



Responsible Land Governance: Towards an Evidence Based Approach

ANNUAL WORLD BANK CONFERENCE ON LAND AND POVERTY
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BETTER LAND MANAGEMENT IN BOTSWANA THROUGH AN INTEGRATED ELECTRONIC LAND MANAGEMENT SYSTEM

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Abstract

The Government of Botswana has a long-term commitment to improving land management administration. This commitment involves making land management more customer-oriented, efficient, effective, and supporting the long-term socio-economic development of the country. They recognize the importance of having strong land management policies and practices for tribal, state and free-hold lands and they have a commitment to “achieve a good Land Administration System.” As part of their commitment, they are implementing an integrated electronic Land Information System (“LIS”). LIS will address Botswana's needs both now and in the future. This paper will explicate the multi-faceted and silo-oriented processes of land management currently utilized within Botswana. It will be suggested that this computerized system will help to centralize and consolidate land management processes for Botswana while allowing new land management processes to be established at scale. It will further be suggested that despite numerous proposed benefits such as on-line registration of lots, electronic land title transfers and simpler allocation of lots to citizens, the success of the LIS is contingent upon a local commitment. The result will be a fit-for-purpose LIS that is critical to the long-term development of the country through the implementation of efficient and scalable land management processes.

Key Words: Botswana; efficiency; land information system; land management administration



Introduction

The Government of Botswana has a long-term commitment to improving land management administration. This commitment involves making land management more customer-oriented, and efficient, effective and support the long-term socio-economic development of the country. The government recognizes the importance of having strong land management policies and practices for its tribal, state and free-hold lands and they have a long-term commitment to “achieve a good Land Administration System” that will:

- Guarantee ownership and security of tenure
- Provide security for credit
- Provide a lot to every eligible citizen of Botswana
- Support land and property taxation
- Develop and monitor land markets
- Reduce land disputes and appeals
- Facilitate land reform
- Improve urban planning and infrastructure development
- Support environmentally sustainable practices
- Produce statistical data for analysis and decision making

To further its commitment to good Land Administration, the Government of Botswana is in the process of implementing an integrated electronic Land Information System (“LIS”). When implemented this LIS will address the country's needs in the short term, but will also have the capacity to grow as new land management policies and procedures are established in the future. The LIS will result in better harmonization, standardization and integration of reliable, cost effective and transparent land management processes in Botswana across the many government agencies involved with land management, and will improve the service delivery to the public.

This paper will explicate the multi-faceted and silo-oriented processes of land management



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currently utilized within Botswana. Through the design and implementation of the LIS, this computerized system will help centralize and consolidate land management processes for the country while allowing new land management processes to be established at scale. Despite numerous proposed benefits such as on-line registration of lots, electronic land title transfers and simpler allocation of lots to citizens, the success of this LIS is partly contingent upon local commitment at all levels of government and hands-on-work within Botswana. The result, as will be articulated here, will be a fit-for-purpose LIS that is believed to be critical to the long-term development of the country through the implementation of efficient and scalable land management processes.

Land management in Botswana: Historically and today

Before Botswana's independence in 1966, there were three land tenure types, consisting of Tribal reserves, Freehold land and Crown land. Tribal reserves were lands that at the time belonged to the eight major Tswana tribes. White settlers had acquired land in Botswana and such land was allocated as Freehold land. The remaining land became Crown land. After independence, the tribal reserves were renamed Tribal lands, Crown land became State land and Freehold land remained Freehold land.

Today, these three types of land tenures are still in existence within Botswana. Tribal land can be understood as land, which is owned by the State but it is administered by statutory Land Boards created by the Tribal Land Act that operates under customary and common law. The rights to land are allocated through two different types of certificates. Customary Land Grants, which are allocated pursuant to Customary Law and Common Law Leases, which are allocated under Common Law. Every citizen of Botswana is entitled to a free plot of Tribal land. Whereas once Tribal Land was primarily rural in nature, now urban areas are encroaching on Tribal lands. Moreover, State Land can be understood as land that is owned by the State and is administered under the State Land Act by the Ministry of Land Management, Water, and Sanitations Services. It exists in both rural and urban areas. State land is distributed to individuals and organizations for residential, commercial and industrial purposes in urban areas, whereas in rural areas, State land is distributed for establishment of national parks, game



reserves and forestry reserves. State land has been allocated through a Certificate of Rights, which is convenient for the urban poor, because of its low-cost. Now however, the primary means of allocation of state land is the Fixed Period State Grant. Finally, Freehold lands can be understood as as fee simple properties. The government stopped allocation of Freehold lands in 1978 and the current policy is to acquire such lands when they come on the market and convert them to Tribal or State lands. Approximately 73% of the land in Botswana is currently Tribal land, 23% is State land and 4% is Freehold land.

