A Framework for Guiding Cadastral Systems Development in Customary Land Rights Contexts

By: Simon Hull

HLLSIM005

Supervisors:

Associate Professor Jennifer Whittal

Professor Jean-Paul van Belle

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Department of Architecture, Planning and Geomatics: Division of Geomatics

Faculty of Engineering and the Built Environment

University of Cape Town

DECLARATION

I, Simon Antony Hull, hereby declare that the work on which this dissertation/thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

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ABSTRACT

Land reform in South Africa is reported to be failing, and land tenure reform in customary contexts is the least well-addressed component of land reform. To address this failure, a framework for guiding cadastral systems development in customary land rights contexts is developed. Using a research synthesis methodology, this conceptual framework is derived from existing literature. It comprises of five evaluation areas (underlying theory, land administration system context, change drivers, change process, and review process), each of which is broken down into related aspects and elements. The three interrelated goals of ***success***, ***sustainability***, and ***significance*** permeate the framework. It is suggested that cadastral systems development (and, by consequence, land tenure reform) projects operating in customary land rights contexts fail when they are not sensitive to the ***significance*** of development processes and outcomes for customary land rights-holders.

The conceptual framework is tested and extended through a progressive case study of four examples of cadastral systems development in Germany, the Netherlands, Mozambique, and South Africa. The elements of the framework are compared against context-specific descriptors that emerge from the case studies to assess how well they have been addressed. Thus, each case brings contextual relevance to the framework, sequentially increasing its groundedness.

The European cases are chosen because they are seen to be examples of 'good practice' for their contexts and because developments in southern Africa have drawn from and been influenced by them. Hence, they are expected to add relevant insight to the conceptual framework. The southern African cases are chosen because they reflect the intended context of application of the framework and have been undergoing cadastral systems development for the past few decades.

The framework was found to be useful in highlighting strengths and weaknesses in all four cases. Weaknesses in the European cases related to their insensitivity towards human rights, class and gender issues possibly arising from assumptions about the uniformity of their socio-economic context. There was also inadequate attention given to the review processes. Strengths arose from the developed nature of the countries as reflected in their good governance and well-functioning cadastral systems. In the southern African cases, the primary weaknesses arose from the adoption of inappropriate theory of development, leading to a loss of ***significance*** of development process and outcomes. Other weaknesses are related to the lack of developing status of southern African countries, as reflected in their poor land governance and low levels of technological capacity. Strengths related to acknowledgement of human rights issues and the need to address historical injustices in the southern African cases.

The resultant, grounded framework is intended to be used as a tool by policymakers and cadastral systems developers. By taking note of the framework's aspects and elements, it is proposed that cadastral systems development in customary land rights contexts will carry ***significance*** for the land rights-holders, encouraging their adoption and embrace of the process and outcomes of development, which in turn fosters the ***success*** and ***sustainability*** of development.

ACKNOWLEDGEMENTS

"I keep my eyes always on the LORD. With Him at my right hand, I shall not be shaken!"
Psalms 16:8

First and foremost, all glory to the LORD. By His grace, this thesis has come together at a time when it will hopefully prove most useful.

To Ruth, Zoë and Sophia, I dedicate my PhD. Your support and encouragement have been invaluable to me! I am so sorry to have missed so much. Thanks for believing in me.

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"Things fizzled out; you could not hope to change Africa. People lost interest, or they went back to their traditional way of doing things, or they simply gave up because it was all too much effort. And then Africa had a way of coming back and simply covering everything up again."

"There was always some eager foreign organisation ready to say to Africans: this is what you do, this is how you should do things. The advice may be good, and it might work elsewhere, but Africa needed its own solutions."

From *Tears of the Giraffe* by Alexander McCall Smith

CONTENTS

LIST OF TABLES

LIST OF FIGURES

GLOSSARY OF ACRONYMS

GENERAL

CPR – Civil and Political Rights

ESCR – Economic, Social and Cultural Rights

ETLR – Evolutionary Theory of Land Rights

FAO – Food and Agriculture Organisation of the United Nations

GLTN – Global Land Tools Network

GNSS – Global Navigation Satellite System

GTA – Grounded Theory Approach

HRBA – Human Rights-Based Approach

IDP – Internally Displaced Person

LAS – Land Administration System

LIS – Land Information System

LTIS – Land Tenure Information System

LTT – Land Titling Theory

M&E – Monitoring and Evaluation

MCC – Millennium Challenge Corporation

NGO – Non-Governmental Organisation

RCM – Rational Comprehensive Model of planning

RRR – Rights, Restrictions, and Responsibilities

SDG – Sustainable Development Goals

SDI – Spatial Data Infrastructure

SIDA – Swedish International Development Cooperation Agency

STDM – Social Tenure Domain Model

UK-DFID – United Kingdom Department for International Development

UN – United Nations

VGGT – Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security

GERMANY

AAA® – comprising AFIS®, ALKIS®, and ATKIS®

AdV – Working Committee of the Surveying Authorities of the *Länder* of the Federal Republic of Germany, or *Amtliches Deutsches Vermessungswesen*

AFIS® – official control point (geodetic) system

ALB – automated property register

ALK – automated cadastral map

ALKIS® – official real-estate cadastral information system

ATKIS® – official topographic and cartographic information system

NMCA – National Mapping and Cadastral Agency

MOZAMBIQUE

CGCRN – *Comite de Gestao Communitario de Recursos Naturais* or Committee for Community Management of Natural Resources

DUAT – *Direito de Uso e Aprovetamento dos Terras* or right of use and benefit of land

G6 – group of donor organisations made up of UK-DFID, the embassies of the Netherlands and Denmark, Irish Aid, Swedish SIDA, and the Swiss Agency for Development

GESTERRA – Capacity Building Programme on Land Management and Administration

iTC – *iniciativa para Terras Comunitárias* or Community Land Initiative

SiGIT – *Sistema de Gestão de Informação sobre Terras* or Land Information Management System

SPGC – *Serviços Provinciais de Geografia e Cadastro*, or Provincial Geographic and Cadastre Services

SOUTH AFRICA

CLaRA – Communal Land Rights Act no. 11 of 2004

CLTB – Communal Land Tenure Bill

CLTP – Communal Land Tenure Policy

CPA – Communal Property Association

CRDP – Comprehensive Rural Development Plan

DLA – Department of Land Affairs (replaced by DRDLR)

DRDLR – Department of Rural Development and Land Reform

ESTA – Extension of Security of Tenure Act no. 62 of 1997

IPILRA – Interim Protection of Informal Land Rights Act no. 31 of 1996

IUR – Institutionalised Use Right

LRAD – Land Redistribution for Agricultural Development

NDP – National Development Plan

PIE – Prevention of Illegal Eviction from and Unlawful Occupation of Land Act no. 19 of 1998

PLAS – Proactive Land Acquisition Strategy

PTO – Permission to Occupy

RDP – Reconstruction and Development Programme

RDPP – Recapitalisation and Development Policy Programme

SLAG – Settlement / Land Acquisition Grant

SLLP – State Land Lease and Disposal Policy

TCB – Traditional Courts Bill

TKLB – Traditional Khoi-San Leadership Bill

TLGFA – Traditional Leadership and Governance Framework Act no. 41 of 2003

ULTRA – Upgrading of Land Tenure Rights Act no. 112 of 1991

Part 1: Setting the scene

1 INTRODUCTION

1.1 MOTIVATION

> *"[T]he urgency and Constitutional imperative of land reform in South Africa can neither be taken lightly nor postponed. The people have voiced their impatience and the inequalities are threatening peace and stability in our country."* (Mahlati, 2019: iv)

Despite over two decades of intervention, land reform in South Africa is failing (Cousins *et al.*, 2005; Kepe & Hall, 2016). This is attributed to an inappropriate "logic of land reform" (Cousins, 2016: 1), which may be linked to differences in how land is understood, giving rise to application of inappropriate theory for the context (Shipton, 2009; Zevenbergen *et al.*, 2013). A "fundamental overhaul of government land reform policy" (van Zwieten, 2017a: 3) is required, but for land reform to become ***successful***, it is posited that the process and outcomes should be ***significant*** for existing land rights-holders. ***Sustainability*** also needs to be built into any land administration systems linked to land reform (Williamson *et al.*, 2010). Because the cadastre links people, rights, and land (Silva & Stubkjær, 2002; Whittal, 2008; Hull & Whittal, 2013) – see Section 1.3.4 – land reform policies impact, and are influenced by, cadastral systems development.

In order to meet modern challenges (such as urbanisation, environmental protection, climate change, sustainable development, human rights and governance issues) cadastres continually need to change (Bennett *et al.*, 2010). Well-functioning cadastres are considered by some as essential for securing property rights, economic gain, and environmental management, yet according to Jones & Land (2012) there are only about 40 countries in the world whose cadastral systems may be described as well-functioning. Cadastral agencies need to continuously work at improving the quality and security of their data as well as their interaction with citizens and other users of cadastral data (*Ibid.*). Cadastral systems development is an on-going process requiring innovation and possibly the adoption of new technologies. If countries want to reap the benefits of a good cadastral system, they will need to embark on a project to either revolutionise the existing system or implement from scratch a modern cadastral system.

Modern Land Information Systems (LIS) consist of a spatially referenced database with the capability for systematic collection, updating, processing, and distribution of data (Furuholt, Wahid & Sæbø, 2015). Having correct and up-to-date land information is considered by some to be essential for a country's legal, administrative, and economic decision-making (*Ibid.*), and as an aid for planning and sustainable development (Williamson *et al.*, 2010). It is also considered by many to be important for the economic and social development of (particularly) poor and undeveloped countries. But such modernisation efforts come at a cost: the migration from old cadastral systems to modern LISs is challenging (Furuholt, Wahid & Sæbø, 2015). There may be unintended consequences to these projects. It is also not clear whether these modernisation initiatives do actually benefit citizens and communities (through e.g. improved tenure security and land governance), and if so, how. Though these projects aim to improve the LIS, the needs of citizens and communities and the impact of modernisation may not be fully considered.

The primary drivers for the improvement of land administration systems (LASs) have been the formal recognition of rights in land, and the provision of a means of trading these rights (Burns

et al., 2006). Globally, several projects for improving LASs have been undertaken over the past decades. The overarching aim is for increased efficiency and effectiveness in land administration services (*Ibid*.). Several projects have attempted to assess whether these objectives have been achieved (see e.g. Akingbade *et al.*, 2012; Borzacchiello & Craglia, 2012; Griffith-Charles & Sutherland, 2013). 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 (Akrofi & Whittal, 2013; Zevenbergen *et al.*, 2013; Barry & Danso, 2014; Furuholt, Wahid & Sæbø, 2015) stemming from the irrelevance of the new system to the local context. This is especially problematic when cadastral systems development affects customary land rights-holders, where rights may not be formalised (Burns *et al.*, 2006; Enemark, McLaren & Lemmen, 2015).

It is very difficult to quantify the costs and benefits of LAS, largely because many of the benefits are not quantifiable (Nkwae, 2006). Some property rights reforms have been very successful, while others' successes have been overshadowed by disastrous unintended consequences. This research seeks to develop a framework for cadastral systems development that avoids this problem. To avoid such setbacks, new interventions should, as a minimum, (Conning & Deb, 2007):

- engage citizens and communities from the outset,
- incorporate monitoring and accountability mechanisms into the programme design, and
- include pilot programmes and regular impact evaluations to measure intended and unintended consequences.

1.2 DESIGN

1.2.1 Problem Statement

Land tenure security is a problem for approximately 60% of South Africans who identify with customary land tenure systems (Hornby *et al.*, 2017). To address this problem, since 1994, the South African government has embarked on an extensive land reform programme, but land reform in South Africa is failing. This is possibly due to inappropriate policy and/or application of inappropriate theory for the context (Hall, 2004; Atuahene, 2011; O'Laughlin et al., 2013; Kingwill, Hornby, et al., 2017). Not everyone identifies with land in the same way. For some, it is an economic asset to be traded (cf. de Soto, 2000). For others, holding land may confer status or belonging (Platteau, 1996; Nyamu-Musembi, 2008). Yet others may see land as representative of a deity (Akrofi, 2013). For land reform programmes to ***sustainably succeed***, I propose that cognisance needs to be taken of these different understandings of the role of land in society. Only then will land reform be ***significant*** for land rights-holders. Land reform programmes that operate outside of the understanding of land rights-holders may be destined to fail (Enemark et al., 2014a; Kingwill, Hornby, et al., 2017).

Cadastral systems link land, rights, and people, as explained in Section 1.3.4. ***Successful*** land reform may require development of the cadastral system to accommodate land reform objectives. The underlying assumption made by initiators of cadastral systems development projects appears to be that, by improving the cadastral system, benefits will accrue to the land rights-holders. This assumption is not necessarily valid and is seldom tested.

1.2.2 Aim, Objectives, and Questions

The aim is: **to develop, test and extend a framework to guide cadastral systems development in customary land rights contexts such that the development is *successful*, *sustainable*, and *significant*.**

Drawing from existing evaluative frameworks, aspects of pro-poor development, a human rights-based approach (HRBA) to development, and issues related to good governance, a conceptual framework for guiding cadastral systems development is produced (objective A in Table 1-1). To test the framework (objective B), the research draws on international experience because this situation is not unique to South Africa. Many countries, both developed and developing, have already embarked on cadastral improvement projects, for example the Netherlands (de Zeeuw, 2015a) and Germany (Gundelsweiler, Bartoschek & De Sá, 2007). Others are still at early stages of cadastral systems development involving extending the cadastre across the nation: e.g. Mozambique (Van den Brink, 2008).

An analysis of the data gathered leads to the final objective: drawing from the experiences of the case studies, the conceptual framework is refined and grounded in real data. It is proposed that adherence to this framework throughout the process of cadastral systems development will yield cadastral systems that last due to their relevance for the affected land rights-holders.

Table 1-1 Research objectives and associated questions.

Objectives	Research Questions
A. To develop a conceptual framework for guiding cadastral systems development.	1. What theoretical framework needs to be adopted to extend existing land administration theories such that they may be equally relevant to developed and developing contexts? 2. What evaluative frameworks are already in existence and appropriate for this study? 3. How can existing frameworks be synthesised into a conceptual framework to ensure trustworthiness of the outcome?
B. To test and extend the conceptual framework through a descriptive multiple-case study.	4. Which cases of cadastral systems development are appropriate for evaluation using the conceptual framework? 5. When assessing these cases using the conceptual framework, what strengths and weaknesses of the framework are identified?
C. To propose a grounded framework for guiding cadastral systems development for customary land rights-holders.	6. What is learned from the preceding analysis? 7. How can the conceptual framework be refined?

1.3 TERMINOLOGY

In the field of modernisation of cadastral systems, terminology is diverse and, in some cases, undifferentiated. Researchers and practitioners tend to adopt and use whatever terms they are most familiar with, while the reader is left to interpret the meaning thereof through the subtext and argument. Several authors have affirmed the need for standard definitions and consensus to

enable sharing of knowledge and concepts (Silva & Stubkjær, 2002; Çağdaş & Stubkjær, 2009; Lemmen, van Oosterom & van der Molen, 2013). Tjia and Coetzee (2013), with reference to Hess and de Vries (2006), affirm that the lack of common vocabulary hinders the exchange of cadastral data. Adopting internationally recognised vocabulary improves communication about land administration. Conversely, Barry and Roux (2012: 305) caution that standardisation may "stifle critical thinking and innovation". In this thesis, I have embraced the need for a common understanding of terms, although Barry and Roux's caution should not be ignored. Hence, the following terminology is explained such that their understood meanings are shared with the reader.

1.3.1 Land reform

Land reform in South Africa comprises three elements: land restitution, land redistribution, and land tenure reform (DLA, 1997; Kloppers & Pienaar, 2014; Kepe & Hall, 2016) – see Figure 1-1. **Land restitution** involves restoring "land rights to victims of racially motivated dispossession" (Kepe & Hall, 2016: 27). In South Africa, the focus of restoration is on those dispossessed of land under acts of racial discrimination since 19 June 1913 (DLA, 1997). This date marked the passing of the Natives Land Act (no. 27 of 1913), which prohibited "natives"[1] from owning about 93% of South African land. Land restitution seeks to return land to those from whom it was taken, or to otherwise reasonably compensate the victims or their descendants (DLA, 1997).

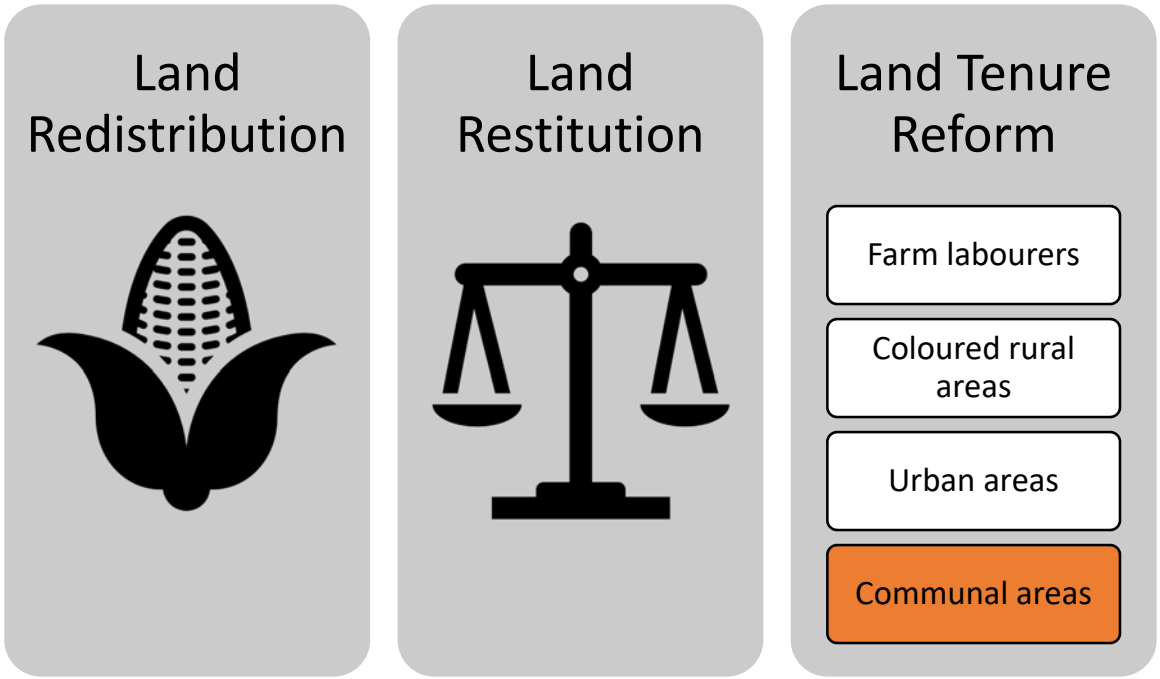

Figure 1-1 Land Reform in South Africa (the focus area for this research is noted in orange)

Land redistribution focusses on achieving racial equity in landholding by citizens. Although the amount of land available for 'natives' to own was increased to 13% by the Native Trust and Land Act (no. 18 of 1936), the distribution of land ownership in the country was still skewed. The apartheid government plan was for "80% of the population [to be] confined to 13% of the land while less than 20% [would own] over 80% of the land" (Rugege, 2004: 284), although the so-called 87:13 ratio of white to black land ownership was never fully realised (Walker & Dubb, n.d.).

