

## Meeting the Challenges of Land and Property Administration in Developing Countries

Christopher Barlow

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A significant gap separates countries making the leap from *developing* to *developed* economic growth. Singapore, Korea, Taiwan, and Japan—which the World Bank referred to in the 1990s as *miracles of development*—have successfully crossed this chasm.

Hernando de Soto, a Peruvian economist best known for his book *The Mystery of Capital* (2003), has built a career based on the notion that the chasm that separates countries is attributable to the formalization of land and property rights. He makes a very clear case that in too many developing countries, people are essentially excluded from formalizing their land and property rights and, consequently, a black market exists outside of the formal economy. According to de Soto, this results in *dead capital* that cannot be taxed, capitalized, or protected through the rule of law.

This dead capital notion can be viewed through the lens of how much revenue a government generates as a percentage of GDP (Gross Domestic Product) from property tax. According to statistics gathered by the Lincoln Land Institute (De Cesare 2010) and further analyzed for this article, OECD

(Organisation for Economic Co-operation and Development) member nations, a collection of developed plus middle-income countries such as Mexico and Colombia, generate on average 2.12 percent of GDP from property taxes. In comparison, developing nations on average generate 0.6 percent of GDP from property taxes.

John Norregaard, from the International Monetary Fund, analyzed the potential growth in GDP should countries focus efforts on property tax modernization (Norregaard 2013). He estimated a 2 percent growth in GDP in 5–10 years for developed countries and a 0.5–1.0 percent growth in GDP for developing countries. These estimated growth rates all depend on solid land and tax administration, which, as Norregaard correctly points out, is a major obstacle to modernization, almost as great as the need for political leadership and will.

A clear linkage exists between a government achieving for its people and communities self-sustainable and self-managed revenue sources and operating the institutions and technology that generate and process those revenues.

In general, valuation information and data are underappreciated, particularly in a developing world context. International development organizations that fund land administration or property tax modernization efforts seem to pay little attention to methods and capabilities for improving how land, property, and resources are valued. There seems to be a prescribed linear notion that without land rights recording and registration, effective valuation and property tax systems cannot be implemented.

People knowledgeable in land rights issues like James Kavanagh, Director of the Royal Institute of Chartered Surveyors (RICS) Land Group, are advancing the notion that valuing nonregistered lands has much merit and benefit and serves to strengthen land tenure security. Together with Plimmer, Kavanagh recently published an article on this very topic. They write,

*Regardless of the nature of the tenure, what is of major economic, environmental and social importance is the ability of land occupiers or owners to be able to use their land rights to improve their livelihoods and living standards. In order to take advantage of many of the opportunities to use land to improve livelihoods and living standards, it is contended that the ability to ascribe a monetary value to the individual bundle of rights, restrictions and responsibilities which may be held as collateral or traded in a market is of paramount importance.* (Kavanagh and Plimmer 2015, 14)

*Where markets are emerging, inefficient, fragmented, or poorly supported by government institutions (which might gather, record and make available transactional details), the lack of data availability may be a major hindrance to the valuation process.* (Kavanagh and Plimmer 2015, 17)

It was with this backdrop and based on experience in supporting government partners in both developed and developing countries that Thomson Reuters asked the international consulting firm KPMG to examine the benefits of a modernization project undertaken by the Valuations Department of the City of Cape Town, South Africa. The department had implemented the valuation module of the Thomson Reuters Aumentum software system in 2009.

KPMG developed an analytical model to demonstrate the benefits and gains of this modernization effort not only at

the department level but also at the government and societal levels. In addition, the firm conducted a review to determine how the government as a whole and also different citizens and stakeholders were benefiting from more accurate and timely valuation information, supported by what Kavanagh and Plimmer identify as government institutions enhancing data availability and data credibility (KPMG 2015).

