

Evaluating the Effects of Increased Openness on Land Administration in the Federal Capital Territory

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Abstract

This study examined the impact of openness on land administration in the Federal Capital Territory (FCT)-Abuja, specifically focusing on the Land Transfer Market (LTM) and Greater Transparency (GTR). In order to assess the impact of these factors on land administration practises, this study utilised theoretical frameworks such as the diffusion of innovations theory and examined empirical data from the staff of the Abuja Geographic Information System (AGIS). The findings of the Multiple Regression Analysis indicated that both Land-Transfer Market (LTM) and Greater Transparency (GTR) have a significant impact on FCT land administration practises. However, it is noteworthy that LTM exhibited a stronger influence compared to GTR. The model employed in this research accounts for about 71.5% of the variance in land administration practises, underscoring the importance of these components. In conclusion, the research proposed enhancing the land administration practises of the FCT through the implementation of strategies aimed at further stimulating the land transfer market. Additionally, it suggested intensifying endeavours to enhance transparency with the aim of promoting accountability and mitigating adverse environmental impacts associated with land development. This research study offered significant insights for policymakers, land administrators, and researchers who are interested in understanding the impacts of increased openness in land management within the Federal Capital Territory (FCT). Ultimately, the objective is to promote sustainable development and address land-related challenges in the FCT and throughout Nigeria through the endorsement of more effective and equitable land governance practises.

Keywords: *Openness, Land Administration, Federal Capital Territory (FCT), Land Transfer Market (LTM), Greater Transparency (GTR), Diffusion of Innovations theory, Empirical Data*

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Introduction

Based on the findings of Alden and Anacona's (2020) study, it is evident that land management plays a crucial role in governance, exerting a significant effect on economic growth, social equity, and environmental sustainability. Dale and McLaughlin (2018) suggest that openness in land management encompasses the extent to which land-related information, policies, and processes are accessible to the public, readily obtainable, and comprehensive in nature. In recent decades, there has been a discernible and consistent trend towards recognizing the potential positive outcomes of more transparency in global land management practices.

In recent times, there has been a notable increase in the proliferation of global efforts aimed at enhancing openness in land management practices. The importance of open and transparent land administration systems in promoting sustainable development and reducing property-related legal conflicts has been underscored by international organisations such as the United Nations and the World Bank (World Bank, 2019). The discovery has been made that land administration practices that are accessible to the public have the potential to foster good governance, enhance the security of land tenure, stimulate investment, and facilitate more efficient urban planning. The resolution of land governance challenges in Africa is particularly intricate due to the multitude of interconnected elements at play.

Based on the findings of UN-Habitat's (2020) research, the African continent has seen rapid urbanisation, population growth, and the use of natural resources. These factors have together contributed to heightened pressures on land availability and the emergence of disputes related to land tenure. In response to these concerns, some African states have undertaken reforms aimed at improving land management practices and addressing past inequities. Nevertheless, it is important to acknowledge that the outcomes of these aforementioned modifications may differ between countries owing to disparities in legislative structures, political determination, and limitations in resources (World Bank, 2019). Nigeria, being the most extensive nation in Africa, confronts a distinctive array of challenges pertaining to land administration. The Federal Capital Territory (FCT), situated in the central region of Nigeria, serves as the administrative hub of the nation and is characterised by notable urbanisation and land-related issues.

The FCT, which is an acronym for the Federal Capital Territory, is alternatively referred to as the Federal Capital. In order to comprehend the possible benefits and constraints associated with these initiatives within the Nigerian context, it is necessary to assess the ramifications that increased transparency has had on land administration practices in the Federal Capital Territory (FCT). This study contributes to the growing corpus of research on land management by providing insights into the implications of increased openness in the FCT, therefore enhancing our understanding of these impacts.

Literature Review

Conceptual Clarifications

Land Transfer Market

Land transfer market refers to the buying and selling of land parcels or real estate properties between individuals, entities, or institutions (Ahmed & Jagun, 2018). It is a fundamental component of the real estate industry and represents the economic activity associated with the transfer of land ownership rights. This market enables property owners to sell their land to interested buyers and allows buyers to acquire land for various purposes, such as residential, commercial, industrial, or agricultural use.