[1] Section 10 of the Act refers to "natives" as being "any person, male or female, who is a member of an aboriginal race or tribe of Africa".

Myburgh (2013) gives a comprehensive breakdown of the racial division of South Africa post-1913. Per the 1916 Native Land Commission, 12,5% of South Africa was exclusively occupied by 'natives' (native-owned land accounted for 8,9% of South Africa), 12,4% was unoccupied Crown land, 73,9% was European-occupied, owned or leased farmland, and 1,2% was urban. Hence, the oft-quoted 87:13 ratio is more accurately a 74:13 ratio (*Ibid.*).

Through the provision of a Settlement / Land Acquisition Grant (SLAG), the poor and needy have been enabled to acquire land to restore this imbalance in landholding (DLA, 1997). The SLAG was replaced in 2000 by the Land Redistribution for Agricultural Development (LRAD) programme, which was itself replaced by the Proactive Land Acquisition Strategy (PLAS) in 2011. Through PLAS, the state acquires farmland and makes it available on a leasehold basis to address the failings of SLAG and LRAD. These failings are attributed to a lack of capital and capacity for households to effectively utilise the land (Kepe & Hall, 2016). But PLAS has recently been criticised for diverting attention away from the poor and showing signs of elite capture [2] (Hall & Kepe, 2017; High Level Panel, 2017).

Adams, Sibanda & Turner (1999: 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 (FAO, 2002: 7) define 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 rights. Enemark (2005) 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 rights of access to land (FAO, 2002). These rules reflect the balance of power among stakeholders. Changes to these rules may result in a fundamental shift in existing power structures.

Land rights may be defined as rights to occupation, use, and transaction of land, including rights to exclude others from exercising such rights, and rights to enforce protection of the rights-holder (Adams, Sibanda & Turner, 1999). In the context of this research, land rights are broadly interpreted to include all rights and privileges in landed property: those reflected in formal registration, those protected by legislation such as anti-eviction laws and the Constitutional Bill of Rights, and land rights held through customary, traditional and social systems. Similarly, in this research, holding of a land right implies more than formal registration.

Land tenure reform is a planned change to the terms and conditions of land tenure (*Ibid.*). It serves to recognise locally-held land rights and to transfer power over these rights to the land rights-holders (Alden Wily, 2000). In South Africa, the aim is to "secure and protect customary and informal land rights that were left vulnerable by apartheid" (Kepe & Hall, 2016: 27) in recognition of Section 25(6) of the Constitution of South Africa:

> *"A person or community whose tenure of land is legally insecure as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to tenure which is legally secure or to comparable redress."*

[2] Elite capture is defined by Persha and Andersson (2014) as occurring when individuals with privilege due to their superior political status use their advantage to gain a disproportionately large share of resource or benefits intended for more needy recipients.

1.3.2 Land tenure security

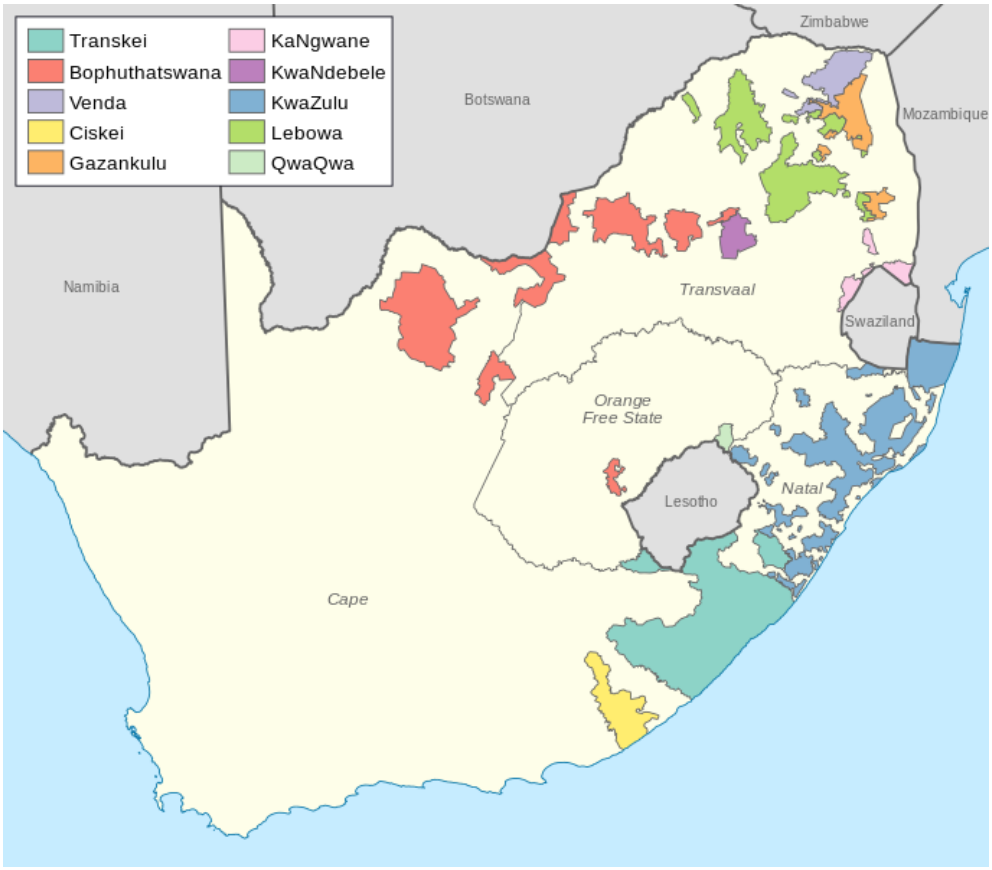

Figure 1-2 Distribution of the homelands in South Africa [3]

Security of tenure is acknowledged to be a "multifaceted concept" (Bruce, Migot-Adholla & Atherton, 1994: 260). Social legitimacy and the exercise of power relations are oft entangled with the rules defining people's relationships (Okoth-Ogendo, 2006; Royston, 2017). Applying a systems-understanding of land rights and land tenure, Whittal (2014) understands **land tenure security** to reflect the meaning that people and societies place on land rights. She identifies three aspects of tenure security: legitimacy (acknowledgement by people), legality (acknowledgement by legislation), and certainty (acknowledgement of the influences of corruption, power struggles, and chaotic environments). This 'triplet approach' enables researchers to measure land tenure security for different land rights types. Legitimacy and legality relate to recognition of rights to land and protection of those rights, respectively, both of which improve certainty (FAO, 2002). Smith (2008), citing Roth (2004), adds to these the length and breadth of land rights, where length relates to the duration over which rights have been held, and breadth relates to the various types of land rights held. Simbizi *et al.* (2014: 231) identify land tenure security for sub-Saharan Africa as "an emergent property of a land tenure system". The system comprises five interacting elements: people, social institutions, public institutions, land rights and restrictions, and land and information about land. Positive interactions between these elements improves tenure security.

[3] Htonl. 2013. *File: Bantustans in South Africa.svg – Wikimedia Commons.* Available: https://commons.wikimedia.org/wiki/File:Bantustans_in_South_Africa.svg [2019, April 25]. Copyright 2013 by Htonl. Reprinted under the Creative Commons Attribution-ShareAlike 3.0 Unported (CC BY-SA 3.0) license.

Drawing from the above, land tenure security is here understood to reflect the certainty of land rights-holders that their rights to land will be upheld in the face of challenges to those rights (as Weinberg (2015: 6) puts it, "the legal and practical ability to defend one's ownership, occupation, use of and access to land from interference by others"). Such challenges often come in the form of investment projects such as agri-businesses, mining ventures, wind farms, and irrigation projects; or they may stem from increased urbanisation, population pressure, and climate change. Without secure tenure, customary land rights-holders are easily displaced by powerful elites (see e.g. Chitonge *et al.*, 2017).

In South Africa, land tenure security is a particular problem for four categories of land rights-holders (Rugege, 2004; Kingwill, Royston, *et al.*, 2017):

1. farm labourers and their families living on privately owned land,
2. people living on former mission stations,
3. people living in situations of insecure tenure in urban areas, such as informal settlements,
4. people living under customary tenure systems in the rural areas of the former homelands or Bantustans, – the so-called 'communal areas' – see Figure 1-2. Although cadastral systems development may impact on all types of land reform, it is to this last group, the so-called communal areas, that this research is specifically directed.

1.3.3 Customary tenure

Cadastral systems development that impacts on **customary land tenure systems** is most likely to come up against differences regarding the understanding of land and theories of development, and hence will most benefit from the developed framework. Cousins (2008) notes that the terms 'customary', 'communal', and 'traditional' are often and incorrectly used as synonyms. 'Indigenous' and 'tribal' may be added to that list. He asserts that it is important that these terms be understood as distinct.

The conflation of 'communal' and 'customary' is attributed to misconceptions about customary land tenure by colonial authorities. The colonial authorities assumed that customary land was communally held to "render easier the seizing of African lands" and is hence more of a politically strategic designation than a description of actual land holding relationships (Chanock, 2001: 381). "Because colonial governments did not find conceptions of land holding that were equivalent to … exclusive land ownership among colonized peoples, it was assumed that landholding [*sic.*] was vested in the community" (Joireman, 2011: 297), whereas land rights may actually be individualised and/or communal (Lavigne Delville, 2010). By describing tenure as *communal*, the implication is that land belongs to the community and not to the individual, and that they use the land as a collective for a common purpose (Bennett, 2008). But this is not the case. Despite empirical evidence that "customary tenure is not exclusively communal", the "communal paradigm" persists in land policies and legislation (Banda, 2011: 316). Examples of such legislation from South Africa are the *Communal* Land Rights Act no. 11 of 2004, known as CLaRA, the *Communal* Land Tenure Policy, CLTP (DRDLR, 2013a), and the *Communal* Land Tenure Bill, or CLTB (DRDLR, 2017a). These examples serve to highlight the prevalence of the **communal paradigm** in South African legislation that is aimed at *customary* land tenure reform.

To avoid confusion, and following the examples of Cotula (2007), Lavigne Delville (2010), and Chitonge *et al.* (2017), in this thesis ***customary* tenure** is 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" (Chitonge *et al.*, 2017: 83) and that access to land is via "social norms and networks …

where local powers play an important role in land rights regulation and conflicts resolution" (Lavigne Delville, 2010, n. 1).

Customary tenure may be divided into the "holding" and the "commons" (Adams, Sibanda & Turner, 1999: 5). 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. Access to the commons may either be open or limited to certain group members. Per Okoth-Ogendo (2002: 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. Although land does not belong to individuals, it is not public property but should rather be understood to be private property for the community that controls it. Individuals of this community have clear rights, restrictions and responsibilities (RRRs) with respect to access and use of the land and associated resources (*Ibid.*).

Local powers may be either traditional leaders or traditional authorities, although the distinctions between the two are significant. **Traditional leaders** include categories of leadership, such as king, chief, headman, and sub-headman. It is noted that these terms were impositions of colonial rule and have been replaced under Section 8 of the Traditional Leadership and Governance Framework Act (TLGFA) 41 of 2003 with three categories: king, senior traditional leader, and headman (Bekker, 2008). These leaders oversee the customs and traditions of people living under customary land tenure, administered under customary law (see below). They also had statutory duties prescribed under Section 3 of the Bantu Authorities Act 68 of 1951 (Bank & Southall, 1996; Vorster, 2002), also known as the Black Authorities Act. The office of traditional leadership is inherited, not elected, and is generally patriarchal. Hence, although traditional leadership is recognised under Section 211(1) of the South African Constitution, it is not a democratic institution and conflicts with the non-discrimination clause of the Constitution (Vorster, 2002).

Ntsebeza (2003) refers to the above as **traditional *authorities*** to highlight their imposed, not elected, status. However, Vorster (2002) equates traditional authorities with the *tribal* authorities appointed by the President under Section 2(1)(a) of the Bantu Authorities Act. Tribal authorities were established to support the traditional leader in the administration of tribal affairs. They also supported government as advisors on matters related to the development of land under their jurisdiction (*Ibid.*). In this thesis, traditional authorities are understood as per Vorster.

Per Section 28(4) of the TLGFA, these apartheid-era tribal authorities are replaced by **traditional councils** in the democratic South Africa. As stipulated in Section 3(2) of the TLGFA, 40% of the council members are supposed to be democratically elected from the community, and 60% are supposed to be appointed by the senior traditional leader. In addition, one third of the council members should be female. However, most traditional councils have not met these requirements. The legal standing of these councils is hence questionable, and the implications for traditional communities remains uncertain (Centre for Law and Society, 2013). This is particularly significant given that, per the CLTP (DRDLR, 2013a), traditional councils are juridical persons that may own land.

Customary law is a set of rules, usually not codified, drawing on tradition yet continually evolving under the influence of contextual pressures. Diala (2017) 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 (Bennett, 2008). In practice, under situations of legal pluralism, people often observe customary and/or statutory law as the need dictates (Cotula, 2007; Diala, 2017) giving rise to a continuum of different combinations of both (Cousins & Hornby, 2006). **African customary law** is upheld by the Constitution (Section 211) and we have a legally pluralist system in South Africa today in which a hybrid form of official and living customary law is practiced. Not all customs are legally binding – they must have the attributes of reasonableness, long establishment, uniform observance, certainty, and conformity with the Constitution (Rautenbach, 2017; Osman, 2019). African customary law is derived from official customary law and judicial decisions. A court of law may decide whether the attributes listed above are present. Judicial precedents may then be used (Osman, 2019) – not every case needs to go to court.

Under **customary tenure**, rights to the holding and the commons are recognised 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 (FAO, 2002; Rugege, 2004; Cousins *et al.*, 2005; Freudenberger *et al.*, 2013). The following general characteristics of customary land tenure systems are noted (Cotula, 2007; Cousins, 2007; Freudenberger *et al.*, 2013; Chitonge *et al.*, 2017):

1. 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 (Berry, 1993; Cotula, 2007) – there is no such thing as 'pure' indigenous knowledge (Knight, 2010). 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" (Cotula, Toulmin & Hesse, 2004: 2).

1.3.4 Cadastral systems development

The **cadastre** is a:

> *"… parcel based, and up-to-date land information system containing a record of interests in land … It usually includes a geometric description of land parcels linked to other records describing the nature of the interests, the ownership or control of those interests, and often the value of the parcel and its improvements" (FIG, 1995: 1)*

Silva and Stubkjær (2002: 410) add that it is a:

> *"… systematic and official description of land parcels, which includes for each parcel a unique identifier [and] includes text records on attributes of each parcel. … The focus of cadastre is spatial, not legal or fiscal."*

The '*parcel*' referred to above is usually understood to be a spatial unit of area (or volume), over, under or within land or water, "where rights and/or *social* tenure relationships apply" (Uitermark

et al., 2010: 2, emphasis added). Although cadastres are usually associated with systems of registered land rights, from these definitions it is implied that the cadastre does not *only* refer to registered ownership or limited real rights or similarly formalised land rights. The 'parcel', 'interests', and 'attributes' could refer equally to off-register and customary land interests and tenure arrangements. It is also 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 (see Wallace, 2010). A 'continuum of accuracy' has been proposed such that spatial units (**plots**) may be described via text, points, lines, polygons, or polyhedrons as contextually appropriate (Lemmen, van Oosterom & van der Molen, 2013).

Point-based cadastres, wherein the plot may be identified via a single point location [4] rather than as a geometric figure (Hackman-Antwi et al., 2013), allow for the accommodation of different expressions of land, including fluid boundaries, and formed the basis of a study into a community-based local land cadastre to record land rights in informal settlements in South Africa (Home & Jackson, 1997). De Vries, Bennett, and Zevenbergen (2015) discuss the emergence of *neo*-cadastres that rely on crowd-sourced geospatial information to record cadastral extents of off-register land rights (such as customary land rights). Thus, the modern cadastre may accommodate a range of levels of (im)precision and (in)accuracy in the description and recordal of plots. This may address the tension between the 'traditional', Western-based notion of the cadastre as highly precise and rigid, versus non-Western, customary conceptions of land and property rights that accommodate imprecision and fluid boundaries.

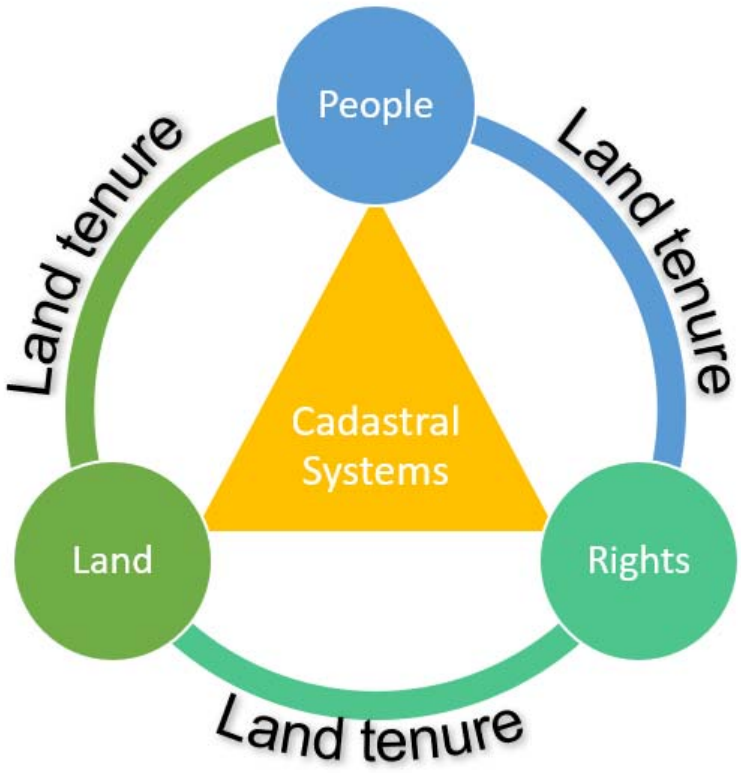

Figure 1-3 Cadastral systems and land tenure: linking people to land and rights

[4] Note that in common (non-Geomatics) parlance, such is often erroneously referred to as a 'GPS point'. While the coordinates of such a point may be obtained by handheld GNSS (Global Navigation Satellite Systems, of which GPS is one), they could also be digitised from maps, satellite images or aerial photographs, or surveyed using a total station, compass and tape measure, or any other appropriate means.

