

Computerisation of land governance systems as a tool to mitigate statutory land corruption in Central, East and Southern Africa: Evidence from Three Countries

Abstract

This study was on computerisation of land governance systems as a tool to mitigate statutory land corruption in Central, East and Southern Africa. Using evidence from the Lubumbashi (Democratic Republic of the Congo), Dar salaam (Tanzania) and Kitwe (Zambia), the study used both primary and secondary data to conclude that despite computerisation of land governance activities in Tanzania and Zambia, corruption still took place. On the other hand, land related services in Lubumbashi (Democratic Republic of the Congo) are still paper based. Causes of corruption identified were low salaries for employees in public land institutions, delay in payment of salaries, lack of monitoring in the services provided, cumbersome procedures, and lack of transparency. In this regard, it is recommended that the respective governments should work on curbing corruption through increasing salaries for employees in land institutions, pay salaries on time, effective monitoring in the services provided, streamlining procedures and ensure transparency.

Key words: Corruption, Land governance, statutory land, Democratic Republic of the Congo, Tanzania, Zambia

1. Introduction

Statutory land comprises property rights regulated by state policies, laws and institutions such as central and local governments (Mushinge et al., 2018). The prerequisite to secure property rights (that is, right to use, right to manage, right to generate income, right to transfer, right to exclude, and right to compensation) are all land governance activities that include land use planning, cadastral surveying, servicing of land, land allocation, land registration and titling and land development. The foregoing activities have in most African countries, been computerised or run parallel to the paper based system. The computerisation of the systems is thought to have reduced the period it takes for the land sector to offer land services. Further, the computerisation of the land sector is believed to positively impact on doing business in many African countries. For instance, doing business, it is stated, in any country is generally enhanced if most of the services are automated. Migrating the land administration services from the paper based to a computer based system, means that there is a traceable audit trail created to ensure some level of accountability and transparency.

However, despite the introduction of computer-based system, there is still widespread corruption in the land sector in some African countries (Twinomurinz and Ghartey-Tagoe, 2011). The existence and prevalence of corruption in the land sector is one of the common problems for these countries and causes a number of problems for their populations. Where statutory land governance is deficient, high levels of corruption often flourish (TI and FAO, 2011). Weak land governance tends to be characterised by among other things low levels of transparency, accountability and the rule of law (Deininger et al., 2012). Under such a system, land delivery is unequal, tenure is insecure, and natural resources are poorly managed (TI and FAO, 2011). Consequently, social stability, investment, broad-based economic growth and sustainable development are undermined (ibid). The foregoing shows that corruption has raised considerable research interest within the land sector and therefore has been investigated both theoretically and empirically from various aspects. However, the prevalence of corruption in each of the land governance activities (that is, land use planning, cadastral surveying, servicing of land, land allocation, land registration and titling and land development) remains unrevealed. Hence, the need to undertake this research.

2. Corruption and computer based statutory land governance system

In this paper, corruption implies the abuse of entrusted power for private gain (UN-Habitat et al., 2013). Some common forms of corruption include bribery, fraud and favouritism. Bribery means a public officer receiving money or something of value illegally from a client as incentive to offer a service. Fraud is abuse of discretion for private gain while favouritism is abuse of discretion not for self-interest but for the interest of family, friends, political party members and so on (Van der Molen and Tuladhar, 2007). Some of the causes of corruption are social, economic and organisational features (Hamir, 1999). According to Hamir (1999):

- Social causes include lenient punishment and large number of people competing for insufficient natural resources such as land.
- Economic causes comprise great inequality of wealth and very low salaries and wages as compared with the standard with living.
- Organisational features that may cause corruption are outdated or inadequate policies and procedures; excessive discretion (discretion is an important lubricant of effective governance, however, too much of it can facilitate corruption); insufficient supervision (if there is inadequate supervision to see that instructions and procedures are being followed properly, even the best policies can be frustrated); and insufficient publicity (ignorance is a fertile ground for corruption and insufficient publicity of an institution's aims and procedures is a major cause of corruption).

When corruption is present in the land sector, related actions and distorted interests and policies that favour the few (TI and FAO, 2011), drive decisions. Corruption among other things undermines good land governance as well as fairness and social justice, thus, hindering socio-economic development (Brankov and Tanjevic, 2013).

