



# Interrogating Land Administration Procedures and Systems Implementation in Africa: Evidence from Botswana

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## ABSTRACT

To ensure proper administration of land in Botswana, the Government of Botswana adopted Land Administration Procedures Capacity and Systems (LAPCAS). With this system, all land in the country must be registered using digital means. Despite this unique effort to improve land administration, the implementation of the policy has faced various challenges. This research explored the challenges in the implementation of LAPCAS to propose alternative ways that the Ministry of Lands and Water Affairs (MLWA) could adopt to improve the situation. This study adopted a systematic literature review approach for data collection and analysis. Although LAPCAS generated some positive impacts, it has experienced more challenges than anticipated. Challenges, including loopholes and delays, resource constraints and poor coordination, characterised the implementation of LAPCAS. These challenges have hampered the government's overall efforts to address concerns associated with the ownership and control of land in the country. Consequently, the researchers have called for the development of a new land administration framework that is anchored on the core issues inherent in the Framework for Effective Land Administration (FELA). The tenets of the FELA have been identified as critical to developing a better alternative land administration framework that the MLWA can employ to deal with challenges in the implementation of LAPCAS in Botswana. This research helps to expand the existing literature on policy actions, programmes and frameworks for effective land administration, especially in the context of Botswana.

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## INTRODUCTION

Land is an essential resource for the development of every nation. Land resources are particularly critical to the economic activities of all societies. Thus, efforts to improve land management have become crucial to the development of nations' land use to ensure sustainable use of land resources.<sup>1</sup> Bejtja and Bejtja contended that land administration has become indispensable because land is a vital primary input to

<sup>1</sup> Kingsford Gyasi Amakye and Mawusi Y Ameyibor, "Understanding the Challenges and Nature of Land Administration in the Tamale Metropolis, Northern Region, Ghana," *Ghana Journal of Science, Technology and Development* 8, no. 2 (2022): 44–59.

production in economic theory.<sup>2</sup> Indeed, the obvious indispensability of land to the development of nations is further strengthened by the fact that more than half of a country's capital wealth is traced to land resources.<sup>3</sup> Proper land administration facilitates the sustainable use of land for various reasons, including agricultural, commercial, and residential purposes.<sup>4</sup>

In its quest to improve the traditional approach to land management in Botswana, the government of Botswana adopted the Land Administration and Management Project in 2009. This study was conducted to confirm the provisions of the Botswana National Land Survey and the United Nations Committee of Experts on Global and Geospatial Information Management.<sup>5</sup> Under this arrangement, all land in Botswana was supposed to be registered using digital means, thus eliminating the manual system of land registration. Again, the system integrated all the ministries, agencies, and departments in charge of land administration in Botswana, such as the Ministry of Lands and Water Affairs, Land Boards, Department of Town and Country Planning, Department of Surveys and Mapping, Department of Lands, and the Deeds Registry Department. Despite these efforts to improve land administration through this approach, the implementation of this policy faces numerous challenges. This study seeks to address the challenges associated with the implementation of land administration procedures in Botswana. The management of land has transformed significantly, resulting in the establishment of land boards. Developments of new systems like LAPCAS that was introduced as an information technology tool to advance service delivery.<sup>6</sup>

In the views of Collin and Bornegrim, land administration must be given top priority in any nation's development to improve societal welfare.<sup>7</sup> Land security is particularly crucial for people in terms of social, economic, and environmental factors. Therefore, land administration is essential to society's ability to function, and people get frustrated and unfairly treated in the absence of order. A strong land administration system, according to the United Nations Economic Commission for Europe, will also support land and property taxation, ensure ownership and security of tenure, offer credit security, lessen land disputes, ease land reform, enhance urban planning and infrastructure development, and support environmental management.<sup>8</sup> A well-designed land administration system will ensure tenure stability and ownership.

According to Kampamba et al., land management and land administration are two interrelated concepts that mostly depend on information to provide services.<sup>9</sup> The purpose of this article is to highlight the advantages of having an accurate and up-to-date land information system. Good land management allows for efficient management of both land and land information. Since 2009, Botswana's government has been working to enhance its land administration processes, systems, and capacity to ensure that every piece of land on the tribal territory is registered. The primary goal of this project is to survey tribal plots in accordance with cadastral standards so that they can be recorded at the Deeds Registry.<sup>10</sup>

The rationale behind LAPCAS is to ensure prosperous social and economic development for Botswana's population through transparent, efficient, and effective land management. To achieve the project goal, Kampamba et al. stated that LAPCAS had to be divided into seven components or sub-projects. The development of national standards for unique identifiers of land parcels and location addresses; improvement of land administration processes; and computerisation of the deeds register.<sup>11</sup> The

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<sup>2</sup> Saida Bejtja and Dritan Bejtja, "Private Property Issues on Eastern Europe in Restitution and Compensation Problems," *Academic Journal of Interdisciplinary Studies* 3, no. 1 (2014): 271.

<sup>3</sup> Bejtja and Bejtja, "Private Property Issues on Eastern Europe in Restitution and Compensation Problems."

<sup>4</sup> Linn Collin and Lina Bornegrim, "Administration of Tribal Land in Botswana," 2010; Dinao E.Tjia and Serena Coetzee, "Towards a Profile of the Land Administration Domain Model (LADM) for South Africa," in *Proceedings of Global Geospatial Conference*, 2012, 14–17.

<sup>5</sup> UN-GGIM, "Framework for Effective Land Administration: A Reference for Developing, Reforming, Renewing, Strengthening or Modernizing Land Administration and Management Systems" (United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), 2019).

<sup>6</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>7</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>8</sup> United Nations. Economic Commission for Europe, *Economic Commission for Europe, & Nations Unies. Commission Économique Pour l'Europe. Land Administration Guidelines: With Special Reference to Countries in Transition*, vol. 96 (United Nations Publications, 1996).

<sup>9</sup> Johnson Kampamba et al., "Land Governance in Botswana," in *Land Governance in Southern Africa Symposium*, 2019.

<sup>10</sup> Kampamba et al., "Land Governance in Botswana."

<sup>11</sup> Kampamba et al., "Land Governance in Botswana."

remaining areas are systematic adjudication and registration of tribal (customary) land; improvement of information technology operations and maintenance; facilitated exchange and dissemination of information; and building of capacity.