The **cadastral system** is a subsystem of a LIS (Whittal, 2008). It combines the cadastre, with its spatial focus, and the land record, with its legal focus (Silva & Stubkjær, 2002). Hence, cadastral systems link people to land (spatial component) and rights (legal component) as well as other (off-register) land-based interests (see Figure 1-3). Here and throughout this thesis, **rights** include what customary landholders *perceive* as their rights and interests according to living customary law.

Considering such broad definitions of cadastre and cadastral systems, in this thesis the understanding of cadastral system is not restricted to systems of formalised, registered land rights. It is conceivable that unregistered, customary land rights may also be recorded in a cadastral system of sorts, as illustrated in Table 1-2. Such off-register cadastral systems 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.

Table 1-2 Cadastral systems of registered freehold or unregistered customary land tenure

Cadastral system	Registered freehold	Unregistered, customary
People	Juristic persons (e.g. individuals, companies, trusts)	Recognised 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 (e.g. a gathering of older men – *ibandla* (Alcock & Hornby, 2004) or *imbizo* in isiZulu, or *lekgotla* in seSotho – see Figure 1-6) and demarcated following customary norms (e.g. building a cairn at the corners of the demarcated plot).[5] Plots and boundaries may be flexible (variable over time).
Rights	Exclusive use, ownership, occupation, access, exclusion (Whittal, 2014) 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 (Whittal, 2014) and recorded in the collective memories of the community or by some other means (see e.g. Figure 9-6 in Section 9.3.4).

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

[5] Such was the practice observed by the author in the Ingwavuma district of northern KwaZulu Natal in 2009 – see Section 1.5. See also the descriptions of plot allocations in Alcock and Hornby (2004) and Hull *et al.* (2016).

nature of existing land 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. Considering the definitions of land tenure in Section 1.3.1, land tenure reform may be considered a type of cadastral systems development. These improvements may be anything from small changes – "fine-tuning" (Bruce, 1993a: 43) – 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 (not promoting radical and destructive transformation) and changing it (sometimes innovatively, sometimes to turn over the Western traditions) to meet current needs.

1.3.5 Land administration systems

As part of a country's national development plan, **land policy** forms the highest-level instrument for stating the strategies and objectives for the social, economic, and environmental use of land (Törhönen, 2004; Enemark, 2005) – see Figure 1-4. Below this are the land management and land administration levels (Steudler, 2004; Yilmaz, Çağdaş & Demir, 2015). **Land management** relates to the strategic level, whereas **land administration** relates to the "processes of recording and disseminating information about the ownership, value and use of land and its associated resources" (UNECE, 1996: 14) at the implementation level. The setting of goals (policy level) and objectives (strategic level) are realised through action that results in outcomes (implementation level) requiring review. From new policy usually flows new legislation and hence practice.

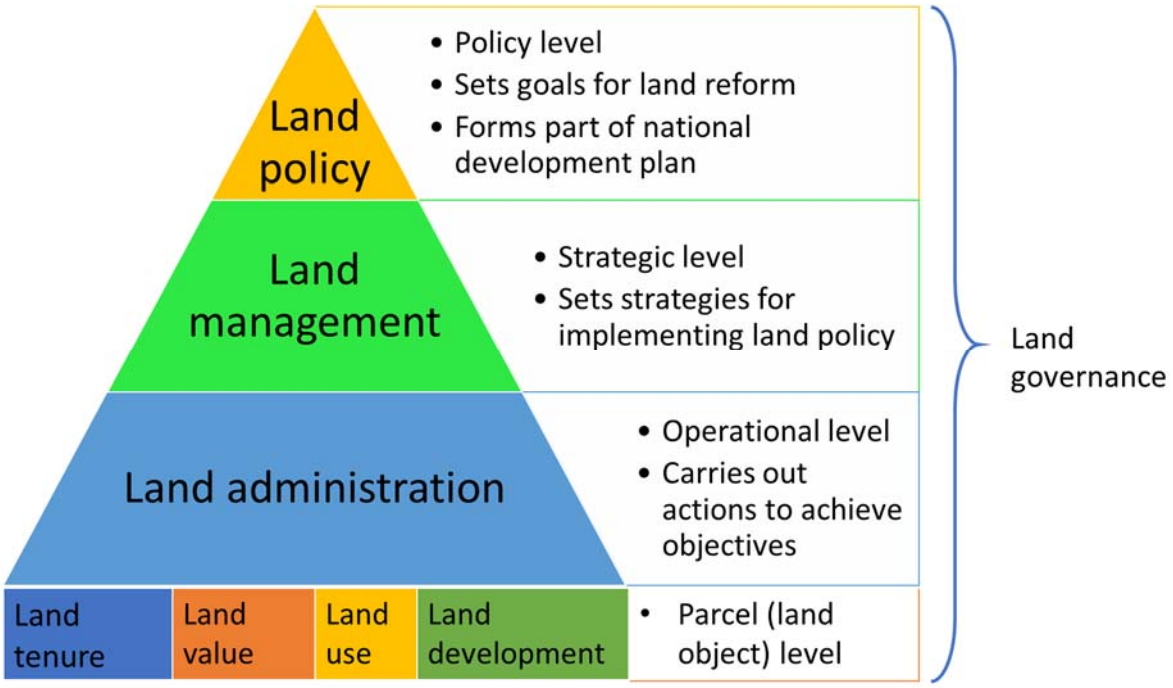

Figure 1-4 Hierarchy and functions of elements of Land Administration Systems

Land administration systems (LAS) support the integrated management of land and involve the determination, recording and dissemination of information about the tenure, value, use and development of land (Enemark, 2005; Kalantari, 2008). The cadastre is the basis for land administration (Williamson *et al.*, 2010; Hull & Whittal, 2013), hence it is implied that development of the cadastre will yield development of the LAS, but not necessarily vice versa.

Considering the broad definitions of cadastre and cadastral system given above, it is worth noting that LAS are not exclusive to registered property systems; they also exist in off-register land rights

contexts. In customary contexts, traditional leaders administer land on behalf of their communities (Alcock & Hornby, 2004; Hull et al., 2016). Yet there is tension between the notion of land administration systems – emanating from Western conceptions of property, law and rights – and land administration in customary land rights contexts, based on non-Western systems of property rights (Mahlati, 2019). Western-imposed legislative and administrative frameworks fail to accommodate the nuances inherent in customary land tenure and administration systems. This tension exists in South Africa's Constitution, which recognises equally civil law, common law, and African customary law. Development of African customary law in its application to land and land administration is ongoing. Hence, our understanding of LAS must be extended and possibly redesigned to accommodate this tension in a way that is sensitive to legal pluralism.

Land governance is concerned with the rules, mechanisms, policies, processes, and institutions by which land, property and natural resources are accessed, used, controlled, transferred, and managed (Amanor, 2012; Enemark, 2012). It therefore spans all of the levels of LAS as illustrated in Figure 1-4, whether customarily or legally defined. It covers all the activities associated with land and natural resource management, preferably to achieve sustainable development, and as such includes land tenure systems, land and agrarian reform, and land administration (*Ibid.*).

Finally, a **system** can be defined as "a complex of interacting elements" (von Bertalanffy, 1950: 143), i.e. "any two or more parts that are related, such that change in any one part changes all parts" (Hanson, 1995: 27). These parts, through their connections to each other, form a whole that exhibits properties unique to the whole rather than emanating from the parts (Checkland, 1981). The systems approach assumes that the world contains structured wholes that maintain their unique identities under a range of conditions and which exhibit "certain general principles of 'wholeness' " (*Ibid*., p. 6).

1.4 SCOPE

As illustrated in Figure 1-1, the focus area for this research is on land tenure reform in customary land rights contexts in southern Africa. Generally, this implies emphasis on rural areas where traditional leaders have jurisdiction – see Figure 1-5. Customary land rights and tenure systems are also noted to coexist with registered rights in some urban areas, most notably informal settlements. The research is scoped mainly towards the rural areas, although the applicability of the framework to such urban areas is not ruled out. The other contexts for land tenure reform listed in Figure 1-1 are not considered. It is noted that land tenure reform impacts on both land restitution and redistribution, hence these aspects of land reform are also mentioned in the research.

While the context of the research is land tenure reform, the subject is cadastral systems development. Innovations in cadastral systems occur in a variety of contexts, but new forms are mostly developed and implemented in developed countries with well-functioning cadastres. Hence, as explained in Section 3.3.1, cases are drawn both from Europe (the Netherlands and Germany) and southern Africa (Mozambique and South Africa). The purpose of the case studies is to test and extend the conceptual framework. These four cases are deemed sufficient for this purpose, as explained in Section 3.3.1.

Frameworks for evaluating LAS mostly have their origins in the developed, 'Western' world. There are notable exceptions in which the primary researcher and the focus of the research are both in a developing context (Chimhamhiwa *et al.*, 2009; Akrofi & Whittal, 2013; Ali, Zevenbergen & Tuladhar, 2013), but this does not appear to be the norm. Also, there is very little published literature in this domain that deals with developments in Africa south of the Equator. Hence it

appears that there is scope for more focused research on cadastral systems development by researchers operating from developing contexts, particularly in southern Africa.

Figure 1-5 Typical customary land rights context (former Transkei region of the Eastern Cape)

1.5 Bias

I am a white African, English-speaking male who grew up in Durban, South Africa, during apartheid. My formal education thus far, at both undergraduate and post-graduate levels, has been technically oriented with minimal social, political, or legal input other than that which pertains to geomatics, specifically the land surveying profession. I am a registered Professional Land Surveyor and practised as such in Cape Town for several years before changing tack and trying my hand at high school education.

As a schoolteacher, I lived and worked in Ingwavuma, northern KwaZulu Natal (see Figure 3-5 and Figure 11-1), for 6 years, teaching maths and sciences to mostly Zulu (plus a few Swazi and Tsonga) learners. During this time, my wife and I negotiated with the local *induna* for a piece of land on which to build a house. Following the *imbizo* with the neighbouring community – Figure 1-6 – we were granted land on which to build and, eventually, a PTO (Permission to Occupy) certificate for our site (see footnote 31 on page 171 and Annexure D). We lived in our house for two years before a change in circumstances and an opportunity precipitated a move back to Cape Town.

Living and working in a former Bantustan area exposed me to the norms and traditions of customary landholding and strongly influenced my choice of research topic. I acknowledge that I will always be a white African male with a strongly positivist formal education who can never fully see things as a 'customary person' living in a customary area. Yet, through my first-hand experiences in Ingwavuma and over this research journey, I have tried to become more sensitive to the ontology and epistemology that are associated with customary norms and traditions.

Hence, my training in the 'hard' sciences has, over the past decade, been 'softened' through exposure to previously unfamiliar social science concepts. Throughout this thesis, I am attempting to broaden the horizons of understandings of cadastral systems beyond the influence of geomatics, yet I remain grounded within the geomatics discipline, and this bias may be evident in the thesis, in which cadastral systems development is viewed from a cadastral and land tenure systems perspective.

Figure 1-6 *Imbizo* in Ingwavuma area, northern KwaZulu Natal

Such a perspective assumes that cadastral systems exist in most countries; seldom do we have a 'clean slate' and definitely not in sub-Saharan Africa, where cadastral systems are legacies of colonial administrations and are based on western legal and land administration paradigms. They involve land professions that initially developed in Europe along with cadastral systems in that region and systems of governance and law that are derived from western paradigms.

Geomatics practitioners specialising in cadastral and land tenure systems approach cadastral systems development with an understanding of land law, administration and land surveys within the formal and (increasingly) informal and customary settings. New forms of land surveying, recordation and inclusion of informal and African customary law and practice, as alluded to in Sections 1.3.4 and 1.3.5, are at the forefront of developments in the field. New forms often reject the need for precision, fixed boundaries, formal registration/titling, and exclusive land rights. These new forms are researched and tested internationally and find expression in developments such as fit-for-purpose land administration (Enemark et al., 2014a,b; Enemark, McLaren & Lemmen, 2015), the Social Tenure Domain Model (Augustinus, 2010; Lemmen, 2010), flexible land administration systems and legislation (Christensen, 2004), and many other innovations that address the tension between traditional, Western-based conceptions of cadastral systems, and their application in customary land rights contexts.

The researcher's approach is thus as a geomatics practitioner conducting research on the development of existing cadastral systems, originally based on Western paradigms of law and surveying, so as to better meet the needs of all citizens. As such, the starting premise is that of existing land administration and cadastral systems practice, including the research findings of the domains of geomatics and legal pluralism as well as allied fields in the social sciences. When including customary land practices and administration, the researcher takes the view that whatever local practices are, these can only find a place in cadastral systems development when they are legally recognised.

1.6 CONTRIBUTION TO KNOWLEDGE

The major contribution to knowledge is the conceptual framework, refined through case study. The refined framework is hence not simply another evaluative framework differing from its predecessors in that it has a developing world focus. It differs from existing frameworks through the emphasis on the ***significance*** of cadastral systems development in less developed contexts (especially southern Africa). Hence it is expected to be fit-for-purpose in its application in the developing world context, which is where existing frameworks are thought to be lacking. Emphasis is placed on the application of the framework in southern African countries. The case study descriptions and analysis thereof hence form an additional contribution to knowledge.

By incorporating the proposed framework into the design and implementation of cadastral and land administration development projects, land policy makers should be enabled to design development projects with an eye to not only improving the system itself, but also to benefitting the citizens the system is supposed to serve. This is particularly important in contexts with high levels of poverty and low levels of development.

The Advisory Panel on Land Reform and Agriculture (hereinafter 'the Advisory Panel') was constituted by President Ramaphosa in September 2018 to give expert advice to the Inter-Ministerial Committee on Land Reform. Among other recommendations, they identified "a need to develop a coherent policy response, grounded in historical, financial, and economic research, also considering social aspects and climate changes issues" (Mahlati, 2019: 34). All these aspects, and more, are addressed in this thesis, and it is hoped that this will be used for improved land policy in South Africa and similar contexts.

At the theoretical level, this research will contribute to the extension of land titling and land tenure information systems (LTIS) theory at the substantive level, as identified by Barry and Roux (2012).

1.7 OUTLINE

Table 1-3 Linking parts, chapters, research questions and objectives

Part	Chapter	Research Question	Objective
1	1: Introduction		
2	2: Theoretical framework	1: Theoretical framework	A
	3: Methodological framework	2: Existing frameworks	A
		4: Which cases?	B
3	4: Human rights	3: Synthesis	A
	5: Success, sustainability, significance		
4	6: Germany 7: Netherlands 8: Mozambique 9: South Africa	5: Assessment	B
		6: What is learned?	C
	10: Grounded framework	5: Assessment 7: Refined framework	B C
5	11: Conclusion and Recommendations		

In this chapter, which forms Part 1 of the thesis, the motivation, research problem, aims, objectives, and research questions have been presented. Some of the important terms for this

research were defined. The scope of the research, the researcher's bias, and the contribution to knowledge were also presented.

The links between objectives, research questions and chapters are illustrated in Table 1-3. The first objective is to develop a conceptual framework, with associated questions concerning the appropriate theoretical framework, existing evaluative frameworks, and synthesis of the latter into the conceptual framework. These questions are covered in Parts 2 and 3, incorporating chapters 2 – 5.

The second objective is to test and extend the conceptual framework. Research question 4 considers which cases to choose. This is also covered in chapter 3. Research question 5 considers the application of the framework to the chosen cases. This is covered in Part 4, chapters 6 – 10.

The final objective is to develop a grounded framework for guiding cadastral systems development in customary land rights contexts. The lessons learnt in chapters 6 – 9 are incorporated into the refined, grounded framework in Part 4, chapter 10. Conclusions and recommendations are covered in chapter 11, which is Part 5.

Part 2: Ontology and Epistemology

2 THEORETICAL APPROACH

The researcher's theoretical framework is defined by the adopted worldview and paradigm of the researcher, where the worldview shapes the paradigm and hence informs the type of theory that emerges from research (Barry & Roux, 2012). The following discourse begins with a description of different worldviews followed by the adopted paradigm and justification for the resultant theoretical framework in terms of this research.

2.1 WORLDVIEWS

A holistic approach to problem solving requires "consideration of the multidimensional nature of the complex real world" (Whittal, 2008: 107). To try and understand the complex world we live in, different worldviews have been proposed. Each provides similar yet different perspectives on problems or research subjects, because every researcher has their own mental image of the phenomenon being investigated. This mental image influences the researcher's "philosophical perspective and personal bias" (Barry & Roux, 2012: 307). Hence, multiple researchers may approach a problem from multiple and different worldviews and propose different theories for explanation and prediction, and each theory may be valid (Checkland, 1999; Barry & Roux, 2012). Various models have been proposed to explain worldviews, and some of these are briefly presented below.

The TOP (Technical, Organisational, Personal perspectives) model uses a 'Western view' of organisation as a collective and the person as an individual (Linstone, 1985). Each perspective relates to *how* a problem is seen, rather than *what* the problem is.

The Three Worlds model (Habermas, 1984; Mingers & Brocklesby, 1997; Mingers, 2006) helps us to understand a variety of paradigms in terms of our relations to and interactions with three 'worlds': the material, social, and personal worlds. This worldview addresses the "views of self that individuals hold as well as the necessity to identify bias, paradigm, culture, and other personal and subjective factors" that affect research (Whittal, 2008: 112). The distinction between worlds is purely analytic: real-world situations of human activity involve all three (Mingers & Brocklesby, 1997), implying that "we have a relationship with the material world and society" as well as with ourselves (Whittal, 2008: 107).

Similarly, the *wuli, shili, renli* (WSR) model is an Oriental approach to systems thinking developed by Zhu (2000). The suffix, *li*, can be understood to refer to a perspective that covers knowledge about things, behaviour, and mental constructs (Whittal, 2008). Each of these *lis* is interrelated and interdependent, forming a differentiated, interconnected whole (Zhu, 1999). *Wuli* refers to the material-technical perspective; *Shili* refers to the psycho-cognitive perspective; and *Renli* refers to the social-political perspective.

What these different models teach us is that researchers may approach phenomena from different perspectives. The same problem may be viewed predominately from a technical / material perspective, an organisational / social perspective, or a personal / cognitive perspective. Due to the interrelation of these different perspectives, one perspective may not be considered to the exclusion of all others. "Thus, an observer's world view is influenced by their personal

interactions … with the social and material world, and how they internalise these interactions" (Barry & Roux, 2012: 307).

