
This is an electronic reprint of the original article.
This reprint may differ from the original in pagination and typographic detail.

Adekola, Oluwafemi; Krigsholm, Pauliina; Riekkinen, Kirsikka

Towards a holistic land law evaluation in sub-Saharan Africa: A novel framework with an application to Rwanda's organic land law 2005

Published in:
Land Use Policy

DOI:
[10.1016/j.landusepol.2021.105291](https://doi.org/10.1016/j.landusepol.2021.105291)

Published: 01/04/2021

Document Version
Publisher's PDF, also known as Version of record

Published under the following license:
CC BY-NC-ND

Please cite the original version:
Adekola, O., Krigsholm, P., & Riekkinen, K. (2021). Towards a holistic land law evaluation in sub-Saharan Africa: A novel framework with an application to Rwanda's organic land law 2005. *Land Use Policy*, 103, Article 105291. <https://doi.org/10.1016/j.landusepol.2021.105291>

This material is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.



Towards a holistic land law evaluation in sub-Saharan Africa: A novel framework with an application to Rwanda's organic land law 2005

Oluwafemi Adekola^{a,*}, Pauliina Krigsholm^{a,b}, Kirsikka Riekkinen^{a,b}

^a Aalto University School of Engineering, Department of Built Environment, P.O. Box 12200, Aalto, Finland

^b Finnish Geospatial Research Institute, National Land Survey of Finland, Geodeetinrinne 2, 02430, Masala, Finland

ARTICLE INFO

Keywords:

Land law
Land reform
Holistic evaluation
Evaluation framework
Sub-Saharan Africa

ABSTRACT

Land laws provide a legal basis for addressing a country's land-related strategies and are the central land policy instruments through which governments realise land policy objectives. Considering their vital role, it is imperative that land laws be evaluated to ensure that policy objectives are followed and that the laws are not ineffective or counterproductive. The extant literature, however, provides only a fragmentary basis for evaluation. The present study addresses this gap and constructs a novel framework to support the holistic evaluation of land law performance in the context of sub-Saharan Africa (SSA). The framework was developed through a review of systematically selected literature on land laws in SSA. Four key evaluation perspectives emerged: land access; land tenure; land use and development; and land administration institutions. The framework was then used to assess the overall performance of Rwanda's Organic Land Law (OLL) 2005 through a content analysis of secondary data on the land reform outcomes. The OLL application suggests that the framework may provide stakeholders with insights into the overall effects of land law and potential areas of improvement. However, the framework must be further explored in various cases of SSA countries to validate its functionality.

1. Introduction

In recent decades, land reform has been high on the agenda of the post-independence sub-Saharan African (SSA) countries, most of which have endeavoured to address the issues related to land through major or minor reforms. These reforms have been characterised by the enactment of new national land laws (hereafter, land laws),¹ to restructure land relations. These laws provide the legal basis for regulating access to land and regulating the use and control of land and its resources to alleviate poverty and boost economic development. The new laws allow countries to address land issues, so land reforms are in principle 'land law reforms' (McAuslan, 1998; Manji, 2015).

Land laws are among the central policy instruments through which governments can realise land-related goals. They establish directives and provide a legal basis for achieving land policy objectives. In practice, land laws regulate matters, such as land rights, use, transactions and distribution, that have social, cultural and economic implications for individuals and society (Bruce et al., 2006). Land laws, which top the hierarchy of land regulations, provide the means for executing other land policy instruments, including land administration or cadastral

systems and the regulatory tools related to property taxes, land use planning, zoning and environmental regulation. Land laws are crucial to land reform, whose success or failure depends on the extent to which the laws address the targeted concerns. Land laws are relevant to promoting tenure security, reducing land conflicts and addressing gender equality while enabling the sustainable use of land and its resources (Collins and Mitchell, 2018). Consequently, countries have enacted new laws to solve problems related to land, such as tenure insecurity, degradation, discrimination and conflicts or disputes (Manji, 2015).

Enacting a new land law to solve land issues can be complex, however. Recent studies have noted some controversial effects, especially in the context of SSA countries. Boone (2007) asserts that changing the existing rules that govern land is tantamount to redefining the 'relationships between and within communities, and between communities and the state' (p. 558), which could lead to insecurity. Given the fixed supply of land, government interventions to reorganise land relations through new laws may benefit some people to the detriment of others. For example, a new land law aimed at resolving conflicts might trigger new conflicts (Collins and Mitchell, 2018).

Collins and Mitchell (2018) show that a new law aimed at

* Corresponding author at: Aalto University School of Engineering, Department of Built Environment, P.O. Box 12200, Aalto, Finland.

E-mail address: Oluwafemi.adekola@aalto.fi (O. Adekola).

¹ Here we refer to national land law as the major law governing the land in a nation.

strengthening communal land rights could negatively affect women's rights and land access because most customary forms of tenure do not encourage women's ownership. Despite the unexpected outcomes, amendments to the laws to solve land issues are inevitable. Land laws may not provide a panacea, but, if their performance is regularly assessed, they provide the foundation and direction to achieve land-related objectives. Consequently, they must be regularly evaluated.

Earlier studies have evaluated land law in relation to access (Rugege, 2004; Manji, 2015), the protection of (tenants') rights (Banda, 2006; Lunstrum, 2008), conflicts and women's rights (Ravnborg et al., 2016; Collins and Mitchell, 2018) and use and management (Ekpodessi and Nakamura, 2018; Boone, 2007), yet this growing body of literature provides only fragmentary evidence. No standardised method exists for evaluating land law as a whole although evaluation frameworks have been developed for distinct aspects of land policy, such as land consolidation (Van Huylenbroeck et al., 1996), land readjustment (Yilmaz et al., 2015) and land administration (Steudler et al., 2004). In addition, a land governance assessment framework has been developed to ensure active stakeholder involvement in the identification of land policy issues (Deininger et al., 2011). Each of these evaluation frameworks considered the related legal elements that could directly influence the success or failure of the policy instrument. These legal elements are rooted in land law, but only those that applied to the perspectives of the various frameworks were evaluated.

According to Mader (2001, p. 124) the 'evaluation [of legislation] is a pragmatic effort to improve the legislator's assumptions and knowledge about the effects of [such] legislation'. Evaluation can be performed before (ex ante) or after (ex post) a law's enactment (Mader, 2001). The latter has dominated in the evaluation of land law in SSA countries, with most evaluators focusing on specific aspects or problem areas of the laws. Intuitively, however, the evaluation of land law should span all aspects of the law. Identifying the overall performance of land law allows policy makers to ensure that land laws do not become ineffective or counterproductive due to changing circumstances in their nation.

Hence, this study presents a framework for the holistic evaluation of land laws in the SSA context and employs it to assess the overall effect of Rwanda's Organic Land Law 2005 (OLL) on land reform outcomes in Rwanda. The OLL provides an interesting case because of the recent revolutionary land reform in Rwanda. After the OLL's promulgation, Rwanda undertook a land titling programme that positively transformed the country's land sector (Schreiber, 2017). Whilst the outcomes of the land reform have been influenced by several factors, such as the government's political will, public participation, input from civil society and the support of international organisations and NGOs, the OLL has been recognised as a significant catalysing policy instrument for achieving reform outcomes in Rwanda (Gready, 2010; Ali et al., 2014; Ngoga et al., 2017; Ngoga, 2018).

