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Theories of Land Reform and Their Impact on Land Reform Success in Southern Africa

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Received: 18 October 2019; Accepted: 5 November 2019; Published: 12 November 2019



Abstract: Our purpose is to present and test a typology of land reform theories as a means of understanding and interrogating the motives behind land reform and to better equip land administrators and policymakers to enact land reform programs that are appropriate for their contexts. Here, land reform is understood to include the related concepts of land redistribution, land restitution, land tenure reform and land administration reform. The theory typology thus has application for land restitution programs specifically operating in the global South. The continuum of theories is derived from literature and tested through a multiple case study of land reform in Nigeria, Mozambique, and South Africa, drawing from a combination of primary and secondary data. The findings suggest an over-reliance on replacement theories in all three contexts, although the Mozambican experience draws on theories towards the middle of the continuum (the adaptation theories). This is recommended as the most viable approach for the context.

Keywords: land reform; cadastral systems; customary tenure; development theory; land rights; land tenure

1. Introduction

Change agents tend to adopt methods with which they are familiar and that were successful in the past. Methods are thus motivated without reference to underlying theoretical positions which are often derived from the academic background or professional domain of the change agent. Such theoretical positions underlie and inform land development, albeit without acknowledgement. Theoretical foundations set the scene for what data is collected, how it is processed to obtain information, and how meaning is derived therefrom. Conscious decisions at the theory level and understanding the impact of theory on methods and practice, are important for successful land reform. We thus propose a typology of theories that underlie land reform initiatives and a method for interrogating the process and outcomes to uncover the underlying theory.

The value and meaning of land to land rights-holders is context-specific [1] so a system of land administration that reflects land values and meanings is also context-specific. When seeking to undertake cadastral and land administration systems development in contexts differing from well-understood Western norms, the worldview and thus theoretical approach to land tenure, rights and administration should align with that of the societal context. Hence, adopting appropriate theory for development is important for significant intervention, improving sustainability and success [2].

Globally, several projects for improving cadastral and land administration systems (LAS) have been undertaken over the past decades [3]. Such improvements should yield benefits for land rights-holders, but if cognisance is not taken of their specific needs and their own worldviews, there will likely be (negative) unintended consequences to development [4–7] stemming from the irrelevance of the new

system to the local context. This is especially problematic when developments affect customary land rights-holders, whose land rights may not be formalised [3,8] and tenure socially secured.

In this paper, we present a continuum of theories informing land reform in customary land rights and tenure contexts. We propose that interventions aimed at strengthening or improving land administration, land rights recordal, and/or the cadaster (all of which are herein referred to under the umbrella term of cadastral systems development—see Section 1.1.3) should begin with understanding the theory underlying the intervention and how this aligns with the lived experience of customary land rights-holders. Cadastral systems development that impacts on customary land tenure systems is most likely to come up against differences regarding the understanding of the relationship between people and land and theories of development. Evidence is presented from three case studies on land reform in South Africa, Mozambique and Nigeria, with a focus on the impact on customary land rights-holders.

Following this introduction, several significant terms are defined to ensure that their meanings are clearly understood by the reader. The aim of the research is then presented. In Section 2, the continuum of land reform theories is presented. This is followed by Section 3, wherein the research method is described. Results are presented in Section 4, followed by the conclusions (Section 5).

1.1. Definitions

1.1.1. African Customary Law

Customary law is a set of rules, usually not codified, drawing on tradition yet continually evolving under the influence of contextual pressures. Diala [9] refers to people's adaptation of customs in response to such pressures in his definition of living customary law. This is differentiated from official customary law in that the former is uncodified, flexible and adaptive, while the latter is codified and restrictive [10]. In practice, under situations of legal pluralism, people often observe customary and/or statutory law as the need dictates [9,11] giving rise to a continuum of different combinations of both [12].

African customary law is upheld by the South African Constitution (Section 2.1). There is a legally pluralist system in South Africa today in which the common law and customary law systems operate in parallel and are of equal status. Not all customs are legally binding—they must have the attributes of reasonableness, long establishment, uniform observance, certainty, and conformity with the Constitution [13,14]. A court of law may decide whether the attributes listed above are present. Judicial precedents may then be used [13]—not every case needs to go to court. Official customary law follows the processes of making of formal law, while living customary law evolves in communities and is recognized through judicial decisions.

1.1.2. Customary Land Tenure

Adams, Sibanda and Turner ([15], p. 2) succinctly define land tenure as "the terms and conditions on which land is held, used and transacted". The Food and Agriculture Organisation of the United Nations ([16], p. 7) defines land tenure as "the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land". The legal approach recognises the *de jure* (formal, statutory) identification of land tenure (how the land is held) and associated rights (what the holder may do with the land). Enemark [17] takes the legal approach, defining land tenure as the allocation and security of land rights through legal cadastral surveying, land transfers, and the management of boundary disputes. The customary approach focuses more on the *de facto* (informal, extra-legal) situation, constituting the communally accepted rules defining access to land along with land use rights and interests [16]. These rules reflect the social relationships that order customary society and the balance of power among stakeholders. Changes to these rules may result in a fundamental shift in existing power structures and social relationships.

Cousins [18] notes that the terms 'customary', 'communal', and 'traditional' are often and incorrectly used as synonyms. He asserts that it is important that these terms be understood as distinct.

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The conflation of 'communal' and 'customary' is attributed to misconceptions about customary land tenure by former colonial authorities in South Africa. Cousins contends that the British assumed that customary land was communally held to "render easier the seizing of African lands" and was more of a politically strategic designation than a description of actual land holding relationships ([19], p. 381). Perpetuating this description of customary tenure as communal, perhaps incorrectly perpetuates the implication that all land in customary areas belongs to the community and none to the individual, and that the community use the land as a collective for a common purpose [10]. But this is not the case—customary land rights may be individualised and/or communal [20]. Despite empirical evidence that "customary tenure is not exclusively communal", the "communal paradigm" persists in land policies and legislation ([21], p. 316).

To avoid confusion, and following the examples of Cotula [11], Lavigne Delville [20], and Chitonge et al. [22], *customary* tenure is here preferred over communal or traditional tenure. This is to avoid the communal paradigm, with its colonial connotations, while highlighting that landholding is "regulated by local traditional institutions, based on customary norms and practices" [22] (p. 83) and that access to land is via "social norms and networks ... where local powers play an important role in land rights regulation and conflict resolution" [20] (n. 1).

Customary tenure may be divided into the 'holding' and the 'commons' [15]. The 'holding' refers to land occupied and used exclusively by individuals or households for residential, farming, or other activities. The 'commons' is land shared by multiple users for grazing and gathering. Figure 1 illustrates examples of this from rural South Africa: clearly demarcated fields and dwellings relate to the holding and are for the exclusive use of certain community members (usually households); the uncultivated land in-between fields and dwellings is the commons, accessible for grazing or other activities by all community members. Access to the commons may either be open or limited to certain group members. Per Okoth-Ogendo ([23], p. 2) the African 'commons' is "available exclusively to specific communities, lineages or families operating as corporate entities ... characterised by ... their permanent availability across generations past, present, and future." In other words, land is held as an asset across generations, managed at different levels of social organisation, and used in function-specific ways. Okoth-Ogendo contends that customary land does not belong to individuals, it is not public property (property held by the State for public purposes) but should rather be understood to be private property for the community that controls it. Hence, it is the system of customary tenure that is communal, being in essence community-based. Individuals of this community have clear rights, restrictions and responsibilities (RRRs) with respect to access and use of the land and associated resources (ibid.).



Figure 1. Smallholdings under customary land tenure in the Eastern Cape Province of South Africa.

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Under customary tenure, rights to the holding and the commons are recognized under *customary law*. While providing *de facto* tenure security, these use rights do not confer individual ownership and may be subject to arbitrary deprivation at the hands of corrupt traditional leaders [16,24–26]. The following general characteristics of customary land tenure systems are noted [11,22,26,27]:

- Land rights are socially embedded, overlapping, and nested. They mirror the social and cultural
 values of the community and gain legitimacy from the trust a community places in the institutions
 governing the system.
- 2) Rights are derived from accepted membership of a social unit (kinship ties), either through birth or acquired allegiance.
- 3) They allow multiple uses (e.g., farming, fishing, occupation) and users (e.g., farmers, migrants, herders, residents) of resources.
- 4) Rights are both individual (the holding) and communal (the commons).
- 5) They are dynamic and evolve in response to external or internal change. Boundaries are flexible and negotiable.

It is acknowledged that, while such local land tenure systems draw their legitimacy from traditional practices, they are affected by modern (colonial and post-colonial) influences [11,28]—there is no such thing as 'pure' indigenous knowledge [29]. This is especially true in South Africa "where what is referred to as customary law is a mixture of 'tradition' and colonial and apartheid legislation" ([30], p. 2).

1.1.3. Cadastral Systems Development

Although *cadastres* are usually associated with surveyed land parcels and registered land rights [31,32], the land parcel and associated RRRs could refer equally to off-register and customary land interests and tenure arrangements. It is important to acknowledge that the definition of the cadastre as parcel-based is changing to allow for the inclusion of other means of spatial identification [33]. A 'continuum of accuracy' has been proposed such that spatial units may be described via text, points, lines, polygons, or polyhedrons as contextually appropriate [34]. Point-based cadastres, wherein the plot may be identified via a single point location rather than as a geometric figure [35], allow for the accommodation of different expressions of land, including fluid boundaries. Neo-cadastres rely on crowd-sourced geospatial information to record cadastral extents of off-register land rights (such as customary land rights) [36]. Thus, the modern cadastre may accommodate a range of levels of (im)precision and (in)accuracy in the description and recordal of plots.

A cadastral system combines the cadastre, with its spatial focus, and the land record, with its legal focus [32]. Hence, cadastral systems link people to land (spatial component) and rights (legal component) as well as other (off-register) land-based interests, through the accepted rules defining the relationship (land tenure)—see Figure 2. Unregistered, customary land rights may be recorded in a cadastral system, as illustrated in Table 1, and as accommodated variously in the different land acts of countries such as Tanzania, Kenya, Uganda, Liberia, and Malawi. Such off-register cadastral systems may contain all of the elements of registered, formalised cadastral systems using methods and instruments appropriate to their given contexts. Hence, a cadastral system should not be understood to refer exclusively to formalised systems of property rights, but may refer to non-exclusive, customary property rights too, as per both official and living African customary law. Extending the definition of cadastral systems to a conception inclusive of off-register rights and interests addresses the tension between formal land law and lived experience with respect to land in a legally pluralist society. A caution is that the new conception of an inclusive cadastral system should treat the off-register but legal cadastre with the same value as the formal cadastre in re-engineering an inclusive system.

Cadastral systems development may be understood to refer to any intervention aimed at improving an existing cadastral system, whether legally or customarily defined, i.e., improving the links between people, land and rights. Developments of the cadastral system may change the nature of existing land

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rights, but this is not necessarily the case. Developments may relate to how land is demarcated, how rights are recorded, and the administration of land rights.

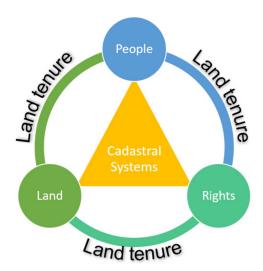


Figure 2. Cadastral systems and land tenure: linking people to land and rights.

Table 1. Cadastral systems of registered freehold or unregistered customary land tenure.

Cadastral System	Registered Freehold	Unregistered, Customary
People	Natural and juristic persons (e.g., individuals, companies, trusts)	Recognized members of a customary community governed according to African customary law.
Land	Parcels precisely defined by land surveyors following legislated standards of accuracy (e.g., the South African Land Survey Act 8 of 1997 and associated regulations).	Plots allocated according to custom [37] and demarcated following customary norms (e.g., building a cairn at the corners of the demarcated plot). Plots and boundaries may be flexible (variable over time).
Rights	Exclusive use, ownership, occupation, access, exclusion [38] as stipulated in the registered title or deed and as restricted by any relevant legislation.	Access, occupation, use, exclusion, rights and interests defined according to (official and/or living) African customary law [38] and recorded in the collective memories of the community or by some other means.