The management of land in Botswana, prior to the initiation of the LIS, spanned numerous and varying governmental organizations. This resulted in multi-faceted and silo-oriented processes of land management as each organization worked independently and little information sharing occurred. For example, Botswana leads the way in Africa for the distribution and registration of land rights to all segments of society through the localized Tribal Land Boards and changes in policy have made it easier for individuals to pledge their given land to secure a loan. However, hundreds of thousands of plots have been issued grants of customary rights, but none of the owners can pledge the land they have been allocated to secure a loan from a formal credit source. This is because grants of customary rights cannot be registered in the Deeds Registry at present due in large part to cumbersome paper-based documentation processes, the legal framework, and a limited number of locations where applications to the Deeds Registry can only be made in person (or at the cost of employing a conveyancer acting pursuant to a power of attorney). A Land Information System must permit the majority of users to obtain registration of their lands in the Deeds Registry without ensuring these burdens. Of further concern is the fact that grants of customary land use are registered at individual locations and there is no current ability for any one, including the government, to access those records without visiting the Land Board in person. This inability to efficiently access land information of all sorts is the current state of affairs for all government bodies that deal with land within Botswana. The information is there, but you have to visit the office, which maintains that information in person. There is no one repository for all land information that can be accessed electronically.

The Government of Botswana recognizes that effective land management and land



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administration is vital for the social well-being and long term economic development of the country and is committed to improving land management administration. It is believed that a quality land administration system is required that will in part: support land and property taxation; develop and monitor land markets; reduce land disputes; and improve urban planning and infrastructure development. Despite a strong focus on improving land management policies and practices, there are a number of challenges that may hinder the government's commitment to and attainment of quality land administration, including:

- Three tenure systems are currently implemented through different legislation, processes and procedures (i.e., Freehold, State Land and Tribal Land) leading to non-standardization and harmonization of land administration processes
- Customer satisfaction levels are not at acceptable levels and need to be improved
- Delays in the land administration processes are long
- Centralized reporting is difficult
- Training of staff
- Lack of coordination
- The absence of a Land Information Technology organization

A centralized and computerized LIS was one of the tools that was recommended to assist the government in improving and resolving a number of the recent land administration issues. It was believed that such a system would result in better harmonization, standardization and integration of land management processes. It was further suggested that this LIS would need to provide effective, easy to use, on-line allocation and registration of plots, title transfers and management, delivery of land management information to a broad range of users, and survey/cadastral land management services. The underlying goal was to drastically improve land administration services for the citizens of Botswana.

For the implementation and long term maintenance of such an LIS, the establishment, strengthening and consolidation of IT support systems in the country and the development of an organizational structure specific for land administration was required. A Land Information



Center was thus established to: manage the way forward; manage the LIS software and its administration; and, develop land management policies and direction. This organization has a focused mandate to administer and improve land management processes throughout Botswana and has been given the funding and accountability to achieve their mandate.

The development and implementation of the LIS

The development and implementation of the LIS required the collaboration of the responsible Botswana governmental ministries with a strategic partner from Sweden, Lantmäteriet, The Swedish Mapping, Cadastral and Land Registration authority, and a software development company from Canada, ENKON Information Systems. These partners have to-date been instrumental in the development and implementation of the system and will continue to be involved with the operation and maintenance of the system for the near future. They have provided the leadership and capacity building that is required for the long term success of the LIS including support and training in areas such as land management policy, change management, IT, test and quality assurance, software design and architecture, user training, security, database administration and data management. This has included capacity building in Sweden and in Canada and evaluations of the systems that are in place in these countries for land management. The information garnered through these evaluations is applicable to software development and land management administration within Botswana broadly.

Moreover, the parties have formed a strong team with clearly defined roles. ENKON is the experienced system provider (taking responsibility for the development of the system and understanding local context in Botswana). Lantmäteriet is the experienced advisor and cooperating partner for many years (focusing mainly on assisting with training and quality assurance at all levels) and the Ministry of Land Management, Water and Sanitation Services in Botswana being very determined to be successful and has been heading the implementation of this comprehensive change throughout the government while involving the important stakeholders. Together the parties have identified and addressed capacity gaps and the capacity building is ongoing to ensure the services asked for now and in the future can be provided. The parties have also worked to ensure that the local commitment is strong.



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The initial roll-out of the LIS focused on streamlining seven major areas of land management administration. These areas were:

- Deeds Registry
- Plot and Plan Registry
- Land Applications
- Land Transactions
- Leases
- Physical Plan Register
- Map Module

Within this initial roll-out and the subsequent implementation, importance was placed on integrating the LIS with the many other government systems such as the tax, national identity, and financial systems. This integration assists in the wide delivery of land information and LIS users will have the ability to tap into that information source for whatever legitimate government purpose is required, such as taxation. To achieve this requirement, the LIS includes a software framework that allows seamless integration of the LIS to other government systems using the newest Internet technologies, to take advantage of the vast storage of information in these government repositories. Some of the advantages that are realized from integration include:

- Reinforcing anticorruption policies
- Enhancing detection of unlawful activities
- Producing statistical data for better decision making
- Easier sharing of land information between agencies
- Improvement in data quality and accuracy of information across departments
- Minimizing duplicated work and increased benefits to society from existing information

Together these advantages further allow new land management processes to be established at scale.