The evaluation (of law) can be very complex, however, due to multiple significant factors, such as the inherent indeterminacy of law, differences in jurisdiction, influence in the law-making process and the implementation and enforcement of laws (Mader, 2001; Tremper et al., 2009, 2010). In this study, we avoid these broad epistemological concerns by focusing on the methodology for developing a practical framework for policy makers and evaluators, an approach that addresses the land law elements that can be closely associated with policy reform outcomes. In essence, the framework evaluates a land law, in this case the OLL, as a policy instrument. It considers the law's intended and incidental effects on land reform outcomes in Rwanda, i.e., outcomes connected to the OLL. Consequently, this study's insights should not be viewed as establishing causalities; instead, the framework provides an approach to understanding the overall contributions of land law to land reform outcomes.

The evaluation framework was developed through a review of a broad range of literature on post-independence land laws in SSA countries. The success criteria that describe the expected outcomes of land

laws were analysed and simplified to produce concise, semantic success criteria, which were consolidated under four general perspectives that constitute the basis for evaluating the overall performance of land laws. The framework was applied to the case study of the first post-colonial land law in Rwanda. Rwanda was chosen because its recent land reforms have attracted the interest of several international organisations. This interest facilitated the collection of comprehensive data that were relevant to testing the framework. The framework offers insight into the overall effect of the OLL on land reform outcomes in Rwanda. The results cannot be generalised to other SSA countries, but they may inspire the holistic assessment of land laws in SSA countries in future research.

The research methodology (Section 2) describes the strategy for developing the framework and provides an overview of the Rwanda case study. Section 3 presents the results of the evaluation framework and case study while Section 4 discusses the findings and limitations. Section 5 offers concluding remarks.

2. Research methodology

This section describes the development of the evaluation framework and how it was used to evaluate the case study of Rwanda.

2.1. Development of the evaluation framework

To develop the framework used in this study, we performed an in-depth review of systematically selected literature on land laws in SSA countries. This method provided comprehensive access to the available fragmentary evaluation evidence on land laws in various parts of the SSA region. The literature review enabled the drawing of a wide range of salient conclusions that would not otherwise have been reached. These conclusions include the success criteria of land laws, i.e., how land laws are expected to contribute to policy outcomes. The success criteria were synthesised to provide the basis of the framework.

The academic studies reviewed in this study were selected on the following criteria: (1) publication in academic journals with full-text access, (2) English language and (3) SSA land laws implicitly or explicitly addressed in the title, abstract or keywords. In addition, technical reports from international organisations (e.g., the World Bank and the African Development Bank) and national policy documents were included to triangulate the data to reduce publication bias. Keywords such as 'land law' and 'land law reform' were used in various combinations to search the journal databases such as ScienceDirect, Scopus, and Web of Science. Additional keywords, such as 'land act' and 'land proclamation', were included based on their relevance to the study and the results that emerged from the original keyword search. The papers were selected through a three-stage exploratory analysis (Fig. 1).

Initially, 821 journal articles, 33 books, 71 technical reports and 11 national policy documents were obtained. In the first stage, screening the paper titles and abstracts eliminated duplicates and studies that did not meet the eligibility criteria. This reduced the numbers to 169 journal articles, 25 books, 9 technical reports and 11 national policy documents. A second, in-depth analysis of the full texts led to the removal of studies that were not relevant or related to land law. The remaining papers (Appendix A) were used to synthesise the relevant data for the study.

The framework was developed in four stages (Fig. 2). In the first stage, an in-depth analysis was conducted on each included paper to extract the success criteria of the land laws, yielding 75 success criteria (Appendix B), which were analysed through two successive phases of simplification.

The second stage reduced the extracted success criteria to simpler, relevant terms based on the results and recommendations related to the performance of the land laws discussed in the examined papers. This phase integrated a number of success criteria with similar terms, reducing the number of success criteria from 75 to 35 (Appendix C).

In the third stage, multiple terms that referred to the same or similar concepts were merged, yielding nine simple and purely semantic success

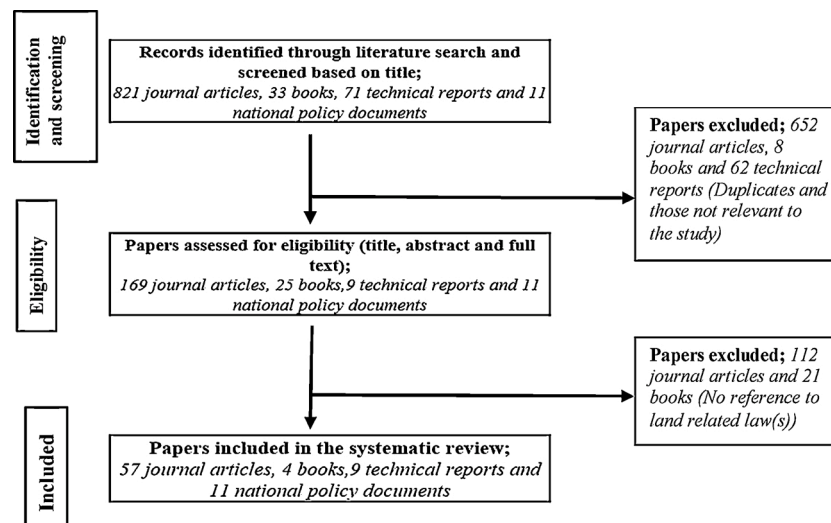


Fig. 1. Flow diagram of the paper selection process.

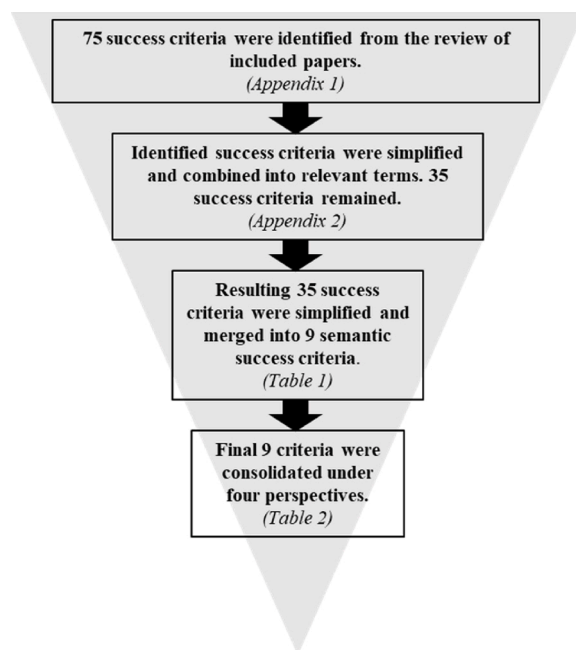


Fig. 2. Outline of the strategy for developing the framework.

criteria (Table 1) to enhance the applicability of the framework. The resulting success criteria were consolidated under four general evaluation perspectives (Table 2). These four perspectives underlie the evaluation framework, and the consolidated success criteria (i.e., the nine success criteria) serve as preliminary measures. The framework is presented in Section 3.

2.2. Case: Rwanda's organic land law No. 08/2005

Rwandan land reform is significant due to the country's history. The tragic Rwandan genocide of 1994 displaced millions of Rwandans who fled to neighbouring African countries. Afterwards, the country was hit by socio-political and economic crises aggravated by the return of millions of refugees who had fled the country (Musahara and Huggins, 2005). This extensive migration significantly impacted land tenure in Rwanda, one of the smallest African countries in terms of landmass. The growing population intensified the pressure on and competition for land

Table 1
Simplification into semantic success criteria.