Land tenure reform, a planned change to the terms and conditions of land tenure [15] that serves to recognise locally-held land rights and to transfer power over these rights to the land rights-holders [39], may be considered a type of cadastral systems development. These improvements may be anything from small changes to complete redesigns or brand-new developments. It is not assumed that cadastral systems development replaces living customary land law with official customary land law, fluid boundaries with fixed boundaries, or customary landholding with registered freehold. Cadastral systems development involves taking what is already in existence and changing it to meet current needs.

1.2. Aim

The primary aim of this paper is to present a typology of land reform theories—see Table 2—as a means of understanding and interrogating the motives behind land reform. Such an understanding may reveal deficiencies in the approach taken by development practitioners and land policymakers, with a consequent negative impact on the success of land reform projects. To test the typology, three cases of land reform in sub-Saharan Africa are assessed. It is found that the theory underlying land reform is misaligned with the lived experience of the would-be beneficiaries of land reform: the customary land rights-holders themselves.

Table 2. Summary of land reform theories.

Theory	Possible Indicators		
Conservative	Preservation of customary tenure Broadly African view of land Traditional leaders prominent in land administration		
Democratic adaptation	Respecting and clarifying existing, legitimate land rights Improving gender equity, accountability and democracy Building on existing customary practices		
Hybrid adaptation	Combination of statutory and customary arrangements Participatory approach: communities decide which rights are recorded		
Incremental adaptation	Titles are a long-term objective Extra-legal, off-register practices recognised as legitimate Spontaneous titling according to need		
Incremental replacement	Titles are the desired end state Customary tenure provides sufficient tenure security Legal recognition of customary tenure and adjudication practices		
Evolutionary replacement	Land rights spontaneously evolve towards individualisation Titles are required for tenure security		
Collective replacement	Nationalisation of all land/collective farming villages Equitable distribution of resources and services Democratisation of traditional leadership Improved productivity and self-reliance		
Systematic titling	Titles are required for tenure security Titling leads to economic development Customary tenure must be replaced		

2. Typology of Theories

Land administration and cadastral systems development are influenced by land policy and land-related theories. There appear to be two broad sides to debates around these theories [22,40] (summarized in Table 2 above). The replacement theorists support the substitution of customary land rights (living, uncodified customary law) with titles (official, codified customary law, possibly including collective freehold titles or records, or individual freehold or limited real rights titles or records) to ensure tenure security. Hence, titling separates land held by individuals or groups from the greater community. Conservative theorists maintain that uncodified, living customary tenure systems provide sufficient tenure security and that titling reduces tenure security; they advocate to conserve much of the customary status-quo. In situations where the influence of traditional leaders is strong (such as in South Africa), such approaches may be described as anti-democratic, as explained in Section 2.2 below.

Between the replacement and conservative extremes lies a third school of thought [40]: the adaptation theorists who advocate for incremental changes to the land tenure system, or the adoption of hybrid tenure systems to accommodate local and changing needs. This approach, which Bruce [41] (p. 43) calls "renovating" customary tenure, acknowledges the worth of living customary tenure systems while suggesting that their "defects" can be addressed "by a certain amount of creative tinkering and fine-tuning, rather than more dramatic reforms."

These three schools, with their internal variations, are illustrated in Figure 3 and explained below. The arrow in the figure serves to represent a continuum with the conservative and replacement theories on opposite extremes since the conservative approach advocates for little or no change while the replacement theories advocate for fundamental and significant change. The descriptions below are neither all-encompassing nor definitive but are presented to illustrate the continuum and to describe some of the dominant thinking behind land reform theories. Neither do the theories exist in isolation from one another on the continuum, but they may overlap in certain scenarios [42]

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(see Table 2). The section begins with an overview of the arguments for and against replacement vs. conservation positions.

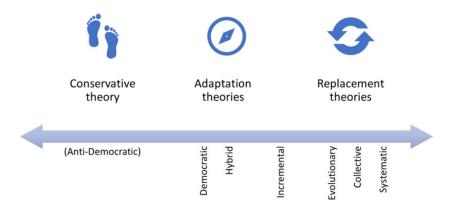


Figure 3. Three schools of land reform theories.

2.1. Overview: Replacement or Conservation

Replacement theorists consider living customary land tenure to be a hindrance to the development of land markets and modernization of the economy, and propose to replace it with an apparently better-suited tenure system, namely private property rights [43]. For replacement theorists, titling and registration are seen to be the means of solving land management and administration problems in Africa and elsewhere. This is perceived to foster successful land development, increase credit opportunities, and promote the development of land markets [44–46]. Arko-Adjei [43] summarizes the conventional logic behind replacement theory as follows:

- With the focus of customary tenure systems being on group rights, the tenure of *individuals* is insecure.
- Because customary rights are inalienable, they do not promote investment and thus hinder development.
- Common property related to customary systems is archaic and likely to disappear in the future as tenure evolves towards individualisation.

The 'tragedy' of the African commons occurred with their inclusion within colonial boundaries, resulting in the replacement of indigenous LAS by an imposed colonial system, and the general disruption of indigenous social systems. African customary law was seen as inferior to colonial legal systems and suppressed on the grounds that it would naturally evolve or be succeeded by the 'better' Western law [23,43]. "There was, therefore, no need to acknowledge, let alone develop, customary law as a viable legal system and customary land tenure as a system of rights and duties" ([23], p. 8).

Some scholars have strongly criticised the introduction of land titling and registration in Africa, especially in sub-Saharan Africa [44]. They cite the failure of both market-oriented and state-imposed tenure reforms in sub-Saharan Africa, using as evidence the increased marginalisation of the poor and vulnerable and their exploitation by elites [47]. Bruce ([48], p. 51) warns that comprehensive tenure reform programs in customary contexts are often ineffective and usually expensive. He suggests that more attention be given to "community-based solutions to tenure insecurity and a 'state-facilitated' evolution of indigenous land tenure systems." Per Hornby et al. ([49], p. 25), "Land titling is a questionable means of securing tenure and is thus not necessarily appropriate as a way to increase investment in land."

2.2. Conservative Theory

Conservative theory sees living customary tenure as providing sufficient tenure security [19] because "land acts as a social, political and economic tie between kinship groups" ([46], p. 39). This

viewpoint stems from a multi-functional, multi-generational understanding of land from a broadly African perspective in which land forms the foundation of socio-economic, religious, and political systems [6,23,43,46]. Such African customary tenure systems are based on social legitimacy through kinship and ethnicity [48]. Land titling programs in these sorts of contexts may fail because titling breaks down the social structure of rural African communities [46]. Hence, de jure tenure security may erode pre-existing, socially embedded de facto tenure security. Conservative theorists thus advocate for the recognition and recordal of de facto customary tenure systems.

The role of traditional leaders is of crucial importance in conservative theory, because they are largely responsible for land allocation and administration. While a popular view of pre-colonial traditional leaders is that they were autocratic rulers "who paid little heed to their subjects' wishes", Delius ([50], p. 215) shows that this view is biased and that alternative perspectives stress "the consultative, even democratic, dimensions of chiefly power" [19]. However, the nature of traditional leadership has changed considerably with the advent of colonialism (and apartheid in South Africa), and many traditional leaders now live up to such a prejudicial view of them [50]. It is worth highlighting that there is no truly indigenous tenure and that modern versions of customary tenure carry with them the stains of colonial and, in South Africa, apartheid administrations and, it is contended, an associated feudal, anti-democratic version of customary land rights, tenure and administration [51,52].

Bruce [48] cautions that the premise of conservative theory may only apply in situations of subsistence agriculture and land abundance. Tenure insecurity may arise for commercial farmers under customary tenure systems if they become targeted as sources of wealth and power and seen as a threat to traditional leadership. Tenure insecurity may also arise due to the abuse of power by traditional leaders or their ineffectiveness as land administrators. Hence, as noted by Ubink and Quan [53] and Kingwill et al. [54], we should avoid romantic assertions of customary tenure systems because such "systems can experience problems of gender discrimination, or abuses of power by chiefs, traditional councils, shacklords and community leaders" ([54], p. 402). Democratic adaptation theory provides an alternative.

2.3. Democratic Adaptation Theory

Due to the overlay of colonial and apartheid influence, modern customary tenure systems may carry little resemblance to pre-colonial customs. Current practices may be anti-democratic and unconstitutional [52]. Democratic adaptation theory highlights the need for democratization, justice (particularly around gender equality), and accountability. In the face of a colonially-inspired, 'communal' land tenure system with concomitant abuses of power [19,51,52], the goal is to clarify existing land tenure relationships [46] through:

- respecting existing land rights that are legitimate in African customary law;
- providing clarity on what these existing rights are—the 'arrangement' vs. the 'form' of tenure [49]—in so far as these are recognised in African customary law; and
- providing land tenure security where customary tenure systems are weak.

This may be achieved by recognizing social and off-register tenures that already exist 'in the shadow of' the dominant legal system of property rights (what Kingwill et al. [54] term the 'edifice') but are legitimate and legal in terms of African customary law. By building on "the identified strengths of existing customary tenure ... some non-conflicting elements of formal tenure concepts" may be recognized ([43], p. 38). By focusing attention on anti-eviction measures, democratic land administration and governance, gender equity in land allocation, and locally accepted evidence [54], land rights-holders may be protected from human rights abuses at the hands of traditional leaders acting under the authority of the State [19,51,52]. This involves "working in the shadow of the edifice, using the spaces and opportunities that exist within current institutions and policies to focus attention on improving the tenure security of ... [those] ... who live in extra-legal situations" ([54], p. 390).

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2.4. Hybrid Adaptation Theory

Hybrid adaptation theory allows communities to decide "which rights are important and should be recorded" ([43], p. 36). Such a participatory approach creates a sense of ownership of the process of formalisation, as opposed to the top-down approach of the replacement theorists. It also allows for flexibility, innovation, and the adoption of fit-for-purpose technology and low-cost tools to record land tenure information [55]. It leads to hybrid tenure arrangements that reflect "what happens frequently in practice; that tenure is often established through a combination of statutory law, custom or informal arrangements, rather than a single one" [56] (emphasis added).

The persistence of customary law alongside statutory law is evidence of its resilience, so that even where traditional leadership is absent, land administration may proceed according to customary norms [37]. Where such local practices are 'overwritten' by official structures, the pre-existing norms and practices may persist 'underneath' the official structures [57].

Royston [57] refers to the complexity of land tenure, power relations, and social responsibilities as an 'entanglement' that confounds attempts at formalisation. In land law this is noted as a poor match between official customary law and living customary law. The latter follows its own trajectory regardless of its mapping in official customary law. She presents the case that government intervention into a communal context may lead to a situation of hybridised tenure, wherein some aspects are formalised (e.g., communal land rights change to leasehold) while others remain unchanged (e.g., local management practices and social legitimacy). "This is especially true if state intervention overly simplifies a complex reality" ([57], p. 232). Even in situations of land reform that resulted in registered titles, customary norms may persist [58]. For example, when the title holder dies, "The land remains in the name of the deceased and is informally divided among the heirs according to customary rules" ([41], p. 41—see also [59]).

Hence, Bruce, Migot-Adholla and Atherton [58] suggest a shift away from systematic titling programs and towards incremental approaches focussed on addressing contextual needs. This marks a shift away from a 'replacement paradigm' and towards an 'adaptation paradigm'. Such an approach looks to adapt local norms and practices and official laws and policies to achieve a better fit and greater tenure security [49].