To mitigate corruption in the land sector, the majority of African countries have sought to migrate from a paper-based system to a fully computerised platform. United Nations (2004) defines e-government or digital government as the use of information and communication technology (ICT) and its application by the government for the provision of information and basic public services to the people. The mechanisms through which e-government works to reduce corruption are considered straightforward: e-government reduces contact between corrupt officials and increase transparency and accountability (Andersen, 2009; Tembo, Nkwae, & Kampamba, 2014). Scholars (for example, Lupu and Lazar, 2013; Anderson, 2009; Misuraca, 2007) have observed that there is an implicit hierarchy and sequentiality of objectives on which e-governance applications or systems must focus to reduce corruption. These include, increasing access to information, presenting the information in a manner that leads to transparency of rules and their application in specific decisions, and increasing accountability by building the ability to trace decisions/actions to individual civil servants represent the successive stages in the hierarchy.

According to Hafkin (2009), in order to implement a robust e-government system, the following have to be met:

- A minimum threshold level of technological infrastructure
- Near-universal Internet access
- Human capital (of both designers and users)
- Legal frameworks/enabling environment
- Political will
- Integration and redesign of government organisation and processes

- Consideration of people issues: public service culture, technophobia, reaching minorities

Evidence (see for example, Hafkin, 2009) indicates that many African countries are far from fulfilling the three top basic prerequisites for e-Government development highlighted above. Hence, a failure in one will result in the failure to implement effective e-government.

3. Research Methodology

The study was qualitative in nature and comprised of the collection and synthesis of primary and secondary data on statutory land governance. Primary data was collected during an ongoing study on computerisation of land governance systems as a tool to mitigate statutory land corruption in Central, East and Southern Africa. Three countries (i.e. Democratic Republic of Congo, Tanzania and Zambia) were selected for this study. The respondents of the study were drawn from Lubumbashi (DRC), Dar salaam (Tanzania) and Kitwe (Zambia). An average of 12 experts in each country were interviewed between the period April-June 2019 as detailed in Table 1.

Table 1: Number of people interviewed in each country

	Democratic Republic of Congo	Tanzania	Zambia
Ministry of Lands	2	3	1
Local Authorities	3	2	2
Private Land Surveyors	1	4	3
Architects	-	2	3
Property Consultants	-	3	3
Utilities Companies	2	2	2
Total	8	16	14

Semi-structured interviews were used to collect information from key informants while purposeful sampling was used to identify them. In terms of secondary data, both published and grey literature was used. Documents considered for the review included but not limited to peer-reviewed journal articles, books, theses, and technical reports published by international organisations.

The limitation of the research design adopted in this study is that due to limited time for data collection, data was only collected from key informants. Data reliability and validity could have been enhanced through collecting data from other respondents such as employees from non-governmental organisations and the general public who seek land related services.

4. Results and Discussion

The study intended to establish whether or not statutory land governance activities (which include land use planning, cadastral surveying, servicing of land, land allocation, land registration and titling, and land development) were susceptible to corruption. Further, the study intended to establish whether computerisation of land governance activities could curb corruption. The perceptions of stakeholders on corruption in land governance activities and computerisation of land governance activities in Democratic Republic of Congo, Tanzania and Zambia are explained in the following subsections.

4.1 Democratic Republic of the Congo

4.1.1 Corruption in Land Use Planning

Respondents believed that land use planning process by municipal and government officials is marred with corruption. One reason is that most of the public servants, including those in the land sector, have not yet received their salaries for an average period of 2 years. Politically connected people, who buy land at low and insignificant cost, and resell it to the general public, drive the most common form of corruption. Findings revealed also that there is absence of trust by the public in public officials, given the fact, almost all public services are expensive.

4.1.2 Corruption in Cadastral Surveying

Findings show that cadastral surveying system is tainted in corruption at all levels which include conducting field survey, preparation of survey and examination of survey. Fraud plays an important role, mainly due to the lack of coordination and monitoring in the services provided. There is a lack of communication to some extent between departments or offices that increases the likelihood of fraud.

4.1.3 Corruption in Servicing of Land

Findings revealed that there were some indication of corruption in utility companies (Water by Régie de Distribution d'Eau de la République Démocratique du Congo and electricity by Société nationale d'électricité) in Lubumbashi. For a household to receive water/sewer and electricity, residents need to pay bribes in most cases to the services providers. This systems is paper based, which exacerbates the incidence of corrupt activities.

4.1.4 Corruption in Land Allocation

Respondents revealed that there were allegations of fraud in the land allocation process. Once an area is identified as potential site for residential, commercial or industrial development and after the authorities have signed the paper work, the cadastral department begin selling plots without an official announcement to the public. In addition, politically connected people tend to benefit more from the system of land allocation. Findings revealed that the majority of processes in land allocation are paper based.