Challenges

While the design and implementation of the LIS has to-date helped the Government of Botswana achieve its commitment to establishing new land management processes, there were and are many associated challenges. These challenges include ensuring that: governmental staff are committed to the changes necessary; there is a sufficient budget to implement and sustain the project; the involved parties fully understand each other and appreciate their differences; changes to existing legislation are made to facilitate the turning of paper processes into electronic ones; and information entered into the system is accurate, definitive and unimpeachable. Such challenges have and will continue to be overcome with continual dialogue between all parties involved with the design and implementation of the LIS as policies and practices related to land management are continually refined within Botswana.

The most challenging aspect of the project has been the administration of legacy data. Historical land rights such as Title Deeds and Tribal Land Certificates existed only in hard copy formats at the start of the project. This information needed to be converted into an electronic form suitable for uploading into the LIS in a highly accurate and efficient manner. This presented challenges with allocating already stressed resources in the various government departments and the Land Boards and Sub-Land Boards who manage Tribal Land. This was overcome by establishing well-defined procedures that could be replicated easily through these organizations and in addition using the help of contracted resources.

The challenge related to the parties understanding each other and establishing a fruitful working relationship was overcome through an agile approach to the development, open minds and focusing on achieving sustainable results for the good of Botswana. It has been important to allow time, discussions and openness to understand each other, for the non-Botswana parties to fully understand the local context and for Botswana to appreciate how efficient, structured and modern system development is done in a suitable way. For example the quality assurance support has been focused on improvements, capacity building and advice rather than pointing fingers and looking for mistakes. The commitment, understanding and support from top management of the parties has been a factor for success and all parties have learned from each



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other during the project. As for the agile approach it has been important to take step by step, allow changes and learning as the system evolves. Of course mistakes has been done but since the focus has been to achieve the expected results each mistake has been a step towards knowing more, improving and being successful. Trying to be too strict on specifications, deadlines and details would have made the project virtually impossible.

Benefits

The challenges associated with the design and implementations of the LIS are, however, drastically outweighed by its numerous benefits. These benefits include: the ability to easily search all land management information across Botswana; data and information relating to land can be shared instantly between different governmental agencies; unlawful activity such as possessing more than one allocated land plot can be investigated quickly and cheaply; and the LIS could be funded under a user pay system to ensure that it has sufficient funding to operate efficiently in the future. The central benefits of the LIS can be understood as better harmonization, standardization and integration of reliable, cost effective and transparent land management processes across the various governmental agencies involved with land management. For example, the LIS will provide effective, and easy to use, on-line registration of lots, electronic land title transfers, simpler allocation of lots to its citizens, better dispute and claim management, an efficient registration of survey plans and incorporation of many other land processes related to administration and registration of Tribal Lands. It will also provide a mechanism for delivery of land management information to a broad range of users including mapping and cadastral information through a simple web interface. Such benefits of the LIS would, however, be largely unattainable without local commitment at all levels and the hands-on-work of government ministries and other stakeholders as alluded to within the above conversation concerning challenges.



Conclusion

The Government of Botswana has a long-term commitment to improving land management administration and is dedicated to the attainment of " a good Land Administration System." As part of their commitment, they are implementing a LIS, which will centralize and consolidate land management processes for the country while allowing new land management processes to be established at scale. Currently, the administration of land management within Botswana can be understood as multi-faceted and silo-oriented with numerous governmental organizations providing land management services with little to no communication with one another. The LIS will thus change how land management is addressed within the country as a whole through a streamlined "fit for purpose" computerized system that will cater to the country's needs now and in the future.

Despite readily apparent challenges such as the administration of legacy data that needed to be converted into an electronic format, implementation of the LIS will benefit Botswana greatly when completed. The economic and social benefits of the system will be numerous and such a system is essential to provide the level of land tenure security that foreign investors are looking for when investing in Botswana. The efficiency gains in land administration will also result in a much more responsive system to the general public and land practitioner, which will reduce wait times for land process delivery and better utilize scarce resources. The integration of the LIS with other government systems will provide a new level of information sharing that in the past has not been practical or even possible in achieving.

This is all made possible through the unique cooperation between the three parties: Botswana Ministry of Land Management, Water, and Sanitation Services; Lantmäteriet, the Swedish Mapping, Cadastral and Land Registration authority, and the development company from Canada, ENKON Information Systems. Using an agile approach, allowing changes and understanding the local context has together with the openness, understanding and support from top management created a solid basis for successful development. All parties are fully committed to make this implementation successful and working all for the good of Botswana.