Success criteria	Combined simplified terms
1. Structures modalities for access to and acquisition of land by the government and the people	Structure land access; citizens' access to land; government's access to land; land acquisition; land allocation; structuring of land allocation
2. Promotes equitable access to land and its resources	Provide equitable access to land; women's access to land; fair access to land
3. Structures land relations	Structure land-people relationships; guide land relations
4. Recognises existing tenure and equitably secures property rights	Secure land rights; equitable protection of land rights; equitable security of land rights; protect existing land rights; recognise existing tenure
5. Harmonises and amends existing laws and regulations	Amend rules; amend rules to secure land rights; harmonise rules governing land relationships
6. Controls and organises the use and exploitation of land and its resources	Productive use of land; control the exploitation of land and its resources; organise exploitation of land at the local level
7. Equitably integrates mechanisms to organise land-use planning and development	Organise land use; organise land use and development; land management; mechanisms for land use and management
8. Establishes land administration institutions to organise land administration	Land administration; land administration institutions
9. Provides a legal basis for the functions of land administration institutions	Develop land administration mechanism; limit land disputes; land conflict adjudication; land rights formalisation; land market; government revenue

and exacerbated land scarcity, creating a challenge for the government, which sought to resolve the land problem by introducing policies such as the 59-ers Reclaiming Land, land sharing and *imidugudu* (forced villagisation) programmes to resettle the refugees (Pottier, 2006; Ngoga, 2018). However, these ad hoc policies were not enough to solve the country's land problems, such as tenure insecurity, increasing land scarcity, land-related conflicts, gender discrimination and inequity in access to land (Ngoga, 2018).

Consequently, the government had to develop a new framework of policy, law and institutions to confront the country's land challenges. This led to the development of the National Land Policy 2004, which established an appropriate framework for resolving land issues. The

Table 2
Evaluation perspectives and corresponding success criteria.

General evaluation perspectives	Success criteria
Land access	Structures modalities for access to and acquisition of land by government and the people Promotes equitable access to land and its resources Structures land relations
Land tenure	Recognises existing tenure and equitably secures property rights Harmonises and amends existing laws and regulations
Land use and development	Controls and organises the use and exploitation of land and its resources Equitably integrates mechanisms to organise land use and development
Land administration institutions	Establishes land administration institutions to organise land administration Provides a legal basis for the functions of land administration institutions

development of this policy in 2004 was followed by the promulgation in 2005 of the OLL, which was introduced to provide a legal basis for achieving land policy objectives. Except for disparate pieces of legislation originating mostly during the colonial period, Rwanda had no land law until the enactment of the OLL (Republic of Rwanda, 2004). In 2013, the OLL was amended to the Law Governing Land in Rwanda 2013. Notwithstanding, the extensive studies and information on the effects of the OLL on land reform in Rwanda provided valuable insights for the case study. Hence, the developed framework was used to evaluate Rwanda's first post-colonial land law, OLL N° 08/2005 (Government of Rwanda, 2005).

To evaluate the performance of the OLL, secondary sources of data were examined, including international nongovernmental organisation reports on the outcome of land reforms. These reports were selected for their comprehensive information on the law's effects on Rwanda's land reform. The developed framework examined the areas in which the OLL facilitated beneficial reforms and those in which improvements may be needed.

A content analysis was performed on the OLL and the selected reports. The contents of the documents (Fig. 3) were coded and analysed to identify data relevant to the perspectives and success criteria of the developed framework. The findings are presented in Section 3.2.

3. Results

This section describes the emergent evaluation perspectives and their success criteria. Thereafter, the case study findings are reported.

3.1. Evaluation framework for land laws in sub-Saharan African countries

There are four general evaluation perspectives: land access; land tenure; land use and development; and land administration institutions. These perspectives underlie the evaluation framework within which the overall performance of land laws is evaluated. In addition, the consolidated success criteria are used as preliminary measures under the associated perspectives. The perspectives and their success criteria are discussed in the succeeding sections.

3.1.1. Land access perspective

This evaluation perspective considers how land laws affect the process by which individuals or collectives gain temporary or permanent rights and opportunities to occupy and use land for productive or other economic and social purposes (Cotula et al., 2006). Individuals or groups need to access land for residential, commercial or agricultural purposes, and the government requires access to land for the provision of services and infrastructure to its citizens. The success criteria from studies describing the expected outcomes from this evaluation perspective are that land laws should (1) structure modalities for access to and acquisition of land by the government and the people and (2) promote equitable access to land and its resources.

3.1.1.1. Structuring modalities for access to land (by the government and the people). The first criterion concerns modes of access to and acquisition of land by the government and the people. Under this criterion, earlier studies have emphasised that land laws should structure the modes of access to land within a society, establishing a well-defined normative basis for access to land by the government and the people. Essential improvements, such as housing and food production, cannot be achieved without land access, so studies have assessed how well land laws regulate citizens' and investors' access to land, such as through exchange, inheritance and the transfer of land rights (Teka et al., 2013; Ali et al., 2014; Dancer, 2017; Ekpodessi and Nakamura, 2018).

In addition, the procedures for the government's access to and acquisition of land for public development should be well structured. In essence, land laws should provide an opportunity for expropriation, but the law should also ensure adequate compensation for the affected landowners (Larbi et al., 2004; Kironde, 2006; Teka et al., 2013).

3.1.1.2. Promoting equitable access to land and its resources. Land laws should not only structure the modes of access to land but also provide equitable opportunities for citizens to access land without discrimination. Earlier studies have noted that land tenure systems in some SSA countries tend to restrict the land access of specific people, such as women and nonindigenous individuals (Place, 2009; Kalabamu, 2019). Consequently, land laws must address and prevent discrimination in land access and ensure that every citizen has an equal opportunity to

Case study land law	Secondary data for assessing case study outcomes
Rwanda Organic Land Law N° 08/2005 (OLL)	<ul style="list-style-type: none"> Rwanda land tenure regularisation case study (Gillingham and Buckle, 2014). Land market values, urban land policies and their impacts in urban centres of Rwanda (USAID, 2014). New ways to assess and enhance land registry sustainability: Evidence from Rwanda (Ali et al., 2017). Land Governance Assessment Framework: Rwanda (Ngoga et al., 2017). Securing Land Rights: Making Land Titling Work in Rwanda: 2012–2017 (Schreiber, 2017).

Fig. 3. Documents used for the case study evaluation.

gain access. The laws should promote fairness and transparency (Anafo, 2015) and should aim to eliminate gender bias and facilitate women's access to land (Clover and Eriksen, 2009; Ali et al., 2014; Van der Walt and Viljoen, 2015). Furthermore, restrictions on the marginalised should be removed (Kalabamu, 2000; Wubneh, 2018).

3.1.2. Land tenure perspective

Scholars and policy evaluators have regularly examined how land laws affect the relationship between people and land. Land access and land tenure are not mutually exclusive perspectives as accessing land is tantamount to having rights related to it, but land tenure is a complex area of study because of the multiplicity of land tenure systems (Holden and Ghebru, 2016). Therefore, the perspectives should be treated separately to provide more precise and simpler evaluative measures. Studies from the land tenure perspective draw attention to land law's effects on the relationship between people and land, focusing on the system of rights that are defined by law or custom (Clover and Eriksen, 2009). From the land tenure perspective, land law is expected to (1) structure land relations, (2) recognise existing tenure and equitably secure property rights and (3) harmonise and amend existing laws.

3.1.2.1. Structuring land relations. The colonial laws in most SSA countries privileged the statutory tenure system over the pre-existing customary tenure system. This led to ambiguity, confusion and uncertainty about land rights, especially those that were not considered 'formal' (Kalabamu, 2019). Consequently, earlier studies emphasised the vital role of land law in this regard. It is essential that land laws clearly structure the tenure system(s) to prevent the occurrence of overlapping and contradictory rights that may cause tenure insecurity (Pottier, 2006; Clover and Eriksen, 2009; Kibreab, 2009).