2.5. Incremental Approaches

Straddling the adaptation and replacement theories are the incremental approaches. On the adaptation side, proponents reject the criticism that customary tenure is a constraint to land development. They also reject land titling and registration programs as the solution to the economic problems in Africa, but instead support an incremental approach to tenure reform that "places relatively few demands on resources and institutional capacities" ([43], p. 37). The provision of registered titles is not entirely rejected but is instead considered to be a long-term objective. Extra-legal, off-register tenure practices may be made visible through recognition rather than replacement [49]. An incremental adaptation approach aims at promoting the adaptability of existing arrangements, avoiding a regimented tenure model, and relying on informal procedures at a local level: "an approach based on co-operation rather than confrontation" ([44], p. 75).

On the replacement side, proponents advocate for registered title but incrementally and in response to demand (rather than spontaneously). Bruce, Migot-Adholla and Atherton [58] advocate for such an approach in situations where customary tenure systems provide adequate tenure security, but some rights-holders desire registered titles. In such situations, sporadic, voluntary registration of title may be appropriate. Clear legal recognition of customary rights and highly participatory adjudication processes are required for secure tenure.

Royston et al. [56] propose a conceptual framework for incrementally upgrading tenure under customary administration. The starting point is recognition of land rights, and such recognition may be according to traditional norms and practices, or according to official administrative or legal processes, whichever is most applicable on the ground. They term such recognition the 'rules of the game' and

caution that failure to acknowledge these existing rules leads to interventions that lack significance for land rights-holders and a consequent loss of sustainability as people revert to their previous land tenure and administration practices. The 'rules of the game' may be recorded using innovative solutions such as the Social Tenure Domain Model (STDM) [60,61]. This, in turn, allows for the provision of essential services. "An incremental approach to tenure security aims to facilitate public investment through official recognition, without title being a necessity" ([40], p. 69). A corollary is that registered diagrams need not be produced—descriptions, videos, plans etc. may suffice if they meet the requirements for public investment.

Incremental approaches are criticised because they may merely increase the time taken and the number of steps involved to arrive at a 'final' result, which might only be a transitional solution [43]. Royston [40] cautions that such a solution might take a lifetime to emerge.

2.6. Evolutionary Replacement Theory

"Most western analysts discussing the future of indigenous tenure systems assume explicitly or implicitly that they will develop in the direction of private individual ownership, whether by evolution or forced march" ([41], p. 38). A central tenet of evolutionary replacement theory, also known as the Evolutionary Theory of Land Rights (ETLR), is that, "under the joint impact of increasing population pressure and market integration, land rights spontaneously evolve towards rising individualization and that this evolution eventually leads Rights-holders [sic.] to press for the creation of duly formalized property rights" ([44], p. 29). This idea is illustrated in the continuum of land rights [62] where the arrow pointing towards registered freehold indicates the evolutionary trend from informality towards formality. The implication of the ETLR is that a state needs to implement a land titling programme to formalise private property rights once land becomes scarce in order to reduce conflict and promote efficiency, economic growth and political stability [63]– goals that are often shared by cadastral innovators and land administrators [64–66].

Platteau [44,63] clearly shows that these aims are not always achieved, especially with reference to sub-Saharan Africa [7,67]. He asserts that perhaps "the most delusive idea behind the ETLR is that land titling can be expected to increase land security for all customary Rights-holders" ([44], p. 73) and calls such an assumption "naïve". Whittal [38] concurs: "The assumptions underlying evolutionary land rights thinking require critique [because] change is not always unidirectional" (p. 17) and because freehold should not be valued more highly than other land tenure forms that can offer strong tenure security.

The ETLR does reflect the idea that land tenure arrangements and practices are changing more or less autonomously under the pressure of growing scarcity of land, and that these changes are leading to increased individualisation of land tenure and increased transferability of land [43,44]. However, it fails at the point of formalisation and registration of private property rights in the context of sub-Saharan Africa [63]. In some contexts, land registration has led to improved credit access, higher land values, increased investments in land, and higher output/income [68]. But the evolution of land rights is not necessarily a cost-effective process, especially in sub-Saharan Africa, which could create bias in favour of the wealthy [68,69]. Hence, the assumption that registered titles give tenure security may be invalid in the face of government land reform policy and practice that advances the ETLR [46]. It also flies in the face of many customary norms and practices that would be recognised as legal and offering a high degree of tenure security when viewed from an African customary law perspective.

2.7. Collective Replacement Theory

Collective replacement theory draws on socialist ideologies [41] and focuses on non-individualized outcomes of land tenure reform [46]. Such 'African socialism' [41] aims to address social and economic inequality. Okoth-Ogendo [70] describes two versions. The first is that of nationalization of all land for the purposes of redistribution to beneficiaries in collectives via leasehold. This approach may characterize customary tenure systems wherein the State represents the successor to the tribe [41].

The second version focuses on improving production through collective farming villages, such as the Ujamaa in Tanzania [46,70]. The objectives of such schemes were:

- 1) Equitable distribution of resources;
- 2) Democratization of traditional and community leadership;
- 3) Increased development and improved land productivity;
- 4) Focus on self-reliance; and
- 5) Efficient distribution of services such as water, electricity, education, and health.

Collective ownership of land may be desirable for poor land reform beneficiaries because it provides them with a sense of group support akin to customary tenure [71]. While collective ownership and production are not in themselves problematic, the imposition of such an approach on inexperienced groups takes no consideration of their desires or needs. The beneficiaries are also not given sufficient post-settlement support from the State [41]. Hence, most such schemes in South Africa have not met their statutory obligations [47]. Likewise, the Ujamaa in Tanzania and similar collective schemes in Ethiopia [41] and Mozambique [72–74] did not live up to expectations and have since been abandoned. It appears that proponents of collective replacement theory draw from a communal paradigm that assumes people will want to work and live together in communities and fails to recognize the individual rights within customary land systems. Bruce ([41], p. 47) concludes that cooperatives are best seen as a "transitional mechanism" for rapid transfer of title to groups of people on large farms, but which should be followed by subdivision and individuation.

2.8. Systematic Titling

De Soto [45] proposes that replacement of customary tenure through systematic titling will lead to increased economic activity to the benefit of the poor. Such land titling theory (LTT) [75] proposes that a land title provides security of tenure that can then be used as collateral for mortgage finance, stimulating economic development, and rapidly reducing poverty [45,68,76,77]. De Soto's approach has been met with some criticism [25,43]:

- The formalisation process is costly, and the result is increased land values that are inaccessible to vulnerable groups and consequently not pro-poor.
- Land markets emphasise inequality in land distribution.
- Formalisation may create opportunity for abuse, opportunism, and the destruction of established local systems if government institutions are weak.
- The 'poor', who are the intended beneficiaries of formalisation, are not a homogenous group.
- The formalisation model does not recognise the complexity of overlapping customary rights.
- There is little evidence to support the hypothesis that formalisation will lead to improved credit access in African countries.

In evaluating the impact of some property rights reforms projects, Conning and Deb [78] concur that the benefits achieved in practice do not match up with theory. This may be because, in some cases, property rights reform projects have formalized informal property rights that already provided tenure security, meaning that the change from informality to formality made very little difference to property rights-holders. Other projects have focused on improving tenure security without addressing land market issues related to transferability. In further cases, land titling projects have resulted in a decrease in tenure security as land is appropriated by social elites and other power-holders [3]. Lack of investment opportunities, risk aversion, and political, social or economic constraints are other key causes. Also, if the registry is incomplete or out of date, the scope for using land as collateral is further limited [79].

Systematic land titling and registration programs should only be adopted in situations where customary tenure is weak or absent [46,80], where land is becoming valuable due to urbanisation or population growth, and when land is being redistributed as part of a land reform programme [58]. But

even under such circumstances, the arguments presented here strongly suggest the exercise of caution. Bruce [41] cautions that land redistribution and tenure reform may only see positive impacts when sufficient support and an enabling market environment are in existence. As with ETLR, systematic titling programs are also inclined to ignore customary norms and practices valid under African customary law since the resources and time required to interrogate these, and design aligned cadastral systems developments, does not lead to the quick-fix titling 'solutions' desired and promoted by many multi-national funding agencies.

2.9. Summary

Western, rights-based approaches tend towards individualisation which is realised in the formalisation of land ownership [1]. By contrast, a broadly African view of human rights embraces a mixed communal and individual conception of land rights based on the ubuntu ideology [81]. If land is viewed primarily as an economic asset, then the dominant underlying theory is of the replacement group. How formalisation is promoted determines the type of replacement theory. Conversely, if land is viewed primarily as a social, communal asset, then the underlying theory is towards the conservative side of the theory continuum. Conservative theory favours preservation of traditional forms of land administration, while replacement theories value more centralized, limited, and formal rules and procedures. Table 2 provides a summary of the salient features of the theories considered above. These features are used as indicators in Section 4 to aid in the identification of the theory underlying land reform and cadastral systems development.

3. Data Collection and Analysis

3.1. Data Collection

As components of larger, independent research projects, the first and second authors conducted in-depth interviews and focus groups with a variety of stakeholders in land administration and reform in South Africa and Nigeria respectively. (The Mozambican case was a desktop study by the first author, therefore only secondary data was used.) The respondents comprised of four groups:

- 1) The 'top-down' group of people involved in cadastral systems development and land administration activities, representing the relevant state department or agency responsible for land administration.
- 2) The 'bottom-up' people who are the customary land rights-holders due to benefit from development.
- 3) The traditional leaders responsible for administering land in customary areas.
- 4) The observers (South African case only): academics and members of Non-Governmental Organizations (NGOs) who are not involved in development but who are witnesses to the process of development and its effects.

These four groups were chosen to allow for the collection of different perspectives on the subject. The 'top-down' group brings the perspective of the respective state, which has its own agenda when it comes to land tenure reform and cadastral systems development. The 'bottom-up' group brings the perspectives of individuals and communities living with insecure land tenure. The traditional authorities should represent the views of the communities under their jurisdiction, but they may have their own agendas regarding land reform. The observers bring a less-biased perspective because they are witnesses to the processes of land tenure reform and cadastral systems development without necessarily having a vested interest in the outcomes. South African interviews were conducted in May, September and October 2017, while Nigerian interviews were conducted between October 2017 and January 2018 [82].

To preserve anonymity, the identities of the respondents are not revealed. All interviews were conducted in terms of the University of Cape Town's code of ethics. All interviews were electronically

recorded, with the interviewees' permission. Transcriptions of the recordings were shared with the interviewees to ensure that their contributions had been faithfully captured. In some instances, interviewees provided corrections where we had misinterpreted what they had said, and in other instances some interviewees used this opportunity to provide elaborations on their input. In all cases, the interviewees were satisfied that their contributions had been correctly recorded.

Secondary data collection concerned published materials related to land tenure reform and cadastral systems development. Publications include magazine and newspaper articles, conference proceedings, books, reports, and peer-reviewed journal articles. Operational manuals and organisational newsletters also served as sources of information. By combining such secondary data with the diverse opinions collected from the four groups of interviewees, the data is triangulated to improve trustworthiness of the results [83,84].

3.2. Data Analysis

The qualitative data collected from interviews and published sources was analyzed following a grounded theorizing approach [85]. The intent behind such an approach is for the researcher to adhere, as far as possible, to the three pillars of emergence, constant comparison, and theoretical sampling. *Emergence* requires the researcher to have an open mind when approaching the data, which is broken down, conceptualized, and re-constituted through the processes of 'coding' and 'categorizing'. Coding is the process of identifying important issues that emerge from the data and describing these issues with short phrases [86]. Similar codes are then grouped together to form concepts, and similar concepts are grouped into categories. *Constant comparison* requires the researcher to keep comparing the emerging codes, concepts and categories to those that were previously collected. This allows the researcher to identify gaps in the data, leading to *theoretical sampling* as data is specifically collected to fill in the gaps [87]. Once this iterative process has been repeated several times, the researcher will identify which codes feature prominently in the case, and which do not. This is referred to as 'groundedness' and is useful for highlighting dominant thinking behind processes. In this research, constant comparison of codes with the continuum of theories, paying attention to their groundedness, was useful for uncovering the theory underlying land reform.