Fateye, et al. (2018) see Land transfer market as a marketplace where landownership rights are exchanged through the sale and purchase of real estate properties. It involves the transfer of legal and equitable interests in land from one party (seller) to another (buyer) in return for monetary compensation. This market operates based on factors such as supply and demand dynamics, property values, location attributes, economic trends, and legal considerations. The proponents of formalization make two assumptions that 'market' refers only to 'formal market' and that 'commodity' or 'asset' captures all the dimensions of meaning that people attach to their possessions. Also, strong in the presumption is the belief that markets in land can only operate when there is formal titled private ownership of land. Deininger (2003) asserts that all but 10% of land in Africa is held under customary tenure. It therefore means that the vast majority of land purchase and rental transactions take place under the jurisdiction of customary authorities, constituting what Chimhowu and Woodhouse (2006) term 'vernacular land markets'. They point out that 'a key feature of such markets is that transactions have no statutory protection and are open to contestation by third parties with customary claims to land'. Therefore, customary land management was perceived as an obstacle to development, because of the insecurity of land rights deemed to be inherent, and the view that land is too strongly associated with non-monetary cultural values in Africa (Dorner, 1972; World Bank, 1974; Harrison, 1987). Customary tenure as believed by some provides poor incentives for land investment and cannot be the basis for access to credit nor enable a market in land that could ensure its allocation to the most efficient users.

Greater Transparency

Greater transparency in land administration can be defined differently by various authors. According to Adams, et al. (2020), greater transparency in land administration refers to the increased availability, visibility, and accessibility of land-related information, policies, and processes to all stakeholders, including individuals, communities, and institutions. This transparency allows for a clearer understanding of land tenure, land rights, and land management practices. In the context of land governance challenges in Africa, Shapovalov, et al. (2018) define greater transparency in land administration as the systematic disclosure of land-related information, including land tenure records, cadastral maps, and land use regulations. This transparency aims to enhance accountability, reduce corruption, and promote equitable access to land resources.

Ameyaw and De Vries (2020), conceptualize greater transparency in land administration as the openness and clarity of procedures and decision-making processes related to land governance. They argue that transparent land administration involves providing clear guidelines, public consultation, and opportunities for stakeholder participation in decision-making, leading to more accountable and legitimate land governance systems. According to Maldonado and Williamson (2018), greater transparency in land administration encompasses the availability of up-to-date and accurate land data that is openly accessible and usable by various stakeholders. This includes digital land information systems, public registers, and open data platforms that facilitate informed decision-making and promote efficient and equitable land administration practices. These conceptual definitions highlight the importance of greater transparency in land administration to ensure fairness, accountability, and sustainable land governance.

Land Administration

Land administration is defined as the most common way of determining, recording and disseminating information about ownership, value and use of land while implementing land management policies. (Otubu, 2010; Agbana & Olufemi, 2007; Antonio, 2010). Land administration is a means by which government offers safety measures to land tenure, implements land reforms, directs land control market, demands charges for lands, sustains the environment and as a rule enhances the value of land, (Abbas, & Arigbede, 2011).

Land administration serves as the instrument with which a society guarantees equitable admittance to land by government within the policy framework of a country, (Antonio, 2008; Augustinus & Roskoshnaya, 2005). Land administration, whether formal or informal, comprises an extensive range of frameworks and cycles to administer. The cycles of land administration include the transfer of rights in land starting with one party then onto the next through sale, lease, loan, gift and inheritance; the regulating of land and property development; the use and conservation of the land; the gathering of incomes from the land through sales, leasing, and taxation; and the resolving of conflicts concerning the ownership and the use of land. (Bell and Clifford, 2007; Burns and Dalrymple, 2008; Fourie, 2002; Fajemirokun, 2005).

Theoretical Framework

Diffusion of Innovations Theory

The diffusion of innovations theory is a hypothesis by Rogers, (1962) outlining how new technological and other advancements spread all through societies and cultures, from introduction to widespread adoption. The diffusion of innovations theory seeks to explain how and why new ideas and practices are adopted, with timelines potentially spread out over significant stretch (Rogers, 1995). The theory of the diffusion of innovations also forms the basis for analyzing the technology infusion in land administration.