3.1.2.2. Recognising existing tenure and providing equitable protection of property rights. Land laws should enable citizens to enjoy the use of their land without the fear of being indiscriminately deprived of their rights. The protection of land rights improves tenure security, which is important for poverty alleviation and economic development. A successful law secures all forms of land rights (Waeterloos and Rutherford, 2004), including those for women, minority groups, the vulnerable and individuals without formal documentation (Banda, 2006; Clover and Eriksen, 2009; Sitko et al., 2014; Van der Walt and Viljoen, 2015).

3.1.2.3. Harmonising and amending existing laws or regulations. SSA countries tend to have a range of tenure systems, laws or regulations that govern land. For instance, some countries had unwritten customary practices prior to the colonial period, and several land policies and regulations have been introduced in various countries from the colonial to the post-colonial period. These regulations sometimes promote conflicting interests; for example, some colonial regulations were unfair and racially discriminatory in South Africa (see Van der Walt and Viljoen, 2015). Studies indicate that land laws should endeavour to address these issues by amending unfair regulations and policies and harmonising existing regulations (Clover and Eriksen, 2009; McAuslan, 2013).

3.1.3. Land use and development perspective

Growing populations, rapid urbanisation and a fixed supply of land dictate the need to sustainably use and develop land and its resources. Hence, close attention has been paid to land law's role in the sustainable use and development of land. This evaluation perspective considers how land laws are expected to influence the use and development of land in a socially and financially effective way. Studies from this perspective address topics such as the planning, implementation and control of land use and the exploitation of land resources. Land law is essential to coordinating the activities of individuals and collective bodies (Nnkya, 1999), so this perspective's success criteria indicate that land laws should (1) control the use and exploitation of land and its resources and

(2) equitably integrate mechanisms to organise land development.

3.1.3.1. Controlling the use and exploitation of land and its resources. Land laws should facilitate the sustainable, efficient use and development of land and its resources (Waeterloos and Rutherford, 2004; Ali et al., 2014) and should specify the relative rights and obligations of landowners and tenants (Banda, 2006). By specifying these rights and responsibilities, land laws inhibit the degradation of the land (Tekla et al., 2013) and ensure its productive use (Wubneh, 2018). Studies evaluating land laws indicate that laws should endeavour to curb land speculation and prevent the concentration of land in the hands of a few individuals (Fabiya, 1984; Lunstrum, 2008; Olong, 2011).

In addition, studies evaluating this aspect of land law have addressed other key areas related to environmental management, including the protection of biodiversity, ecosystems and the environment (Röder et al., 2015); the conservation and rehabilitation of wildlife populations (Lunstrum, 2008); and the management of the effects of land use on climate change (Republic of Kenya, 2016).

3.1.3.2. Equitably integrating mechanisms to organise land development.

Land laws serve as a legal basis for other land improvement mechanisms, such as land-use planning (zoning) regulations, the compulsory acquisition of land for public interests (Larbi et al., 2004; Home, 2013) and land readjustment (Yilmaz et al., 2015). Land laws should provide a legal basis for the use of development tools to organise land development. In the legal context, studies under this criterion have emphasised the need for land laws to facilitate participation and ensure that development tools are applied equitably without contradicting other intended outcomes, such as the protection of land rights (Waeterloos and Rutherford, 2004; Magigi and Majani, 2006; Nzioki et al., 2009).

3.1.4. Land administration institutions perspective

In seeking to enhance land administration systems, countries use land laws to improve their land administration institutions because 'good land administration' is paramount for good land governance. This perspective is very broad and encompasses the previously enumerated perspectives because land administration, in itself, fundamentally supports all land-related objectives (Williamson et al., 2010). Nevertheless, this perspective focuses on land law's effects on the operation of institutions responsible for land administration. According to studies from this perspective, land laws should (1) establish accessible institutions to organise land administration and (2) provide a legal basis for the functions of land administration institutions.

3.1.4.1. Establishing accessible institutions to organise land administration. Land law should provide a basis for establishing and structuring organisations to perform land administration duties and deliver services. The main interest under this criterion is the accessibility of land administration institutions to users. The services of these institutions need to be accessible, especially services such as land registration and information. Studies examining land administration on the basis of accessibility suggest that land law should promote the decentralisation of land administration institutions so that their services will be accessible to the people, even those in rural areas (Tekla et al., 2013; Ali et al., 2014; Biitir et al., 2017).

3.1.4.2. Providing a legal basis for the functions of land administration institutions. In addition to the previous criterion, land laws should provide a legal framework that specifies the functions of land managers or administrators in land administration institutions. This criterion encompasses functions such as the provision and maintenance of the land administration system. With the land administration system, land administration institutions provide necessary services to users, including the provision of adequate information for land transactions (Larbi et al., 2004; Colin, 2013; Ekpodessi and Nakamura, 2018), the

recognition and recording of land rights (Unruh, 2005; Nzioki et al., 2009) and the adjudication of land-related conflicts (Olong, 2011; Ekpodessi and Nakamura, 2018; Kalabamu, 2019). In addition, the institutions should be able to generate revenue for the government through land and property taxes (Mitchell et al., 2008; Home, 2013).

3.2. Evaluation of the performance of Rwanda's organic land law No. 08/2005

The developed framework was tested through its application to a case study in Rwanda that takes into account the land law (i.e., the OLL) and the outcomes of land reform. The law's provisions and their observed effects on land reform outcomes were examined from each of the identified evaluation perspectives.

3.2.1. Land access perspective

3.2.1.1. Structuring modalities for access to land. The OLL establishes and recognises the means of land access or acquisition. It defines categories of land and states that individual or legal entities can acquire land. According to the law, access or acquisition can occur through inheritance, purchase, gift, exchange, sharing or the allocation of state land by the responsible bodies. In addition, the government can acquire land through expropriation in the public interest prior to the awarding of appropriate compensation. The law does not describe the procedures to be followed when expropriating land, but this may have been addressed in other relevant laws, such as the Expropriation Law 2007.

3.2.1.2. Promoting equitable access to land and its resources. The OLL promotes equitable access to land by explicitly prohibiting discrimination based on sex or country of origin. Husbands and wives are guaranteed equal rights to land under the law. In addition, any person, whether Rwandan or a foreign investor, can enjoy the right of ownership. Through these provisions, the OLL prevents discrimination against women and all other persons in terms of land access, but the law recognises only legal marriages between a husband and a wife and does not explicitly recognise women in polygamous marriages

Effects: The outcome of the reform reveals that a private market was created to facilitate land access through transfer, exchange and purchase. This effectively promoted an efficient, active land market and increased opportunities to access privately held lands (Ali et al., 2017). Through expropriation, the government could access land for development, but, in practice, this deprived some landholders of land access. In Kigali, for instance, some landholders lost their land rights to (government) expropriation without adequate compensation (USAID, 2014).

The results of the land tenure regularisation programme indicate that women's land access has improved as the law made possible the formalisation of gender-neutral land rights (Gillingham and Buckle, 2014; Ngoga et al., 2017). The programme's data reveal that progress was made, with women as sole owners of 25% and co-owners of 60% of registered land rights (Ali et al., 2017). Although the law did not recognise polygamous marriages, the outcome of the reform shows that affected parties were allowed to agree on how the rights should be awarded (Ngoga et al., 2017).

3.2.2. Land tenure perspective

3.2.2.1. Structuring land relations. The OLL structures land relations in Rwanda by unifying all forms of tenure. The law establishes that the right to own and use land is guaranteed by the state, which has supreme power over the land. This implies that the freehold now belongs to the state while all other existing rights were converted to leasehold. The lease ranges from 3 to 99 years and can be extended. The law does not recognise the rights of those using swampland, however, claiming exclusive rights to swampland for the state.