As a result of this study, it became apparent to Thomson Reuters that a better model is needed in order to achieve greater insight into the long-term, sustained, and scalable benefits of these modernization efforts. It is also what Richard Almy, in his formidable work, *A Global Compendium and Meta-Analysis of Property Tax Systems* (Almy 2013), refers to as “a little studied topic”: the effectiveness and costs of valuation systems. Almy prescribes strategies “for economizing on valuation,” strategies that were reviewed later in light of this KPMG study.

### The Three S’s

The three S’s of the design of a land information or property tax system project are *sustainability*, *security*, and *scalability*. And there are two bases of the three S’s. The first is the operational, and the second is the technical; they are interrelated and interdependent. As an example, consider sustainability. Too often international projects are funded only through the completion of the implementation phase; they lack a decentralized funding model so that institutional capacity building can be sustained (operational basis) or the underlining system (the technical basis)—the engine to churn revenues—can be supported and upgraded. Decentralization of revenue collection and use is one strategy that Almy recommends, because it generates higher levels of taxation.

Table 1 offers some guiding questions related to the three S’s. It is through this prism that Thomson Reuters asked KPMG to examine Cape Town’s valuation modernization efforts.

### Results of Cape Town Study

In 2009, the Valuations Department of the City of Cape Town identified areas that could be improved through a modernization project. The time required to perform general valuations had to be reduced while upgrading calculation methods. This would require increasing staff efficiency and thereby reducing

**Table 1.** Guiding questions for the three S’s

Basis	Sustainability	Security	Scalability
Operational	Is training available to ensure long-term capacity development and skill transfer for staff?	Does the modernization effort improve the fairness and equitability of the processes?	Does the solution integrate with other government bodies, such as the courts and the treasury?
Technical	Can the system streamline processes for meeting the expected long-term demand for government services?	Are protections in place to thwart hackers and viruses?	Can the system adapt to new technologies, such as mobile, GPS, maps and imagery?

the cost of valuations. In addition, the number of objections to property valuations had to be lowered. This would require the Valuations Department to better communicate the appeals and valuation processes to the public. In summary, the Valuations Department had three goals:

1. An increase in productivity and efficiency
2. Improvement in transparency and accountability
3. An increase in accuracy.

All of these mirror Almy's prescribed strategies to "economize on valuation" (Almy 2013).

To achieve these goals, the City of Cape Town implemented the valuation module of the Thomson Reuters Aumentum software system. This module includes records management, workflow tools, imagery integration, reporting, and audit trail functions.

The KPMG study investigated the benefits of the valuation module for Cape Town at three levels: department, city, and societal. KPMG applied a Theory of Change impact analysis for this investigation, defined in the report as

*... the process of assessing the consequences/impacts that are likely to flow from a specific course of action. The focus is on the impacts that alter the manner in which people live, work, and relate to one another.* (KMPG 2015, 8)

Table 1 in the KPMG report, which cannot be reproduced here because of space limitations, summarized the impacts in terms of the three areas of improvement (listed above) cross-referenced to the department, city, and societal levels. The study also reviewed in depth how the technical features and functions (the technical basis for this project) supported the benefits.

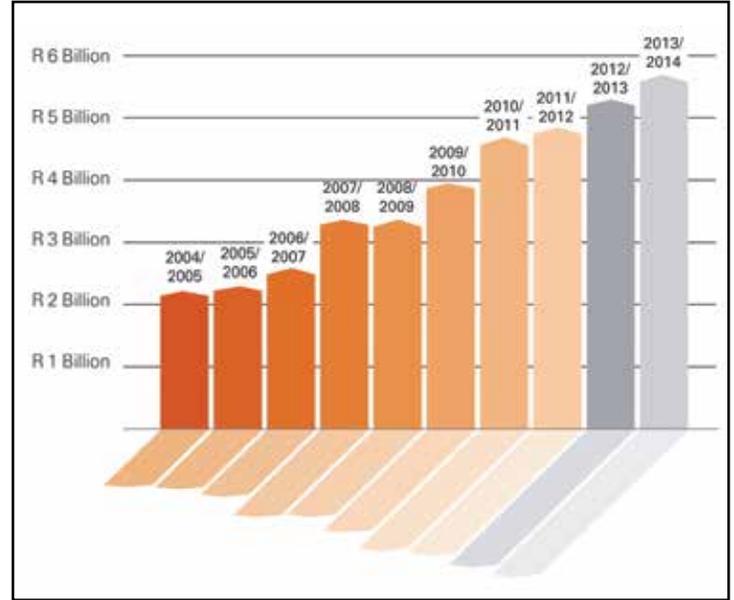
The following sections describe some related and important benefits in relation to the operational basis of the three S's (sustainability, scalability, and security).