The project addresses various important land governance issues, including technical and legal concerns, management, administration, financial control, and human resources. It is anticipated that each of the seven previously listed components will be delivered to achieve the project's goals. The LAPCAS project is a good initiative in that some results are already generating positive impacts on the passage of Botswana land administration, and other positive impacts will show over time. However, not every element of this project has gone according to the original schedule. Issues remain regarding insufficient implementation capability and the requirement for a more significant shift in perspective. Additional difficulties in performing this project include the typically deficient Information and Communication Technology (ICT) infrastructure, as well as the project implementers' inaction, change resistance, and low stakeholder commitment.<sup>12</sup>

The Land Boards lack sophisticated computer systems to maintain records, and the type of technology needed for the project is too challenging to administer given the current circumstances. Note that the primary challenge facing the Ministry of Lands and Water Affairs is the lack of comprehensive regulations regarding the administration of tribal land. Additionally, each Land Board determines its own land issues and management strategies frequently without the need for policies. The inability of many rural properties in Botswana to serve as collateral for loans is a barrier to development; therefore, the successful completion of the LAPCAS project will serve as a basis for addressing these issues.<sup>13</sup>

This study is driven by the need to promote effective land administration procedures and systems for sustainable socioeconomic development in Africa. The researchers agree with the notion that problems associated with land administration pose a threat to the development of any nation.<sup>14</sup> However, these problems cannot be addressed without an adequate understanding of the existing land administration procedures and systems in the continent. The researchers further posit that there is inadequate interrogation of existing land administration procedures and systems in Africa, a situation that could undermine efforts to attain SDG 16. It is again the conviction of the researchers that a thorough examination of the existing land administration procedures and systems can help in proposing alternative measures. Specifically, the study relies on the LAPCAS project in Botswana to investigate the implementation of land administration procedures and systems in Africa with the aim of offering measures to improve the existing situation.

## METHODOLOGY

Denzin and Lincoln,<sup>15</sup> as cited in Ospina, asserted that qualitative research involves an interpretive and naturalistic approach, that is, researchers study things in their natural settings and attempt to make sense of or interpret phenomena in terms of the meanings people bring to them.<sup>16</sup> This exercise espoused the qualitative approach to information gathering and results analysis.

This study adopted a systematic literature review by comparing already published studies given their capacity as a method to summarise current knowledge in a specified domain by selecting papers that satisfy the set criteria.<sup>17</sup> The structure of the review was based on guidelines that aimed to ensure that the retrieved information best addressed the research question and reflected the phenomena under investigation with the highest accuracy. The search was refined according to the inclusion criteria to restrict the retrieved studies to those that could respond to the aims of this literature review.<sup>18</sup> A systematic literature review was chosen given its capacity as a method to summarise the current topic knowledge by selecting articles even though literature examining the challenges in the implementation of land administration procedures, capacity and systems in Botswana has received relatively little attention.

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<sup>12</sup> B. Malatsi and A. Finnstrom, "Reformation of Land Administration in Botswana," *FIG Working Week*, May 2011.

<sup>13</sup> Kampamba et al., "Land Governance in Botswana."

<sup>14</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>15</sup> Denzin K. Norman and Yvonna S Lincoln, *The Sage Handbook of Qualitative Research* (Chicago: SAGE Publications, 2017).

<sup>16</sup> Sonia Ospina, "Article Qualitative Research," *Encyclopedia of Leadership*, 2004, 1–13.

<sup>17</sup> Jenny Watts and Noelle Robertson, "Burnout in University Teaching Staff: A Systematic Literature Review," *Educational Research* 53, no. 1 (2011): 33–50.

<sup>18</sup> Watts and Robertson, "Burnout in University Teaching Staff: A Systematic Literature Review."

### **Inclusion and Exclusion Criteria**

Hornberger and Rangu stated that inclusion and exclusion criteria often establish the parameters for who is eligible to participate in the study; if an item passes the screening and fulfils all the requirements, it must be included.<sup>19</sup> For this study, articles were searched and retrieved, some of which passed the initial screening of titles and were reviewed to determine whether they met the inclusion criteria or not. Studies are further assessed at this point in the selection process to ensure that each satisfies all inclusion requirements and none of the exclusion criteria.<sup>20</sup> The literature search was performed using the Google search engine, and based on screening, unrelated articles for this study were excluded. There were documents or publications on Google Scholar citing land administration, capacity, and systems in Botswana; however, the problems with these documents were that most of them had the same or similar information regarding issues of land administration, while others depicted information on challenges of topics not relevant to the study. After excluding unrelated articles, the remaining articles were reviewed, and information was extracted and used to assess the information about the interest of the study (see Table 1).

**Table 1: Inclusion and Exclusion Criteria**

<b>Criteria</b>	<b>Inclusion</b>	<b>Exclusion</b>
Date	Studies conducted between 1985 and 2022	Sources of publications before 1985
Topic	Sources of challenges in the implementation of land administration procedures, capacity and systems	Sources and publications not related to the topic or studies not relevant to the topic: -Duplications/repetitive publications -Conference Proceedings
Location	International literature written in English	-Sources not in English language -Articles not available
Publications	Primarily qualitative research	Studies that used quantitative data or quantitative analysis

All sources published before 1985, publications not related to the study, duplicate articles, articles not in English, conference proceedings, and articles not available together with those that used quantitative methods were excluded from the literature review.