3.2.2.2. Recognising existing tenure and equitably protecting property rights. Because the law was enacted in the context of existing forms of tenure, the OLL recognises that land may be owned through custom as well as written law and guarantees equal protection of landholders' rights. Landholders can enjoy their land rights and freely exploit the land in conformity with the provisions of the law. In addition, the law prohibits discrimination in matters relating to land rights.

3.2.2.3. Harmonising and amending existing laws and regulations. The law harmonises the previous land tenure, land laws and regulations. It abolishes previous (contradictory) legal provisions and customary practices, transitioning the various tenure forms to a statutory system while still recognising and protecting previous landholder rights.

Effects: By assuming the absolute right over land, the state of Rwanda was able to modify land rights. The state converted all rights, including (previous) customary rights, to statutory rights in the form of long-term usufruct rights, i.e., the right to enjoy the use of land for 'up to 99 years depending on land use' (Ngoga et al., 2017, p. 18). Laws and regulations that were contrary to the OLL were abrogated, eliminating the problems that were associated with legal pluralism, such as ambiguity, confusion, uncertainty and conflicts of interest.

Through the provisions of the OLL, the state ensured the protection of landholder rights through land registration, and the landholder rights under customary tenure were formalised as part of the land tenure regularisation. This increased the level of subjective tenure security as a substantial number of landholders acknowledged that they were not concerned about future land disputes or loss (Ali et al., 2017). It also safeguarded the rights of the vulnerable, such as widows and female orphans, whose rights had not previously been recognised (Ngoga et al., 2017). According to Prindex,² Rwanda has had the lowest level of perceived tenure insecurity in SSA (8%). However, the law transferred the ownership of swampland to the state, dispossessing the landholders who claimed customary tenure (Ngoga et al., 2017) and contradicting the law's claim to protect all landholders from dispossession.

3.2.3. Land use and development perspective

3.2.3.1. Controlling use and exploitation of land and its resources. The law promotes this criterion by establishing a land structural exploitation chart to control the use and exploitation of land and its resources. It also specifies landholders' obligations, which include the productive use of land in accordance with the intended use without impinging on the rights of others. The OLL requires landholders to obey the laws and regulations relating to the protection, conservation and better exploitation of land and its resources. To enforce these obligations, it imposes penalties for degraded and unexploited land.

3.2.3.2. Equitably integrating mechanisms to organise land development. The OLL provides a strong legal basis for the use of other land development tools. According to the law, various particular laws will govern the management, organisation and exploitation of land. The law also emphasises the use of land consolidation to improve land use and productivity, but it implies the need to implement land consolidation in conjunction with residents without describing the participatory procedure to be applied.

Effects: The short-term effects of land tenure regularisation suggest that investment in and implementation of soil conservation measures increased (Gillingham and Buckle, 2014). In addition, problems related to land degradation and speculation were mitigated through government agencies and community initiatives (Ngoga et al., 2017). However,

² Prindex is a joint initiative of the Global Land Alliance and Overseas Development Institute that measures perceptions of property security in more than 30 countries. www.prindex.net/ [Accessed June 3, 2019].

land consolidation (including crop specialisation), which aimed to solve the problem of land fragmentation and to increase agricultural productivity, had mixed results. Land consolidation significantly increased the total production of some crops but also reduced the land tenure and food security of farmers, some of whom felt pressured to undertake crop specialisation (Ngoga et al., 2017).

3.2.4. Land administration institutions perspective

3.2.4.1. Establishing accessible institutions to organise land administration. The OLL promotes this criterion by establishing land commissions at several levels of governance: national, provincial or city, district, town and municipality. In addition, the law institutes a land bureau for every district, town and municipality to make land administration services accessible to the people.

3.2.4.2. Providing a legal basis for the functions of land administration institutions. The law specifies the functions of the established institutions. The land commissions are to prepare and implement a land structural organisation chart and ensure that the land under their jurisdiction is well managed and exploited. The law also specifies the functions of the Land Officer, who is responsible for directing the land bureau. These functions include maintaining the land administration system, which embraces the land register and the issuance of land certificates to landholders, who are obligated to register their land.

The law also makes courts and sector-level mediation committees responsible for land dispute adjudication and permits the government to generate revenues through land taxes.

Effects: The enactment of the OLL established and activated the institutions described in the law. These institutional arrangements were useful for implementing the land tenure regularisation programme in Rwanda, which led to the development of a land administration system that has continued to rank higher than most of Rwanda's SSA counterparts in terms of quality (Gillingham and Buckle, 2014; Schreiber, 2017; World Bank, 2019).³

Equipped with the new land administration system and supported by the provisions of the law, the land administration institutions provide the government and citizens with land administration services. For the government, the services include generating more revenue through taxes, monitoring the effectiveness of the service delivery and implementing other programmes related to the transformation of the Rwandan land sector (Ali et al., 2017; Schreiber, 2017). For the people, the system made secure the ownership and transfer of land rights and promoted an active land market, enabling access to land. In essence, the land administration system, through the provisions of the law, facilitated the achievement of some of the outcomes under the other perspectives. In addition, the OLL created several formal and informal avenues for accessible and affordable land dispute adjudication (Ngoga et al., 2017).

4. Discussion

Evaluating the effects of a change in law is a complex task that can be approached from multiple perspectives and with many tools, methods and techniques (Mader, 2001). The evaluation of land laws has tended to focus on specific outcomes of law reforms (e.g., Rugege, 2004; Banda, 2006; Manji, 2015) while a holistic framework that combines all relevant aspects of land law reform has been missing. To address this gap, this study developed a framework for coherently examining the fragmented evidence of land law evaluation in an SSA context, thus

delineating the overall performance of land law in relation to land policy objectives.

The framework was derived from a review of systematically selected literature on land laws in SSA countries. The review identified a large number of success criteria that indicate the expected outcomes of land laws. The identified success criteria were simplified and consolidated in a set of semantic success criteria that were categorised under four general perspectives (land access; tenure; use and development; administration institutions) that form the basis of the evaluation framework. In addition, the consolidated success criteria doubled as provisional measures under the perspectives in this study.

Land law evaluation is challenging for several reasons. In sensitive interventions, such as land reform, several factors produce the observed outcomes, which makes it hard to determine the causalities between land laws and land reform outcomes. Moreover, the outcomes take considerable time, and information about them may be difficult to find (e.g., Lavigne Delville, 2020). Nevertheless, we argue that a broad scope evaluation is needed in this context due to the wide-ranging impacts of land laws (Bruce et al., 2006; McAuslan, 2013). The piloting of the holistic framework with Rwanda's OLL case highlights both the intended and unintended effects of land law reform and shows that both successful and unsuccessful outcomes can be identified. Focusing only on narrow aspects of reform may give a biased view of the reform's effects, but we concede that aiming for a full picture in the evaluation is an ambitious goal that can also be criticised. One obvious barrier is the difficulty of obtaining reliable information on all evaluation perspectives and success criteria. Finding a valid estimate of the counterfactual for all the success criteria is a particular challenge. It should be stressed, however, that our framework aims primarily to provide a structure for prospective evaluations and, in its current form, investigates more qualitative questions, such as 'In what ways has the land law made notable contributions to the observed land reform outcome?'

The evaluation of the case study suggests that the law was a major driver of the land reform outcomes. It is interesting to note that, from all the evaluation perspectives, the law played a significant role in the ensuing outcomes of Rwanda's land reform. This corroborates the idea of Bruce et al. (2006), who stress that land law is an important instrument that offers directives for the achievement of land policy objectives.