### Sustainability

The modernization project served to reduce the cost of general valuation, increase staff productivity, add more property taxes to the tax roll, and reduce the number of citizens' objections.

According to the KPMG report, from 2000 to 2014, the city logged a 61 percent increase in the number of properties on the tax roll. From fiscal year 2008–2009 to fiscal year 2013–2014, government revenue from property taxes increased 71 percent, or US\$187 million, for the city (see figure 1). Granted, this revenue gain cannot be attributed solely to the increase in the number of properties on the tax roll; other factors contributed, such as inflation and rising property values. Nevertheless, the impact of the system is substantial.

**Figure 1.** Revenue from property taxes in Cape Town from 2004–2014



In terms of Almy's statement about better understanding the costs of valuation, the Cape Town modernization was designed to simultaneously reduce costs and enhance revenue generation. The mathematics here are straightforward. From 2000 to 2009, general valuation costs were reduced by Rand 94 million (US\$ 7.7 million) with the introduction of improved methods, processes, and technology. When the increase in tax revenues from 2008–2009 is added, the return of investment from the cost savings and revenue increase versus the system cost was about US\$97 to US\$1. In other words, for each dollar invested in the system, the city had a return of US\$97. Again, not all of the cost savings, nor all of the revenue increase, can be attributed to the technology. This needs to be considered in light of the city's entire modernization effort, inclusive of legislative changes. Nevertheless, there is substantial "economized value."

### Scalability

Improved data accuracy and accessibility led to greater reliance on the valuation roll to verify the authoritative ownership status. Scaling this system for greater use by more stakeholders, such as through web access, and having trust and confidence in this authoritative information source have spread the use of these data across government.

As an example, the information is now being used to verify seller information, a check against fraudulent land sales. This is an acute problem across Africa and many other developing nations with very large black markets for land and property sales (also an historical reason why land title insurance is so prevalent in the United States). The valuation roll, which identifies those responsible for paying taxes, is a check against

dubious land and property sales; it serves to dissuade these nefarious practices.

An area KPMG identified, despite the fact that government property valuation is a fairly new subject for them, was the sheer volume of data captured and maintained by the department. As an example, the city's Transportation Department has been using the valuation roll to create new bus routes because the values of homes in specific townships are important in determining demand for bus services. These data are being *scaled* by the city to better connect low-income townships with transportation to central business districts. Cape Town is a smart city that recognizes that urbanization requires getting people closer to their jobs.

KPMG found that the valuation roll is a seeming treasure trove of data waiting to be unlocked to aid the municipality in planning. Future analytical applications could include extrapolating information on predicted future government revenues to support areas with either increasing or decreasing home values, or conducting planning scenarios based on the impact of a rising or falling tax revenue base and the ability of the government to deliver services or infrastructure projects based on those changes.