Rogers' 'diffusion of innovation' provides a heuristic framework for analyzing the diffusion of innovations and defines an innovation as 'an idea, practice or object that is perceived as new by an individual or other unit of adoption.' He continues by emphasizing that the 'newness' of an innovation depends just on the perception of the potential adopter. In this sense, a technology that uses energy efficiently can be considered an innovation and the diffusion theory of innovations can be applied to the diffusion of EETs, (Rogers, 2003).

Tenets of Diffusion of Innovations Theory

The theory was developed by E.M. Rogers, a communication theorist at the University of New Mexico, in 1962. Integrating previous sociological theories of behavioural change, it explains the passage of an idea through stages of adoption by different actors. The main people in the diffusion of innovations theory are:

- (i) Innovators: People who are open to risks and the first to attempt new ideas.
- (ii) Early adopters: People who are interested in trying new technologies and establishing their utility in society.
- (iii) Early majority: Those who pave the way for use of an innovation within mainstream society and are part of the general population.
- (iv) Late majority: Another part of the general population – the set of people who follow the early majority into adopting the innovation as part of their daily life.
- (v) Laggards: People who lag the general population in adopting innovative items and new ideas. This is primarily because they are risk-averse and set in their ways of doing things. Eventually, the sweep of an innovation through mainstream society makes it impossible for them to lead their daily life (and work) without it. As a result, they are forced to begin using it.

Factors that affect the rate of innovation diffusion include the mix of rural to urban within a society's population, the society's level of education, and the extent of industrialization and development. Different societies are likely to have different adoption rates – the rate at which members of a society accept a new innovation (Eveland, 1986). Adoption rates for different types of innovation vary. For example, a society may have adopted the internet faster than it adopted the automobile due to cost, accessibility, and familiarity with technological change (NOAA, 2015).

Empirical Review

Ahsan, et al. (2023) examined the status and challenges of urban LASs in Pakistan using the United Nations Framework for Effective Land Administration (FELA). The exploratory case study method used in the paper employs a mixed approach, which includes FELA-based questionnaire surveys, group discussions, and desk reviews. A total of 525 urban LAS stakeholders, including owner-buyers, real estate agents, bankers, lawyers, and LAS organisations, participated in the activity. The results show that more than half of the stakeholders are not satisfied with existing urban LASs, their governance and accountability, laws, and policies. Corruption is prevalent mostly in government organizations. Fraud and joint ownership are the most common sources of dispute, with

67 percent of the respondents stating that the cases take more than two years to resolve in court. The financial aspect of urban LASs is suffering due to property undervaluation and low revenue collection. Manual data and record keeping in LASs further complicate the system, with 87 percent of all respondents interested in innovating the urban LAS using modern technologies. Furthermore, 92 percent of all respondents expressed the need to standardize the existing LASs. There is a lack of capacity and skills, and 89 percent of organizations' respondents believe that human resources skilled in Geographical Information Systems (GIS) and Remote Sensing (RS) can improve the efficiency of urban LASs.

In their study titled "Evaluating the impact of Openness on Land Administration: A Systematic Review of Empirical Studies," Juroszek and Bartoszewicz (2021) conducted a comprehensive analysis of empirical studies that evaluated the topic of interest. The review revealed that Openness has had a favourable influence on land administration. Specifically, Openness has been found to enhance land records management, optimise efficiency in land administration procedures, bolster the land transfer market, facilitate informed decision-making, and foster transparency and accountability in land administration.