In addition, our findings indicate that the 'land administration institutions' perspective significantly offers a means of implementing the land law from other perspectives. The land administration institutions established by the OLL facilitated the creation of a land administration system that supports the performance of land administration functions. In addition, the law provides a framework for the performance of the land administration system. This enables the fulfilment of the law from the other perspectives, such as land access, tenure and use and development, as each perspective contains some of the functions performed by land administration. This finding highlights the interconnectedness of these evaluation perspectives and the important role played by land administration in the implementation of land-related strategies (Williamson et al., 2010). This finding may be somewhat unsurprising, given that 'land administration is an implementer that follows [land] law and enhances it' (Törhönen, 2004, p. 549).

The findings uncovered some shortcomings of the OLL. First, the law stipulates that the state recognises and guarantees the rights of landholders, but the evidence shows that, whilst this provision protects landholders' tenure security from externalities, it offers no protection from the state itself. For example, land was expropriated without adequate compensation to landholders, and the rights of landholders using swampland were unrecognised and forfeited. These rather contradictory observations may be attributed to the law's giving the state the ultimate power over land. This reflects the unwillingness of the state to surrender its prerogatives, which give it the ability to exercise arbitrary discretion and make peremptory decisions as noted in previous studies (Fabiye, 1984; Bruce and Knox, 2009). In addition, these findings reflect the notion that land law sometimes has contradictory outcomes

³ According to information from the World Bank Doing Business Index, the quality of land administration in Rwanda has continued to improve. The country has moved from 61st (2012) to 3rd (2019) in the world in terms of property registration.

(Collins and Mitchell, 2018).

Secondly, regarding the land use and development perspective, the OLL did not clearly and in detail address the procedure for public participation in the implementation of the land consolidation programme. Without a uniform, legally backed procedure, implementation is bound to be inconsistent. This may explain the mixed outcomes of the land consolidation programme as noted in the results under the land use and development perspective.

We note, however, that the outcomes of the land reform can also be viewed from various perspectives in the context of Rwanda. Some other factors may have played significant roles in enabling the achievements of the OLL. First is the political willingness of the government to solve the country's land challenges. As noted by Bruce (2007), competition for land contributed to the conflict (genocide) in Rwanda, which made the land issue a significant challenge that the government was determined to resolve to foster peace in the country (Ngoga, 2018). Second is the inclusive approach adopted in the policy-making processes, which gave the citizenry a voice in the reform (Pottier, 2006; Ali et al., 2014). As noted by previous studies, engaging people in policy making increases the chance of successful policy implementation (Manji, 2006; Ng'ombe et al., 2012). In addition, the Rwanda case benefitted from the intervention and contributions of civil societies and international organisations, which further facilitated a successful reform (Gready, 2010; Ngoga et al., 2017).

Using a case study evaluation, we have demonstrated to an extent that land laws can be evaluated holistically from the developed framework's perspectives and that the evaluation can identify overall aspects of land law that need improvement. However, some limitations must be considered when interpreting this study's results. Firstly, as noted in the introduction and to avoid the complexities inherent in the evaluation of law, our framework was purposely tailored to evaluate the performance of land law based on observable land reform outcomes that can be linked to the land law. Nevertheless, as noted in the above paragraph, other factors can be responsible for land reform outcomes. These factors were not considered, but future research could integrate these factors into the framework to provide a more comprehensive evaluation.

Secondly, the case study evaluation used secondary data from a selection of grey literature on the Rwandan land reform outcomes. This selection bias may have influenced the results of the case study. The successful outcomes in the case study may have been greatly emphasised and the unsuccessful outcomes underreported. Despite this limitation, the case study offers insights into the use of our framework.

Thirdly, the overall evaluation perspectives provided by the framework were applied specifically to assessing Rwanda's OLL. Although the framework was developed using literature on land laws in SSA countries, its applicability should not be straightforwardly generalised to other SSA land laws as land laws are country specific and vary in content across countries, with some land laws focusing on achieving only specific land-related objectives (see McAuslan, 2013). However, the framework could serve as a basis for further development as it represents a first attempt at the holistic evaluation of land law in an SSA country.

In continuation of the above, although the framework provided the overall evaluation perspectives, it offers evaluators the opportunity to use measures that correspond to their specific policy objectives. In addition, while qualitative measures were useful in this case study, quantitative (and possibly additional qualitative) measures should be developed and implemented to provide a more detailed evaluation. For instance, some of the measures could be combined with the land-related indicators in the sustainable development goals (SDGs).⁴ However, policy evaluators must ensure that the adopted measures correspond to the policy objectives.

⁴ The SDGs, adopted by the United Nations member states in 2015, provide a shared blueprint for peace and prosperity for people and the planet now and into the future. Retrieved from <https://sustainabledevelopment.un.org/sdgs>.

5. Conclusions

Evaluation is a precondition for improvement. To effectively improve the performance of a land law, policy makers should endeavour to evaluate the law from all relevant perspectives. Instead of focusing only on problematic areas while neglecting others, a more structured analysis of land laws and their outcomes is needed to comprehensively understand their performance. Consequently, the present study developed a framework that supports a holistic evaluation of land law performance in the SSA context and applied that framework to assessing Rwanda's OLL. The framework allows evaluation of the overall performance of the land law from four general evaluation perspectives identified in previous studies on land laws in SSA countries: land access; tenure; use and development; and administration institutions.

This study's novel contribution is the introduction of an evaluation framework that was used to holistically assess the OLL. The evaluation offers a comprehensive means of understanding the performance of the land law in relation to land reform outcomes in Rwanda. Such an evaluation can help policy makers to guarantee that all the relevant perspectives of land laws are considered prior to decision making, to identify land reform priorities and to ensure well-informed decision making.

As this is the first study performing a holistic evaluation of land law in an SSA country, it lays the groundwork for future research emanating from this study. Further research is needed to test the applicability of the suggested framework in other SSA countries' contexts using relevant empirical data.

CRedit authorship contribution statement

Oluwafemi Adekola: Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing - original draft, Writing - review & editing, Validation. **Pauliina Krigsholm:** Conceptualization, Validation, Writing - review & editing, Supervision. **Kirsikka Riekkinen:** Conceptualization, Funding acquisition, Project administration, Supervision, Validation, Writing - review & editing.

Declaration of Competing Interest

The authors report no declarations of interest.

Acknowledgement

This work was supported by Aalto University School of Engineering, Finland. Special thanks also goes to the anonymous peer reviewers, whose comments have been helpful.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.landusepol.2021.105291>.

References

- Ali, D.A., Deininger, K., Goldstein, M., 2014. Environmental and gender impacts of land tenure regularization in Africa: pilot evidence from Rwanda. *J. Dev. Econ.* 110, 262–275. <https://doi.org/10.1016/j.jdevco.2013.12.009>.
- Ali, D.A., Deininger, K., Duponchel, M., 2017. New ways to assess and enhance land registry sustainability: evidence from Rwanda. *World Dev.* 99, 377–394. <https://doi.org/10.1016/j.worlddev.2017.05.016>.
- Anafo, D., 2015. Land reforms and land rights change: a case study of land stressed groups in the Nkoranza South Municipality, Ghana. *Land Use Policy* 42, 538–546. <https://doi.org/10.1016/j.landusepol.2014.09.011>.
- Banda, S., 2006. Land law reform: a comparative analysis of South Africa's labour tenancy contract and Malawi's tenant worker's contract. *Oxford Univ. Commonw. Law J.* 6 (2), 201–225. <https://doi.org/10.1080/14729342.2006.11421472>.
- Bitir, S.B., Nara, B.B., Ameyaw, S., 2017. Integrating decentralised land administration systems with traditional land governance institutions in Ghana: policy and praxis. *Land Use Policy* 68, 402–414. <https://doi.org/10.1016/j.landusepol.2017.08.007>.