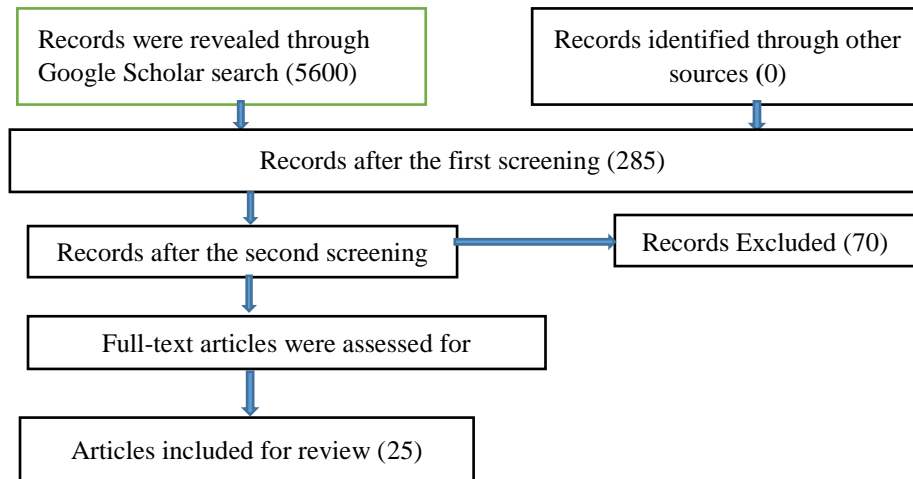
### **Data Extraction Tools**

Data extraction is the process of organising and standardising important study characteristics from the information found in reports and journal articles. It is essential to determine the likelihood of bias in individual studies and synthesise their results.<sup>21</sup> To analyse the literature and determine the frequency of difficulties in implementing land administration protocols, capabilities, and systems, a data extraction method was employed. The primary objective of the literature review was to determine the current awareness of the advantages of having relevant and reliable land administration procedures, systems, and capacity in Botswana. This assessment was intended to provide a strong synopsis of the degree of implementation by land management and management employees and to acknowledge causative factors; therefore, it was significant to analyse the conceptualisation of benefits advocated by the included articles. As indicated above databases, Rayyan software was used for the systematic selection and screening of literature, whereas charts (both bar and pie charts) were developed using Microsoft Excel software. Figure 1 shows the data extraction tool used to evaluate the literature.

<sup>19</sup> Brianna Hornberger and Sneha Rangu, “Designing Inclusion and Exclusion Criteria,” *University of Pennsylvania ScholarlyCommons*, 2020, 3–13.

<sup>20</sup> Timothy Meline, “Selecting Studies for Systemic Review: Inclusion and Exclusion Criteria,” *Contemporary Issues in Communication Science and Disorders* 33, no. Spring (2006): 21–27.

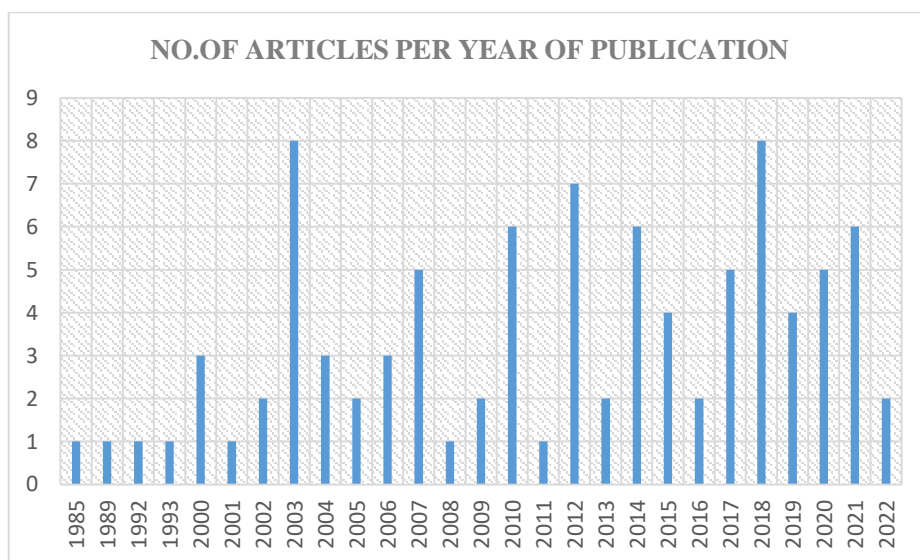
<sup>21</sup> Lena Schmidt et al., “Data Extraction Methods for Systematic Review (Semi) Automation: A Living Systematic Review,” 2021.



**Figure 1: A data extraction tool used to evaluate the literature**  
 Source: Authors' construct (2023)

**Sample Selection**

Purposive sampling was used in this research because it provided the researcher with strong theoretical reasons for selecting cases to include in their samples. With purposive sampling, according to Etikan et al., the researcher determines what information is necessary to have and then searches for sources who, because of their expertise or experience, can and will supply it.<sup>22</sup> The Google Scholar website was used to access international, African, and Botswana-published documents. Google Scholar revealed 5600 search results on challenges in the implementation of land administrative procedures, capacity, and systems in Botswana. They were then screened out of 285 articles. Ten (10) pages from the search were sampled for further selection comprising 95 (95) articles to be reviewed, in which the study selected publications covering the period from 1985 to 2022, as depicted in Figure 2.



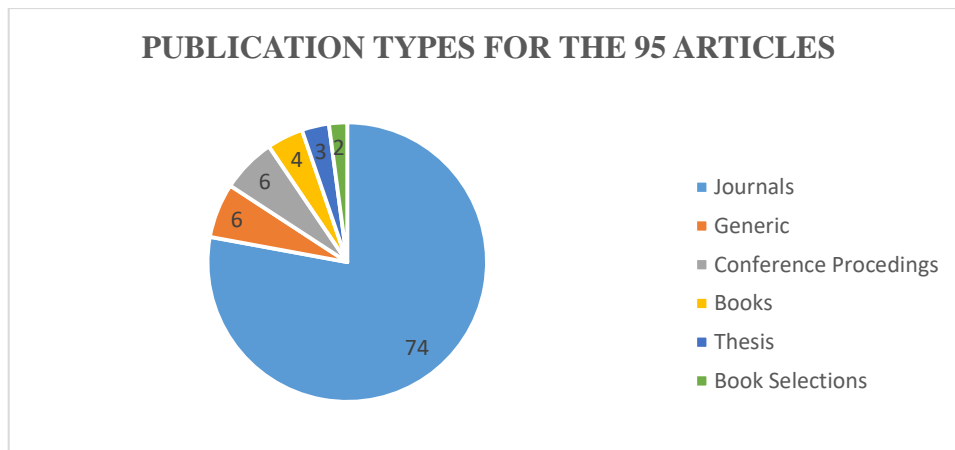
**Figure 2: Number of articles per year published**  
 Source: Authors' construct (2023)