Guba [88] suggests that researchers should establish an audit trail that allows someone else to examine the process of data collection and analysis. To this end, we have made use of computer assisted qualitative data analysis software (CAQDAS) called Atlas.ti (version 8). CAQDAS are useful for making sense of dense, detailed qualitative data in a variety of different formats: textual documents, audio-visual recordings, and pictures [89–91]. Coding and categorizing of the interview transcripts and documentary evidence have been done using this software, which allows for transparency of data analysis, improves the credibility of the findings, and makes it possible for others to replicate the research (dependability).

A framework for guiding cadastral systems development in customary land rights contexts has been previously published by the first and third authors [92]. The framework constitutes five evaluation areas, broken down into associated aspects and elements, which are measured using appropriate indicators. One of the evaluation areas of the framework is the theory underlying development, which is the focus area for this paper. The associated aspects and elements are presented in modified form in Table 3. These aspects and elements are used here along with the indicators in Table 2 to aid in identifying the theory underlying development in the South African, Nigerian and Mozambican case studies.

An understanding of land in its social context provides a justification for development that is aligned to the normative principles emanating from the underlying theory. For example, two typical goals of cadastral systems development are economic growth and tenure security. If goals are related to economic growth, then measures of success will be market-orientated [93,94]. If it is accepted that titling is directly related to improved tenure security [95–97], as per the replacement side of the theory continuum, then a measure of success may be the numbers of land parcels registered [98].

Aspects	Elements	
Understanding land in its social context	Justification for developmen	
<u> </u>	Belonging	
Goals for development	Gap analysis	
	Measures of Success	

Table 3. Aspects and elements of the underlying theory.

4. Results

4.1. Nigeria

4.1.1. Justification for Development

In pre-colonial Nigeria, land was mainly administered using customary laws of the community, making land administration and management the sole responsibility of the indigenous people (per conservative theory) [99,100]. In the colonial era, a mix of customary and statutory laws was used to administer land. Customary laws were used in the communities and statutory laws were enacted to allow land transaction between the indigenes and non-indigenes (along the lines of hybrid adaptation theory) [100–102]. The only formal title was freehold which created more avenues for land to be acquired by the European traders [103]. At independence in 1960, two scenarios resulted: in the southern regions, customary law prevailed and chiefs administered the land, while in northern regions, a Land Tenure Law of 1962 was enacted [101]. The Land Tenure Law introduced statutory and customary rights of occupancy. In the post-colonial government, inadequate management systems and maladministration of land caused many challenges to national development. As a result, the post-colonial government passed the national land policy and Land Use Act (LUA) in 1978. The aim was, among other things, to unify the land tenure system and make land readily available to citizens, yet accessibility to land remains contentious [104]. Land speculations, land grabbing and expropriation without adequate compensation are the major constraints to land availability. Ambiguities are inherent in the LUA; as a consequence, many have called for its review [105–110].

The LUA is based on formalization theory (collective replacement). In response to the challenges posed by the existence of the LUA, a land reform program was initiated in 2009 with two forms of reform: 1) expunging the LUA from the Constitution and amending all clauses that empower the state Governors to consent to mortgage transactions and assignments of land, and 2) making provision for all Nigerians to continue to enjoy their possessory and use rights to their land [111]. Changes in government can be attributed to the little success recorded so far. A National Land Reform Commission has been proposed to help in sustaining the program.

4.1.2. Belonging

The Constitution of the Federal Republic of Nigeria provides rights to own immovable property anywhere in the Federation, equal rights for women and men, and prohibits discrimination based on gender. Women's rights are recognized as equal to men's, at least in law. This is suggestive of the influence of democratic adaptation theory. However, recent experiences in the northeast of the country suggest reality that differs from this ideal.

Land tenure in the northeast fosters uncertainty, allows discrimination and impedes economic development [112]. Customary land management in the region discriminates against women's land ownership and inheritance with only 4% of land owned by women in the region [113]. During the Boko Haram insurgency, many of these women have been widowed, which complicates their land access (ibid.). Many of these women were also denied land access from the community they fled from. The lack of clear land tenure system victimizes women which further hinders the process of restitution

following conflict [112]. The uncertainty in land tenure also hinders agricultural production. More worrisome is the unclear legal recourse (ibid.).

Land is accessible in two ways: family members have land and give you access to it, or you rent land and give a percentage of your produce to the landlord [114]. In Maiduguri (the Boko Haram stronghold) there is a growing property market. People returning to lands from which they previously fled find that they must pay double the price for land access compared to the previous decade [115,116]. In respect of agricultural activities, many rural farmers have returned to their settlements and are engaged in active farming activities [117], although challenges still abound [118].

The LUA aims to protect land rights by granting statutory and customary rights of occupancy, limited to a 99-year leasehold. The LUA failed to indicate a renewal of this right of occupancy at the expiration of the 99 years. As the expiration of the leasehold draws near, there is tenure insecurity. This is suggestive of the influence of *evolutionary replacement theory*.

4.1.3. Gap Analysis

The Nigerian land policy aims to unify the land tenure system and make land readily available at an affordable rate [101,119]. However, a survey conducted by the second author in 2018 showed that these objectives have not been met [120]. Speculation in land is on the increase and fragmentation in the land tenure system is observed. Securing customary land rights was not central to the objectives of Nigerian land policy, although customary land rights were recognized by granting the customary right of occupancy (per *hybrid adaptation theory*). The LUA is dysfunctional in rural areas and lacks administrative support for service delivery. To ensure tenure security in customary areas, land policy must be pro-poor in process, outcome [121] and content.

4.1.4. Measures of Success

Two land laws were enacted after independence in 1960: The Land Tenure Law of 1962 and Land Use Act of 1978. Although both laws aimed at making land readily available for all Nigerians in an attempt to redistribute land and unify the land tenure system [119] (suggestive of *democratic adaptation theory*), this central objective is yet to be achieved [101,120,122]. To address this problem, the government initiated a land reform program in 2009.

The Nigerian land reform program has faced many problems which hinder its success [111]. The proposed reform favors leasehold tenure over freehold tenure, suggestive of the influence of *collective replacement theory*. To this day, most land is held by wealthy elites creating speculative activities in the land market [111,120]. As regards land restitution in Nigeria, much is yet to be achieved because of problems inherent in the LUA and problems related to its implementation [101]. Political will has been the major obstacle to achieving the laudable objectives of the LUA.

"[T]he introduction of compulsory title registration in urban areas, the establishment of a deeds registry applicable throughout the country, and the abolition of customary forms of tenancy" [119] (p. 237-238) were part of the recommendation of the panel who promulgated the LUA of 1978. These measures are indicative of *replacement theories*. Yet, lengthy and costly land registration processes [123–125] persist after four decades of this legal framework for land administration, and less than 3% of Nigerian land is registered in a formal land registry [126]. This caused the slow pace of development as all attempt is to replace customary system of land tenure.

4.1.5. Summary

The underlying theories informing the promulgation of the LUA and land reform program in Nigeria are summarized in Table 4. Conservative- and adaptation-based approaches were observed under the elements 'Justification for development', 'Belonging', and 'Gap analysis'. Yet it appears that the land reform program in Nigeria tends towards replacement theories. It is argued that this is not in the interest of customary land rights-holders. Land policy reform must be central to land tenure

reform. In enacting land policy, an intensive, participatory approach should be adopted to match land rights-holders' sense of belonging to the land reform goals.

	Understanding Land		Goals for Development		
Theory	Justification for Development	Belonging	Gap Analysis	Measures of Success	
Conservative	X				
Democratic adaptation		Х		Х	
Hybrid adaptation	X		Х		
Incremental adaptation					
Incremental replacement					
Evolutionary replacement	X	Χ			
Collective replacement				X	
Systematic titling	Х			Х	

Table 4. Identifying land reform theories: Nigeria.

4.2. Mozambique

4.2.1. Justification for Development

The General Peace Agreement signed in October 1992 ended 17 years of civil war and 25 years of armed conflict in Mozambique [127,128]. Competition for land quickly became a major issue. The government had distributed land rights to private investors and government officials with little thought for smallholder farmers, reinforcing their marginalization and impoverishment [129,130]. Lack of recognition of customary land rights decreased their tenure security as the interests of more powerful investors, previous colonial landholders, and state officials were promoted [130]. The political change in the country since 1992 has resulted in land acquiring new status as a commodity with productive value (per land titling theory).

The post-war political climate favored investment, and a 'land rush' followed. The solution to 'the land question' was assumed to lie in upgrading the technical aspects of the land management services and building capacity therein. Several approaches were suggested by international donors and NGOs, but Tanner [128] notes that these approaches were misaligned with the reality of rural Mozambique. To address this impasse, lawyers drafted a new law that reflects the underlying reality. They did this in consultation with various stakeholders, social scientists, NGOs, and farmer representatives (following democratic and hybrid adaptation theories). The result is the 1997 Land Law that has avoided irrelevance and instead matches as best as possible the actual sociology of rural land use.

Notwithstanding the above, the development of the 1997 Land Law and subsequent land administration reform were strongly influenced by land titling theory. We see this in Tanner [128], who refers to the need for citizens of Mozambique to unlock the capital value of their land, and Myers [129], who notes that without tenure security, smallholders and private investors are unlikely to make long-term investments in land. Access to this 'locked up capital' was a fundamental goal of the development process, but Norfolk & Bechtel [131], while acknowledging the importance of land tenure security for promoting investment and sustainable land use, highlight that the link between tenure security and access to investment credit is weak, especially in rural areas.

It appears that the theoretical foundation for the changes witnessed in Mozambique is that land titling leads to economic development (land titling theory). However, it does not appear that this approach is completely aligned to the normative principles governing the lived experience of most Mozambican customary land rights-holders.

4.2.2. Belonging

Ownership of all land vests with the State, consequently "the idea that people were returning to 'their' land [after the civil war had ended] had no real foundation ... [but the] reality on the ground was very different ... and post-war occupation of abandoned and apparently 'unoccupied' land by new investors gave rise to a number of conflicts" ([128], p. 9). To complicate matters further, colonial landowners were also returning to 'their' abandoned farms, attracted by the improved political and economic situation in the country. Many had documentation supporting their claim to these old farms, only to find them occupied. Thus Tanner ([128], p. 9) noted that the 'land question' facing the new government "was both potentially explosive and extremely complex". This situation paved the way for a new Constitution and National Land Policy to address the need for land restitution for internally displaced persons and refugees, drawing on the General Peace Accord's provision for such [73].

The Constitution provides rights to land for all Mozambicans (though the State retains ownership) and equal rights for women [132], suggestive of democratic adaptation theory. Likewise, the 1995 National Land Policy [133] aims to protect land rights of Mozambican people while promoting investment and ensuring sustainable and equitable use of natural resources. Importantly, the 1995 Land Policy recognized and accepted customary systems of land allocation and conflict resolution and provided for their accommodation in land legislation [128], per incremental replacement theory. These goals were enshrined in the 1997 Land Law (19 of 1997), which "aimed to achieve a balance between safeguarding the interests of communities and facilitating investors' access to land [and] to halt speculative land grabs that were leading to increased landlessness among the poor" [127] (p. 1). The drafting of the Land Policy and the Land Law were both highly participatory endeavors that sought to recognize customary land rights-holders' interests and practices, and therefore the "Mozambican case offers important lessons at a time when land policy and reform is high on the agenda in many African countries" [128] (p. 1).

In Chapter III of the 1997 Land Law, a right to land known as a DUAT (from the Portuguese Direito de Uso e Aprovetamento dos Terras), or right of use and benefit of land, is established. It is "roughly comparable to a lease" ([127], p. 1) because, while not conferring full ownership (which vests in the State), it does confer use rights for up to 50 years. It is also inheritable, secure, renewable, and transferable subject to certain conditions. A DUAT includes most of the aspects of the incremental theories and can be acquired as follows:

- 1) Occupation of land by a community governed under African customary law;
- 2) Occupation of land for an uninterrupted period of 10 years as if the occupier were the owner;
- 3) Allocation of a 50-year lease by the State to a private investor, after consultation with the affected local community.