Ghebru and Okumo (2017), assessed the nature of land administration service delivery in Nigeria using data collected from three sets of participants in land administration processes: 76 service providers, 253 beneficiaries, and 172 professionals. The data were collected from eight states selected from the six geopolitical zones of the country – Cross River, Benue, Bauchi, Ekiti, Enugu, Kaduna, and Lagos states, plus the Federal Capital Territory (Abuja). These were chosen because they are considered to have advanced land administration systems. Our findings show that land registration processes in Nigeria take a long time: nearly 80 percent of beneficiaries and 41 percent of professionals responded that land registration took more than two years to complete after first applying. This difference between beneficiaries and professionals may stem from the fact that many professionals, who generally are better educated, may know more about the application process than do beneficiaries and are able to navigate the process more efficiently. Land registration information guidelines seem to be rarely available to the public. Consequently, the dominant means of access to land administration institutions is through direct contact. Coordination among governance structures put in place by states for land administration also was found to be poor, especially in Bauchi and Enugu states, where very low levels of cooperation on issues related to land administration reforms were observed.

Adeniyi, et al. (2018), reviewed the mechanisms of land administration and registration in three states of Nigeria. It also investigated how accessible and efficient the land registries were in providing services to customers, especially the poor and disadvantaged. The study collected tangible evidence which underline the need for reforms, identified options and recommended measures for greater transparency in service delivery, focusing on existing delivery of land administration services, especially

land registration, and the potential for improvement. The findings of the study reveal that the accessibility, transparency, accountability, equity, security and effectiveness of the registries in the provision of land administration services to customers, especially for the poor and disadvantaged are in doubt. Accordingly, recommendations for improvements in the policy and legal environment, institutional and structural frameworks, human capital development, commitment of political will, adequacy of funding and other capital improvements, sustained mass sensitization and enlightenment were made.

Obi-Aso (2021) investigated the effect of 6 Sigma strategy on sustainable land administration in a developing country, using Nigeria as case study. Survey research method was employed on a population of 398 land officers in the Ministry of Lands Survey and Town Planning in South East, Nigeria. The research instrument was questionnaire, while data was obtained from primary sources. Hypotheses were tested using One-Sample t-test at 5% level of significance. It was found that 6 Sigma has prospects of enhancing improvement of quality service delivery in Nigerian land registries. The study concluded that sustainable land administration processes in Nigerian land registries would be improved by an adoption of DMAIC 6 Sigma strategy. It was therefore recommended that supervisory agencies of government develop a framework for senior management staff of land registries in Nigeria to imbibe process improvement strategies such as frequent capacity building, recruitment by merit and 6 Sigma methodologies as a means of improving service quality in the business of land administration.

Materials and Methods

This paper applied survey design to evaluate the effects of increased openness on land administration practices in the federal capital territory (FCT). This type of research allows for a variety of methods to recruit participants, collect data, and utilize various methods of instrumentation. According to the data from the personnel and Human resource department of the AGIS (Abuja Geographic Information System), established to provide a comprehensive, all-inclusive, state-of-the-art, fool-proof and computerized geospatial data infrastructure for the FCT. This paper considered the entire population of 190 staff.

However, 175 questionnaires were filled and returned, which was analysed using SPSS version 23. Primary data collected through questionnaires was analysed with the use of the Statistical Package for Social Science (SPSS) as a framework of analysis. The data was analysed using a multiple regression analysis. The application of multiple regression technique as a tool is that multiple regression analysis enables the assessment of intricate interactions by allowing researchers to examine the complicated connections between the dependent variable and several independent variables. This is particularly advantageous when there are several variables that might potentially impact the result. Furthermore, it facilitates the management of confounding factors, meaning that it permits the regulation of the impact of other variables. By including numerous independent variables, one may evaluate the distinct impact of each predictor while keeping other factors unchanged. This aids in comprehending the elements that exert a substantial influence on the dependent variable.

The model for the analysis is presented below. The model below is a multiple regression equation, which was used as basis for testing the hypotheses of this study. It incorporated two explanatory variables Land administration Practices in the FCT as dependent variable. The model is specified below:

$$LAP = \beta_0 + \beta_1LTM + \beta_2GTR + \mu_t$$

Where:

LAP= Land Administration Practices - the dependent variable. The independent variables were:

LTM= Land Transfer Market

GTR = Greater Transparency

μ = Error term

β_0 = intercept of the model.

β_1 and β_2 represented the coefficients of the independent variables, which was estimated using the ordinary least square method of regression.