**Search Results**

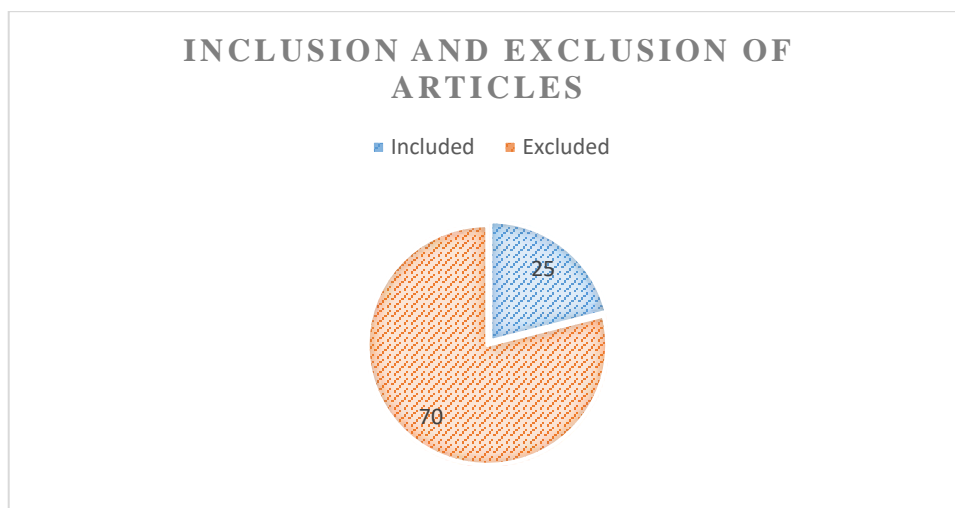
The electronic search revealed a total of five thousand six hundred (5,600) articles in the literature search, and their titles were screened to determine whether they met the inclusion criteria or not. Titles were

<sup>22</sup> Ilker Etikan, Sulaiman Abubakar Musa, and Rukayya Sunusi Alkassim, "Comparison of Convenience Sampling and Purposive Sampling," *American Journal of Theoretical and Applied Statistics* 5, no. 1 (2016): 1-4.

reviewed, and duplicates were mostly not relevant. Non-English language articles were excluded. Summaries of the outstanding 285 (285) papers were checked for relevance through the first screening, which led to ninety-five (95) articles remaining for the second screening (see Figure 3). A stringent inclusion criterion was exercised on the 95 articles, after which 25 (25) articles were retrieved in full. This means that seventy (70) articles were excluded for different specific reasons, as previously discussed, using the data extraction tool, leaving 25 relevant articles for review (see Figure 4). Expanding the inclusion criteria is necessary to produce more articles because of the small amount of studies observed and the requirement for rigorous examination of the relevant literature.



**Figure 3: Pie chart showing the 95 article categories revealed after first screening of 285 articles**  
 Source: Authors' construct (2023)



**Figure 4: Number of included articles and excluded from the literature review**  
 Source: Authors' construct (2023)

## PRESENTATION AND DISCUSSION OF RESULTS

This section discusses the findings of the study, which are in line with the research goal. The findings are presented and discussed on the basis of specific themes emerging from the review.

## Benefits of having relevant and reliable land administration procedure capacity and systems in Botswana

The benefits of having relevant and reliable LAPCAS in Botswana since independence are as follows:

### Land Administration Procedures

According to Enemark et al., land administration is a multidisciplinary, cross-sector field with technical, legal, managerial, political, economic, and institutional components. Effective land administration can be implemented nationally to create advantages that outweigh current shortcomings.<sup>23</sup> A nation should be able to handle all aspects of land administration, including land tenure, land valuation, land usage, and land development, with a comprehensive legal and regulatory framework.<sup>24</sup> Decision makers in natural resource management can benefit from improved quality land administration data, such as combining land tenure information on public and private land, offering thorough information on property rights, and aligning the boundaries of land tenure and land use planning datasets.<sup>25</sup> According to Subedi, land administration is essential for ensuring the security of land tenure.<sup>26</sup> The goal of land policy is to achieve national political objectives, which may include social fairness, economic growth, sustainable housing, sustainable agriculture, and the eradication of poverty. Land administration is a set of instruments that helps to operationalise these goals. The government benefits from the creation of land administration systems and tenure security because they promote economic development by raising production and, to some extent, generating more income. As shown in Figure 3, land administration promotes economic development through two channels, tenure security and service delivery.<sup>27</sup>

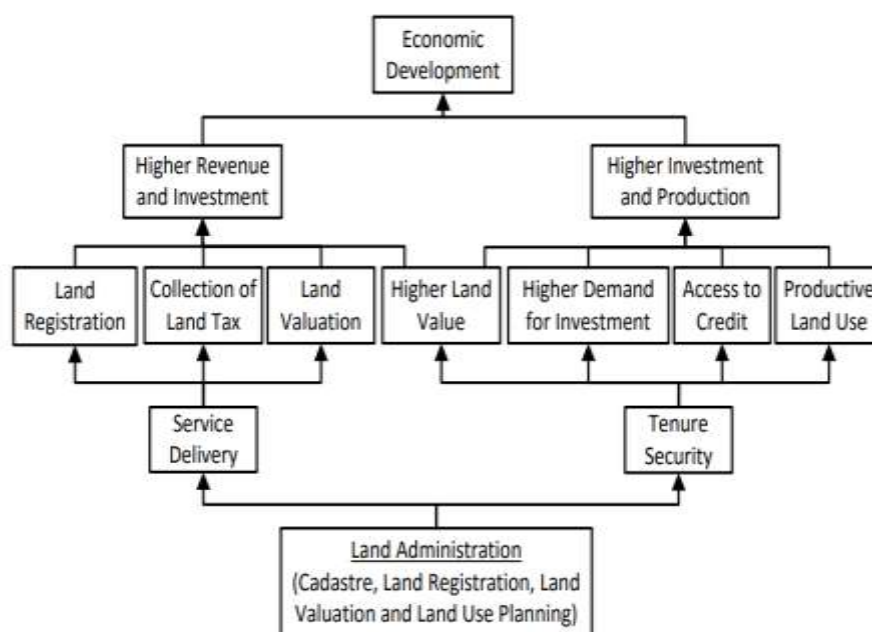


Figure 5: Conceptual framework in relation to land Administration and economic development.<sup>28</sup>

### Capacity

Enemark and Williamson assert that capacity building is widely acknowledged as a notion intimately associated with education and training and is seen as a crucial element of land management programmes. They recommended that capacity building should be viewed as a core component of any initiative to create

<sup>23</sup> Stig Enemark, Robin McLaren, and C H J Lemmen, "Fit-for-Purpose Land Administration: Guiding Principles for Country Implementation," 2016.