When thinking about land in Africa, a broadly African worldview needs to be considered if the researcher is to properly understand land from the perspective of the land rights-holder. Africa is a very diverse continent with multiple contexts, so there is no single 'African worldview'. However, there are some commonalities between contexts, and these are referred to as a *broadly African* worldview. According to Akrofi (2013: 68), with reference to Okafor (1996), a broadly "African worldview hinges on the centrality of community, respect for tradition, a high level of spirituality, ethical concern, harmony with nature, sociality of selfhood, veneration of ancestors, and unity of being." Fundamental to this worldview are the three major features of religion, community, and time (Chike, 2008). Akrofi (2013) draws the following conclusions when applying a broadly African worldview to land:

- land is for the living, the dead, and the not-yet-born,
- land may *only* be sold in consultation with the community,
- land binds Africans to their ancestors. This strongly influences the *duration* of land tenure in Africa and confers importance on use rights over the type of land tenure.

2.2 PARADIGMS

Denzin & Lincoln (1998) define a paradigm as a net containing the researcher's epistemological, ontological and methodological premises. These beliefs shape how the researcher views the world and interacts with it. All research is shaped by these beliefs about the world and how it should be understood and studied. Some of these beliefs are assumed and taken for granted, while others may be highly controversial and debatable.

The general interpretative paradigms that dominate qualitative research are: constructivist-interpretivist, (post)structuralist, and (post)positivist (Denzin & Lincoln, 1998). The goal of **constructivist-interpretivist** thinking is the understanding of the complex world from the point of view of those living in it. To understand the world, it must be interpreted (Schwandt, 1998). Hence the model works within a relativistic ontology: multiple constructed realities are recognised because reality is constructed in the mind of the interpreter. Reality is dependent on the individual for its form and construction. The constructivist-interpretivist methodology assumes that interpretation of findings needs to happen through interaction between investigator and respondents. The final construction is reached by consensus of the group. Validity is assured through adherence to criteria of trustworthiness (credibility, transferability, dependability, and confirmability) and authenticity (Guba, 1981; Creswell & Miller, 2000).

The focus of **structuralism** is on deconstructing mental processes to understand the basic elements of consciousness. The individual is seen as being shaped by sociological, psychological and linguistic structures over which he/she has no control (Jones, 2008). The structuralist sees culture as composed of hidden rules that govern the behaviour of its practitioners, whether they are aware of them or not. The structural paradigm suggests that all human thought processes are the same in all cultures and that they exist as binary oppositions (formal vs. informal, male vs. female, etc.). **Poststructuralism** (*Ibid.*) may be defined as a position or argument that denies the possibility of truth and hence of a truly scientific study of humankind or human nature. There are some basic assumptions:

- The concept of self as a separate entity is deemed false (advocacy and participatory worldview). Instead a person is seen as emanating from conflicting knowledge claims held in

tension, e.g. race, gender, class etc. Self-perception plays a critical role in one's interpretation of meaning.
- An individual's *perceived* meaning of something (a situation or literature for example) is more important than the *actual* or intended meaning.
- Interpretation of a text or situation should be achieved through a variety of perspectives to create a multi-faceted viewpoint, even if these different interpretations are conflicting.

The **(post)positivist** paradigm works within realist ontology. The **positivist's** realism is naïve because it is assumed that reality is realizable. The only authentic knowledge is that which can be positively verified. The emphasis is on the discovery of laws of society with a reliance on quantitative methods (Seale, 2008). **Postpositivists** adopt an ontology of **critical realism.** According to Mingers (2006), the critical realist's perspective is multi-paradigmatic: the research may take elements of a variety of paradigms where appropriate to suit the research. Postpositivists accept that the researcher can introduce bias into the research through their underlying theories, background, knowledge and values. Hence, while postpositivists believe that reality exists, they maintain that it can only be imperfectly known. It is impossible to verify if a belief is true, though it is possible to reject false beliefs. New evidence may influence the researcher's worldview resulting in a paradigm shift.

In terms of epistemology, the postpositivist accepts that the researcher has a certain bias and the results of research are only accepted as *probably* true if the findings are verified by peers and fit with pre-existing knowledge. The postpositivist methodology includes experimentation, falsification of hypotheses and both qualitative and quantitative methods (mixed methods research). Emphasis is placed on triangulation of research to falsify, rather than verify, hypotheses. Research is conducted in natural, rather than controlled, settings with an emphasis on context and the contribution to grounded theory. With its emphasis on context and recognition that nothing can ever be fully known, the postpositivist paradigm is well-suited to case study research.

Complex subject matter is best tackled using a soft systems methodology (Checkland, 1999; Çağdaş & Stubkjær, 2009). The difference between hard and soft approaches is that, while hard systems thinking can ask what system is required to solve a given, defined problem, soft systems thinking has to allow completely unexpected answers to emerge because the problem / goal itself is ill-defined. Hard systems pursue the truth while soft systems manage debate about which is the correct way forward (Mingers & Brocklesby, 1997).

Hence soft systems methodology (SSM) is well suited to a postpositivist paradigm wherein it is impossible to know if something is true due to the bias of the researcher. In SSM, systems are modelled so that alternative viewpoints can be expressed, explored, compared, and contrasted. This is achieved using a number of tools: rich pictures, root definitions, conceptual models, and comparisons (Jackson, 2003). SSM is very flexible in its approach; not all the tools need to be used in all situations, only those that are relevant. It aims to provide a structure for debate that leads to accommodation between different viewpoints so that desirable change can be implemented.

2.3 ADOPTED THEORETICAL FRAMEWORK

The critical realist ontology and a soft systems approach are adopted by Whittal (2008) in her research on (fiscal) cadastral reform (cf. Whittal & Barry, 2005). She found that the mixed methods approach, as fits a postpositivist paradigm, was useful in her case study analysis. Akrofi's (2013) research into customary urban land administration systems also fits with the postpositivist paradigm. Because customary tenure is multifaceted and complex, "involving social, political, cultural, historical and geographical contexts" (*Ibid.*: 32), a critical realist ontology

was found to be useful: it "allows for … flexibility while avoiding conflict at the ontological and epistemological levels" (*Ibid.*: 79). He also adopted a broadly African worldview which had not previously been applied to cadastral studies.

The subject of this research is cadastral systems development in 'developed' and 'developing' contexts. The researcher has adopted a multi-paradigmatic approach as facilitated by the Three Worlds model and including a broadly African worldview. Cadastral systems development is identified as a complex subject (Çağdaş & Stubkjær, 2009). Extending its application to include customary systems and a broadly African worldview increases the complexity. Hence a postpositivist paradigm using critical realist ontology and soft systems methodology is a suitable theoretical framework for this research.

It is worth highlighting that, although this research lies in the geomatics domain (see Section 1.5), the adopted approach allows for the inclusion of perspectives from other domains such as the social sciences and critical agrarian studies – see Section 3.2. Although every effort is made to afford such perspectives equal weighting, my bias as a geomatician is evident in the dominance of papers from land administration / governance studies in Table A-1. Such bias is tempered through inclusion of texts from other perspectives (Table A-2), yet this inherent bias is acknowledged.

3 METHODOLOGICAL APPROACH

The first objective for this thesis, as described in Section 1.2.2, is the development of a conceptual framework for guiding cadastral systems development. The conceptual framework draws on existing evaluative frameworks, taking cognisance of different world views, with attention given to the ***significance*** of development on land rights-holders. Together, the sections in this chapter partially address objectives A and B. The first section of this chapter describes the progressive case study methodology. The next section describes the research synthesis methodology applied when choosing existing frameworks. The third section describes the choice of cases and analysis thereof. The final section of the chapter addresses the issue of trustworthiness in qualitative research.

3.1 PROGRESSIVE CASE STUDY

The methodology adopted for this research is the 'progressive case study approach' (Steenhuis & De Bruijn, 2006). This approach adopts aspects of the deductive, case study approach (Yin, 2009) and the inductive, grounded theory approach (Corbin & Strauss, 1990; Glaser, 1998; Holton, 2017). Both approaches are briefly described below.

3.1.1 Case study approach

Robson (1994: 52) summarises the case study as a research strategy that involves "an empirical investigation of a particular … phenomenon within its real life context using multiple sources of evidence". Gerring (2004: 341) defines case studies as intensive studies "of a single unit with an aim to generalize across a larger set of units." Case studies usually involve a mixture of data collection techniques to answer *how* or *why* type questions, e.g. observation, interview, and documentary analysis. Per Yin (2009), analysis follows a (post)positivist paradigm using deductive reasoning wherein theories are usually posited *a priori*.

Williamson & Fourie (1998) advocate the case study methodology as the best research design for cadastral reform because it enables the researcher to evaluate and understand the existing cadastral system (the *phenomenon* Robson referred to) as well as the economic, cultural and social influences affecting it (the *context*). Silva & Stubkjær (2002) found that the case study methodology was the most frequently used research design in cadastral reform research because, rather than providing solutions to problems, it provides an in-depth understanding of a problem. The use of case studies as the basis for doctoral research in cadastral systems development was reviewed by Çağdaş & Stubkjær (2009) and shown to be an effective research design.

Barry (1999) used case studies to investigate effective cadastral system usage by previously disadvantaged people during a period of political change in South Africa. Zevenbergen (2002) and Steudler (2004) each used case studies from four different nations in their doctoral research on land registration and land administration respectively. Whittal (2008) conducted an embedded single-case study to analyse the introduction of a new land valuation system in Cape Town for the purposes of property taxation. Ali (2013) used a single case study from Pakistan to develop a framework for evaluating the quality of LAS. The case study design has also been chosen for evaluation of land titling theory (see e.g. Rattanabirabongse *et al.*, 1998; Galiani & Schargrodsky, 2004, 2010; Do & Iyer, 2008; Broegaard, 2009) and land tenure security (see e.g. Kingwill, 2011). From the foregoing, it appears that there is a precedent for using case studies as a research design for research concerned with cadastral systems development.

Yin (2009) summarises the rationale for choosing multiple- over single-case study design: multiple-case studies should be conducted when the researcher is seeking replication of the

results of individual case studies to strengthen the case for generalisability. Each case is chosen so that it predicts similar results (literal replication) or produces contrasting results for predictable reasons (theoretical replication). The more cases are analysed, the higher the degree of certainty of the results. The credibility of the findings is improved through triangulation of multiple data sources that all point towards similar conclusions.

3.1.2 Grounded theory approach

Strauss and Corbin (1990: 23) define grounded theory as being:

> *"… inductively derived from the study of the phenomenon it represents. … [It] is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. … One does not begin with a theory and then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge."*

This approach begins with observation of a phenomenon of interest, usually qualitatively described. The features of the phenomenon thus described are 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 (Allan, 2003). Similar codes are then grouped together to form concepts, and similar concepts are grouped into categories (*Ibid.*). In Organisational Theory (Hatch, 2006) this is referred to as 'abstraction' and is used to get a better sense of the world by eliminating complexity (McAuley, Duberley & Johnson, 2007). During this process, the researcher may also engage in 'memoing'. This is the recording of ideas that surface in the researcher's mind while coding and forms another level of abstraction leading to theory building. Theories are built up from an analysis of the linkages between concepts, categories, and memos to explain the phenomenon of interest. Hence theory is built from an analysis of practice.

Data collection and analysis follow in a cyclical process: as data is analysed, gaps are identified that lead the researcher to further data collection via theoretical sampling (Morse, 2007; Corbin & Strauss, 2008) – see Section 3.3.1. Hence cases are not selected *a priori* but are chosen as the need arises and in accordance with the findings of the previous cycle of data collection. This process should continue until theoretical saturation is reached, i.e. further data collection yields no new insights.

The grounded theory approach (GTA) is one of the most widely known and comprehensive qualitative social research methods in current use. Through application of the methodology a researcher can develop a theory that is shaped by the views of participants to explain a process, action, or interaction (Strauss & Corbin, 1990; Barry & Roux, 2013). The main advantage of using the GTA is that the process is explicitly designed to develop rich, detailed theory inductively from data. If the process is rigorously followed then the derived theory should satisfy the requirements of a scientific theory: falsifiable, logical, robust (Lee, 1989). It is also helpful for analysing unstructured, qualitative data systematically (Johannessen & Hornbæk, 2014). The main disadvantages are that it is time-consuming, intensive, and laborious, and the analyst is always uncertain whether theory will emerge or not, making it an inappropriate method for the inexperienced researcher (Barry & Roux, 2013).

3.1.3 Combining approaches

Steenhuis and de Bruin (2006) have proposed a progressive case study approach that combines the strengths of the deductive case study approach with the inductive GTA and is developed in an interpretivist paradigm. Credibility of results is ensured through following a (post)positivist,

deductive analysis of data from multiple sources – triangulation. By induction, new insights may emerge from the data, leading to the proposition of new, unvalidated theory.

Progressive case study begins with literature review, as advocated by Yin (2009) for the case study approach and as discouraged in a GTA (Glaser, 1978; Glaser & Holton, 2007). The literature should be used to sensitise the reviewer to the pertinent concepts of the study (Steenhuis & De Bruijn, 2006). In my research, the literature review is used to develop the conceptual framework – see Section 3.2 and chapter 5 – that is subsequently "validated and adjusted through empirical case study" (Steenhuis & De Bruijn, 2006: 7) in Part 4. Following the progressive case study approach, each case study builds on the results of the previous case study as data collection and analysis follow each other cyclically. Hence subsequent cases allow for the emergence of new concepts as well as the replication of previous findings. "Using multiple-cases in this manner provides strengthening of previously established concepts in subsequent cases while simultaneously allowing the development of new insights" (*Ibid.*: 9).

The intent is for the researcher to adhere, as far as possible, to the three pillars of the GTA: emergence, constant comparison, and theoretical sampling (Holton, 2017). *Emergence* requires the researcher to have an open mind when approaching the data. *Constant comparison* requires the researcher to keep comparing the emerging codes, concepts and categories to those that were previously collected. Codes, concepts and categories thus acquired may be compared to the descriptors, elements, and aspects in the conceptual framework respectively. It is here that the methodology deviates from a pure GTA into what Holton (2017) calls 'grounded theorising'. Constant comparison with the conceptual framework allows the researcher to identify gaps in the data, leading to *theoretical sampling* (see Section 3.3.1) as data is specifically collected to fill in the gaps (Glaser & Holton, 2007).

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'. Other codes, not included in the conceptual framework, may emerge from the data as relevant for the case under study. Hence, strengths and weaknesses are identified related to the ***significance*** of the change process for land rights-holders, indicating potential for ***success*** and ***sustainability*** of the project.

3.2 Research Synthesis Methodology

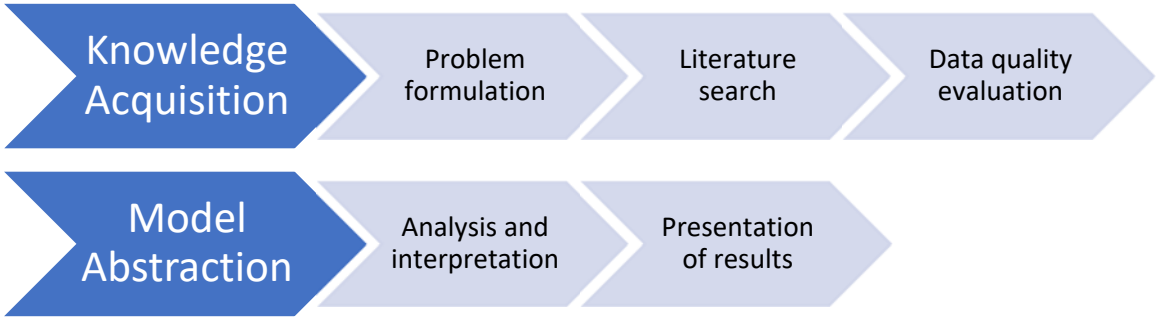

Figure 3-1 Research synthesis methodology

Conceptual modelling is used in complex, 'wicked' contexts as a means of simplifying and understanding the problem. Such contexts are typical for cadastral systems reform (Barry & Fourie, 2002). Following Simbizi *et al.* (2014) and Unger *et al.* (2016), a research synthesis

methodology (Cooper, 1998) is applied to the conceptual modelling process (Kotiadis & Robinson, 2008). This methodology comprises five stages grouped into two phases (see Figure 3-1). The stages are: problem formulation, literature search, data quality evaluation, analysis and interpretation, and presentation of results. The first three stages relate to the knowledge acquisition phase, while the last two relate to model abstraction. The progressive case study begins with literature review. In this research, the outcome of the literature review is a conceptual framework as per objective A.

3.2.1 Knowledge acquisition

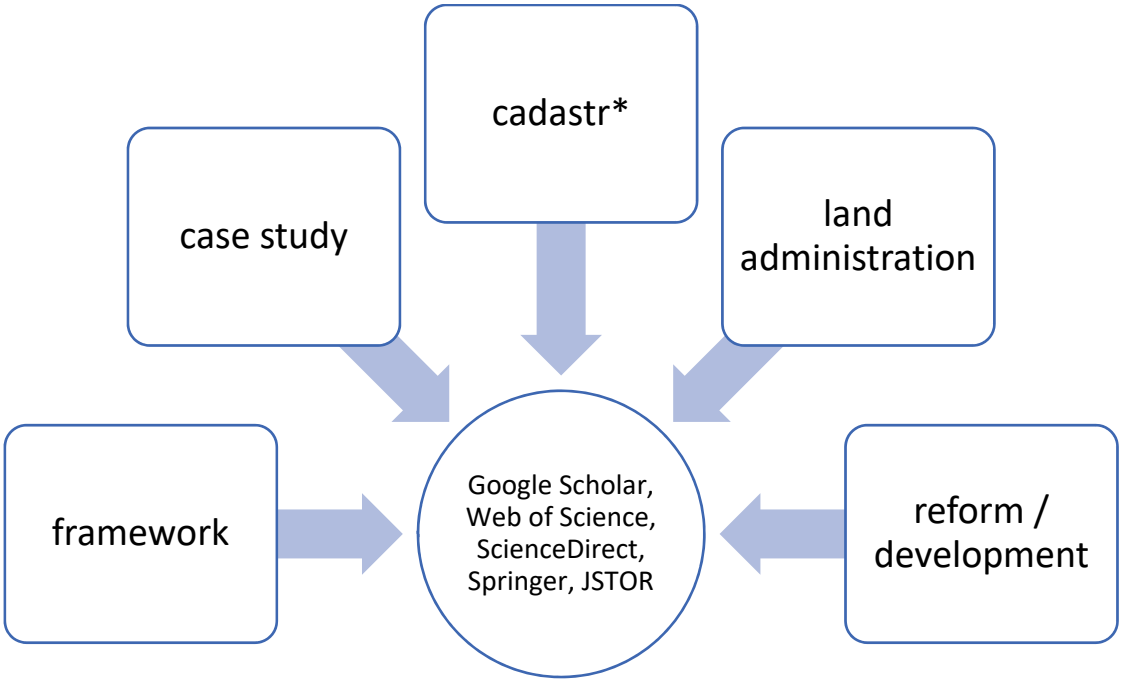

Figure 3-2 Knowledge acquisition: keywords and sources consulted

To address the problem and objective A, a literature review was conducted. Using the keywords *framework AND "case study" AND cadastr* AND "land administration" AND (reform OR development)*, I interrogated Google Scholar, the Web of Science, ScienceDirect, Springer Link, and JSTOR – see Figure 3-2 – for peer-reviewed journal articles, doctoral theses, conference proceedings, books, policy documents, and technical reports by large organsiations such as FIG, UN, FAO and the World Bank. To draw on established experience while focussing on the latest (most relevant) research, I only searched for documents published since 2004, i.e. within the decade prior to the commencement of my research. The first 100 results returned per source, sorted according to relevance to the keywords, were then collated into a list of nearly 500 'hits'. By reading through the abstracts of each of these, this list was initially filtered down to 99 articles using the following criteria:

- Only publications **in English** [6] involving the **development, assessment or testing of a framework / methodology / improvement**, preferably (but not only) related to some aspect of land administration or cadastral systems research, are considered.

