Performance of Technology in Urban Management: Insights from the Urban Land Registry in Benin

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### ABSTRACT

*The article questions the appropriation of existing urban planning and management tools in Sub-Saharan Africa, through a multiple case study: the implementation of a land information system (or simplified cadastre) in three cities in Benin. An ethnographic exploration of the use of the tool is conducted. The first section presents the historical context of the design of land information systems, framed by the urban management paradigm, and unwarranted confidence in new technologies. The second section presents the theoretical framework and the methodology of the research, inspired by public policy analysis and development anthropology. The third section describes findings of the multiple case studies. A vicious circle is highlighted, made up of: lack of political support, obsolescence, and decline of cost-effectiveness. The fourth section discusses the results of the ethnographic inquiry. These are, essentially, the interpretation of the paradoxes, blockages, and conflicts in the implementation of the tool in light of social, political and economic dynamics that take place at the local level, although unexpected by the creators of the tool.*

### INTRODUCTION

By the year 2030, Africa's urban population is expected to comprise half of its total population (UN-Habitat, 2010)<sup>1</sup>. This projection poses a major challenge to urban planners in the continent. In addition to that, many scholars point out the

weaknesses of urban planning and management in the region, such as planning systems dating from the colonial period, inadequate building standards, a shortage of trained planners, etc. (Silva, 2012). This literature frequently leads to urge for innovative models and tools of urban planning (Augustinus & Deininger, 2006; Kessides, 2006;

DOI: 10.4018/978-1-4666-9814-7.ch044

UN-Habitat 2011). Hence, a “policy-fix genre” (Pieterse, 2009, p. 3) has been developed in the academic literature dealing with urban Africa; it focuses on innovations, but is rarely moderated by an analysis of past experiences.

The ongoing research<sup>2</sup> presented in this article tackles the issue differently; it questions the appropriation of existing urban planning and management tools in Sub-Saharan Africa, through the case study of a land information system (or simplified cadastre) in Benin. This research starts from the idea that it is crucial to thoroughly understand the actual use of existing tools before reinventing them. In other words, this research is interested in urban planning and management practices on the ground. Thus, an original approach is adopted: an ethnographic exploration of the implementation of a land information system is conducted to understand its performance.

This article presents preliminary research results, resulting from a first fieldwork conducted in fall 2012. It is structured as follows: the first section presents the historical context of the design of land information systems. It shows how the design of land information systems was embedded in beliefs dating from the 1980s, namely the urban management paradigm and unwarranted confidence in new technologies that were supported by international development agencies. The second section presents the theoretical framework and the methodology of the research. The third section describes the multiple case-study: the implementation of a land information system called the Urban Land Registry in three municipalities in Benin. The fourth section discusses the results of this ethnographic inquiry. These are, essentially, the interpretation of the paradoxes, blockages, and conflicts in the implementation of the tool in light of social, political, and economic dynamics that take place at the local level, although unexpected by the creators of the tool. The article ends with a conclusion that highlights the limits of technology in urban planning and management practices.

## **LAND INFORMATION SYSTEMS IN THE 1980S: CONTEXT AND PROBLEMS**

Land information systems, also called simplified cadastre in the 1980s, can be defined as a parcel-based database combined with software and procedures designed to collect, update, and process data (Dale & McLaughlin, 1989; Durand-Lasserve, 1993; UN-Habitat, 1990). They were designed in the 1980s as part of a broad paradigm shift in international development policies, from subsidized urban policies to institutional reforms, and from conventional planning tools (master plan, etc.) to management tools derived from the private sector.

### **From Infrastructure Provision to Urban Management**

Sub-Saharan African cities have long been ignored by international aid agencies that were historically involved in rural development and agriculture. The World Bank played a leading role in the urban sector starting from its first urban project launched in 1972 in Senegal and throughout the 1970s. This first generation of urban projects in the 1970s focused on the enhancement of the physical environment of poor neighborhoods; it proved to be disappointing and failed to entail overall poverty alleviation.

At the beginning of the 1980s, an important theory renewal emerged from the lessons learned in the previous decade, around the concept of urban management. Urban management reforms represent a dramatic shift in the urban strategy of the World Bank regarding several aspects (Osmont, 1995; Stren, 1991). Urban projects from the earlier period focused on the local scale (neighborhood), and the few successes actually resulted in improvement pockets. Then, the idea to treat the city as a whole emerged at that time to connect urban productivity to macroeconomic development. Moreover, the reforms suggested

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