4.1.5 Corruption in Land Registration and Titling

Respondents reported that land registration and titling is very costly. Actually, the official amount to pay is not very high but to get the title, residents had to pay bribes. Findings reveal that most corrupt activities are observed on the registration of lease agreement and the preparation of certificate of the title. In addition, because the land registration and titling are not computerised, the same land or plot can be sold to different individuals and holding different title certificates.

4.1.6 Corruption in land development

The research results indicate claims of fraud in land development. For any development taking place, an official authorisation should be granted to person. It is called "autorisation de batir" meaning building permission. Some respondents experience some form of abuse from the officials from the "minister de l' urbanisation et Habitat".

4.2 Tanzania

4.2.1 Corruption in Land Use Planning

Respondents revealed that corruption thrives in the land use section of the land sector. Land use plans have to be approved at various office levels and this breeds corruption due to deliberate delays. Respondents also revealed that the system is long and cumbersome and thus is susceptible to corruption. Local authority councillors also middle in land issues and try to influence decisions on land use planning in their respective areas.

4.2.2 Corruption in Cadastral Surveying

Respondents concurred those bureaucratic procedures regarding the cadastral survey plans approval leads to corrupt tendencies. Some Surveyors change the plans while surveying using excuses of the terrain not in conformity with town planning drawings. Respondents reported of cases of changing the sizes of plots in order to get more plots unlawfully. Bribery plays a part in the examination of survey diagrams. Private land surveyor need to be paid for work done, thus they are willing to pay government surveyors for a faster approval process. The said money paid to the government surveyors is an inducement for them to expedite the process. Corruption also takes place in preparation of

deed plans that are attached to Certificates of Occupancy. Some respondent however stated that due to computerisation the rates of corruption is now marginal. This may be because the deed plans can be produced at a faster speed than before.

4.2.3 Corruption in Servicing of Land

Bulk services, water, electricity and sewerage, are provided by the utility agencies but individual connections are done by plot owners and these have to deal with the agencies on an individual basis thus creating room for corruption. The study revealed that corruption is always present but its form tend to change regularly, for instance, nowadays the full cost of installing most bulk services are pre-paid but when actual installation is to be done costs on labour have to be paid again to hasten the process. The payments to hasten the process are unofficial and could be described as bribes. Parallel system exists as some procedures are computerised and some are paper based. The paper-based system is more susceptible to abuse.

4.2.4 Corruption in Land Allocation

Land allocation was once a thriving area of corrupt tendencies among land administration and central and regional land offices. Decentralisation and the notion that land has value and can be sold to individual has more or less helped in curbing these corrupt tendencies. Presently land is advertised for sale and whoever has the ability can buy and get their titles at a faster rate than before. Computerisation of the allocation of land has helped curb corruption but some respondents are of the opinion that (and newspapers have confirmed recently) that land officials responsible for allocation of land deliberately create artificial shortages by holding land and later releasing by soliciting bribes at extortionist prices.

4.2.5 Corruption in Land Registration and Titling

The system is partially computerised due to its nature that titles have to be checked and signed to suit legal consideration of titling. Corrupt practices come in due to delays in the whole land titling process. The Ministry of Lands is the place where registration takes place but there are zonal offices that execute certain specific functions. Plans are afoot to open land registration offices in all regions of Tanzania. This will greatly cut costs to the land owners but may not guarantee that corruption will disappear. Respondents are unanimous in their fear that as long as the system is controlled by officials through selected access then corruption will always be present. However, other respondents are of the opinion that a faster system produces a large number of products in a shorter period thus title deeds can be obtained faster.

4.2.6 Corruption in Land Development

The study revealed that corruption is rife, as one has to bribe officials to obtain a building permit quickly with minimal delay. The scrutiny of architectural drawings is a long and cumbersome process and has to pass through all the land delivery service sections (land use, environment, fire and utility services) before a final approval is given. Respondents stated that the most corrupt aspect of land management especially is in major cities". Respondents revealed that hands are greased to facilitate a faster scrutiny.