[6] It is acknowledged that this criterion may have excluded suitable frameworks published in other languages from e.g. Asia, Latin America or Francophone countries, and there may be a resulting bias in the conceptual framework. This would need to be addressed through further research that extends the results of this thesis into other contexts.

- Sources with **broad geographic scope** are considered (Silva & Stubkjær, 2002) in order to include diversity of frameworks, but **preference is given to sources focussed on sub-Saharan Africa and related developing contexts** as this is the focus area of this research (Simbizi, Bennett & Zevenbergen, 2014).
- Publications with a **high citation count** are preferred, though this criterion is not strictly enforced in order to make sure that the above two criteria are satisfied. Citations were counted using Google Scholar statistics gathered during August 2015.
- The research design should *preferably* include or be based upon **case study** in order for the developed framework to be grounded in reality, though this criterion is not strictly applied so that appropriate theoretical frameworks are not excluded.

Reading through the titles and abstracts of these publications, several themes were noticed. These are illustrated in Figure 3-3. A more thorough analysis of the 99 articles was done and these were further filtered on the above listed criteria until only 20 remained as a more manageable number for initial review (Silva & Stubkjær, 2002; Çağdaş & Stubkjær, 2009; Yilmaz, Çağdaş & Demir, 2015). These 20 articles form the foundation for the development of the conceptual framework. They are listed in Table A-1 in the Appendix.

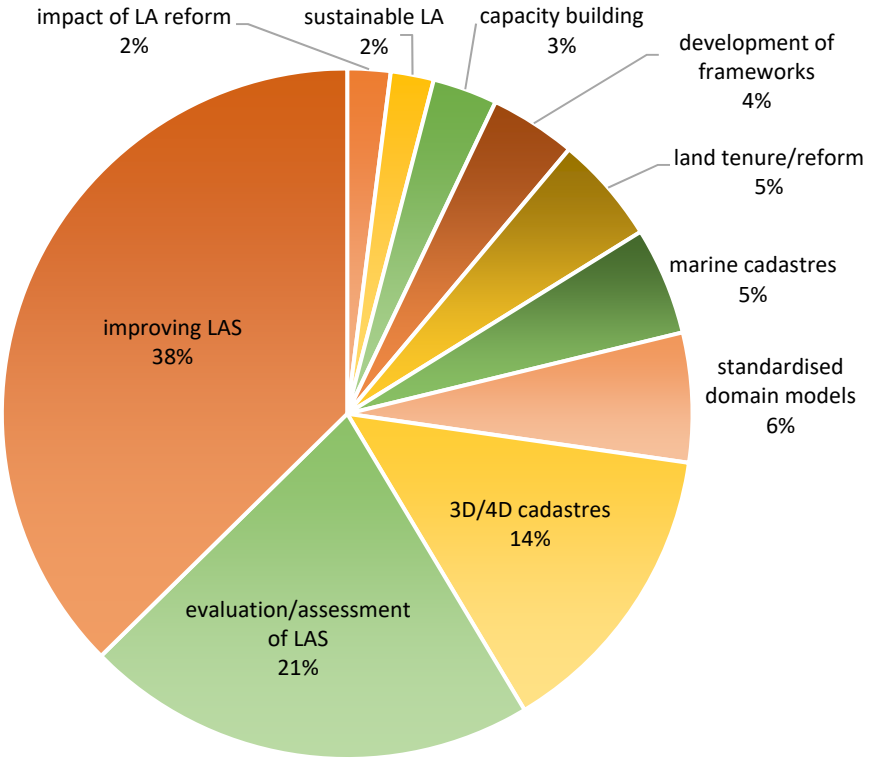

Figure 3-3 Themes derived from literature review

Acknowledging that cadastral systems development involves social, legal, anthropological, and political aspects, and to address the research aim, texts concerning land rights, human rights-based approaches, pro-poor approaches, and good governance were also interrogated – see Figure 3-4. The method of choosing these additional texts was not as rigorous as that described above. The process could be likened to theoretical sampling (see Section 3.3.1) in that I searched explicitly for texts related to human rights, good governance, and pro-poor approaches, both in general and dealing specifically with land-related topics, until I felt that a level of 'saturation' had

been reached. A sample of the most influential (for this research) texts is presented in Table A-2 in the Appendix. As with Table A-1, these lists are not exhaustive; other researchers may choose to draw on other texts for inspiration, and new publications enter the public domain every day. This topic is discussed further in Section 10.4.

3.2.2 Model abstraction

Model abstraction may be completed by coding, conceptualising and categorising the information acquired. This is in the spirit of the GTA (Allan, 2003; Johannessen & Hornbæk, 2014) as described in Section 3.1.2. Following the progressive case study approach, I restrict my use of the GTA to open, axial, and selective coding. The processes of coding and categorising are adopted as tools for abstracting the data and identifying relevant themes. Themes are allowed to emerge from the data rather than being imposed on the data, and data acquisition and analysis follows a cyclical process (Barry & Roux, 2013; Hull, 2014). The first cycle is the collection and analysis of existing land administration frameworks and published literature (secondary data). The following cycles comprise primary data collection and analysis sequentially in each of the case study areas. The final framework is hence not grounded on the data alone, but incorporates elements of existing theories as well.

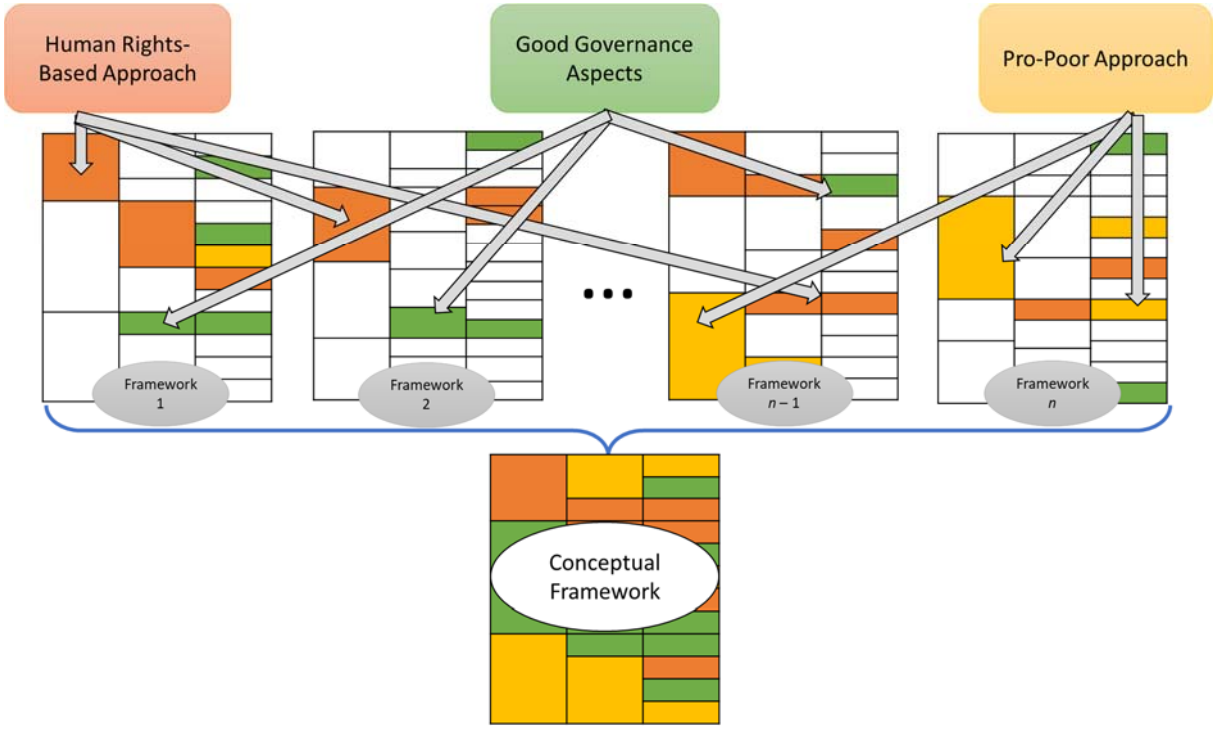

Figure 3-4 Evaluating frameworks (from 1 to *n*) based on their sensitivity to various approaches

The analysis and interpretation stage is illustrated in Figure 3-4. Beginning at the top of the figure, the HRBA, good governance aspects, and pro-poor approach are presented. These approaches are described in Chapter 4. Below these approaches are the frameworks listed in Table A-1 (here n = 20). Through coding and categorising, aspects of these approaches are identified in the frameworks. This is illustrated through the use of different colours in the figure. The conceptual framework is derived by pulling together those parts of the existing frameworks that resonate with these approaches. This is described in Chapter 5.

The final stage of the research synthesis methodology is presentation of results. This is realised in the tables in Chapter 5.

3.3 SELECTION AND ANALYSIS OF CASES

3.3.1 Case selection and sampling

> *"All research … involves sampling. This is because no study … can include everything" (Punch, 2005: 101).*

Because case studies are used to provide an in-depth investigation of a phenomenon in its context, a common criticism of case studies relates to the generalisability of the findings. The aim is not for statistical representivity, but rather for describing and understanding a complex situation or feature. Propositions may be posited from the findings, leaving the way open for further case studies (up to Case *n*) to test and refine the propositions and, eventually, generate theory (Punch, 2005). Hence, when it comes to the choice of cases, sampling is purposive.

Four cases have been studied – from Europe: the Netherlands and Germany, and from southern Africa: Mozambique and South Africa. The choice of cases from 'developed' (European) and 'developing' (southern African) contexts is one of theoretical replication – the cases from these different contexts should yield contrasting results due to the differences between their generalised contexts.

The European cases are held up as examples of 'good practice' because they represent the most developed cadastral systems (Rajabifard et al., 2007). Through sharing knowledge of such practices, land administration and cadastral systems development may be improved in other nations. "Under-developed nations are also able to see the methods and processes that more developed countries have gone through in attempting to create and implement a cadastre, aiding in the formation of effective 'road-maps' for cadastral creation and reform" (*Ibid.*: 288). Some European LAS have influenced the development of cadastral systems in African contexts. The South African cadastre has British and Roman-Dutch legal heritage, while that of Mozambique draws on the influence of Portugal. These imposed colonial legal systems overrode existing African customary law that, in South Africa, is now recognised and assuming a more prominent place in mainstream law and practice. More recently, *Kadaster* International has influenced cadastral development in Rwanda and Lesotho (Kadaster, 2012). Hence, the European cases are included both for their exemplary quality (in their regions; their qualities cannot be assumed to be transferable to African contexts) and as influencers of cadastral systems development globally and in Africa.

The *conceptual* framework (objective A, developed in Chapter 5) is tested against these examples of 'good practice' to assess whether the components of the framework are present in these cases, and whether anything is missing from the framework (objective B). Specifically, Germany was chosen because this nation has recently embarked on a cadastral improvement project: the migration from the outdated ALB / ALK systems to the future-oriented ALKIS® and the AAA® model (Gundelsweiler, Bartoschek & De Sá, 2007). The Netherlands case is chosen because those in the land administration sector present themselves as world leaders in cadastral innovation, even exporting their expertise internationally (Kadaster, 2012). While it is acknowledged that these cases will not contain customary context-specific elements, this first round of analysis is undertaken to check whether the framework contains the basic elements of 'good practice' cases. It is also acknowledged that not all elements identified in these European cases will be relevant in other contexts such as those of African customary land. Application of any framework in a new context demands a process of naturalistic generalisation – taking what is valid and useful in a new context and rejecting/ignoring what is not.

The southern African cases are chosen, firstly, because this is the researcher's context and there are pressing land access and tenure security needs. Secondly, LAS in the southern African region are likely to be requiring, or currently implementing, LAS development projects, hence testing and developing fit-for-purpose tools for evaluation of these projects is timely. Thirdly, human-rights issues are important in all contexts, but their impact is greater in a developing context due to the higher proportion of disadvantaged and marginalised people than are serviced in developed contexts. Mozambique is chosen as a case study area because, like Germany, it has recently undergone a cadastral systems development project. The rationale for the South African case was explained in Chapter 1. It is expected, in this second round of analysis, that these cases will reveal more nuanced, context-specific elements and descriptors that are more relevant for customary contexts than the European cases.

Within these generalised contexts, cases are chosen for their literal replication, i.e. Germany and the Netherlands should yield similar results, because they are cases within similar contexts. Likewise, Mozambique and South Africa should yield similar results because both countries are members of the Southern African Development Community and have been undergoing significant changes at the national level since the early 1990s. Literal replication strengthens the validity of the findings (Yin, 2009), although the importance of context needs to also be taken into account in application. Multiple cases are used so that the resulting framework is grounded on a diversity of cases for greater credibility and generalisation to (substantive) theory (Barry & Roux, 2012). It is acknowledged that no single study can investigate an exhaustive set of cases – the addition of other cases in new studies will be an ongoing process by multiple researchers. The analysis and generalization processes will strengthen the resulting substantive theory over time.

If the cases in question are nation states, it is obviously not possible for the researcher to collect data from every possible source. Some sampling needs to be done, and the types of sampling employed here are informant sampling and theoretical sampling. Informant sampling involves targeting knowledgeable sources for information. The researcher seeks out the people and documents that are best able to provide the answers to the research questions. This involves an element of snowball sampling as well, where the researcher is guided by the interviewees as to who to interview next, because the interviewees know who can better provide the answers to the questions.

Theoretical sampling is when the researcher chooses sources based on the results of previous data collection and analysis. The sources are chosen to fill gaps in the data, or to verify trends that are emerging. Theoretical sampling should continue until all research categories are saturated (Corbin & Strauss, 2008). This may require a dedicated team of data collectors and analysers working collaboratively, and it may take a significant amount of time before saturation is reached. There is no knowing, at the outset, just how long it could take. Such a team and boundless time were not available to me; hence data collection has not proceeded to full saturation for all indicators in the cases studied. Instead, I have taken a satisficing approach: sufficient data has been collected to allow trends to emerge and triangulation of results.

3.3.2 Data collection and analysis

Primary data collection is mostly by face-to-face interview using semi-structured questionnaires and a combination of open-ended and specific questions. Some interviews were conducted telephonically, and others over email (especially follow-up interviews). Interviewees were encouraged to speak freely of their experiences of cadastral systems development and land tenure reform to allow for the gathering of rich, in-depth data on the subject. Interviews typically lasted up to two hours. The unit of analysis is individual people comprising four groups:

1. The 'top-down' group of people involved in cadastral systems development and land administration activities, usually representing the relevant state department or agency responsible for land administration. In the European cases, this is the only group that was interviewed.
2. The 'bottom-up' people who are the land rights-holders due to benefit from development.
3. The traditional leaders responsible for administering land in customary areas.
4. The observers: academics and members of Non-Governmental Organisations (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 and having certain hopes and dreams for the future. The traditional authorities should represent the views of the communities under their jurisdiction, but they often 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.

In Germany, three face-to-face interviews were conducted with staff in leadership positions of the land administration authorities of Baden-Württemberg, Bayern, and North-Rhine Westphalia. One interviewee also represented the AdV,[7] which is described in Section 6.1. Two interviews were conducted simultaneously in Stuttgart, and the third was conducted in Bonn. In addition, with funding secured from the South African Geomatics Institute, I attended the InterGEO 2014 Conference in Berlin and observed some of the latest software and hardware in support of cadastral systems development.

In the Netherlands, 11 interviews were conducted with a variety of staff working for Het Kadaster. Most of these were conducted face-to-face in Kadaster's headquarters in Apeldoorn, and several were conducted in Zwolle. Several follow-ups were done via e-mail. The locations of the sites visited in Germany and the Netherlands are illustrated in Figure 6-1. In both cases, additional information was collected from secondary sources: published literature (journal articles and conference proceedings), reports, presentations, and other documents supplied by the interviewees.

Data collection in the South African case comprised of 10 interviews conducted with key informants, as well as published literature. Reviewed publications include policy documents, peer-reviewed journal articles, opinion pieces and commissioned reports. Interviews were conducted in May, September and October 2017. Most were face-to-face, one was telephonic, and one was via email. Interviewees included DRDLR employees, people working for NGOs, researchers and retired consultants, traditional leaders, members of local government, and a focus group of seven customary land rights-holders from the Eastern Cape. Thus, the four groups identified above are included. The generalised locations of data sources used are illustrated in Figure 3-5.