<sup>24</sup> Enemark, McLaren, and Lemmen, "Fit-for-Purpose Land Administration: Guiding Principles for Country Implementation."

<sup>25</sup> D. Mitchell, R. Grenfell, and K. C. Bell, "Investigating the Benefits of Land Administration Information to Natural Resource Management," 2004, [https://www.fig.net/resources/proceedings/fig\\_proceedings/athens/papers/ts05/ts05\\_6\\_mitchell\\_et\\_al.pdf](https://www.fig.net/resources/proceedings/fig_proceedings/athens/papers/ts05/ts05_6_mitchell_et_al.pdf).

<sup>26</sup> G. P. Subedi, "Land Administration and Its Impact on Economic Development" (University of Reading, 2016).

<sup>27</sup> Subedi, "Land Administration and Its Impact on Economic Development."

<sup>28</sup> Subedi, "Land Administration and Its Impact on Economic Development."

land administration infrastructure rather than an add-on, as is frequently the case.<sup>29</sup> It should be highlighted that capacity is a continuous process rather than a static state; it guarantees that human resources and how they are used are essential to capacity development; and it necessitates that capacity development strategies take into account the broader context in which organisations carry out their operations.<sup>30</sup> It can be concluded that the capacity-building concept offers guidance for analysing and assessing capacity needs and for identifying an adequate response to these needs at societal, organisational and individual levels.<sup>31</sup>

## Systems

Numerous initiatives to modernise land administration in Botswana by introducing electronic systems for the management of land and related information have been undertaken since the 1990s. Some of these systems being LYNSYS, BLIS, SLIMS, TLIMS, and SDI, were fruitless, and in 2009, there was the introduction of LAPCAS.<sup>32</sup> Raboloko mentioned that the main causes of failures in these electronic systems were lack of internet connectivity, poorly trained project teams, poor project management, and implementation and system documentation.<sup>33</sup>

On their part, Enemark et al. opined that well-functioning land administration systems benefit society in many ways, including by promoting the rule of law and governance, reducing poverty, ensuring tenure security, bolstering formal land markets, providing credit security, promoting land and property taxes, safeguarding state lands, resolving land disputes, and enhancing the planning and execution of land use. These structures make it possible to perform land policy in a way that advances social and political goals and promotes sustainable development.<sup>34</sup> A strategy to create land administration systems facilitates and supports the provision of some essential data needed to track the progress of Sustainable Development Goals.<sup>35</sup> The authors went on to say that the primary goals of land administration systems are typically recognised as ensuring everyone has the security of tenure, but they can also facilitate investments and credit, facilitate land and property valuation and taxation, support land development, plan and regulate the use of land and natural resources, and provide land information to aid in land policy decision-making.<sup>36</sup>

### ***Attainment of seven components of land administration procedures' capacity and systems***

According to Land and Malatsi, LAPCAS is a successful initiative that has advanced and accomplished many of its initial goals.<sup>37</sup> For example, it clarified certain previously unclear legal character prerequisites, not least the registration of land rights on tribal land. It is anticipated that more outcomes will soon enhance the Ministry of Lands and Water Affairs' service delivery. Furthermore, evaluating some of the remaining findings may take years or even decades because the effects may manifest themselves in people's attitudes and behaviours rather than in hard data.<sup>38</sup> The authors also emphasise that improvements must be introduced by people and that growth of this kind cannot occur if people are unwilling or unable to do so. Therefore, it is unknown how significant the impact of the LAPCAS capacity-building project will be.

Due to the size of the LAPCAS project, not all of the goals of the original plans have been achieved because of several challenges. Notable obstacles include poor ICT organisation, insufficient implementation capability, and the requirement for a more significant shift in perspective. When it comes to data collection, there are issues with the results because the information gathered was not updated

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<sup>29</sup> Stig Enemark and Ian Williamson, "Capacity Building in Land Administration—A Conceptual Approach," *Survey Review* 37, no. 294 (2004): 639–50.

<sup>30</sup> Enemark and Williamson, "Capacity Building in Land Administration—A Conceptual Approach."

<sup>31</sup> Stig Enemark, "Supporting Capacity Development for Sustainable Land Administration Infrastructures," in *Report of the Eighth United Nations Regional Cartographic Conference for the Americas* (United Nations, 2005).

<sup>32</sup> Kampamba et al., "Land Governance in Botswana."

<sup>33</sup> K. Raboloko, "Public Perceptions of Botswana's Improvement of Land Administration Procedures, Capacity and Systems Project (LAPCAS): The Role of Marketing and Publicity Initiatives In Raising Public Awareness and Their Service Quality Effect" (Botho University, 2019).

<sup>34</sup> Enemark, McLaren, and Lemmen, "Fit-for-Purpose Land Administration: Guiding Principles for Country Implementation."

<sup>35</sup> Enemark, McLaren, and Lemmen, "Fit-for-Purpose Land Administration: Guiding Principles for Country Implementation."

<sup>36</sup> Enemark, McLaren, and Lemmen, "Fit-for-Purpose Land Administration: Guiding Principles for Country Implementation."

<sup>37</sup> K. Land and B. Bareng Malatsi, "Improving Land Governance in Botswana – Achievements and Lessons Learned," 2015, <https://docplayer.net/178279042-Improving-land-governance-in-botswana-achievements-and-lessons-learned.html>.

<sup>38</sup> Land and Bareng Malatsi, "Improving Land Governance in Botswana – Achievements and Lessons Learned."

appropriately and was kept following modifications. The technological support systems are somewhat too complex and do not meet the bandwidth and data storage requirements of the present. Nonetheless, human variables also play a role, such as an inadequate sense of duty and occasionally a lack of necessary capacity.<sup>39</sup> LAPCAS was a five-year project in which Lute emphasised the fact that it had to be understood as a foundation for the socioeconomic development of the country through electronic service delivery, linked to e-government and divided into seven components as discussed below.<sup>40</sup> This discussion also shows the status of each component mostly towards the end or after the laps of five years.