4.2.3. Gap Analysis

Mozambique's land policy goal is summed up by Monteiro, Salomão and Quan ([134], p. ii) as follows: "to ensure that land access to all Mozambicans is guaranteed and protected, while satisfying socio-cultural needs, promoting economic progress and [serving] as [a] basis for sustainable and equitable development." The 1997 Land Law was supposed to be the means of realizing this goal. While the Land Law recognized customary land rights, unless communities registered their holdings with central government, their rights remained invisible to would-be investors. Hence, communities were assisted to register their land in the government cadaster and negotiate with potential investors [135]. Allied goals are to secure rights to land and natural resources, to reduce poverty, and ensure economic growth [136]. The above is suggestive of incremental replacement theory.

4.2.4. Measures of Success

To redress the injustices meted out on Mozambique's citizens during the colonial era and the following civil war, the 1997 Land Law recognizes customary tenure rights. However, many customary

communities remain vulnerable to powerful state and corporate investors because their rights are not registered. Thus, the Community Land Initiative was established to both provide for such registration and empower communities to negotiate with would-be investors [135] as a means of tenure regularization to restitute to communities the land to which they belong. The most notable measure of success is the numbers of land parcels registered, including the numbers of titles issued to women [131,135–138]. Community/user satisfaction was also noted regarding the adoption of a fit-for-purpose approach to land administration [137]. Reductions in the cost and time taken to record a land right are proposed measures of success [138], although Balas et al. [137] note that the current pace and cost are prohibitive. These measures are all indicative of the replacement theories.

4.2.5. Summary

Using the indicators specified in Table 2, Table 5 is populated. The evidence suggests that there is a tendency towards replacement theories, with incremental replacement theory being the most prominent theory influencing land reform in Mozambique. The table highlights the spread of theories having influence. This is indicative of the tension between the lived experience of customary land rights-holders and the predominantly Western view of formalized land rights and precise cadaster as necessities for tenure security. Yet the dominance of incremental replacement theory reflects the balance that was sought between respecting existing, customary land rights and securing investment.

	Understanding Land		Goals for Development		
Theory	Justification for Development	Belonging	Gap Analysis	Measures of Success	
Conservative					
Democratic adaptation	X	Χ			
Hybrid adaptation	X				
Incremental adaptation		Χ			
Incremental replacement	X	Χ	Х		
Evolutionary replacement					
Collective replacement					
Systematic titling	X			Χ	

Table 5. Identifying land reform theories: Mozambique.

4.3. South Africa

4.3.1. Justification for Development

"Although significant tenure reform laws have been enacted ... the country has not resolved the contending philosophies around land tenure effectively. On the one hand, there is the propagation of individual rights pertaining to land. This finds expression in the notions of private property rights of the privileged classes. On the other hand, we are faced with a situation where communalism is at the centre of African lived experience, therefore necessitating a different approach to the land tenure question." ([139], p. 37).

The 1997 White Paper on South African Land Policy set out the initial roadmap for land reform in the country. It refers to upgrading customary tenure systems to individual ownership in order to allow people to access the capital value of their land and to promote investment [55]. It has since been replaced by the 2011 Green Paper. Yet, the 2013 Communal Land Tenure Policy (CLTP) ([140], p. 9) refers to the 2012 National Development Plan's (NDP) [141] stance on customary tenure systems, which are seen as "inadequate for the security of credit and investment" and as "a major obstacle to land development and agriculture within the former homelands." These examples are suggestive of a

bias towards replacement theory and are evidence of the mismatch between development thinking and living practice [142,143].

Notwithstanding the White Paper, adaptation theories appear to have formed the theoretical basis for land reform pre-2000 [15]. Both the Interim Protection of Informal Land Rights Act (IPILRA) 31 of 1996, and the former Land Rights Bill of 1999 adopted such an approach. These legislative instruments recognised existing land rights and sought to protect and further strengthen them through incremental transfer of ownership and control of the land into land rights-holders' hands. Unfortunately, current political thinking has departed from this stance, and the CLTP contradicts IPILRA because it seeks to transfer full ownership of customary land to traditional authorities, depriving land rights-holders of their land rights [144]. There is currently support for a return to development thinking that is aligned with an incremental, adaptation-based approach [145].

Interviewees noted that current land policies are said to be hindering land tenure reform in South Africa. The current thinking within government appears to be regressive with a normative base that stems from an incorrect paradigm. This was referred to as the "hierarchical thinking around land ownership", as depicted in UN-HABITAT's continuum of land rights, and is viewed as evidence of an inappropriate paradigm for development. Governments and developers speak about upgrading off-register rights, with individual title as the pinnacle of the continuum [142,145]. Some interviewees proposed affirmation of existing land rights and granting them equal legal status, if they offer a suitable level of land tenure security [38], in line with hybrid adaptation theory. The imposition of the 'supremacy of ownership' onto customary land rights-holders results in the creation of new norms to make sense of the imposition. A mismatch develops between what land rights are officially recorded and what land rights exist on the ground because the applied, replacement theory represents a square peg trying to fit into the round hole of living custom [146].

4.3.2. Belonging

Under customary systems of belonging, land tenure has a multi-generational dimension. The interviews revealed strong opinions that land belongs to the people that live on and work it. There is an equally strong sense that people belong to the land:

"We are owned by the land, we belong to it, not that it belongs to us. That is the African way. ... We are the custodians of the land for those who are still in our loins."

"When I go to [my tribal home], ... I belong to that place. It's me belonging to that place, as part of it ... Land connects people in posterity and to the future. Generations to come, people conceptualize property as belonging."

These quotations emphasize the multi-generational, broadly African view of land that is contrary to Western-inspired conceptions of ownership and is aligned with *conservative theory*. Formalising rights through registration and title (*land titling theory*) is viewed by government as a "quick fix 'silver bullet' solution", but it is followed by "intractable problems and conflicts that emerge as a result of the relative rights that are held between family members and between families and the community". ([145], p. 41)

Government officials interviewed highlighted the importance of returning land to its original owners or their descendants, but other interviewees lamented the lack of post-restitution support. Thus, although they are being given farms as compensation for the injustices previously meted out, such compensation is hollow because they often lack the skills or resources to make effective use of the land (see also Section 4.3.4). In other cases, beneficiaries simply do not want to be farmers. In land restitution, there is an implicit assumption that people will *want* the land back, but note the comments of one interviewee living and working in the urban center of East London, South Africa:

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"Look at restitution. It gives me the land back that my great grandfather lost many years ago. When I'm staying in East London, I don't want to be a farmer ... [It makes no sense] to give me [land], on the basis of the fact that I have a right because my great grandfather lost [land]. ... You end up restituting to me something I never had. Giving me ownership when I never had ownership. It creates problems because people who don't want to own become owners because you only have the 'straight jacket' of titles as your system."

Thus, for land restitution to be successful, it should be in line with what people want, and they should be offered the necessary support to achieve this. People want land [24], but this does not have to be secured through registration of deeds or titles [147].

4.3.3. Gap Analysis

There is a need for improved tenure security for customary land rights-holders living in the former homelands. This need arises due to historic dispossession of land from black people, combined with restricted land access over the past two centuries. The enactment of colonial and independent republic policies of land occupation and administration and later apartheid land policy and administration profoundly affected customary land holding and land rights [15,27,148]. To remedy this, a unitary, non-racial system of land rights was envisaged [55]. However, restoration is not as simple as repealing discriminatory legislation. Interviewees spoke of two stages of liberation: the democratic era ushered in liberation for the nation from 1994, but as a 'class', most black people have yet to be liberated. Overlapping rights, boundary disputes, overcrowding, exploitation by traditional leaders, poverty and unemployment, and poor governance are contributing problems [15,55,140]. Hence, before any land tenure reform can commence, there should be a land rights enquiry to 'disentangle' the complicated situation, in line with *democratic adaptation theory*.

Insecure tenure also arises due to the apparent "'second-class' legal status" of customary tenure [142] (p. 10). Despite constitutional recognition of customary land rights as legitimate, the State appears to subscribe to the 'supremacy of ownership' (per *land titling theory*). This leads to a lack of administrative support and service delivery in the former homelands [142], where land rights-holders are denied land ownership rights. Effective land administration and legislation to protect customary land rights would facilitate the improvement of tenure security [149]. The enactment of such legislation is a constitutional obligation of the State, but to date it is contended that the State has defaulted on this, leaving a dearth of legislation in the area of customary land tenure reform [150]. Weinberg notes that there appears to be a general lack of political will [151]. The objectives and strategic thrust of land reform remain unclear [142].

4.3.4. Measures of Success

The White Paper of 1997 was replaced by the Green Paper of 2011 [152]. The Green Paper lists several development indicators such as shared growth and prosperity, full employment, income equality, and cultural progress, all of which serve to redress the social and economic imbalances due to apartheid as part of the land restitution program. Some of these (employment and income equality) are measurable, whereas poverty and cultural progress are multi-dimensional [153] and need further definition. The CLTP [140] lists poverty alleviation, job creation, gender equity, decongestion of communal spaces, active public participation, vibrant rural economies, employment, food security, increased literacy, and an increase in per capita income as envisioned outcomes of land reform and restitution. Although these are all measurable, they are not indicators of land reform only. Fulfilment of these outcomes could arise from other interventions, and so any measurement thereof does not imply that land reform is successful. Indeed, poverty, unemployment, and inequality are identified as the three key challenges still facing South Africa [154].

The 1997 White Paper [55] acknowledges that success and sustainability are dependent on beneficiaries' ability to access reform programs, and on the support they receive from government.

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Yet interviewees highlighted the lack of support that has been provided for beneficiaries. Per these measures of success, land reform appears to be failing customary land rights-holders. There is a tendency to allow numerical goals—numbers of houses built, numbers of hectares transferred—to override the greater imperative of transformation [145]. This is further evidence of reliance on *replacement theory*.

4.3.5. Summary

Table 6 highlights the dominance of replacement theory in the land reform program in South Africa. Considering the polar opposites of conservative and replacement theory identified under the *Belonging* and *Gap analysis* aspects, it is clear that the approach taken by government has been misaligned with the lived experience of customary land rights-holders. This is a significant contribution to the failure of land reform in South Africa.

	Understanding Land		Goals for Development	
Theory	Justification for Development	Belonging	Gap Analysis	Measures of Success
Conservative		Χ		
Democratic adaptation			X	
Hybrid adaptation	X			
Incremental adaptation	X			
Incremental replacement				
Evolutionary replacement				
Collective replacement				
Systematic titling	X	Χ	Х	Х

Table 6. Identifying land reform theories: South Africa.

5. Conclusions

A continuum of land reform theories is presented, ranging from the conservative theory that seeks to preserve living customary law and tenure, to the replacement theory that seeks to do away with existing customary practices and replace them with formal, registered property rights. Between these two extremes lies a third school: the adaptation theories. These promote a more balanced approach to land reform that is sensitive to context-specific needs. It is cautioned that imposition of inappropriate theory may result in land reform that is unsuccessful. Clark and Luwaya [150] therefore call for careful scrutiny of the theory underlying the development of laws and policies.

Using the specified indicators, the experiences of land reform in Nigeria, Mozambique and South Africa were interrogated to elicit the types of theories that have driven the respective reform programs. Four elements—justification for development, belonging, gap analysis, and measures of success—were used as the lenses through which the reform processes were interrogated. From the analysis, it appears that land reform programs in these countries have tended towards the use of replacement theories. In Nigeria and South Africa, this preference has contributed to the failure of their respective land reform programs, while the tendency in Mozambique appears to be towards the adaptation theories. This may be a reason why Mozambique's land reform programme has been lauded as exemplary [128].