- Boone, C., 2007. Property and constitutional order: land tenure reform and the future of the African state. *Afr. Aff. (Lond)* 106, 557–586. <https://doi.org/10.1093/afraf/adm059>.
- Bruce, J., 2007. Drawing a Line Under the Crisis: Reconciling Returnee Land Access and Security in Post Conflict Rwanda. Working Paper. Humanitarian Policy Group and Overseas Development Institute. Retrieved from: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/4174.pdf> [Accessed August 18, 2020].
- Bruce, J.W., Knox, A., 2009. Structures and stratagems: making decentralization of authority over land in Africa cost-effective. *World Dev.* 37 (8), 1360–1369. <https://doi.org/10.1016/j.worlddev.2008.08.011>.
- Bruce, J.W., Giovarelli, R., Rolles Jr., L., Bledsoe, D., Mitchell, R., 2006. Land Law Reform: Achieving Development Policy Objectives. The World Bank, Washington DC, p. 259. <https://doi.org/10.1596/978-0-8213-6468-0>.
- Clover, J., Eriksen, S., 2009. The effects of land tenure change on sustainability: human security and environmental change in southern African savannas. *Environ. Sci. Policy* 12 (1), 53–70. <https://doi.org/10.1016/j.envsci.2008.10.012>.
- Colin, J.P., 2013. Securing rural land transactions in Africa. An Ivorian perspective. *Land Use Policy* 31, 430–440. <https://doi.org/10.1016/j.landusepol.2012.08.006>.
- Collins, A., Mitchell, M.I., 2018. Revisiting the World Bank's land law reform agenda in Africa: the promise and perils of customary practices. *J. Agrar. Chang.* 18, 112–131. <https://doi.org/10.1111/joac.12201>.
- Cotula, L., Toulmin, C., Quan, J., 2006. Better Land Access for the Rural Poor: Lessons From Experience and Challenges Ahead. International Institute for Environment and Development, IIED, London, p. 50.
- Dancer, H., 2017. An equal right to inherit? Women's land rights, customary law and constitutional reform in Tanzania. *Soc. Leg. Stud.* 26 (3), 291–310. <https://doi.org/10.1177/0964663916677560>.
- Deininger, K., Selod, H., Burns, A., 2011. The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in the Land Sector. The World Bank, Washington DC, p. 147. <https://doi.org/10.1596/978-0-8213-8758-0>.
- Ekpodessi, S.G.N., Nakamura, H., 2018. Land use and management in Benin Republic: an evaluation of the effectiveness of Land Law 2013-01. *Land Use Policy* 78, 61–69. <https://doi.org/10.1016/j.landusepol.2018.06.025>.
- Fabiyl, Y.L., 1984. Land administration in Nigeria: case studies of the implementation of the land use decree (Act) in Ogun, Ondo and Oyo States of Nigeria. *Agric. Adm.* 17 (1), 21–31. [https://doi.org/10.1016/0309-586x\(84\)90060-8](https://doi.org/10.1016/0309-586x(84)90060-8).
- Gillingham, P., Buckle, F., 2014. Rwanda Land Tenure Regularisation Case Study. Department for International Development, United Kingdom, p. 40. https://doi.org/10.12774/eod_hd.march2014.gillingham.
- Government of Rwanda, 2005. Organic Law No. 08/2005 of 14/7/2005 Determining the Use and Management of Land in Rwanda. Kigali, Rwanda. Retrieved from <https://urbanlex.unhabitat.org/sites/default/files/organic-law-determining-the-use-and-management-of-land-in-rwanda.pdf> [Accessed June 2, 2019].
- Gready, P., 2010. 'You're either with us or against us': civil society and policy making in post-genocide Rwanda. *Afr. Aff. (Lond)* 109 (437), 637–657. <https://doi.org/10.1093/afraf/adq038>.
- Holden, S.T., Ghebru, H., 2016. Land tenure reforms, tenure security and food security in poor agrarian economies: causal linkages and research gaps. *Glob. Food Sec.* 10, 21–28. <https://doi.org/10.1016/j.gfs.2016.07.002>.
- Home, R., 2013. 'Culturally unsuited to property rights?': colonial land laws and african societies. *J. Law Soc.* 40 (3), 403–419. <https://doi.org/10.1111/j.1467-6478.2013.00632.x>.
- Kalabamu, F.T., 2000. Land tenure and management reforms in East and Southern Africa—the case of Botswana. *Land Use Policy* 17 (4), 305–319. [https://doi.org/10.1016/s0264-8377\(00\)00037-5](https://doi.org/10.1016/s0264-8377(00)00037-5).
- Kalabamu, F.T., 2019. Land tenure reforms and persistence of land conflicts in Sub-Saharan Africa—the case of Botswana. *Land Use Policy* 81, 337–345. <https://doi.org/10.1016/j.landusepol.2018.11.002>.
- Kibreab, G., 2009. Land policy in post-independence Eritrea: a critical reflection. *J. Contemp. Afr. Stud.* 27 (1), 37–56. <https://doi.org/10.1080/02589000802576681>.
- Kironde, J.L., 2006. The regulatory framework, unplanned development and urban poverty: findings from Dar es Salaam, Tanzania. *Land use policy* 23 (4), 460–472. <https://doi.org/10.1016/j.landusepol.2005.07.004>.
- Larbi, W.O., Antwi, A., Olomolaiye, P., 2004. Compulsory land acquisition in Ghana—policy and praxis. *Land Use Policy* 21 (2), 115–127. <https://doi.org/10.1016/j.landusepol.2003.09.004>.
- Lavigne Delville, P., 2020. Analyzing the benin land law: an alternative viewpoint of progress. *Land Use Policy* 94, 104521. <https://doi.org/10.1016/j.landusepol.2020.104521>. Available at:
- Lunstrum, E., 2008. Mozambique, neoliberal land reform, and the Limpopo National Park. *Geogr. Rev.* 98 (3), 339–355. <https://doi.org/10.1111/j.1931-0846.2008.tb00305.x>.
- Mader, L., 2001. Evaluating the effects: a contribution to the quality of legislation. *Statut. Law Rev.* 22 (2), 119–131. <https://doi.org/10.1093%2Fslr%2F22.2.119>.
- Magigi, W., Majani, B.B.K., 2006. Community involvement in land regularization for informal settlements in Tanzania: a strategy for enhancing security of tenure in residential neighborhoods. *Habitat Int.* 30 (4), 1066–1081. <https://doi.org/10.1016/j.habitatint.2005.12.002>.
- Manji, A., 2006. The Politics of Land Reform in Africa: From Communal Tenure to Free Markets. Zed Books Ltd., London, p. 149, 2006 ISBN 9781848137530.
- Manji, A., 2015. Whose Land Is It Anyway? The Failure of Land Law Reform in Kenya. Africa Research Institute Counterpoint, pp. 1–13. Retrieved from <http://orca.cf.ac.uk/74580/1/ARI-Counterpoint-WhoseLandIsItAnyway-download.pdf> [Accessed July 2, 2019].
- McAuslan, P., 1998. Making law work: restructuring land relations in Africa. *Dev. Change* 29 (3), 525–552. <https://doi.org/10.1111/1467-7660.00088>.
- McAuslan, P., 2013. Land law reform in Eastern Africa: traditional or transformative? A Critical Review of 50 Years of Land Law Reform in Eastern Africa 1961–2011. Routledge, London, p. 286. <https://doi.org/10.4324/9780203491867>.
- Mitchell, D., Clarke, M., Baxter, J., 2008. Evaluating land administration projects in developing countries. *Land Use Policy* 25 (4), 464–473. <https://doi.org/10.1016/j.landusepol.2007.10.004>.
- Musahara, H., Huggins, C., 2005. Land reform, land scarcity and post-conflict reconstruction: a case study of Rwanda. In: Huggins, C., Clover, J. (Eds.), *From the Ground up: Land Rights, Conflict and Peace in Sub-Saharan Africa*, pp. 269–346.
- Ng'ombe, A., Keivani, R., Stubbs, M., Mattingly, M., 2012. Participatory approaches to land policy reform in Zambia: potentials and challenges. *Environ. Plan. A* 44 (8), 1785–1800.
- Ngoga, T.H., 2018. Rwanda's Land Tenure Reform: Non-existent to Best Practice. CAB International, p. 131. <https://doi.org/10.1079/9781789241037.0000>. ISBN: 9781789241037.
- Ngoga, T., Ntaganda, F., Tushabe, K., Niyonsenga, D., Ingabire, N., Muvura, P., 2017. Land Governance Assessment Framework: Rwanda. The World Bank, Washington, USA, p. 137. Retrieved from <http://documents.worldbank.org/curated/en/905231504857005613/Land-governance-assessment-framework-final-report-Rwanda> [Accessed August 2, 2019].
- Nnkya, T.J., 1999. Land use planning practice under the public land ownership policy in Tanzania. *Habitat Int.* 23 (1), 135–155. [https://doi.org/10.1016/s0197-3975\(98\)00038-1](https://doi.org/10.1016/s0197-3975(98)00038-1).
- Nzioki, N., Kariuki, C., Murigu, J., 2009. Implementing land reform policies in Eastern African countries: the case study of Kenya. *Prop. Manag.* 27 (4), 267–278. <https://doi.org/10.1108/02637470910980013>.
- Olong, A.M., 2011. Land Law in Nigeria, second edition. Malthouse Press Ltd, Lagos, Nigeria, p. 325.
- Place, F., 2009. Land tenure and agricultural productivity in Africa: a comparative analysis of the economics literature and recent policy strategies and reforms. *World Dev.* 37 (8), 1326–1336. <https://doi.org/10.1016/j.worlddev.2008.08.020>.
- Pottier, J., 2006. Land reform for peace? Rwanda's 2005 land law in context. *J. Agrar. Chang.* 6 (4), 509–537. <https://doi.org/10.1111/j.1471-0366.2006.00133.x>.
- Ravnborg, H.M., Spichiger, R., Broegaard, R.B., Pedersen, R.H., 2016. Land governance, gender equality and development: past achievements and remaining challenges. *J. Int. Dev.* 28 (3), 412–427. <https://doi.org/10.1002/jid.3215>.
- Republic of Kenya, 2016. National Land Use Policy (Draft). Physical Planning Department Ministry of Lands and Physical Planning. Kenya. Retrieved from <https://landportal.org/library/resources/national-land-use-policy-0> [Accessed July 18, 2019].
- Republic of Rwanda, 2004. National Land Policy. Ministry of Lands, Environment, Forests, Water and Mines, Kigali. Retrieved from <https://landportal.org/library/resources/rwanda-land-lawspolicies-32/national-land-policy-rwanda> [Accessed June 2, 2019].
- Röder, A., Pröpper, M., Stellmes, M., Schneibel, A., Hill, J., 2015. Assessing urban growth and rural land use transformations in a cross-border situation in Northern Namibia and Southern Angola. *Land Use Policy* 42, 340–354. <https://doi.org/10.1016/j.landusepol.2014.08.008>.
- Ruge, S., 2004. The right of access to land and its implementation in Southern Africa: a comparative study of South Africa and Zimbabwe land reform laws and programmes. *Law Democr. Dev.* 8 (2), 235–265.
- Schreiber, L., 2017. Securing Land rights: making Land titling work in Rwanda: 2012–2017. Global Challenges Certification. Innovations for Successful Societies: Woodrow Wilson School of Public and International Affairs. Princeton University: Princeton, NJ, USA. Retrieved from <https://successfultsociety.princeton.edu/publications/securing-land-rights-making-land-titling-work-rwanda-2012-2017> [Accessed June 2, 2019].
- Sitko, N.J., Chamberlin, J., Hichaambwa, M., 2014. Does smallholder land titling facilitate agricultural growth?: an analysis of the determinants and effects of smallholder land titling in Zambia. *World Dev.* 64, 791–802. <https://doi.org/10.1016/j.worlddev.2014.07.014>.
- Steudler, D., Rajabifard, A., Williamson, I.P., 2004. Evaluation of land administration systems. *Land Use Policy* 21 (4), 371–380. <https://doi.org/10.1016/j.landusepol.2003.05.001>.
- Teka, K., Van Rompaey, A., Poesen, J., 2013. Assessing the role of policies on land use change and agricultural development since 1960s in northern Ethiopia. *Land Use Policy* 30 (1), 944–951. <https://doi.org/10.1016/j.landusepol.2012.07.005>.
- Törhönen, M.P., 2004. Sustainable land tenure and land registration in developing countries, including a historical comparison with an industrialised country. *Comput. Environ. Urban Syst.* 28 (5), 545–586. <https://doi.org/10.1016/j.compenvurbsys.2003.11.007>.
- Tremper, C., Thomas, S., Wagenaar, A.C., 2009. Measuring Law for Public Health Research. Retrieved from SSRN: <https://ssrn.com/abstract=1612748> or. <https://doi.org/10.2139/ssrn.1612748>.
- Tremper, C., Thomas, S., Wagenaar, A.C., 2010. Measuring law for evaluation research. *Eval. Rev.* 34 (3), 242–266. <https://doi.org/10.1177/0193841x10370018>.
- Unruh, J., 2005. Property restitution laws in a post-war context: the case of Mozambique. *Afr. J. Leg. Stud.* 1 (3), 147–165. <https://doi.org/10.1163/221097312x13397499736183>.
- USAID, 2014. Land Market Values, Urban Land Policies and Their Impacts in Urban Centres of Rwanda. Retrieved from: https://www.land-links.org/wp-content/uploads/2016/09/USAID_Land_Tenure_Rwanda_Land_Markets_Urban_Centers_Report.pdf [Accessed 30 June 2019].