### Security

This area of the report offers the most interesting and telling results because of how the modernization effort supports the *security* of land tenure for citizens. It describes the impact of the overall government effort to value properties to generate tax revenue and encourage more active participation. It also supports what Kavanagh and Plimmer identified as the need for government institutions to *secure* confidence and transparency in the market. They write,

*The development of a vibrant property market in which land rights are freely (although not without cost) traded is vital if valuers are to be able to produce the kind of "valuations" which twenty-first-century communities' need for to generate economic activities and achieve social development.* (Kavanagh and Plimmer 2015, 13)

The KPMG study described how Cape Town's modernization effort has stimulated more people to join the formal system. The Cape Town Municipal High Court bases estate values and estate decisions on this information. First, the court can authenticate the ownership rights from the valuation roll. Second, the court can query the value when presiding over final inheritance estate decisions. This security is hugely important for people. Parents want to be assured that their family or next of kin will receive their property and land; that their rights are well recorded by the courts; and that these rights have an authoritative rather than arbitrary value assigned for the property.

In addition, the KPMG report identified a correlation between bank lending rates and the use of government valuation data to support lending decisions based on collateral—as a source to confirm and identify land ownership rights associated with the value of an individual's collateral assets.

Another interesting finding was that Cape Town has initiated an incentive program to support people whose incomes fall below a certain threshold by offering them free water management and water leak services. Since 2003, the city has added 18 percent more households for this service, in total supporting 238,000 households.

The city designed a program to instill trust and belief that the processes and systems are fair and equitable. The incentive is provided before instituting taxation—instilling an understanding at the micro household level that individuals benefit personally as a part of the formal system.

The African Tax Institute summarized this point effectively in a report on page 11 of this issue titled, "How Property Tax Would Benefit Africa,"

*The future of African national and municipal governments will depend on institutions and tax policy that are equitable, improve local service delivery and encourage compliance through establishing a social contract between taxpayers and the state. Property tax is one of the more effective means of realizing these goals.* (Monkham and Moore 2015, 13)

### Validity and Future Applicability of this Study

This study, to better model the benefits of a property tax modernization effort, was not undertaken for the sole purpose of looking at a singular case. Rather, Thomson Reuters commissioned the study to add to the professional body of knowledge and to promote the design, funding, planning, and support of modernization efforts. The KPMG approach can be applied to other governments, especially in light of the three S framework.

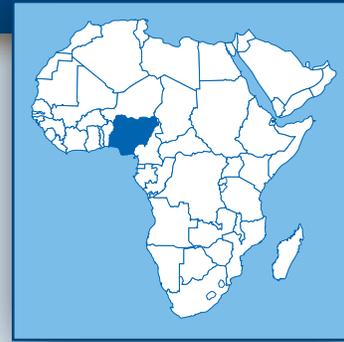
The following practical applications that KPMG identified for Cape Town can be altered for other jurisdictions:

- The *sustained* effectiveness, relevance, and efficiency of a valuation system is measurable.
- Future interventions can be refined to *scale*, for example, with knowledge-sharing among government departments for more efficient government-wide planning.
- A valuation department's understanding of the system and its contribution to improving *security* (i.e., land security, market trust, or formalization) can be enhanced.

*(continued on page 8)*

## Nigeria's Role in Codifying Governance and Improving Transparency

Christopher Barlow



In October 2014, H.E. Ngozi Okonjo-Iweala, the Minister of Finance for Nigeria, participated in a discussion co-hosted by Thomson Reuters and the Atlantic Council's Africa Center in Washington, D.C. The conversation with the minister focused primarily on the need for Nigeria to promote more inclusive and sustainable economic growth and social prosperity, and on real estate market development and land administration modernization in Nigeria.

The minister posed a rhetorical question, "Can you imagine a country of Nigeria's size that doesn't have a mortgage system?" She had just that year launched a new mortgage finance corporation and was promoting the new system in Washington, D.C.

Nigeria is the largest economy in Africa and home to some 197 million people. However, 97 percent of the land in the country lacks documented or recorded land rights. Okonjo-Iweala noted in her remarks that there exists an unmet demand for 17 million household units. She estimated that for each new house built, five to six jobs will be created in Nigeria.