### National systems for unique reference of land parcels and location addresses

The aim of Component 1, as Malatsi and Finnstrom indicated, was a developed and implemented standardised system for the numbering of all land parcels (plots) across all land tenures.<sup>41</sup> A unique plot-numbering system was proposed, developed, and not implemented well. It has also been revealed by Statistics Botswana (2021) that there is a challenge with this component because there are always delays in getting spatial data from the LAPCAS project, data obtained from the LAPCAS project are incomplete and have gaps. Additionally, the Department of Surveys and Mapping has not received data from land boards for the surveyed plots. Online Editors revealed that there were gaps in the surveying process, as shown on the graph below, between plots surveyed and approved plots surveyed per a Land Board with an average of 34.57% approved survey and referred to as LAPCAS on the brink of failure (see Figure 4).<sup>42</sup>

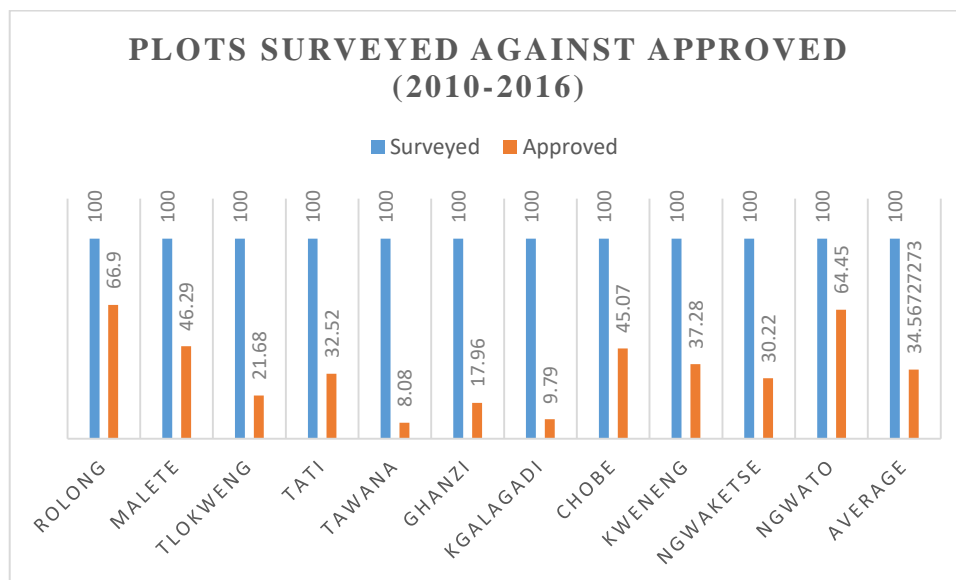


Figure 6: Graph illustrating the performance of Land Boards survey progress from 2010 to 2016

### Improvement of land administration processes

The aim of Component 2, as alluded to in Malatsi and Finnstrom, was to map the then-existing procedures, manual as well as digital developments, and suggest legal and organisational changes that were found essential for the enhancement of land administration in Botswana, as many of the processes in land administration were no longer serving the needs of society.<sup>43</sup>

Malatsi and Finnstrom indicated the project’s achievement as follows: Botswana’s land administration plan was created through the standardisation of seven (7) stages, with ongoing efforts to improve the overall land delivery process; The Ministry of Lands and Water Affairs is now consulting on a proposal

<sup>39</sup> Land and Bareng Malatsi, “Improving Land Governance in Botswana – Achievements and Lessons Learned.”

<sup>40</sup> A. Lute, “LAPCAS Damning Verdict Is out. Weekend Post,” March 21, 2021, <https://www.weekendpost.co.bw/22529/news/lapcas-damning-verdict-is-out/>.

<sup>41</sup> Malatsi and Finnstrom, “Reformation of Land Administration in Botswana.”

<sup>42</sup> Online Editors, “LAPCAS on Brink of Failure,” Sunday Standard. , July 17, 2017, <https://www.sundaystandard.info/lapcas-on-brink-of-failure/>.

<sup>43</sup> Malatsi and Finnstrom, “Reformation of Land Administration in Botswana.”

for an efficient organisational structure. The process of harmonising land laws is also ongoing, with planned revisions. The issue encountered here was that rather than cooperating to accomplish the ministry's aims and objectives, the many organisations and activities under it did not function as a single unit.<sup>44</sup>

### **Deeds Register Computerisation**

Component 3's goal was to computerise the Deeds Registry's information and procedures.<sup>45</sup> Many consumers of internal and external information are interested in the land rights found in the Deeds Registry, which is one of the most significant pieces of information in society. A study on the Deeds Registry has been completed and scanning of the Deeds Registry records is ongoing, which will eventually lead to the computerisation of the Deeds Registry records.<sup>46</sup> (Malatsi and Finnstrom (2013) reported that on-the-job training is happening, hardware and software for scanning documents are in place, and information on deed documents has been recorded.<sup>47</sup>

### **Systematic Adjudication of Tribal Lands**

Component 4's objective is to design procedures within the limitations of existing legislation. People who have enough proof will have their rights examined, mapped out, and decided.<sup>48</sup> The land disputes will be settled through a methodical adjudication process, and all rights will be documented on maps, registers, or databases. Malatsi and Finnstrom noted that one significant issue was that landowners were failing to come forward to assert their rights and that occupants did not seem to be concerned about the absence of certificates for the plots of land they were using.<sup>49</sup> However, research is still being conducted to determine whether mandatory land registration is possible in the future.

### **Development of ICT Procedures and Organisation**

According to Malatsi and Finnstrom, Component 5's objective is to outline the requirements for ICT competency and, in collaboration with the affected departments, provide an appropriate organisation for ICT-related activities within the Ministry as well as for overseeing present and future computer systems. They added that possibilities to grow the IT sector internally or through outsourcing have been looked into and assessed and that a draft ICT strategy plan is available that recommends, among other things, creating an ICT department within the Ministry. This unit oversees software acquisition, virus control, system integration, upgrades, and maintenance. It would also ensure that ministry systems are operational at all times.<sup>50</sup> An ICT organisational proposal has been created and is currently being implemented.<sup>51</sup>

### **Exchange and Dissemination of Land Administration Data**

Establishing information interchange and distribution of information or spatial data infrastructure to internal and external users is the goal of Component 6.<sup>52</sup> Efficient land administration systems require a national spatial data infrastructure (NSDI). Component 5 is considered essential to the NSDI; thus, work on this component has been delayed. Malatsi and Finnstrom listed the following achievements: a metadata server is operational; a metadata catalogue has been created; a land hub plan has been prepared and is in the implementation stages.<sup>53</sup>

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<sup>44</sup> B. Malatsi and A. Finnstrom, "Progress Reformation of Land Administration in Botswana," *FIG Working Week*, May 2013.