In legally pluralist contexts such as are commonly found in Africa, where the advent of colonialism introduced a cadastral system that is misaligned to the lived experience of customary land rights-holders, we recommend that land reform programs begin with an honest interrogation of belonging. This should reveal how people relate to land. Gap analysis should follow to determine what people want, and the justification for development and measures of success should follow. Such an approach is

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grounded in adaptation/incremental land reform theories and should yield more successful land reform in southern Africa.

Author Contributions: Conceptualization, S.H.; Formal analysis, S.H. and K.B.; Funding acquisition, S.H.; Investigation, S.H. and K.B.; Methodology, S.H.; Supervision, S.H. and J.W.; Writing—original draft, S.H. and K.B.; Writing—review & editing, S.H. and J.W.

Funding: This research was supported by the FIG Foundation and the University of Cape Town.

Acknowledgments: The authors acknowledge the suggestions received from Donna Hornby and Ben Cousins.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

References

- 1. Borras, S.; Franco, J.C. Contemporary Discourses and Contestations around Pro-Poor Land Policies and Land Governance. *J. Agrar. Chang.* **2010**, *10*, 1–32. [CrossRef]
- 2. Hull, S.; Whittal, J. Towards a framework for assessing the impact of cadastral development on land rights-holders. In Proceedings of the FIG Working Week 2016: Recovery from Disaster, Christchurch, New Zealand, 2–6 May 2016.
- 3. Burns, A.; Grant, C.; Nettle, K.; Brits, A.; Dalrymple, K. *Land Administration Reform: Indicators of Success, Future Challenges*; Land Equity International: Wollongong, Australia, 2006.
- 4. Zevenbergen, J.; Augustinus, C.; Antonio, D.; Bennett, R. Pro-poor land administration: Principles for recording the land rights of the underrepresented. *Land Use Policy* **2013**, *31*, 595–604. [CrossRef]
- 5. Furuholt, B.; Wahid, F.; Sæbø, Ø. Land Information Systems for Development (LIS4D): A Neglected Area within ICT4D Research? In Proceedings of the 48th Hawaii International Conference on System Sciences, Kauai, HI, USA, 5–8 January 2015; pp. 2158–2167.
- 6. Akrofi, E.O.; Whittal, J. Compulsory Acquisition and Urban Land Delivery in Customary Areas in Ghana. *South African J. Geomatics* **2013**, 2, 280–295.
- 7. Barry, M.; Danso, E.K. Tenure security, land registration and customary tenure in a peri-urban Accra community. *Land use policy* **2014**, *39*, 358–365. [CrossRef]
- 8. Enemark, S.; McLaren, R.; Lemmen, C. Fit-For-Purpose Land Administration Guiding Principles; Global Land Tool Network (GLTN): Copenhagen, Denmark, 2015.
- 9. Diala, A.C. The concept of living customary law: A critique. *J. Leg. Plur. Unoff. Law* **2017**, 49, 143–165. [CrossRef]
- 10. Bennett, T.W. "Official" vs "living" customary law: Dilemmas of description and recognition. In *Land, Power & Custom: Controversies generated by South Africa's Communal Land Rights Act*; Claasens, A., Cousins, B., Eds.; UCT Press: Cape Town, South Africa, 2008; pp. 138–153.
- 11. Cotula, L. Introduction. In *Changes in "customary" land tenure systems in Africa*; Cotula, L., Ed.; International Institute for Environment and Development: Stevenage, UK, 2007; pp. 5–14. ISBN 978-1-84369-657-5.
- 12. Cousins, T.; Hornby, D. The Realities of Tenure Diversity in South Africa. In Proceedings of the 'At the Frontier of Land Issues: Social Embeddedness of Rights and Public Policy, Montpellier, France, 16–19 May 2006.
- 13. Osman, F. The ascertainment of living customary law: An analysis of the South African Constitutional Court's jurisprudence. *J. Leg. Plur. Unoff. Law* **2019**, *51*, 98–113. [CrossRef]
- 14. Rautenbach, C. Oral Law in Litigation in South Africa: An Evidential Nightmare? *Potchefstroom Electron. Law J./Potchefstroomse Elektron. Regsbl.* **2017**, *20*, 1–25. [CrossRef]
- 15. Adams, M.; Sibanda, S.; Turner, S. Land tenure reform and rural livelihoods in southern Africa. *Nat. Resour. Perspect.* **1999**, *Volume February*, 1–15.
- 16. FAO. *Land tenure and rural development*; Food and Agriculture Organisation of the United Nations (FAO): Rome, Italy, 2002; ISBN 9251048460.
- 17. Enemark, S. Understanding the Land Management Paradigm. In Proceedings of the FIG Commission 7 Symposium on Innovative Technologies for Land Administration, Madison, WI, USA, 19–25 January 2005.

18. Cousins, B. Contextualising the controversies: Dilemmas of communal tenure reform in post-apartheid South Africa. In *Land, Power & Custom: Controversies generated by South Africa's Communal Land Rights Act;* Claasens, A., Cousins, B., Eds.; UCT Press: Cape Town, South Africa, 2008; pp. 3–31.

- 19. Chanock, M. *The Making of South African Legal Culture, 1902–1936: Fear, Favour and Prejudice;* Cambridge University Press: Cambridge, UK, 2001; ISBN 0521791561.
- 20. Lavigne Delville, P. Registering and administering customary land rights: Can we deal with complexity? In *Innovations in Land Rights Recognition, Administration, and Governance*; Deininger, K., Augustinus, C., Enemark, S., Munro-Faure, P., Eds.; The World Bank: Washington, DC, USA, 2010; pp. 28–42.
- 21. Banda, J.L. Romancing Customary Tenure: Challenges and prospects for the neo-liberal suitor. In *The Future of African Customary Law*; Fenrich, J., Galizzi, P., Higgins, T.E., Eds.; Cambridge University Press: Cambridge, UK, 2011; pp. 312–335.
- 22. Chitonge, H.; Mfune, O.; Umar, B.B.; Kajoba, G.M.; Banda, D.; Ntsebeza, L. Silent privatisation of customary land in Zambia: Opportunities for a few, challenges for many. *Soc. Dyn.* **2017**, *43*, 82–102. [CrossRef]
- 23. Okoth-Ogendo, H.W.O. *The Tragic African Commons: A Century of Expropriation, Suppression and Subversion;* Land reform and agrarian change in southern Africa, Occasional paper series; University of the Western Cape: Cape Town, South Africa, 2002; Volume 24.
- 24. Rugege, S. Land Reform in South Africa: An Overview. Int. J. Leg. Info 2004, 283, 283–311. [CrossRef]
- 25. Cousins, B.; Cousins, T.; Hornby, D.; Kingwill, R.; Royston, L.; Smit, W. Will formalising property rights reduce poverty in South Africa's 'second economy'? *PLAAS Policy Br.* **2005**, *18*, 1–6.
- 26. Freudenberger, M.; Bruce, J.; Mawalma, B.; de Wit, P.; Boudreaux, K. The Future of Customary Tenure: Options for policymakers. Available online: http://www.land-links.org/issue-brief/the-future-of-customary-tenure/ (accessed on 20 October 2016).
- 27. Cousins, B. More Than Socially Embedded: The Distinctive Character of "Communal Tenure" Regimes in South Africa and its Implications for Land Policy. *J. Agrar. Chang.* **2007**, *7*, 281–315. [CrossRef]
- 28. Berry, S. *No Condition is Permanent The Social Dynamics of Agrarian Change in Sub-Saharan Africa*; University of Wisconsin Press: Madison, WI, USA, 1993.
- 29. Knight, R. Statutory Recognition of Customary Land Rights in Africa: An Investigation into Best Practices for Lawmaking and Implementation; Food and Agriculture Organisation of the United Nations: Rome, Italy, 2010.
- 30. Cotula, L.; Toulmin, C.; Hesse, C. Land Tenure and Resource Access in Africa: Lessons of Experience and Emerging Issues; International Institute for Environment and Development: London, UK, 2004.
- 31. FIG FIG Statement on the Cadastre. Available online: http://www.fig.net/commission7/reports/cadastre/statement_on_cadastre.html (accessed on 26 March 2013).
- 32. Silva, M.A.; Stubkjær, E. A review of methodologies used in research on cadastral development. *Comput. Environ. Urban Syst.* **2002**, *26*, 403–423. [CrossRef]
- 33. Wallace, J. Rights, Responsibilities, Restrictions (RRRs). Available online: http://www.csdila.unimelb.edu.au/people/PeopleFiles/JudeWallace/Registrars_Presentation_4.pdf (accessed on 17 July 2019).
- 34. Lemmen, C.; van Oosterom, P.; van der Molen, P. Land Administration Domain Model. *GIM Int.* **2013**, 18–23. [CrossRef]
- 35. Hackman-Antwi, R.; Bennett, R.M.; de Vries, W.; Lemmen, C.H.J.; Meijer, C. The point cadastre requirement revisited. *Surv. Rev.* **2013**, *45*, 239–247. [CrossRef]
- 36. de Vries, W.T.; Bennett, R.M.; Zevenbergen, J.A. Neo-cadastres: Innovative solution for land users without state based land rights, or just reflections of institutional isomorphism? *Surv. Rev.* **2015**, *47*, 220–229. [CrossRef]
- 37. Alcock, R.; Hornby, D. Traditional Land Matters—A Look into Land Administration in Tribal Areas in KwaZulu-Natal. Available online: https://www.researchgate.net/publication/267260749%0ATraditional (accessed on 18 May 2017).
- 38. Whittal, J. A New Conceptual Model for the Continuum of Land Rights. *South African J. Geomatics* **2014**, 3, 13–32.
- 39. Alden Wily, L. Land tenure reform and the balance of power in eastern and southern Africa. *ODI Nat. Resour. Perspect.* **2000**, 1–4.
- 40. Royston, L. In the meantime... Moving towards secure tenure by recognising local practice. In *Trading Places: Accessing land in African Cities*; Napier, M., Berrisford, S., Kihato, C.W., McGaffin, R., Royston, L., Eds.; African Minds: Somerset West, South Africa, 2013; pp. 47–72. ISBN 978-1-920489-99-1.

Land 2019, 8, 172 24 of 28

41. Bruce, J. The Variety of Reform: A Review of Recent Experience with Land Reform and the Reform of Land Tenure, with Particular Reference to the African Experience. In *Institutional Issues in Natural Resource Management*; Marcussen, H.S., Ed.; International Development Studies: Roskilde, Denmark, 1993; Volume 9, pp. 13–56.