[7] Working Committee of the Surveying Authorities of the *Länder* of the Federal Republic of Germany, or *Amtliches Deutsches Vermessungswesen*

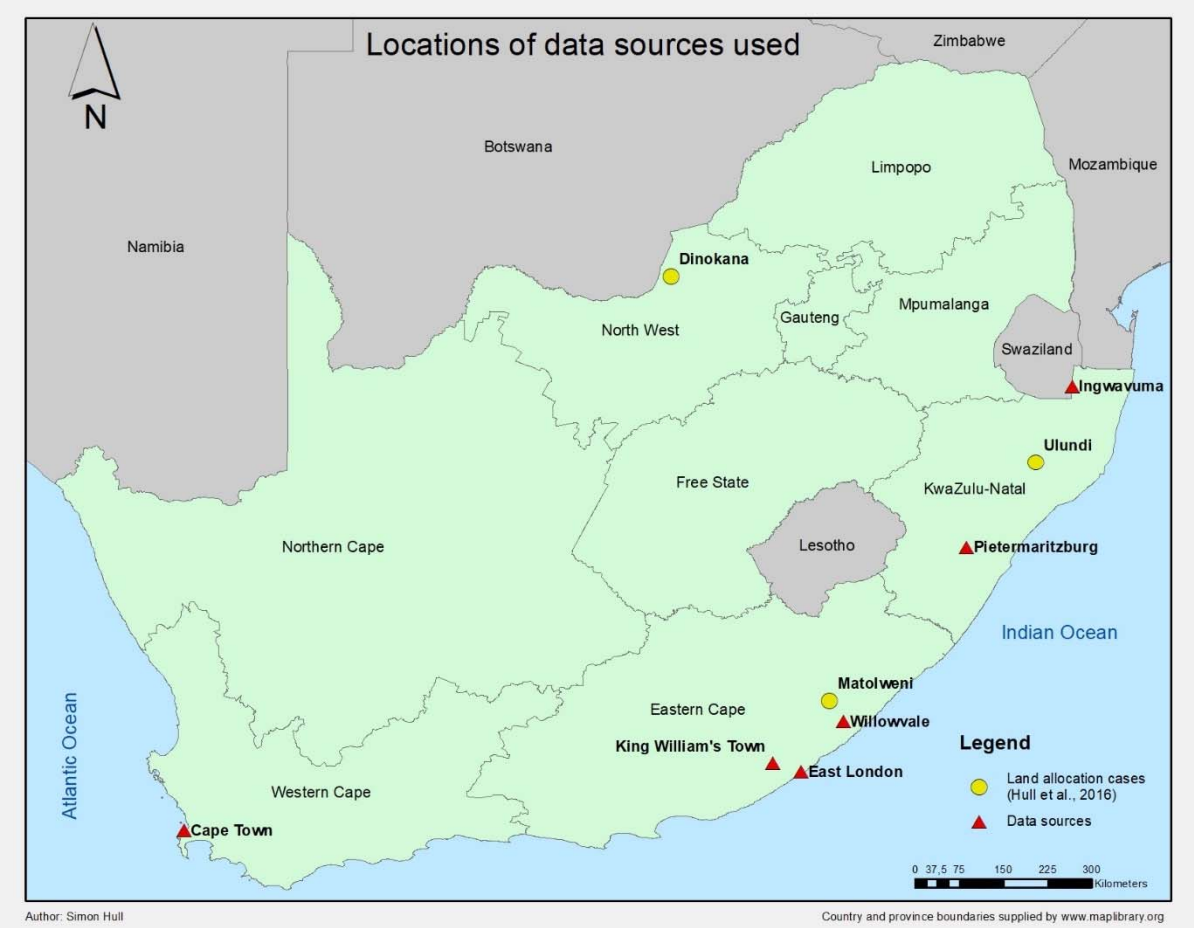

Figure 3-5 Locations of data sources used in the South African case and in Hull et al. (2016)

To preserve anonymity, the identities of the respondents are not revealed in the case descriptions (see Part 4). They are instead referred to by a *G* for Germany, an *N* for the Netherlands, or *SA* for South Africa, followed by a two-digit number. The table correlating the correspondent to the letter and number code is preserved by the researcher, and will be destroyed in future, as per the terms of the ethics agreement with the University of Cape Town.

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 I 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. (Note that the Mozambique case was a desktop study, hence secondary data comprised the only source of information.)

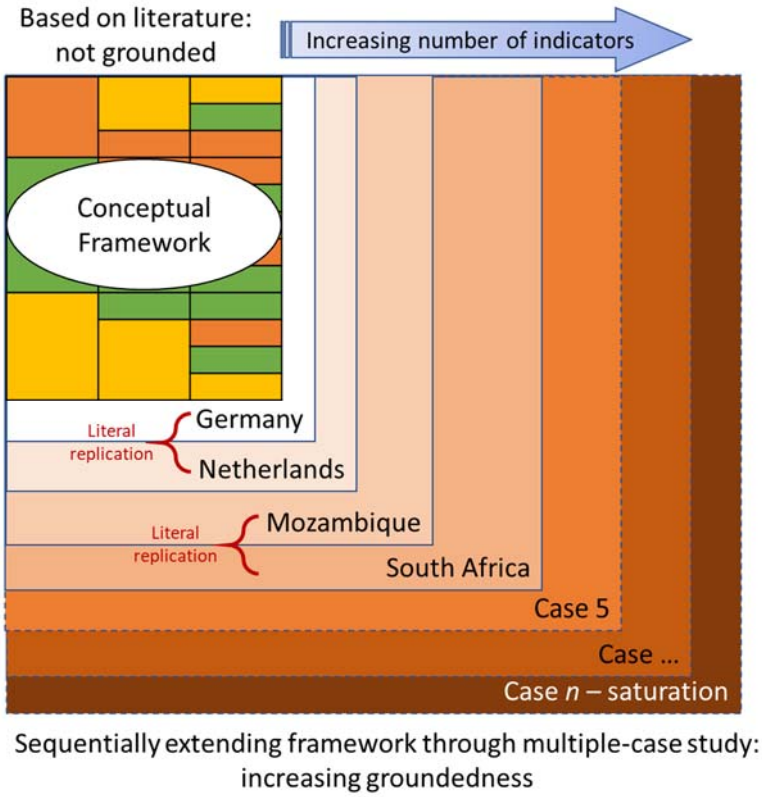

Figure 3-6 Testing and extending the conceptual framework through progressive case study

The purpose of the case study component is to test and extend the conceptual framework (objective B) as illustrated in Figure 3-6. This is done by following the research synthesis methodology presented in the previous section. Data analysis was done using software called Atlas.ti version 7 (for the European cases) and version 8 (for Mozambique and South Africa). Ideally, this phase of the research should last until saturation is reached and no new information is gleaned from additional case studies (Case *n*).

3.4 Ensuring Trustworthiness

Trustworthiness relates to the confidence one has in the findings of the study, the applicability of the findings to other contexts, their replicability, and objectivity. These, Guba (1981) relates to credibility, transferability, dependability, and confirmability respectively, in preference to the associated scientific terms of internal and external validity, reliability, and objectivity. Guba (*Ibid.*) and Shenton (2004) give detailed descriptions of what researchers can do to meet these criteria and ensure the trustworthiness of their studies. Some of these are outlined below.

3.4.1 Credibility

Lincoln and Guba (1985) consider credibility to be essential for establishing trustworthiness. Credibility concerns how well the findings reflect the data that was gathered. Strategies the researcher may employ to ensure credibility include the following:

a) Triangulation

This may involve the use of different data sources, investigators, theories, and methods to cross-check and corroborate the outcomes (Guba, 1981; Creswell & Miller, 2000). In the case studies in Part 4, data is collected through one-on-one interviews, focus groups, and a variety of documentary evidence. As mentioned in Section 3.3.2, informants range from diverse

backgrounds and professions. Convergence of the findings from these diverse data sources and types lends credibility to the research.

b) Member checks

The "single most important action inquirers can take" is member checking because "it goes to the heart of the credibility criterion" (Guba, 1981: 85). It may involve sharing the transcriptions of interviews with the respondents to allow them to verify the correctness of the data recorded and make corrections as necessary. It also involves sharing the research outcomes with the participants and eliciting feedback from them (Guba, 1981; Creswell & Miller, 2000; Shenton, 2004). In this study, all interview transcripts were shared with the respondents and their feedback was used to check the veracity of the transcription and that their contributions had been faithfully recorded.

c) Peer scrutiny

Colleagues, peers and academics should be offered the opportunity to scrutinise the project methods, results and conclusions. "The fresh perspective that such individuals may be able to bring may allow them to challenge assumptions made by the investigator, whose closeness to the project frequently inhibits his or her ability to view it with real detachment" (Shenton, 2004: 67). Shenton also refers to "frequent debriefing sessions" with project supervisors, which Creswell and Miller (2000: 129) refer to as "peer debriefing". Such may be used to uncover flaws in the research approach or analysis, or widen or narrow the focus of the research. Over the course of this study, there have been many such interactions with supervisors. Peer scrutiny has also been employed through review of conference proceedings [8] and journal articles [9] that have influenced the research. An earlier form of the conceptual framework (see chapter 5) went through several rounds of peer review before being published. The present version was also shared with experts in the field of land administration and cadastral systems development, as discussed in chapter 10.

d) Reflective commentary

The process of memoing mentioned in Section 3.1.2 yields a self-reflective commentary on the data collection and analysis. The researcher should reflect on the methods used, the patterns and theories that are emerging, and the conclusions drawn (Shenton, 2004). Such reflective commentary is used in conjunction with member checks and peer scrutiny to answer research question 5 in Chapter 10.

e) Ensuring honesty

Shenton (2004) maintains that respondents should be given the opportunity to refuse to participate or to back out of the study at any time. They should also be encouraged to speak freely and, to facilitate this, the neutrality of the researcher should be stressed as far as it pertains to the outcomes of the research. These strategies help to ensure that data collection involves only those participants who are willing to take part and that they provide, and do not withhold, valid information. Such strategies were employed in the case studies – see Appendix B: Interview guides – and are included in the University of Cape Town's policy on research ethics.

f) Rigour

Rigour refers to the adequacy and appropriateness of research design and methods in terms of their ability to address the research questions (Morse, 2004). Yin (1994) identifies rigour as a weakness of case study research due to the opportunity for researcher bias to influence the results. Such is countered by application of careful research design and appropriate reporting

[8] See Hull and Whittal (2016, 2018)
[9] See Hull and Whittal (2019).

(Lee, 1989; Yin, 1994). Shenton (2004) advocates for the adoption of well-established research methods to ensure credibility. The description of the methodological approach in this chapter should suffice to convince the reader of the rigour of the research.

3.4.2 Transferability

Generalisability is a noted concern of case study research because context is so important (Yin, 1994). For qualitative research that is based on a specific phenomenon in a specific context, it is not possible to generalise the findings to other contexts or phenomena (Shenton, 2004). Yet no context is truly unique and there may be some transferability of findings between contexts (Guba, 1981). The following are some of the considerations that may be used to ensure transferability:

a) Rich, thick descriptions

The degree of transferability depends on the similarity of the contexts. Assessing such similarity is enabled through the collection and reporting of rich, thick descriptions of the cases under study. The reader is thus enabled to draw parallels between the case being reported and their own case study and determine to what extent the findings may be transferable. Detailed contextual information is important in this regard (Guba, 1981; Creswell & Miller, 2000; Shenton, 2004). The case descriptions given in Part 4 are examples of rich, thick descriptions.

b) Multiple cases

Lee (1989) suggests that concerns over generalisability may be partly allayed through the use of multiple cases. If the results are confirmed in successive cases, then the case for generalisability is strengthened (Shenton, 2004). Complex phenomena may only be progressively understood through several cases studied, each one adding to the findings of the preceding cases. Hence, the progressive case study methodology employed in this research (see Section 3.1.3) is appropriate.

> *"Even when different investigations offer results that are not entirely consistent with one another, this does not, of course, necessarily imply that one or more is untrustworthy. It may be that they simply reflect multiple realities, and, if an appreciation can be gained of the reasons behind the variations, this understanding may prove as useful to the reader as the results actually reported." (Shenton, 2004: 71)*

c) Theoretical / purposive sampling

The intent behind data collection should be to "maximise the range of information uncovered" (Guba, 1981: 86) and hence to produce as rich and as thick a description of the case as possible. The purpose is not for representivity leading to generalisability, but for variety leading to transferability. Per Section 3.3.1, sampling has been both theoretical and purposive in this study.

3.4.3 Dependability

From a positivist (or rationalist) paradigm, consistency is interpreted as reliability (Guba, 1981), i.e. "if the work were repeated, in the same context, with the same methods and with the same participants, similar results would be obtained" (Shenton, 2004: 71). Such is often not the paradigm of the qualitative enquirer, who may instead assume a naturalistic paradigm that embraces multiple realities and eschews generalisability (Guba, 1981). Consistency is thus interpreted as dependability, with the focus being on the ability to replicate the methods if not the results (Guba, 1981; Shenton, 2004). The following are strategies that may be employed to ensure dependability:

a) Methodological descriptions

To enable subsequent researchers to repeat the study, the methodology and analytical processes followed should be described in detail. Shenton (2004: 71) thus views the research design as a

"prototype model". Rich methodological descriptions enable the readers to interpret the trustworthiness of the process and hence of the findings. Thus, even if the findings are not replicable due to the variability of naturalistic inquiry (Guba, 1981), they may yet be dependable. This chapter provides such a rich description of the methodology.

b) Overlapping methods

Using triangulation of methods as well as of data sources strengthens the case for trustworthiness of the findings when similar results are found using different methods (Guba, 1981). Examples are the use of one-on-one interviews and focus groups (Shenton, 2004). In this study, both of these methods of data collection were used in conjunction with direct observation and desktop study.

c) Auditing

Guba (1981) suggests that researchers should establish an audit trail that allows someone else to examine the process of data collection and analysis. To this end, I have made use of computer assisted qualitative data analysis software (CAQDAS) called Atlas.ti. CAQDAS are useful for making sense of dense, detailed qualitative data in a variety of different formats: textual documents, audio-visual recordings, and pictures (Bringer, Johnston & Brackenridge, 2006; Friese, 2014; Woods et al., 2016). Coding and categorising 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).

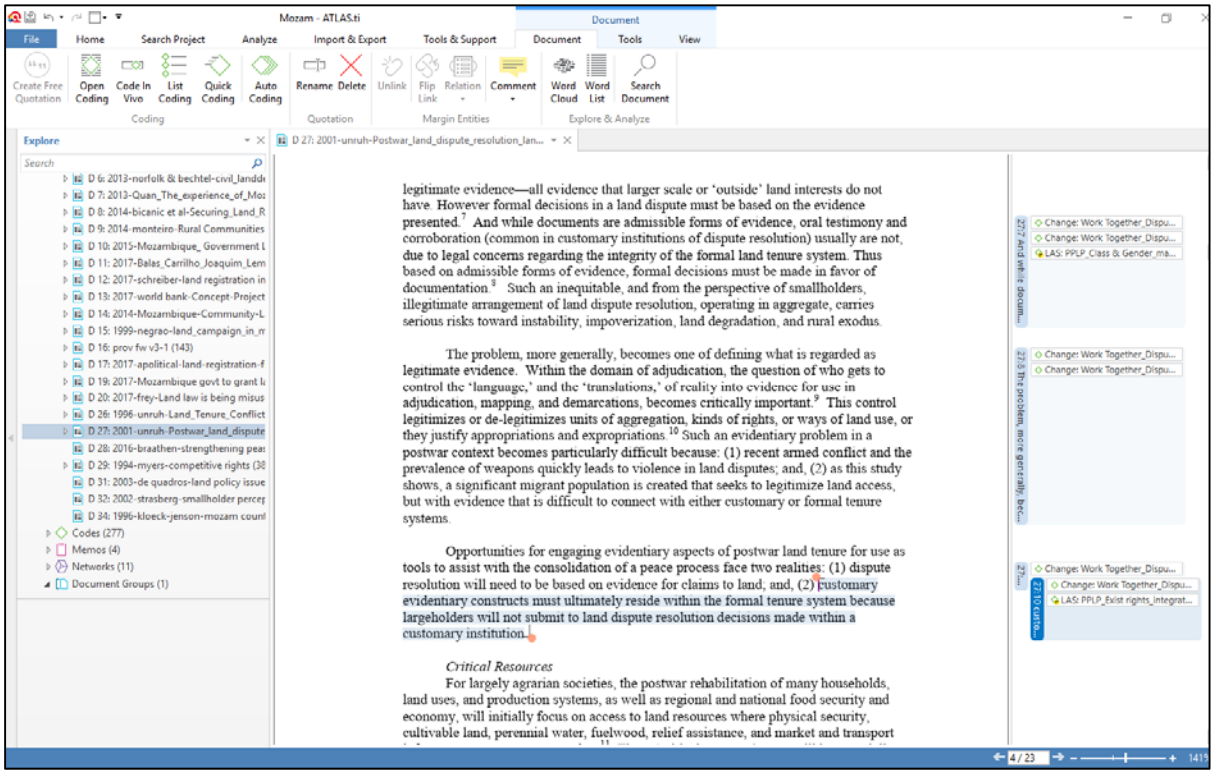

Figure 3-7 Screenshot of Atlas.ti project

Figure 3-7 is a screenshot of Atlas.ti showing, on the left, the list of sources used in the Mozambique case. One of the sources is selected and displayed in the centre. Text relating to dispute resolution mechanisms is selected in the source (towards the bottom of the figure, shaded in blue). On the right are the codes that have been assigned to sections of text on the shown page. For the selected text, two codes are assigned: 'Change: WorkTogether_Disputes_evidence' and

'LAS: PPLP_ExistRights_integrated'. The first word (Change or LAS) relates to the framework areas, of which there are five (Underlying Theory, LAS Context, Responsive Change Drivers, Change Process, and Review Process) – see chapter 5. The second word relates to the aspects of these areas – each area has between two and four aspects. The third word relates to elements of these aspects – each aspect has between one and six elements. The last word is a context-specific descriptor of that element, for which there may be many. The examples here described hence refer, firstly, to the need for *evidence* in *dispute resolution* for effective *working together* as part of the *change process*; secondly, to the *integration* of *existing rights* (statutory and customary) as an element of *pro-poor land policy (PPLP)* within the *LAS context*.

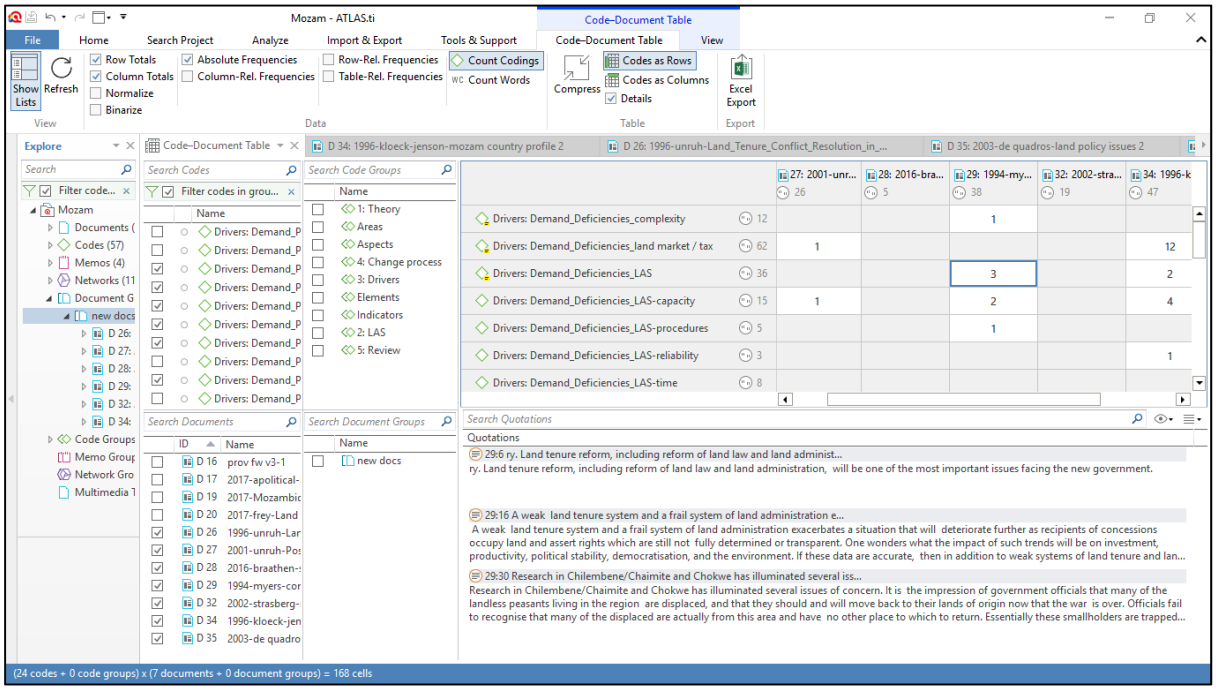

Figure 3-8 The Code-Document table in Atlas.ti

Figure 3-8 illustrates the Code-Document table – a useful tool in Atlas.ti by which codes may be cross-referenced against the sources in which they occur. Through the table, the analyst is directed to the quotations associated with certain codes. These are hence used to build the rich descriptions found in Part 4. The software was similarly employed to analyse documents and interview transcripts for each case studied.