- Van der Walt, A.J., Viljoen, S., 2015. The constitutional mandate for social welfare—systemic differences and links between property, land rights and housing rights. *Potchefstroom Electron. Law J. Elektron. Regsblad* 18 (4), 1035–1090. <https://doi.org/10.4314/pelj.v18i4.09>.
- Van Huylenbroeck, G., Coelho, J.C., Pinto, P.A., 1996. Evaluation of land consolidation projects (LCPs): a multidisciplinary approach. *J. Rural Stud.* 12 (3), 297–310. [https://doi.org/10.1016/0743-0167\(96\)00024-1](https://doi.org/10.1016/0743-0167(96)00024-1).
- Waeterloos, E., Rutherford, B., 2004. Land reform in Zimbabwe: challenges and opportunities for poverty reduction among commercial farm workers. *World Dev.* 32 (3), 537–553. <https://doi.org/10.1016/j.worlddev.2003.06.017>.
- Williamson, I., Enemark, S., Wallace, J., Rajabifard, A., 2010. *Land Administration for Sustainable Development*. ESRI Press Academic, Redlands, CA, p. 487. ISBN: 978-1-58948-041-4.
- World Bank, 2019. *Doing Business Report*. Retrieved from https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf [Accessed 30 June 2019].
- Wubneh, M., 2018. Policies and praxis of land acquisition, use, and development in Ethiopia. *Land Use Policy* 73, 170–183. <https://doi.org/10.1016/j.landusepol.2018.01.017>.
- Yilmaz, A., Çağdaş, V., Demir, H., 2015. An evaluation framework for land readjustment practices. *Land Use Policy* 44, 153–168. <https://doi.org/10.1016/j.landusepol.2014.12.004>.