- 42. Barry, M.; Augustinus, C. *Framework for Evaluating Continuum of Land Rights Scenarios*; UN-HABITAT: Nairobi, Kenya, 2016; ISBN 9789211327137.
- 43. Arko-Adjei, A. Adapting land administration to the institutional framework of customary tenure: The case of peri-urban Ghana. Ph.D. Thesis, Delft University of Technology, Delft, The Netherlands, 2011.
- 44. Platteau, J. The evolutionary theory of land rights as applied to sub-Saharan Africa: A critical assessment. *Dev. Change* **1996**, 27, 29–86. [CrossRef]
- 45. de Soto, H. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*; Basic Books: New York, NY, USA, 2000.
- 46. Nkwae, B. Conceptual Framework For Modelling and Analysing Periurban Land Problems in Southern Africa. Ph.D. Thesis, University of New Brunswick, Fredericton, NB, Canada, 2006.
- 47. Lahiff, E. 'Willing buyer, willing seller': South Africa's failed experiment in market-led agrarian reform. *Third World Q.* **2007**, *28*, 1577–1597. [CrossRef]
- 48. Bruce, J. Do Indigenous Tenure Systems Constrain Agricultural Development? In *Land in African Agrarian Systems*; Basset, T., Crummey, D., Eds.; The University of Wisconsin Press: Madison, WI, USA, 1993; pp. 35–56.
- 49. Hornby, D.; Royston, L.; Kingwill, R.; Cousins, B. Introduction: Tenure practices, concepts and theories in South Africa. In *Untitled: Securing Land Tenure in Urban and Rural South Africa*; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 1–43.
- 50. Delius, P. Contested terrian: Land rights and chiefly power in historical perspective. In *Land, Power & Custom: Controversies Generated by South Africa's Communal Land Rights Act*; Claassens, A., Cousins, B., Eds.; UCT Press: Cape Town, South Africa, 2008; pp. 211–237.
- 51. Chanock, M. Paradigms, Policies and Property: A review of the customary law of land tenure. In *Law in Colonial Africa*; Mann, K., Roberts, R., Eds.; Heinemann Educational Books, Inc.: Portsmouth, UK, 1991; ISBN 0-85255-602-0.
- 52. Claassens, A. Power, accountability and apartheid borders: The impact of recent laws on struggles over land rights. In *Land, Power & Custom: Controversies Generated by South Africa's Communal Land Rights Act;* Claassens, A., Cousins, B., Eds.; UCT Press: Cape Town, South Africa, 2008; pp. 262–292.
- 53. Ubink, J.M.; Quan, J.F. How to combine tradition and modernity? Regulating customary land management in Ghana. *Land use policy* **2008**, 25, 198–213. [CrossRef]
- 54. Kingwill, R.; Hornby, D.; Royston, L.; Cousins, B. Conclusion—Beyond "the Edifice". In *Untitled: Securing Land Tenure in Urban and Rural South Africa2*; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 388–430.
- 55. DLA White paper on South African land policy; Department of Land Affairs (DLA): Pretoria, South Africa, 1997.
- 56. Royston, L.; Abrahams, G.; Hornby, D.; Mtshiyo, L. *Informal Settlement Upgrading: Incrementally upgrading Tenure under Customary Administration*; Housing Development Agency: Johannesburg, South Africa, 2015.
- 57. Royston, L. "Entanglement"—A case study of changing tenure and social relations in inner-city buildings in Johannesburg. In *Untitled: Securing Land Tenure in Urban and Rural South Africa*; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 196–234.
- 58. Bruce, J.; Migot-Adholla, S.; Atherton, J. The findings and their policy Implications: Institutional adaptation or replacement. In *Searching for Land Tenure Security in Africa*; Bruce, J., Migot-Adholla, S., Eds.; Kendall/Hunt: Washington, DC, USA, 1994; pp. 251–265.
- 59. Kingwill, R. Lost in translation: Family title in Fingo village, Grahamstown, Eastern Cape. *Acta Juridica Plur. Dev. Stud. Access Prop. Africa* **2011**, 2011, 210–237.
- 60. Augustinus, C.; Lemmen, C.; van Oosterom, P. Social tenure domain model: Requirements from the perspective of pro-poor land management. In Proceedings of the Proceeding of the 5th FIG Regional Conference; International Federation of Surveyors, Accra, Ghana, 8–11 March 2006.
- 61. Lemmen, C. *The Social Tenure Domain Model: A Pro-Poor Land Tool;* International Federation of Surveyors: Copenhagen, Denmark, 2010.

Land **2019**, 8, 172 25 of 28

62. UN-HABITAT; IIRR; GLTN. *Handling Land: Tools for Land Governance and Secure Tenure*; UN-HABITAT, GLTN, IIRR: Nairobi, Kenya, 2012; ISBN 9789211324389.

- 63. Platteau, J. Does Africa need land reform? In *Evolving Land Rights, Policy and Tenure in Africa*; Toulmin, C., Quan, J., Eds.; DFID/IIED/NRI: London, UK, 2000; pp. 51–73.
- 64. van der Molen, P. The Future Cadastres Cadastres after 2014. In Proceedings of the FIG Working Week 2003; International Federation of Surveyors, Paris, France, 13–17 April 2003.
- 65. Bennett, R.; Rajabifard, A.; Kalantari, M.; Wallace, J.; Williamson, I. Cadastral futures: Building a new vision for the nature and role of cadastres. In Proceedings of the FIG Congress 2010: Facing the Challenges—Building the Capacity, Sydney, Australia, 11–16 April 2010.
- 66. Jones, B.; Land, N. Cadastre 2.0 A technology vision for the cadastre of the future. In Proceedings of the FIG Working Week 2012, Rome, Italy, 6–10 May 2012.
- 67. Akrofi, E.O. Assessing Customary Land Administration Systems for Peri-Urban Land in Ghana. Ph.D. Thesis, University of Cape Town, Cape Town, South Africa, 2013.
- 68. Feder, G.; Nishio, A. The benefits of land registration and titling: Economic and social perspectives. *Land Use Policy* **1999**, *15*, 25–43. [CrossRef]
- 69. Roth, M. Somalia Land Policies and Tenure Impacts: The case of the Lower Shebelle. In *Land in African Agrarian Systems*; Bassett, T., Crummey, D., Eds.; University of Wisconsin Press: Madison, WI, USA, 1993; pp. 298–325.
- Okoth-Ogendo, H.W.O. Agrarian Reform in Sub-Saharan Africa: An assessment of state responses to the African agrarian crisis and their implications for agricutural development. In *Land in African Agrarian Systems*; Bassett, T.J., Crummey, D.E., Eds.; The University of Wisconsin Press: Madison, WI, USA, 1993; pp. 247–273.
- 71. Lahiff, E. *Land Reform in South Africa: A Status Report 2008*; Research Report; Institute for Poverty, Land and Agrarian Studies (PLAAS): Cape Town, South Africa, 2008.
- 72. Unruh, J.D. Land Tenure Conflict Resolution in Mozambique: The Role of Conflict Resolution in Land Policy Reform; LTC Land Conflict Study: Madison, WI, USA, 1996.
- 73. Unruh, J.D. Postwar land dispute resolution: Land tenure and the peace process in Mozambique. *Int. J. World Peace* **2001**, *18*, 3–29.
- 74. de Quadros, M.C. Current land policy issues in Mozambique. L. Reform, L. Settl. Coop. 2003, 3, 175-200.
- 75. Barry, M.; Roux, L. A change based framework for theory building in land tenure information systems. *Surv. Rev.* **2012**, *44*, 301–314. [CrossRef]
- 76. Griffith-Charles, C. The Impact of Land Titling on Land Transaction Activity and Registration System Sustainability. Ph.D. Thesis, University of Florida, Fl., USA, 2004.
- 77. Steudler, D.; Törhönen, M.-P.; Pieper, G. FLOSS in Cadastre and Land Registration: Opportunities and Risks; Food and Agriculture Organisation of the United Nations (FAO) and the International Federation of Surveyors (FIG): Rome, Italy, 2010; ISBN 9789251065105.
- 78. Conning, J.; Deb, P. *Impact Evaluation for Land Property Rights Reforms*; Hunter College and The Graduate Centre, City University of New York: New York, NY, USA, 2007.
- 79. Deininger, K.; Goyal, A. Going digital: Credit effects of land registry computerization in India. *J. Dev. Econ.* **2012**, *99*, 236–243. [CrossRef]
- 80. Quan, J. Land tenure, economic growth and poverty in Sub-Saharan Africa. In *Evolving Land Rights, Policy and Tenure in Africa*; Toulmin, C., Quan, J., Eds.; DFID/IIED/NRI: London, UK, 2000; pp. 31–50.
- 81. Mubangizi, J.; Kaya, H. African Indigenous Knowledge Systems and Human Rights: Implications for Higher Education, Based on the South African Experience. *Int. J. African Renaiss. Stud. Multi Inter Transdiscipl.* **2015**, 10, 125–142. [CrossRef]
- 82. Babalola, K.H.; Hull, S.A. Using the New Continuum of Land Rights Model to Measure Tenure Security: A case study of Itaji-Ekiti, Ekiti State, Nigeria. *South Afr. J. Geomatics* **2019**, *8*, 84–97.
- 83. Lincoln, Y.; Guba, E.G. Naturalistic Inquiry; SAGE Publications Ltd: Beverly Hills, CA, USA, 1985.
- 84. Shenton, A.K. Strategies for ensuring trustworthiness in qualitative research projects. *Educ. Inf.* **2004**, 22, 63–75. [CrossRef]
- 85. Holton, J.A. From Grounded Theory to Grounded Theorizing in Qualitative Research. In *The SAGE Handbook of Qualitative Business and Management Research Methods*; Cassell, C., Cunliffe, A., Grandy, G., Eds.; SAGE Publications Ltd: London, UK, 2017; pp. 233–250.
- 86. Allan, G. A critique of using grounded theory as a research method. J. Bus. Res. 2003, 2, 1–10.

Land **2019**, 8, 172 26 of 28

- 87. Glaser, B.G.; Holton, J. Remodeling Grounded Theory. Hist. Soc. Res. Suppl. 2007, 47-68.
- 88. Guba, E.G. ERIC/ECTJ Annual Review Paper: Criteria for assessing the trustworthiness of naturalistic inquiries. *Educ. Commun. Technol.* **1981**, *29*, 75–91.
- 89. Woods, M.; Paulus, T.; Atkins, D.P.; Macklin, R. Advancing Qualitative Research Using Qualitative Data Analysis Software (QDAS)? Reviewing Potential Versus Practice in Published Studies using ATLAS.ti and NVivo, 1994-2013. *Soc. Sci. Comput. Rev.* **2016**, *34*, 597–617. [CrossRef]
- 90. Friese, S. *Qualitative Data Analysis with ATLAS.ti*, 2nd ed.; SAGE Publications Ltd: London, UK, 2014; ISBN 978-1-44628-204-5.
- 91. Bringer, J.D.; Johnston, L.H.; Brackenridge, C.H. Using Computer-Assisted Qualitative Data Analysis Software to Develop a Grounded Theory Project. *Field Methods* **2006**, *18*, 245–266. [CrossRef]
- 92. Hull, S.; Whittal, J. Human rights in tension: Guiding cadastral systems development in customary land rights contexts. *Surv. Rev.* **2019**, *51*, 97–113. [CrossRef]
- 93. Mitchell, D.; Clarke, M.; Baxter, J. Evaluating land administration projects in developing countries. *Land Use Policy* **2008**, 25, 464–473. [CrossRef]
- 94. Griffith-Charles, C.; Sutherland, M. Analysing the costs and benefits of 3D cadastres with reference to Trinidad and Tobago. *Comput. Environ. Urban Syst.* **2013**, *40*, 24–33. [CrossRef]
- 95. van Asperen, P. Evaluation of Innovative Land Tools in Sub-Saharan Africa: Three Cases from a Peri-Urban Context; Doctoral dissertation, Delft University of Technology: Amsterdam, The Netherlands, 2014; ISBN 9781614994435.
- 96. Durand-Lasserve, A.; Selod, H. The formalisation of urban land tenure in developing countries. In Proceedings of the The World Bank's Urban Research Symposium, Washington, DC, USA, 14–16 May 2007; pp. 1–47.
- 97. Shipton, P. Mortgaging the Ancestors. Ideologies of Attachment in Africa; Yale University Press: New Haven, CT, USA, 2009.
- 98. Deininger, K.; Hilhorst, T.; Songwe, V. Identifying and addressing land governance constraints to support intensification and land market operation: Evidence from 10 African countries. *Food Policy* **2014**, *48*, 76–87. [CrossRef]
- 99. Ghebru, H.; Edeh, H.; Ali, D.; Deininger, K.; Okumo, A.; Woldeyohannes, S. *Tenure Security and Demand for Land Tenure Regularization in Nigeria Empirical Evidence from Ondo and Kano States*; International Food Policy Research Institute: Washington, DC, USA, 2014.
- 100. Ghebru, H.; Okumo, A. Land Administration Service Delivery and Its Challenges in Nigeria: A Case Sstudy of Eight States; NSSP working paper; International Food Policy Research Institute: Washington, DC, USA, 2016.
- 101. Abugu, U. Land Use and Reform in Nigeria: Law and Practice, 1st ed.; Immaculate Prints: Abuja, Nigeria, 2012.
- 102. Maduekwe, N.C. The Land Tenure System Under the Customary Law. In Proceedings of the Nigerian Institute Of Advanced Legal Studies Training Programme For Judges Of The Customary Courts And Area Courts, Abuja, Nigeria, 13 May 2014; p. 19.
- 103. Babalola, S.O.; Rahman, A.A.; Choon, L.T.; van Oosterom, P.J.M. POSSIBILITIES OF LAND ADMINISTRATION DOMAIN MODEL (LADM) IMPLEMENTATION IN NIGERIA. *ISPRS Ann. Photogramm. Remote Sens. Spat. Inf. Sci.* **2015**, *II*, 155–163. [CrossRef]
- 104. Amokaye, O.G. The impact of the Land Use Act upon land rights in Nigeria. In *LOCAL CASE STUDIES IN AFRICAN LAND LAW*; Home, R., Ed.; Pretoria University Law Press: Pretoria, South Africa, 2011; pp. 59–78. ISBN 978-1-920538-01-9.
- 105. Otubu, A.K. The Land Use Act and Land Ownership Debate in Nigeria: Resolving the Impasse. *SSRN Electron. J.* **2015**. Available online: http://dx.doi.org/10.2139/ssrn.2564539 (accessed on 10 November 2019).
- 106. OTUBU, A. Private Property Rights and Compulsory Acquisition Process in Nigeria: The Past, Present and Future. *Eur. Int. Law* **2012**, *8*, 25.
- 107. Otubu, A. THE LAND USE ACT AND LAND ADMINISTRATION IN 21ST CENTURY NIGERIA: NEED FOR REFORMS. J. Sustain. Dev. Law Policy 2018, 9, 81–108. [CrossRef]
- 108. Nuhu, M.B.; Aliyu, A.U. Compulsory Acquisition of Communal Land and Compensation Issues: The Case of Minna Metropolis. In Proceedings of the FIG Working Week 2009, Eilat, Israel, 3–8 May 2009; p. 12.
- 109. Smith, I.O. Practical Approach to Law of Real Property in Nigeria; Ecowatch Publications: Lagos, Nigeria, 2007.
- 110. Otubu, A.K. Compulsory Acquisition Without Compensation and the Land Use Act. *SSRN Electron. J.* **2014**. Available online: http://dx.doi.org/10.2139/ssrn.2420039 (accessed on 10 November 2019).