<sup>45</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>46</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>47</sup> Malatsi and Finnstrom, "Progress Reformation of Land Administration in Botswana."

<sup>48</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>49</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>50</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>51</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>52</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>53</sup> Malatsi and Finnstrom, "Progress Reformation of Land Administration in Botswana."

### **Capacity Building: Training and Study Trips**

There have been many successes with Component 7, which addresses the capacity-building needs shared by all components.<sup>54</sup> The authors note that institutions such as Lantmäteriet, the University of Botswana, and the University of Gävle have provided support for several short-term courses. The University of Botswana and the Ministry of Education have benefited from this training. Long-term land management certificates, diplomas, and degree programmes are currently in place.<sup>55</sup>

### ***Challenges impeding the success of Land Administration Procedure Capacity and Systems in Botswana***

Malatsi and Finnstrom attested that a project of this magnitude is not without its challenges, and the challenges encountered usually run across all policy stages, that is, from the design stage to the implementation stage and across the monitoring and evaluation stages.<sup>56</sup> Collin and Bornegrim observed that the main problem that impedes the success of LAPCAS in Botswana is the lack of an overall regulation of how to administer tribal land.<sup>57</sup> Every Land Board decides on its own land in its areas of jurisdiction and how to manage it. Kampamba et al. argued that LAPCAS could have been the solution to the problems that the Botswana land administration system has been facing; however, the process to implement it took a long time and consequently not actualised, and the land information was available but remains disjointed and inaccessible by the public.<sup>58</sup>

Collin and Bornegrim demonstrated through discussions with Land Board employees and within the LAPCAS project that there were no proper and advanced computer systems for record keeping and that the kinds of systems that the land boards require is too difficult to manage due to existing conditions.<sup>59</sup> Even if an advanced data system is introduced, this would mean that the system will not have the technical prerequisites to operate properly. This means that one of the challenges that hampers efficient and effective land administration in Botswana is inadequate skills in various fields among the staff of the Ministry of Lands and Water Affairs and Land Board members, leading to poor service delivery.<sup>60</sup>

On the other hand, Makhumalo revealed that record management was not getting enough support from Land Board management, and the findings have shown that Land Board management does not give records financial support, mainly because of the budget constraints encountered.<sup>61</sup> The current situation in land Boards requires management to give records a priority for the success of the LAPCAS project.

Online Editors revealed that the LAPCAS results were negatively worse than expected. There were faults in LAPCAS' land registration component and loopholes in the project framework.<sup>62</sup> It was also found that the decision by the Ministry of Lands and Water Affairs to engage unqualified land surveyors contributed to the challenges experienced in this project. Again, the problem of inadequate skilled personnel led to the project's failure because there were some deadlines and targets that were missed.<sup>63</sup> There was also the problem of poor project coordination, and with the realisation that the project was failing, leadership decided to transfer the land registration exercise to individual land boards. The Board also experienced the problem of poor project coordination.

Another problem encountered was the low public awareness. Many citizens were not aware of LAPCAS, its policy intentions, and its core components. Furthermore, low stakeholder participation derailed the success of the project. Indeed, several postponements to LAPCAS completion and failure to meet project deadlines were caused by failure to stimulate public awareness of the project through appropriate engagement and publicity initiatives.<sup>64</sup> Other problems in project implementation include

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<sup>54</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>55</sup> Malatsi and Finnstrom, "Progress Reformation of Land Administration in Botswana."

<sup>56</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>57</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>58</sup> Kampamba et al., "Land Governance in Botswana."

<sup>59</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>60</sup> African Development Bank, "Review of Land Tenure Policy, Institutional and Administrative Systems of Botswana – Case Study," 2016, [https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfDB\\_BotswanaLandReport\\_FA.pdf](https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfDB_BotswanaLandReport_FA.pdf).

<sup>61</sup> T. L. Makhumalo, "Management of Land Records: A Survey of Land Boards in Botswana," accessed April 15, 2023, <https://www.nyaraka.go.tz/uploads/documents/sw-1640863700-Tshoganetso Makhumalo.pdf>.

<sup>62</sup> Online Editors, "LAPCAS on Brink of Failure."

<sup>63</sup> Online Editors, "LAPCAS on Brink of Failure."

<sup>64</sup> Raboloko, "Public Perceptions of Botswana's Improvement of Land Administration Procedures, Capacity and Systems Project (LAPCAS): The Role of Marketing and Publicity Initiatives In Raising Public Awareness and Their Service Quality Effect."

inertia, change resistance, low level of commitment from some stakeholders, and weak country-wide ICT infrastructure.<sup>65</sup> Additionally, there are existing problems relating to plot registration, an overall regulation of the administration of tribal land, no proper registers over the allocated land parcels, and a lack of evidence establishing rights that impede the success of LAPCAS. There are concerns regarding determining who the legal holder of a right is, as well as knowing the parcel's boundaries and location on the ground. These problems are of major concern not only for proper land administration but also for Botswana's overall development and welfare.<sup>66</sup> These challenges have impeded the success of the LAPCAS project in the country and have prompted calls for measures to improve the situation.

### ***Development of Alternative Frameworks***

This section argued for the need to develop alternative frameworks to improve land administration systems in Botswana and identified the critical factors to consider. To begin with, land administration is essential to society's ability to function, and in the absence of order in this area, individuals get frustrated and unfairly treated. For people, land security is crucial in terms of social, economic, and environmental factors. Thus, it is thought that for any nation to advance towards greater welfare, the problem of land administration needs to be given top importance.<sup>67</sup> According to Subedi, the theory of land administration places a strong emphasis on how well-designed land management components, such as the land policy framework, land information infrastructure, and land administration functions, help achieve sustainable development goals, which include social, economic, and environmental development that support each nation's institutional structure.<sup>68</sup> By connecting or integrating all economic units and sectors, a well-coordinated framework that integrates e-governance is suggested as a formula for good land governance.<sup>69</sup>

Based on the review of the LAPCAS project, the researchers believe that there is a need for the Ministry of Lands and Water Affairs to consider the Framework for Effective Land Administration (FELA) as an alternative or substitute for land administration in order to properly administer land administration in the country. According to UN-GGIM (2019), the FELA is considered a reliable framework for creating, updating, improving, fortifying, or modernising land administration and management systems. Among other initiatives, the FELA supports Sustainable Development Goals and execute the Integrated Geospatial Information Framework for the land sector.<sup>70</sup>

To achieve the objective of the FELA framework, nine requirements are essential for an effective land administration and management system.<sup>71</sup> There are three main aspects of the framework: goals, requirements, and pathways. Each goal is accompanied by clear requirements and pathways. Effective land administration systems must be informed by certain critical requirements. These requirements underscore the pathways through which sustainable land administration can be achieved. There are nine main pathways. First, effective land administration and management systems require proper governance and institutions. It is believed that no effective land administration and management system frameworks can be achieved if no clearly defined governance structures and institutions are properly mandated to oversee the implementation of the framework.