The real estate and housing sectors represent less than 3 percent of GDP (Gross Domestic Product) in Nigeria. And statistics from property tax revenue as a percentage of GDP are not available even through sites such as the World Bank—that's how negligible the collection rate is.

Okonjo-Iweala noted that land as an asset has yet to be monetized in Nigeria and emphasized that land reform needs to be completed in a methodical manner. "It gives small holders an asset to take to the bank." She said, "This is particularly important for farmers as they may use the land as collateral to improve the productive capacity of their lands by, for example, obtaining a loan to invest in improved irrigation."

This message from Nigeria—that land, property, and real estate reform is needed to unlock substantial and sustained economic gains—is a story heard in many countries around the world today. Formalization of land rights is a pressing problem. U.N. Habitat estimates that 70 percent of the land in the developing world has no documented, recorded, or mapped land rights. This poses very acute problems in a myriad of ways, particularly in establishing effective, fair, and efficient property tax systems.

It's difficult to tax lands and property if the government does not know who owns the land, where it's located, or what the value of that land is.

Writing in the *Financial Times* in 2013, Okonjo-Iweala stressed that while the development community has placed emphasis on strengthening institutions and transparent systems, the need to institute customs, rules, and procedures is imperative because the function of government then becomes codified and leaders are held to these governance standards. She writes, "Building these systems and processes tends to be long, arduous, and unglamorous. It does not produce the instant headlines that politicians crave nor does it yield the immediate results that donor agencies like to see in their progress reports." However, she adds, "Today, technology provides us with opportunities to rapidly solve some of these challenges."

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The good news from Nigeria is that those "opportunities" are being pursued and at multiple levels of government, including by the states there. Since 2011, Thomson Reuters has supported two governments, Cross River state and Plateau state, in their implementation of digital land registry and cadastre systems. The most telling of results so far has been the dramatic spike in demands from citizens to register their lands.

Okonjo-Iweala cited the good work of Cross River state. She added, "Home ownership gives you a stake in society," she said. "It puts a roof over your head. It gives you an asset. It makes you feel you have accomplished something. This is a common wish that everyone has." The desire to own land and have their rights protected is unalienable among peoples of the world.

Nigeria still has much progress to make, but it is exactly this type of government leader who understands the value and appreciates the connection to inclusive economic growth that is needed in the world today. ■

Imagine a scenario in which the benefits from the departmental, government, and societal levels could be compared. Consider how this body of knowledge would be enhanced by adding counties in the United States, national European agencies, or provinces in Latin America. By understanding and projecting the gains across these levels, support at the highest levels of government for property tax and land administration modernization efforts can be galvanized. The political will to modernize is paramount to enacting progress.

Authoritative valuation data to support not only land tenure but also economic and social prosperity is a fairly untapped rich and deep vein; it has great possible worth across the development board for those working on governance issues, whether in a developing or developed country context.

Finally, the following are the “Top 10” ways more authoritative valuation information supports economic and social prosperity:

1. It provides evidence of land tenure security for people.
2. The information is a check against fraudulent land sales, because the valuation roll is a reference point for individuals’ responsibility to pay tax.
3. The information confirms collateral assets, which are important in receiving credit.
4. It supports courts in the arbitration of land disputes or in estate rulings.
5. Land and property, and the economic value from land resources (such as agriculture crops), may be insured, based on the value of the resource.
6. It creates a clear picture of the land base for a jurisdiction: how much land there is, who has what rights, and how much the land is worth.
7. The data aid in planning and policy making by allowing for highly targeted government services and infrastructure spending.
8. Compensation for compulsory acquisition or for eminent domain claims is more fairly and equitably decided, including other tenure forms such as customary rights.
9. Transparency is improved on disclosing the derived value of other land resources, such as timber, minerals, or agriculture commodity types, including biodiversity.
10. This information is needed to establish a taxable rate and tax roll to implement a fair and equitable property tax system.

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The full KPMG report is available at: <https://tax.thomsonreuters.com/resources/kpmg-study>