3.4.4 Confirmability

Confirmability relates to objectivity and the elimination of bias (Guba, 1981). "[S]teps must be taken to … ensure … that the work's findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher" (Shenton, 2004: 72). The following are useful strategies:

a) Triangulation

As mentioned previously, the triangulation of a variety of data sources, methods, and types adds credibility and dependability to the research. Triangulation also helps to eliminate bias, especially if multiple investigators are used (Guba, 1981; Shenton, 2004). Such was not possible in this research; hence the researcher's bias is stated upfront (see Sections 1.5, 10.4, and below). Nonetheless, the variety of data sources, methods and types used adds confirmability to this research.

b) Stating researcher bias

Bias represents a distortion of the truth and may emanate from the researcher's epistemology or procedures used (Seale, 2008). By stating possible sources of bias, as I have done in Sections 1.5 and 10.4, the reader is enabled to interpret the research through the lens of the researcher's bias, which enhances confirmability (Miles & Huberman, 1994; Creswell & Miller, 2000).

3.5 CONCLUSION

In this chapter, the methodology has been presented. The progressive case study approach is described as a combination of deductive case study and inductive grounded theory, drawing on the strengths of both of these approaches. In Part 4, this approach is used to test and extend the conceptual framework. The research synthesis methodology is also described as pertains to the development of the conceptual framework. Case selection and sampling methods are discussed, as are methods of data analysis. Finally, attention is given to the concern of trustworthiness and how the methodology presented ensures that the results are credible, transferable, dependable, and confirmable. Per Guba (1981: 88), "… triangulation and member checks (for credibility), thick description (for transferability), leaving an audit trail (for dependability), and triangulation and practicing reflexivity (for confirmability) are the minimums that should be required of naturalistic investigators." In Section 3.4 I have shown that these minima, and more, have been attended to in this research.

Part 3: Conceptual Framework

4 HUMAN RIGHTS IN TENSION

In this chapter, as a preamble to the development of the conceptual framework, the idea of a HRBA to land is explored. Following that, a pro-poor perspective on land is presented. Lastly, the idea of democratic land governance is developed with reference to Borras & Franco (2010). This sets the stage for the development of the conceptual framework in the following chapter.

4.1 HUMAN RIGHTS – A BRIEF INTRODUCTION

> *"All societies have ethical standards; that is, norms and beliefs addressing what is right or wrong, permissible or not permissible. These moral standards were established by people, and vary over time and among societies. They are therefore social constructs, made by people for people." (Jonsson, 2003: 13)*

It is from such an understanding that the human rights tradition emerged after the Second World War, as a means of protecting and enforcing these "ethical standards". The fundamental principles of human rights thus derived are identified in Table 4-1. A distinction can be made between *structural* and *operational* principles (Marx *et al.*, 2015). The structural principles describe legal aspects of human rights and include universality, inalienability, indivisibility, interdependence, and interrelatedness of human rights. Operational principles apply more to the application of human rights within their context. Participation, accountability, non-discrimination, and the rule of law are operational principles.

Human rights may be nationally or internationally framed in a Bill of Rights, which further elaborates on the principles in Table 4-1 and makes these principles relevant for a particular context. As an example, the Bill of Rights as set forth in the South African Constitution (*Constitution of the Republic of South Africa*, 1996) may be compared to the Universal Declaration of Human Rights (United Nations, 1948). While the Articles of the Declaration and the Sections of the Bill overlap considerably, there are *inter se* additions and omissions in both documents. The Bill, being far more context specific (for the nation of South Africa) than the Declaration (international relevance), is more detailed than the Declaration.

The Declaration is supported by Covenants and Conventions. Two notable covenants are the International Covenants on Civil and Political Rights – CPRs (OHCHR, 1966a) – and on Economic, Social, and Cultural Rights – ESCRs (OHCHR, 1966b). The CPRs include rights to life, the prohibition of slavery, freedom of movement, equality before the law, freedom of religion and expression, and the right to democratic governance. ESCRs include the right to employment and trade unions, social security, food, water, basic education, and health. These were initially intended to be equally promoted, following the principle of indivisibility, but this was met with resistance from some UN member nations (Jonsson, 2003). So, while the UN recognises CPRs and ESCRs as equal, it is left to specific nations to decide how these Covenants are to be interpreted and applied in their specific contexts. This has led to "internal contradictions concerning both how to promote human rights and who should be endowed with equal human rights" (Ishay, 2004: 359). It is worth noting that the South African Constitution includes aspects of both groups of rights in its Bill of Rights, suggesting that CPRs and ESCRs are identified as equal, at least in South Africa.

Table 4-1 Human rights principles

Principle	Description	
Universality	Human rights apply to *everyone*, regardless of race, gender, religion, or any other means of classification, without exception. All people everywhere have human rights *by virtue of being human* (NESRI, n.d.; OHCHR, 1996; UNFPA, 2005).	Structural principles
Inalienability	Human rights may not be taken away from anyone, although the enjoyment of some rights might be restricted for a time or purpose, usually for the greater good. (OHCHR, 1996; UNFPA, 2005)	
Indivisibility	All human rights have equal status and cannot be ordered hierarchically. The fulfilment of one right depends wholly or in part on the fulfilment of other rights, and the improvement of one right facilitates the advancement of other rights (NESRI, n.d.; OHCHR, 1996; UNFPA, 2005).	
Interdependence & interrelatedness	Whether economic, social, cultural, political, or civil, all human rights are inherent to the dignity of every person, and all human rights are interrelated and interdependent. (OHCHR, 1996; UNFPA, 2005)	
Non-discrimination & equality	Purposeful discrimination (e.g. apartheid), as well as the unintended consequences of policies and practices that may have a discriminatory effect, are precluded. Non-discrimination is complemented by the principle of equality (NESRI, n.d.; OHCHR, 1996; UNFPA, 2005).	Operational principles
Participation	People have the right to participate in how decisions are made regarding protection, enforcement and fulfilment of their rights. They also have the right to access information relating to the decision-making process. (NESRI, n.d.; UNFPA, 2005)	
Accountability	Governments should be held accountable if human rights are not enforced. It is not enough for rights to be recognised in law or policy – there must be real and practical means of checking that these obligations are being met. (NESRI, n.d.; UNFPA, 2005)	
Rule of law	States should also comply with the legal norms and standards, both international and national, which ratify the protection and fulfilment of human rights. Aggrieved rights-holders should be able to seek compensation or appropriate redress in accordance with the rules and procedures provided by law. (NESRI, n.d.; UNFPA, 2005)	
Transparency	Governments should be open about decision-making processes and people should be able to know and understand how major decisions affecting their rights are made (NESRI, n.d.).	

One last distinction needs to be made, and that is between horizontal and vertical relationships with respect to rights. Again, the South African Constitution is referred to as an example. Section 8 of the Constitution refers to the application of the Bill of Rights. In the first instance, the state is obligated to respect, protect, promote, and fulfil human rights (see also sec. 7(2)) – this is the vertical relationship between rights-holders and the state. In the second instance, rights-holders – be they natural or juristic persons – are equally obligated to uphold the rights as laid out in the Bill of Rights. This is the horizontal relationship. Hence the Bill of Rights demands respect in both private and public law.

4.2 A HUMAN RIGHTS-BASED APPROACH (HRBA) TO DEVELOPMENT

In this section, a HRBA to development will be described. It is recognised, however, that human rights principles are an ideal and are not recognised by, enforced by, nor even appropriate for, all peoples and cultures in the world. Different worldviews may yield different conceptualisations of human rights principles (Otto, 1997). "There seems to be some consensus … that the concept of human rights as generally understood is historically a *Western* concept" (Cobbah, 1987: 309,

emphasis added). Mutua (2001: 204) calls human rights "fundamentally Eurocentric" and, as such, serve to promote Western ideals/culture over non-Western ideals/culture (which Mutua refers to as the *Saviour* and the *Savage* respectively – see Section 4.3). With cognisance taken of these potential shortcomings pertaining to development of land, especially in rural Africa, the human rights tradition is presented along with the potential benefits and challenges of a HRBA to development.

4.2.1 The human rights tradition

A HRBA to development provides the conceptual and practical framework for realising human rights throughout the process of development (Cornwall & Nyamu-Musembi, 2004) and puts human rights at the heart of development (Filmer-Wilson, 2005). It puts power in the hands of the beneficiaries of development, as rights-holders, and obligates states to fulfil their duties towards citizens. This means "empowering marginalised groups, challenging oppression and exclusion, and changing power relations" (Uvin, 2007: 604). But empowering some means disempowering others and there are winners and losers in any development process.

According to the United Nations Common Understanding on a HRBA (United Nations, n.d.; Marx *et al.*, 2015), the following three requirements should be met in a HRBA:

1. Development programmes should further the realisation of human rights;
2. Every development initiative should be guided by human rights principles;
3. Development initiatives should contribute to improving the capacity of duty-bearers to uphold their obligations and rights-holders to claim their rights.

The idea of states being duty-bearers draws from the human rights tradition, which is summarised by Franco (2006; 2008) as follows:

- People are not mere beneficiaries; they are *rights-holders*;
- States are not only service providers, they are *duty-bearers* obligated to "respect, protect and fulfil people's human rights" (Franco, 2008: 19). To this list, the South African Constitution adds the obligation to *promote* human rights (see sec. 7 (2)). Per Jonsson (2003) and Clark and Luwayo (2017),
    - the obligation to *respect* means to avoid interfering directly or indirectly with the enjoyment of a right.
    - To *protect* means to take the necessary measures to make sure that other parties don't interfere with one's enjoyment of a right. Such necessary measures include the enactment and effective implementation of legislation.
    - Jonsson breaks down the obligation to *fulfil* into two parts: facilitation and provision.
        - To *facilitate* means that duty-bearers need to put in place the necessary structures for rights-holders to be able to claim their rights, which is equivalent to the Constitution's obligation to promotion (see e.g. sec. 9 (2)).
        - *Provision* relates to an obligation to make services available to assist rights-holders to claim their rights.
- States should be *held to account* if they fail to meet their obligations in this regard, which are as follows:
    - The guarantee that all rights will be exercised *without discrimination*;
    - Taking steps towards the *full realisation* of ESCRs without undue delay;
    - To not take any measures that would *hinder* the full realisation of ESCRs;
    - Using the *maximum of available resources* to fulfil obligations;
    - To prioritise action towards the most *vulnerable groups*; and

- The guarantee of a *minimum core obligation* that satisfies the minimum essential levels of each right.

How well rights are claimed, and obligations are fulfilled, is a function of capacity. "A person can only be held accountable if that person feels that he/she *should* act, that he/she *may* act; and that he/she *can* act" (Jonsson, 2003: 16). To elaborate, accountability in this regard depends on the fulfilment of three conditions (*Ibid.*):

1. Acceptance of *responsibility* to fulfil an obligation.
2. Possession of *authority* to carry out the obligation.
3. The necessary *resources* required to fulfil an obligation.

Practically, this means that if governments follow a HRBA to development, they will employ an accountable and participatory approach that includes stakeholders in the process. There will be a consequent shift from assessing the needs of beneficiaries of development, to empowering citizens to recognise and claim their rights while ensuring that duty-bearers honour their responsibilities (*Ibid.*) – the vertical obligation. This shift from charity (the optional exercise of concern for the needy) to obligation (Cobbah, 1987) avoids the pitfall of failure to consult adequately, which leads to "imposed policies which lack popular support and understanding" (Toulmin & Quan, 2000).

If the horizontal application of human rights is enabled, as in the South African Constitution, then communities are already empowered to take responsibility for the realisation of human rights. Their participation in the development process is hence more effective in terms of putting pressure on their respective state to fulfil its (vertical) obligations.

Cornwall and Nyamu-Musembi (2004) have identified four integrated approaches to building human rights into development: as a set of *normative principles* to guide how development is done; as a set of *instruments* to aid in the development of assessments and *indicators* for the evaluation of development programmes; as a *component* to be integrated into programming; and as the *underlying justification* for interventions aimed at strengthening institutions. These four approaches will be referred to again in Section 4.6.

4.2.2 Benefits and challenges of a human rights-based approach

Filmer-Wilson (2005) has identified the following benefits to following a HRBA:

1. *Empowerment*: By adopting a HRBA to development, needs can become claims and charity can become justice. Such empowerment is likely to raise the self-esteem of the disadvantaged, poor, and marginalised and enable them to take ownership of their role in the development process.
2. *Accountability*: This is the key to improved transparency and effectiveness regarding the fulfilment of state obligations.
3. *Participation*: There should be opportunity for all stakeholders to participate at all levels and stages of the development process in a way that is active, free and meaningful. This includes enabling the poor and marginalised to identify their own development objectives and their active engagement in designing and implementing projects to meet their needs. It also means that developers need to be aware of societal power relations and how these may limit / promote the ability of some groups to participate.
4. *Integration*: A HRBA to development allows for the integration of laws, social practices, policies and institutions, and exposes societal power relations that disadvantage certain groups.

5. *Protecting and promoting ESCR*: The legitimacy of ESCR as human rights is contested by many governments, but a HRBA enforces the equality and indivisibility of all human rights.

Adopting a HRBA to development is challenging (Filmer-Wilson, 2005). The first challenge is putting it on the official agenda of governments; the next challenge is implementation (Franco, 2006). Filmer-Wilson (2005) identifies the following challenges regarding implementation. The *context* of development (political, institutional, cultural, and social factors) influences implementation, with the result that there is no one-size-fits-all approach. Consequently, development needs to be tailored for a context to make it fit-for-purpose. There is also a presumption of a *level of organisation and opportunity* for participation that might not be present, especially among the poor and marginalised who may feel culturally intimidated into not sharing their views. This is especially relevant if we consider the caution raised at the beginning of this chapter: human rights are perceived by some to be culturally Western (Cobbah, 1987; Mutua, 2001) – this is addressed in the following section.

There is an air of superiority about human rights that are based in Western liberal cultural norms (Mutua, 2001), and participants who don't share those views may feel intimidated into not sharing theirs. Also, the principle of equality is not universally accepted, leading some people to feel culturally intimidated.[10] Where participation is free and fair, it can be *time-consuming* as service providers engage in listening, educating and training, organising, conflict resolution, and empowerment. From an evaluation perspective, human rights goals are *long-term*, so assessing the impact of development that is cognisant of a HRBA is difficult (see also Marx *et al.*, 2015). Adopting a HRBA to development pushes development organisations into a politicised arena where power imbalances are directly challenged. This also makes the approach unpopular with states and donors.

4.3 HUMAN RIGHTS IN AFRICA

> *"The concept of human rights is grounded on the idea that people have rights owing to their being human… The [UN] has described human rights as those rights which are inherent in our nature and without which we cannot live as human beings … Human rights are therefore understood as rights which belong to an individual as a consequence of being a human being – and for no other reason. One need not possess any other qualification to enjoy human rights." (Mubangizi & Kaya, 2015: 126)*

The quotation above highlights the principle of universality, which is a fundamental notion of human rights. Yet the universality of human rights is contested:

> *"The more troubling questions facing Westerners and non-Westerners alike pertain to whether contemporary international human rights instruments, given their Western biases, can be said to apply to peoples from non-Western cultures." (Cobbah, 1987: 309)*

Some authors suggest that international human rights standards were built on Western values (Ishay, 2004) without consideration of different value systems in Asia (Merry, 2006) and Africa (Mubangizi & Kaya, 2015). There are conflicting political traditions and historical legacy built into the conceptualisation of human rights (Ishay, 2004) and these need to be dynamically balanced. From a broadly African perspective, the modern notion of human rights has been introduced and imposed through colonialism (Cobbah, 1987; Mutua, 2001; Mubangizi & Kaya, 2015), but African

[10] Sections 9 and 30 of the South African Constitution respectively affirm the equality of everyone and protect their rights to language and culture. But law and practice are not always aligned.

communities have long had their own conception of human rights. Mubangizi & Kaya (2015: 127) link this "African indigenous conceptualisation of human rights" to the "African philosophy and principles of *Ubuntu* and African Indigenous Knowledge Systems". *Ubuntu* is the African philosophy of humanism that links the individual to the collective. It is considered a spiritual way of being, focussing on human relations, and is borne out of the philosophy that community strength comes from community support (Swanson, 2007). This understanding places the concept of rights within a spiritual continuum encompassing and involving all of creation – animate and inanimate, living and deceased. Hence, Murithi (2004: 15; as quoted in Swanson, 2007) advocates for "a re-articulation of human rights from an *Ubuntu* perspective [to add] value to the human rights movement by placing more of an emphasis on the obligations that we have towards the 'other'." The tension, therefore, arises because international human rights treatises are grounded in liberal democracy, which is individualistically based (Sewpaul, 2016), whereas the notion of *Ubuntu* that informs the African view of human rights is embedded in communalism (Nagengast, 2015).

There is a tendency to dichotomise "the West and the Rest" (Sewpaul, 2016), which Mutua (2001) expounds on in his Savages, Victims, Saviours metaphor of human rights. Within the context of human rights, he claims that non-European or Third World culture that deviates from the human rights norm, is the Savage. Human rights proponents claim that the Savage needs to be civilised. The Victims are people "whose 'dignity and worth' have been violated by the savage" (*Ibid.*: 203). Victims are generally portrayed in the media and human rights discourses as powerless, nameless, dispirited masses. But help is at hand: Victims can appeal to international organisations like the UN. These institutions are not the Saviour, however, but merely the vehicle of salvation. The Saviour "is ultimately a set of culturally based norms and practices" that are aligned with the human rights norm (*Ibid.*: 204). This Savages, Victims, Saviours metaphor of human rights entrenches the Eurocentrism of the human rights tradition and is condescending towards non-Western cultures.