Land **2019**, 8, 172 27 of 28

111. Mabogunje, A.L. Land Reform In Nigeria: Progress, Problems & Prospects. In Proceedings of the Annual Conference on Land Policy and Administration, Washington, DC, USA, 26–27 April; 2010; p. 25.

- 112. Matfess, H. Institutionalizing instability: The constitutional roots of insecurity in nigeria's fourth republic. *Stab. Int. J. Secur. Dev.* **2016**, *5*, 1–19. [CrossRef]
- 113. British Council Nigeria. *Gender in Nigeria Report 2012: Improving the lives of girls and women in Nigeria*, 2nd ed.; British Council: Abuja, Nigeria, 2012.
- 114. Norwegian Refugee Council Unsettlement: Urban Displacement in the 21st Century; Norwegian Refugee Council: Oslo, Norway, 2018.
- 115. Amaza, M. A former Boko Haram stronghold is now one of Nigeria's fastest growing property markets. Available online: https://qz.com/africa/688038/a-former-boko-haram-stronghold-is-now-one-of-nigerias-fastest-growing-property-markets/ (accessed on 29 October 2019).
- 116. Iyorah, F. As north-east Nigeria battles Boko Haram's insurgency, the city of Maiduguri is experiencing a construction boom. Available online: https://www.equaltimes.org/as-north-east-nigeria-battles-boko?lang=en#.Xbhtq-gzYdU (accessed on 29 October 2019).
- 117. Babagana, M.; Ismail, M.; Mohammed, B.G.; Dilala, M.A.; Hussaini, I.; Zangoma, I.M. Impacts of Boko Haram Insurgency on Agricultural Activities in Gujba Local Government Area, Yobe State, Nigeria. *Int. J. Contemp. Res. Rev.* 2018, *9*, 20268–20282. [CrossRef]
- 118. FAO Northeast Nigeria Situation Report; FAO: Rome, Italy, 2016.
- 119. Wilson Myers, G. Land and Power: The impact of the Land Use Act in southwest Nigeria; LTC Research Paper; Land Tenure Center: Madison, WI, USA, 1991.
- 120. Babalola, K. Measuring Tenure Security of the Rural Poor using pro-poor land tools: A case study of Itaji-Ekiti, Ekiti State, Nigeria. University of Cape Town: Cape Town, South Africa, 2018.
- 121. Franco, J. Pro-poor policy reforms and governance in state/public lands: A critical civil society perspective. *L. Reform L. Settl. Coop.* **2009**, *1*, 8–18.
- 122. Nwocha, M.E. Impact of the Nigerian Land Use Act on Economic Development in the Country. *Acta Univ. Danubius. Adm.* **2016**, *8*, 117–128.
- 123. World Bank. *Doing Business: Equal Opportunity for All Doing Business*; World Bank: Washington, DC, USA, 2017.
- 124. Nwuba, C.C.; Nuhu, S.R. Challenges to Land Registration in Kaduna State, Nigeria. *African Real Estate* **2018**, 3, 141–172. [CrossRef]
- 125. Gbolahan, B.; Adegoke, J.; Aderibigbe, A. Factors influencing land title registration practice in Osun State. *Int. J. Law Built Environ.* **2017**, *9*, 240–255.
- 126. Atilola, O. Land Administration Reform Nigerian: Issues and Prospects. In Proceedings of the FIG Congress 2010: Facing the Challenges—Building the Capacity, Sydney, Australia, 11–16 April 2010; 2010; p. 16.
- 127. Van den Brink, R. *Land Reform in Mozambique*; Agriculture and Rural Development Notes: Land policy and administration: Washington, DC, USA, 2008; Volume December.
- 128. Tanner, C. *Law-Making in an African context: The* 1997 *Mozambican land law;* Food and Agriculture Organisation of the United Nations (FAO): Maputo, Mozambique, 2002; Volume March.
- 129. Myers, G.W. Competitive Rights, Competitive Claims: Land Access in Post-War Mozambique. *J. South. Afr. Stud.* **1994**, *20*, 603–632. [CrossRef]
- 130. Kloeck-Jenson, S. Mozambique Country Profile. In *Country Profiles of Land Tenure: Africa, 1996*; Bruce, J., Ed.; Land Tenure Centre, University of Wisconsin-Madison: Madison, WI, USA, 1998; pp. 238–246.
- 131. Norfolk, S.; Bechtel, P. Land Delimitation & Demarcation: Preparing communities for investment; TerraFirma Rural Development Consultants: Maputo, Mozambique, 2013.
- 132. UN-HABITAT. *Land Tenure, Housing Rights and Gender in Mozambique*; Rosenberg, G., Ed.; UN-HABITAT: Nairobi, Kenya, 2005; ISBN 9211317711.
- 133. Government of Mozambique A Política Nacional de Terras e Estrategia para a sua Implementação; Council of Ministers: Maputo, Mozambique, 1995.
- 134. Monteiro, J.; Salomão, A.; Quan, J. Improving land administration in Mozambique: A participatory approach to improve monitoring and supervision of land use rights through community land delimitation. In Proceedings of the 2014 World Bank Conference on Land and Poverty, Washington, DC, USA, 23–27 March 2014; p. 29.

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135. Schreiber, L. Putting rural communities on the map: Land registration in Mozambique, 2007–2016. Available online: https://successfulsocieties.princeton.edu/publications/putting-rural-communities-map-land-registration-mozambique (accessed on 23 January 2018).

- 136. EDG. Evaluation of the Mozambique Community Land Use Fund—Final Report; Effective Development Group, GRM International, The QED Group: Maputo, Mozambique, 2014.
- 137. Balas, M.; Murta, J.; Matlava, L.; Marques, M.R.; Joaquim, S.P.; Carrilho, J.; Lemmen, C. A Fit-For-Purpose Land Cadastre in Mozambique. In Proceedings of the 2017 World Bank Conference on Land and Poverty, Washington, DC, USA, 20–24 March 2017; p. 26.
- 138. The World Bank. Mozambique Land Administration Project (Terra Segura) (P164551). Available online: http://projects.worldbank.org/P164551?lang=en (accessed on 10 Febuary 2018).
- 139. Mahlati, V. *Final Report of the Presidential Advisory Panel on Land Reform and Agriculture*; Presidential Advisory Panel on Land Reform and Agriculture: Pretoria, South Africa, 2019.
- 140. DRDLR. Communal Land Tenure Policy (CLTP); Department of Rural Development and Land Reform: Stellenbosch, South Africa, 2013.
- 141. *National Planning Commission National Development Plan 2030 Our Future—Make It Work;* National Planning Commission: Pretoria, South Africa, 2012; ISBN 9780621411805.
- 142. Cousins, B. Land reform in South Africa is sinking. Can it be saved? Available online: https://www.nelsonmandela.org/uploads/files/Land_law_and_leadership_-_paper_2.pdf (accessed on 2 Febuary 2017).
- 143. Cousins, B. Why title deeds aren't the solution to South Africa's land tenure problem. Available online: https://theconversation.com/why-title-deeds-arent-the-solution-to-south-africas-land-tenure-problem-82098 (accessed on 15 August 2017).
- 144. Centre for Law and Society. *Communal Land Tenure Policy and IPILRA*; Centre for Law and Society: University of Cape Town: Cape Town, South Africa, 2015.
- 145. de Satgé, R.; Cartwright, K.; Kingwill, R.; Royston, L. The role of land tenure and governance in reproducing and transforming spatial inequality. Available online: https://www.parliament.gov.za/storage/app/media/Pages/2017/october/High_Level_Panel/Commissioned_Report_land/Commissioned_Report_on_Spatial_Inequality.pdf (accessed on 21 January 2019).
- 146. Kingwill, R. Square Pegs in Round Holes: The competing faces of land title. In *Untitled: Securing Land Tenure in Urban and Rural South Africa*; Hornby, D., Kingwill, R., Royston, L., Cousins, B., Eds.; University of KwaZulu-Natal Press: Pietermaritzburg, South Africa, 2017; pp. 235–282.
- 147. Eglin, R. A NEW LAND RECORDS SYSTEM. Available online: http://afesis.org.za/wp-content/uploads/2017/08/A-new-land-Records-System-Learning-Brief-8_final.pdf (accessed on 15 August 2017).
- 148. Groenewald, A.J. South Africa's Land Reform Programme. St. Mary's Law Rev. Minor. Issues 2003, 5, 195–200.
- 149. Williams-Wynn, C. Land rights: What people want, PositionIT, January/February 2017. Available online: www.ee.co.za/article/land-rights-people-want.html (accessed on 21 January 2019).
- 150. Clark, M.; Luwaya, N. Communal Land Tenure 1994–2017. Available online: https://www.parliament.gov.za/storage/app/media/Pages/2017/october/High_Level_Panel/Commissioned_Report_land/Commissioned_Report_on_Tenure_Reform_LARC.pdf (accessed on 21 January 2019).
- 151. Weinberg, T. *Rural Status Report 3: The contested status of 'communal land tenure' in South Africa*; Sparg, L., Ed.; Institute for Poverty, Land and Agrarian Studies: Cape Town, Soth Africa, 2015.
- 152. DRDLR Green Paper on Land Reform; Department of Rural Development and Land Reform: Pretoria, South Africa, 2011.
- 153. Statistics South Africa The South African MPI: Creating a Multidimensional Poverty Index Using Census Data; Statistics South Africa: Pretoria, South Africa, 2014.
- 154. High Level Panel Report of the High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change. Available online: https://www.parliament.gov.za/storage/app/media/Pages/2017/october/High_Level_Panel/HLP_Report/HLP_report.pdf (accessed on 15 January 2018).



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