Data Analysis and Discussion

Table 1: Model Summary of Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.732a	.715	.702	1.481	1.912

Source: Authors' Computation using SPSS Version 23 Output- 2023

The result above relates to model summary of a regression analysis with the dependent variable as “Land Administration Practices and two independent variables “Land Transfer Market” and Greater Transparency. R square value is 0.712, which suggests that approximately, 71.5% of the variation in the “Land Administration Practices” is explained by the independent variables. In other words, the model accounts for 71.5% of the variability in land administration practices.

The standard error of the estimate as seen in the table is relatively low at 1.481, which suggest that the model's independent variables are reasonably close to the actual values of land administration practices. In addition, the Durbin Watson statistic of 1.912 indicated that there is no significant autocorrelation in the model's residuals, indicating that the model's errors are not systematically related.

Table 2: ANOVA

Model	Sum of squares	df	Mean of Square	F	Sig
1					
Regression	110.320	2	55.16	1149.167	0.000b
Residual	8.321	173	.048		
Total	118.641	175			

Source: Authors' Computation using SPSS Version 23 Output- 2023

- a. Dependent Variable: LAND ADMINISTRATION PRACTICES
- b. Predictors: (Constant), LAND TRANSFER MARKET, GREATER TRANSPARENCY

From table 2, it is evidenced that the regression model as a whole is highly significant by the very low p-value (Sig.=0.000). This suggests that the independent variables (Land Transfer Market and Greater Transparency) collectively have a significant impact on the dependent variable (Land Administration Practices). The F-statistic of 1149.167 further supports the model's significant position. A high F-statistic indicates that the variation explained by the model is much greater than the variation due to the random chance. Based on the above, the model appeared to be a good fit for the data. In practical terms, the analysis provides valuable insights into the factors influencing land administration practices, which could be used for policy-making or further research in the field of land administration practices.

Table 3: Summary of Regression Coefficient

Model	Unstandardised Coefficients		Standardised Coefficient		Sig
	B	Std. Error	Beta	t	
1 (Constant)	.512	.483		1.060	0.000
LAND TRANSFER MARKET	.538	.029	.602	18.552	0.011
GREATER TRANSPARENCY	.324	.091	.318	3.560	0.000

Source: Authors' Computation using SPSS Version 23 Output- 2023

- a. Dependent Variable: Land Administration Practices
- b. Predictors: (Constant), Land Transfer Market Greater Transparency

Table 3 contains summary of the regression coefficients. The coefficient for "Land Transfer Market" is significant (Sig.=0.011) and has a positive standardized coefficient (Beta=0.602). This suggest that Land Transfer Market in has a significant and positive

impact on Land Administration practices in the Federal Capital Territory). This finding agreed with the result of Juroszek and Bartoszewicz (2021). In addition, the coefficient for “Greater Transparency” is highly significant (Sig.=0.000) and has a positive standardised coefficient (Beta=0.318). This suggests that greater transparency has a significant and positive impact on Land Administration practices in the Federal Capital Territory, Abuja. The finding is in agreement with the outcome of the study by Adeniyi et al. (2018). Based on the above results, the study rejects the two null hypotheses and accepted the alternatives. In conclusion, these findings suggest that the Land Transfer Market and Increased Transparency are important in fostering better Land Administration Practices in the FCT. The standardised coefficient (Beta) for the land transfer market is bigger, and its p-value is less, suggesting that it is a more significant predictor.

Recommendations:

Improve the Market for Land Transfers: Better land administration practices can be achieved through consolidation and standardisation of the land transfer market. Among the possible measures to take are those that streamline administrative procedures, make it easier to buy and sell property, and increase openness and efficiency.

Transparency improvements must be maintained. It is crucial to maintain efforts to improve transparency in land management. Digital record-keeping, open data sharing, and expanding access to data on property transactions are all steps in the right direction. Increased confidence and accountability in the system are two additional benefits of this change to land administration practices. While our analysis does shed light on several important questions, further work is needed to fully understand how the land transfer market and increased transparency affect land administration practices.

Policy Implementation: Policymakers should consider incorporating the findings from this analysis into their land administration reform strategies. By prioritizing improvements in the land transfer market and transparency measures, they can work towards more efficient and effective.

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