4.3 Zambia

4.3.1 Corruption in Land Use Planning

Respondents were asked to rate corruption in land use planning and according to them corruption (fraud) was frequently part of the land use planning process in municipalities. Although land use planning involves identification of land, establishing the suitability of the use of land, and preparation of layout plans, fraud mostly occurred at identification of land. Some politicians (Mayors and Councillors) in connivance with some administrators (for example Town Clerks and Directors), Land Surveyors and Planners could privately identify land, prepare layout plans, survey the land and share and/or sale the land for private gain (Interview with Municipality Employee, July 2019). Research findings show that some politicians and administrators were involved in fraud due to lack of integrity. They are selfish and have no regard for the effects their corrupt acts have on others (Hamir, 2009). Some Land Surveyors and Planners on the other hand were involved in fraud because their salaries were low and delay (employees in municipalities could work without pay for some months).

4.3.2 Corruption in Cadastral Surveying

Findings show that private Land Surveyors sometimes paid bribes to Ministry of Lands and Natural Resources Officials, for the survey records to be examined and approved quickly. This was due to a backlog of survey records to be examined and approved (Interview with Private Land Surveyor, June 2019). The backlog was caused by the centralised nature of the examination and approval offices (offices are located in Lusaka and Ndola Districts only, meaning that all surveys done in 117 districts of Zambia have to be lodged, examined and approved in Lusaka or Ndola) and the lack of manpower (Interview with Private Land Surveyor, June 2019).

4.3.3 Corruption in Servicing of Land

According to research findings, as a result of long queues of properties to be provided with water and sewerage services (by Nkana Water and Sewerage Company Limited) as well as electricity (by Zambia Electricity Supply Corporation), it is almost standard for people to pay bribes for these services to be connected quickly. The long queues were caused by utility company's inefficiency and ineffectiveness.

4.3.4 Corruption in Land Allocation

According to the Administrative Circular No.1 of 1985, after the Commissioner of Lands (under the Ministry of Lands and Natural Resources-MLNR) has provided numbers for the proposed parcels of land and confirmed availability, the Municipalities may advertise the land in the news media or any transparent medium, inviting developers to apply on behalf of MLNR (Government of the Republic of Zambia [GRZ], 1985). On receipt of the applications, the Municipalities will interview and select the most suitable applicants for the parcels of land and make recommendations in writing to the Commissioner of Lands, giving reasons supporting the recommendations (GRZ, 2017). Evaluation sheets were used to rate suitable candidates during interviews. However, an examination of the evaluation sheets showed that there was no clear basis of selecting one candidate over the other even when they all provided the necessary requirements such as bank statement or pay slip (ibid). Therefore, selection of potential developers is susceptible to corruption (fraud, bribery and favouritism). For example, most of the land available at a particular point in time can sometimes be allocated to some politicians (Members of Parliament, Mayors and Councillors), administrators (for example, Town Clerks and Directors) and political cadres (belonging to the ruling party) as well as close associates such as family and friends (Interview with Municipality Employee, July 2019). This marginalises other citizens, as they are unable to access land, going against the objective of equitable access to land by ordinary citizens provided for in the Constitution.

4.3.5 Corruption in Land Registration and Titling

The Lands and Deeds Department (under the Ministry of Lands and Natural Resources) register property rights and issues certificates of title based on approved survey diagram for the period not exceeding 99 years. However, the process involves long waiting periods that is, beyond several months, or even years (Mushingi, 2017). As a result, people usually have to pay a bribe to register their property rights and obtain certificates of title quickly (Interview with Real Property Consultant, July 2019)

4.3.6 Corruption in Land Development

Respondents were asked to rate corruption in obtaining development permits and according to them, bribery was frequently part of the process of obtaining development permits from municipalities. The people responsible for granting development permits deliberately create artificial delays and hindrances to force the clients to pay something for the architectural drawings to be scrutinised quickly (Interview with an Architect, July 2019). They artificially delay in scrutinising the work hence asking for the so called express permission that requires payment for one to jump the line (ibid). In most instances with this express payment, they no longer mind about the quality of drawings submitted (ibid).

4.4 Computerisation of Land Governance Activities and Corruption

Findings revealed that all land related services in Lubumbashi (Democratic Republic of Congo) are still based paper system. This makes the land sector more vulnerable to corruption.

Findings revealed that land related services in Tanzania are delivered through both a computerised system and manual or paper based system. The ministry of lands uses the Ministry of Lands Information System (MOLIS) and the Surveys Registration System (SRS) that were launched in 2008. Respondents revealed that computerization helps a lot in keeping proper records and fast processing of data but it is the corruption mentality that needs to change, as manipulation occurs to suit the needs of corrupt officials. Respondents stated that corruption is an embedded in an individual, thus the effectiveness of computers highly depends on behavioral change.