Second, effective land administration and management systems depend on policy and legal systems. Policies and legal systems will help institutions and agencies responsible for land administration ensure the just and equitable administration of land. Third, where there are no adequate funds to execute decisions and programmes of stakeholders in charge of land administration, difficulties will arise in the promotion of effective land administration and management systems. Consequently, the financial capacity of institutions and agencies responsible for effective land administration and management systems is critical to the success of land administration. Fourth, proper land administration is data-driven. Data on land rights, ownership, and control are essential for successful land administration. Where there are no

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<sup>65</sup> Malatsi and Finnstrom, "Reformation of Land Administration in Botswana."

<sup>66</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>67</sup> Collin and Bornegrim, "Administration of Tribal Land in Botswana."

<sup>68</sup> Subedi, "Land Administration and Its Impact on Economic Development ."

<sup>69</sup> Kampamba et al., "Land Governance in Botswana."

<sup>70</sup> UN-GGIM, "Framework for Effective Land Administration: A Reference for Developing, Reforming, Renewing, Strengthening or Modernizing Land Administration and Management Systems."

<sup>71</sup> UN-GGIM, "Framework for Effective Land Administration: A Reference for Developing, Reforming, Renewing, Strengthening or Modernizing Land Administration and Management Systems."

reliable data on family, tribal, and state lands, effective land administration and management systems can become a mirage. Other critical ingredients of effective land administration and management systems are innovation, standards, partnerships, capacity, education, communication, and engagement (see Table 2). These requirements must be considered before, during, and after project implementation.

**Table 2: Framework for Implementing Effective Land Administration Goals, Requirements, and Pathways**

FELA Goals	FELA Requirement	FELA Pathway
Transparency and accountability Increased	Accountable and transparent Governance	Governance, Institutions, and Accountability
Gender responsiveness and inclusiveness of vulnerable groups	Inclusive and recognises all forms of tension	Policy and legal aspects
Affordable investments and economic returns are assured	Affordable and sustainable business models	Financial
Reliable data and service quality	Data are maintained, secure, and not duplicated	Data
Responsible and innovation-oriented	Upgradable systems and approaches	Innovation
Supported interoperability and integration	Considers internationally agreed Standards	Standards
Cooperation, partnerships, and participation	Capacity, capability, knowledge transfer and exchange	Partnerships
National engagement and communication enhance	Strengthen partnerships and support collaboration	Capacity and Education
Facilitates capacity development and knowledge transfer	Advocates for land administration and management	Advocacy and Awareness

Source: (UN-GGIM, 2019)

**Key Observations**

A review of the literature on LAPCAS implementation in Botswana revealed various challenges that impede transparency, accountability, reliability, ease of use, collaboration, cooperation, and leadership. This seems to have weakened the success of the project. Thus, an alternative framework that is anchored on a holistic approach to digital transformation is needed to promote land administration in the country. Indeed, concerns about the poor incorporation of key land administration stakeholders, including landowners, into the LAPCAS project compounded the obvious failure of the project. There are concerns about policy goals and how they are linked to national development goals.

**RECOMMENDATIONS**

Based on the review, it can be contended that clear land administration policy goals should be linked to broader government policy goals in addition to the adoption of customer-focused strategies rather than process-based strategies to increase public awareness of land administration policies and procedures. Furthermore, enhancing land administration in Botswana requires the government to focus on developing relevant legislation, improved organisational structures, better financial mechanisms, and technical issues that are closely interconnected to promote transparency and accountability in land administration, coupled with efforts to promote digitalisation in the land sector.

However, this study contends that achieving the above requires urgent review of the LAPCAS project, taking into account the core tenets of the FELA framework. This position is based on the apparent problems and challenges associated with the LAPCAS project. Botswana’s achievement of effective land administration as described above depends on proper revision of the LAPCAS to ensure that it reflects clearly defined governance structures and institutions properly mandated to oversee the implementation of the framework. The new framework should include clear policy and legal systems to ensure just and equitable land administration. Inherent to the new framework is adequate funding for institutions and

agencies responsible for land administration and management systems to deal with possible cases of inertia in policy implementation, in addition to reliable data on land rights, ownership, and control. Innovative measures through digitalisation, clearly defined success standards, partnerships, and an improved capacity-building framework are crucial to achieving the success of the new framework. Finally, the new land administration procedures and systems framework should include measures to ensure proper communication and engagement of all stakeholders and actors. Participatory approaches should be critical to developing any new land management framework in the country.

## CONCLUSION

Although the LAPCAS project is seen to be on the edge of failing or experiencing challenges, it has taken some steps to deliver some of its components. The study has revealed that the LAPCAS results are already generating some positive impacts on the Botswana land administration division, and other results will show over time. However, not everything has followed the original plan or met its objectives. For instance, challenges exist, including inadequate implementation capacity and the need for a more profound change in mindset. Although the government has been trying to improve LAPCAS in the desire to improve the land administration system in the country, much more needs to be done to achieve the objective of the project. Again, it is not clear what the impact of LAPCAS on society has been coupled with the low publicity of the project. The present study calls for developing a new framework based on the core tenets of the FELA. A new land administration framework, informed by the tenets of FELA, will offer a better alternative framework that could be adopted by the Ministry of Lands and Water Affairs to address challenges in the implementation of LAPCAS in Botswana. The tenets of the FELA can help in developing a framework with clear strategies and actions required to achieve the vision and provide guidelines for governments and donors to plan specific interventions. Finally, the tenets of the FELA can help to fashion new land administration procedures and systems that consider the following measures: determination of user needs; preparation of new legislation; demarcation and survey of all plots of land; establishment of land registers; setting in place of financial management procedures; and development of public awareness strategies regarding how the system will work and its benefits.

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