In Zambia, research findings show that all land governance activities have dual systems (some services are paper based while others are computerised) except the processing of development permits which is still paper based. Respondents stated that despite some services being computerised (use of Geographic Information System in Municipalities, use of Zambia Integrated Land Management Information System at the Ministry of Lands and Natural Resources, and use of computers for processing of application for land services by utility companies), corruption is still widespread. Respondents thought that computerisation might not curb corruption because punishment (if any) was lenient and leaders in key positions were not capable of inspiring and influencing conduct of highest moral standards.

5. Conclusion and Recommendations

Findings of this study showed that despite computerisation of land governance activities in Tanzania and Zambia, corruption still took place. In Lubumbashi (Democratic Republic of Congo) all land related services are still paper based therefore making the land sector more susceptible to corruption. Causes of corruption identified were low salaries for employees in public land institutions, delay in payment of salaries, lack of monitoring in the services provided, unclear and burdensome procedures, and the overall lack of transparency. The

study suggests that the respective governments should work on curbing corruption in the land sector through rewarding public land officials with competitive remuneration, pay salaries on time, effective monitoring in the services provided, streamlining procedures, putting a transparent system of operation, and constant monitoring of corrupt practices and stiffer punishment for erring officials. It should be borne in mind that if the problem of corruption on statutory land is not lessened, the challenges of statutory land administration will persist.

References

- Andersen, T. B. (2009). E-Government as an anti-corruption strategy q. *Information Economics and Policy*, 21(3), 201–210. <https://doi.org/10.1016/j.infoecopol.2008.11.003>
- Brankov, T.P and Tanjevic, N. (2013). Corruption in the land sector. *Economics of Agriculture*, 60 (2), pp. 365-277.
- Deininger, K., Selod, H. and Burns, A. (2012). *The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in the Land Sector*. Washington DC: World Bank.
- Government of the Republic of Zambia (1985). *Administrative Circular No. 1 of 1985: Procedure on Alienation*. Lusaka: Ministry of Lands.
- Government of the Republic of Zambia (2017). *Report of the Committee on Agriculture, Lands and Natural Resources on the Report of the Auditor General on Government's Efforts to ensure Access to Land in an Effective Manner*. Lusaka: National Assembly of Zambia.
- Hafkin, N. J. (2009). *Electronic/Mobile Government in Africa: Building Capacity in Knowledge Management Through Partnership*. Addis Ababa.
- Hamir, A.M. (2009). Keynote address, Chapter 1 in K. Frimpong and G. Jacques (eds) *Corruption, Democracy and Good Governance in Africa*. Gaborone: Lightbooks.
- Lupu, D., & Georgiana, C. (2015). Influence of e-government on the level of corruption in some EU and non-EU states, 20(15), 365–371. [https://doi.org/10.1016/S2212-5671\(15\)00085-4](https://doi.org/10.1016/S2212-5671(15)00085-4)
- Misuraca, C. G. (2007). *e-governance in Africa from the theory to action (Internatio)*. New Jersey: Africa World Press.
- Mushinge, A, Munshimfwa,K.E and Shamaoma, H. (2018). An analysis of the causes of conflicts on State land in Zambia: Evidence from the City of Lusaka. Paper presented at the Commonwealth Association of Surveying and Land Economy (CASLE) Conference held at the Mulungushi International Conference Centre in Lusaka, Zambia, 29 November – 01 December 2018.
- Tembo, E., Nkwae, B., & Kampamba, J. (2014). Land Registration in a Digital Environment *Land Registration in a Digital Environment*, (June 2014), 1–13.

- TI and FAO (2011). Corruption in the Land Sector. Working paper. Available at <http://www.fao.org/3/am943e/am943e00.pdf> [cited 16 April 2019].
- Twinomurinz, H and Ghartey-Tagoe, K.B. (2011). Corruption in developing countries and ICT: the urgent need for work systems to precede e-government. Proceedings of the 11th International Conference on Social Implications of Computers in Developing Countries, Kathmandu, Nepal, May 2011.
- UN-Habitat, ITC, United Nations University and GLTN (2013). Tools to support Transparency in Land Administration. Kenya: United Nations Human Settlements Programme.
- United Nations (2004). UN global e-government readiness report 2004: Towards access for opportunity. Available at <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan019207.pdf> [cited 02 August 2019].
- Van der Molen, P and Tuladhar, A. (2007). Corruption and Land Administration. Available at https://www.fig.net/resources/monthly_articles/2007/march_2007/march_2007_vander_molen_tuladhar.pdf [cited 03 August 2019].