In response to such a damming metaphor, the qualities of African and Asian cultural norms are lauded as equal to, if not superior to, Western notions of human rights (Cobbah, 1987; Merry, 2006; Mubangizi & Kaya, 2015). Yet, while espousing the merits of *ubuntu*, Swanson (2007) acknowledges that the approach is somewhat utopian and cautions against an uncritical adoption of the philosophy. In practice, society and governments fall far short of the *ubuntu* ideal. Sewpaul (2016) cautions against idealising communalism over individualism and asserts that, even in cultures that embrace the spirit of *ubuntu*, human rights violations perpetuate. The current African political landscape provides ample examples. But Western states also have deplorable human rights records (Sewpaul, 2016). It seems that "there is none righteous, no, not one" (Romans 3:10 NKJV – cf. Eccl 7:20) and neither an individualistic nor a communal view of human rights is faultless.

Nagengast (2015) presents something of a silver lining, claiming that there has been a decrease in human rights violations in Africa over the past few decades. This is attributed to a syncretistic mix of human rights and cultural norms. This does not imply that Africans have discarded the notion of *ubuntu*. The claim is that human rights are being understood as political and legal safeguards of individual autonomy, both from the citizen/community perspective as rights-holders and from the state's perspective as duty-bearers. It is impossible to say whether this is because of the imposition of Western ideals on the Rest, as is claimed by Cobbah (1987) and Mutua (2001), or due to the natural 'vernacularization' of transnational ideas like human rights (Merry, 2006).

What is important to note is that there is resistance to the adoption of human rights as applying universally and equally to everyone everywhere, and cultural norms must be considered. This teaches us that caution should be exercised when applying Western notions in African contexts – see the quotation on page iv – because while some rights are broadly accepted (e.g. the right to citizenship), others are contested (such as equality with respect to gender, or freedom of religion).

4.4 THE ARGUMENT FOR LAND RIGHTS

Cadastral systems development is concerned with land and the rights, restrictions, and responsibilities (RRRs) associated therewith. In this section, the place of land RRRs is identified within the broader human rights discourse.

4.4.1 Recognising land rights

Land rights have been defined as formal or informal, where the formal (statutory) rights are explicitly acknowledged by the state and protected by law, while the informal rights lack official recognition and protection (FAO, 2002). Informal land rights may be illegal, legal, or extra-legal depending on the situation. It is, however, noted that polar categorisations of land tenure (legal vs. customary, formal vs. informal) do not capture the full complexity of land tenure systems in existence, particularly in developing, urban contexts (Payne, 2001). There is instead a continuum of land tenure categories (UN-HABITAT, IIRR & GLTN, 2012) – see Figure 4-1. Yet even this conceptualisation has been challenged (Whittal, 2014) with respect to the use of binaries in land tenure (Royston, 2007; Sietchiping, Aubrey & Bazoglu, 2012) and evolutionary bias, and it is now accepted that land rights may move in either direction along the continuum (Lemmen *et al.*, 2015).

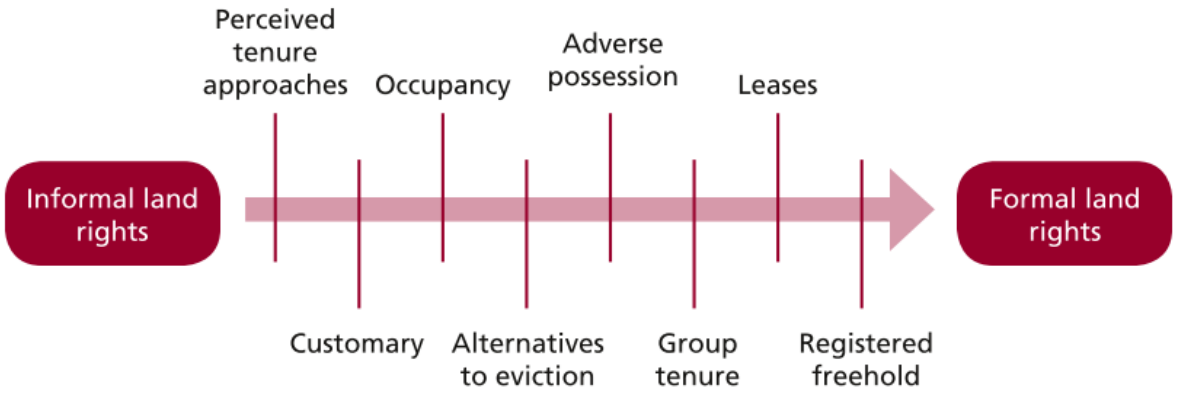

Figure 4-1 Continuum of land rights (UN-HABITAT, IIRR & GLTN, 2012: 12)

Land rights refer to rights to use, control, and transfer a parcel of land (Gilbert, 2013) – see Section 1.3.1. Land rights *per se* are not recognised as human rights under international law. There are difficulties with realising land as a human right in highly urbanised societies (Wisborg, 2002). No matter the context, land rights constitute the basis for access to food, housing, and development (FAO, 2002). For example, legal security of tenure is identified as a key factor in the realisation of the right to adequate housing, along with the obligation of states to ensure such security (United Nations, 1991). This is assumed to also refer to security of rights to land (Gilbert, 2013).

A HRBA to land rights draws attention away from the purely economic value of land and instead highlights the social and cultural importance of land (see for example Akrofi & Whittal, 2013). In the development of a new conceptual model for the continuum of land rights, Whittal (2014),

drawing from Williamson *et al.* (2010), recognises land (*terra firma*) as a human right common to all levels of land value complexity. Land rights are seen as essential to the realisation of other fundamental rights, particularly the rights to food and housing, and cannot be separated from the general bundle of rights (Payne, 2001). Yet they do not have the international recognition they warrant (Gilbert, 2013): "there is no global instrument to protect property rights" (Enemark, Hvingel & Galland, 2014: 335) and "no human rights treaty has recognised land rights as being a core human rights issue" (Gilbert, 2013: 117). On the national level, section 25 of the South African Constitution does acknowledge the right to property, wherein property is interpreted as "not limited to land" (sub-section 4 (b)). Sections 26 and 27 protect every citizen's right to housing, food and water, which all carry strong associations with the right to land.

Arguments for and against the recognition of land rights as human rights have been posited (Wisborg, 2002; Gilbert, 2013). Wisborg concludes that land *is* a human rights *issue*, particularly in the context of oppression and subsequent skewed land distribution. The context also influences the importance of land rights. With regard to the rural, communal, African situation, "land is a human right, in the sense that landlessness amounts to a violation of … welfare rights" (Wisborg, 2002: 15). It is important to note that, from a broadly African worldview, the right to land extends to the living, the unborn, and the (deceased) ancestors as well (see e.g. Nsamenang, 2006; as cited by Akrofi, 2013). This understanding demands that, for African contexts, the prior understanding of human rights principles and land rights are interpreted cross-generationally, which challenges the fundamental definition of a human as understood in Western culture.

The onus rests on country-specific land administrators, as duty-bearers, to ensure that property rights are realised, protected and enforced. "A human rights approach might be an important tool to ensure that both the cultural and economic value of land are recognized … [and that] … the right of people over their lands are respected as a fundamental right" (Gilbert, 2013: 129). Burns *et al.* (2006) assert that the recognition of property rights is a core state function.

4.4.2 Land rights, restrictions, and responsibilities (RRRs)

The human rights tradition makes the distinction between people's rights and a state's (vertical) obligations. This is translated, in land tenure and administration literature, into RRRs. With reference to *cadastral systems development* it is therefore necessary to identify these RRRs associated with land administration, each of which includes a human rights dimension (Williamson *et al.*, 2010; Enemark, Hvingel & Galland, 2014).

The particular land *rights* with which LAS are concerned have been identified as land *ownership* and land *tenure* (Enemark, Hvingel & Galland, 2014), including the rights to use, control, and transfer a parcel of land (Gilbert, 2013). Regarding *ownership*, in relation to property, from a civil legal perspective, *ownership* is equated with *dominium* (McAuslan, 2000), i.e. the complete power to use, enjoy, and dispose of property unless prohibited by law (van der Walt, 1995). In Anglo-American legal systems, ownership is depicted as a bundle of rights. In South African law, ownership is viewed as a unified, hierarchical concept that confers the greatest range of rights in land (Badenhorst, Mostert & Pienaar, 2006; Kingwill, 2011; Mostert, 2012).

Regarding land *tenure*, Williamson *et al.* (2010) and Whittal (2014) provide comprehensive lists of land tenure types and associated rights. Land tenure includes both the soft concept of *perceptions* of security in land and the hard concept of *rights* as laid down in law (Whittal, 2014).

Restrictions usually influence what can or cannot be done with the land (Williamson *et al.*, 2010; Enemark, Hvingel & Galland, 2014). *Responsibilities* apply to both land rights-holders and the state. For land rights-holders, responsibilities refer to a social and ethical (horizontal) obligation towards sustainable development and responsible stewardship for the environment and

community (*Ibid.*). States, as we saw previously, have a (vertical) obligation to respect, protect, promote, and fulfil people's land rights. To complicate matters, in many countries (South Africa included), a state is also a land rights-holder. In South Africa, the State owns most of the land on which the poor hold secondary, customary land rights. Thus, states have both horizontal and vertical obligations.

4.5 A PRO-POOR PERSPECTIVE

The Multidimensional Poverty Index (MPI) contains three dimensions – health, education, and living standards – and 10 indicators. For health, the indicators are nutrition and child mortality; for education, they are years of schooling and school attendance; for living standards the indicators are cooking fuel, sanitation, drinking water, electricity, housing, and assets. The dimensions and indicators within dimensions are all equally weighted. If a person is deprived in one third or more of the indicators, they are considered multidimensionally poor (Oxford Poverty and Human Development Initiative, 2018). Globally 84,7% of multidimensionally poor people lived in rural areas in 2018. In Sub-Saharan Africa the figure is marginally higher at 84,9%, down from 85,8% in 2014 (while the global figure has remained constant) (Alkire et al., 2014; Oxford Poverty and Human Development Initiative, 2018). Hence discussions of human and land rights in rural Africa have implications for the poor. This section introduces a pro-poor perspective of human and land rights, which concludes with a model of democratic land governance as a pro-poor land policy tool. As an attempt at discombobulation, the section begins with a discussion about poverty eradication, alleviation, and reduction.

4.5.1 Distinguishing between poverty eradication, alleviation, and reduction

Mubangizi (2005) makes the distinction between poverty eradication, alleviation, and reduction. The former is noted to be naïve. Indeed, writing in the first century, authors Matthew, Mark and John all record Jesus as saying that we will *always* have the poor with us (see e.g. Matt 26:11), with reference to Moses's similar affirmation penned in about 1400 BCE (Deut 15:11). Yet the first of the international and recently adopted Sustainable Development Goals (SDGs) is to "*End* poverty in *all* its forms *everywhere*" (United Nations, 2015: 17, emphasis added). Responding to the draft SDGs before they were officially published, Tanner (2014: 1) says, "Despite the on-trend rhetoric and optimism, the chances of (all but) ending absolute poverty in our generation are slim. The chances of ending poverty altogether are zero." Indeed, Kimilike (2006) reports that many poverty eradication programmes in Africa have failed, yet the international community, through the UN, has made a commitment to "eradicate extreme poverty" and "reduce at least by half" the number of people living in any kind of poverty by the year 2030 (United Nations, 2015: 17). Whether poverty eradication is possible or not remains to be seen. What is clear is that poverty needs to be *addressed* and goal 1.b of the SDGs promotes the creation of frameworks for this. This research hence contributes towards the achievement of this goal.

Poverty *alleviation* implies that the effects of poverty can somehow be made more tolerable for a while. While this may be helpful in the short-term, it is not a long-term solution and is condescending to the poor (Mubangizi, 2005). Poverty *reduction*, on the other hand, refers to a process by which the causes of poverty-related suffering are addressed. It is hence more realistic, measurable and attainable than poverty eradication or alleviation (Mubangizi, 2005; Kimilike, 2006).

4.5.2 Poverty reduction and human rights

The recognition of human rights principles is seen as important for poverty reduction (OHCHR, 2004; Filmer-Wilson, 2005). Such an understanding of poverty reduction draws from the Savages,

Victims, Saviours metaphor (Mutua, 2001) – see Section 4.3. Conversely, Kimilike (2006) suggests that poverty reduction in Africa should be tackled from an African understanding of poverty, invoking the *ubuntu* ideology. Whether a HRBA is the Saviour for the poor, or such an approach is naïve in the African context, Mubangizi (2005: 34) affirms that "poverty is not only a deprivation of economic or material resources but also *a violation of human rights*" (emphasis added), and Franco (2006) makes the claim that the human rights approach to land issues is *unambiguously* pro-poor. A human right to land is understood to prioritise the landless, rural poor:

> *"If our starting point is the search for a land policy that is truly pro-poor, and it is framed unambiguously in these terms, then a human rights approach is a powerful tool – precisely because it does take sides: it is not pro-elite." (Franco, 2006: 7)*

With this in mind, a human right to land can be thought of as having three interrelated dimensions (Franco, 2006, 2008). The first dimension is the primary recognition of the most vulnerable people (Mutua's 'Victims') as rights-holders. The second dimension refers to the full, meaningful, effective access to land as a resource, which includes both *the recognised right to land* and the *actual control of land and its resources* (Franco, 2008). The third dimension adopts a perspective in which land is understood as territory: the place where people live, move, and have their being. This latter description brings with it strong communal associations with land that provide a different perspective to the Western bias and may begin to address Kimilike's suggestion above. Hence a truly pro-poor land policy "is one that contributes to effectively securing the rights of poor people to occupy and use land for purposes and in ways of their own choosing" (Borras & Franco, 2010: 15) including a communal definition of poverty and land use. This can be achieved through democratic land governance (Borras & Franco, 2010) as described below.

4.5.3 Democratic land governance

According to Borras & Franco (2010: 2), land governance refers to the "most efficient way of administration of land issues" and is technical and administrative in nature rather than a democratic provision of access to and control over wealth and power. The concept of *good* land governance is derived from concerns for pro-poor land policy and the promotion of efficient land policy administration towards poverty reduction through capitalist development. As such it is based more on economics than rights (*Ibid.*).

Achieving pro-poor land policy, which is inherently cognisant of human rights to land, requires *democratic* (rather than *good*) land governance (*Ibid.*). This is a process involving three (vertically) interacting components: grassroots pro-reform mobilisations; top-down state reform initiatives; and mutually reinforcing, democratically embedded interactions between these two components. To these is added the horizontal interactions between private individuals / juristic persons *inter se* that are equally bound by the provisions in the South African Bill of Rights. This is an important additional component at the national level because it requires greater responsibility from the poor to uphold the rights of others instead of only claiming the rights the state is obligated to enforce. All four components are necessary for democratic land governance and are illustrated regarding their influence on cadastral systems development in Figure 4-2.

This perspective marks a shift away from the usual, technical-administrative notion of land governance (Enemark, 2012). Linking this model to a HRBA to development, the grassroots mobilisations reflect broad-based participation by citizens and communities in response to their specific land-based needs; the state's top-down initiatives may relate to their obligations as duty-bearers; and the mutually reinforcing, democratically embedded interactions between the two

reflect accountability, transparency, and mutually beneficial collaboration (see e.g. Emerson, Nabatchi & Balogh, 2012).

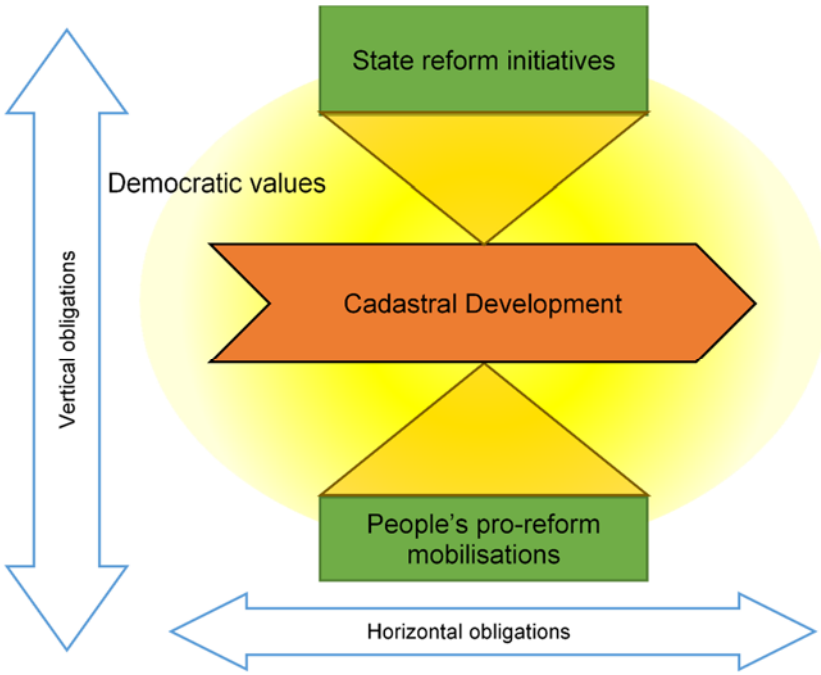

Figure 4-2 Components of democratic land governance (adapted from Borras & Franco, 2010)

4.6 A HUMAN RIGHTS-BASED APPROACH TO DEVELOPMENT OF LAND

Drawing from the preceding discussion, the pertinent elements of a HRBA to the development of land in customary contexts are here identified. This starts with the human rights tradition (Franco, 2006) which identifies citizens and communities as rights-holders and states as duty-bound to respect, protect, promote, and fulfil their obligations in this regard. Keeping the human rights tradition in mind, the presumption of universal acceptance of human rights norms is challenged (Cobbah, 1987; Mutua, 2001; Mubangizi & Kaya, 2015). For any development process, the cultural context needs to be understood and respected if development is to be ***sustainable***, ***successful***, and ***significant***. An understanding of context is also important for acknowledging the relative importance of land rights: while land is not an internationally recognised human right (Gilbert, 2013; Enemark, Hvingel & Galland, 2014), for rural African cultures it has a profound social, cultural, and religious significance that cannot be overlooked (Wisborg, 2002; Merry, 2006). Land rights must therefore be understood cross-generationally through a socio-cultural lens, i.e. land is not merely a commodity to be bought or sold; it is part of the communal responsibility for governance of society and the environment (Akrofi, 2013; Akrofi & Whittal, 2013; Mubangizi & Kaya, 2015).

This understanding equates with Franco's (2008) third dimension of a human right to land: that land is viewed as territory. Implicit in this understanding is the horizontal obligation of individuals and communities towards one another with respect to commonly understood land rights. The other two dimensions can be incorporated with this understanding into a modified model of democratic land governance focusing on the vertical obligation, where the top-down approach relates to the state's obligations towards the most vulnerable citizens as land rights-holders, and the bottom-up approach relates to these citizens' full, meaningful, and effective access to use and control land in a manner that is fitting for their cultural norms.

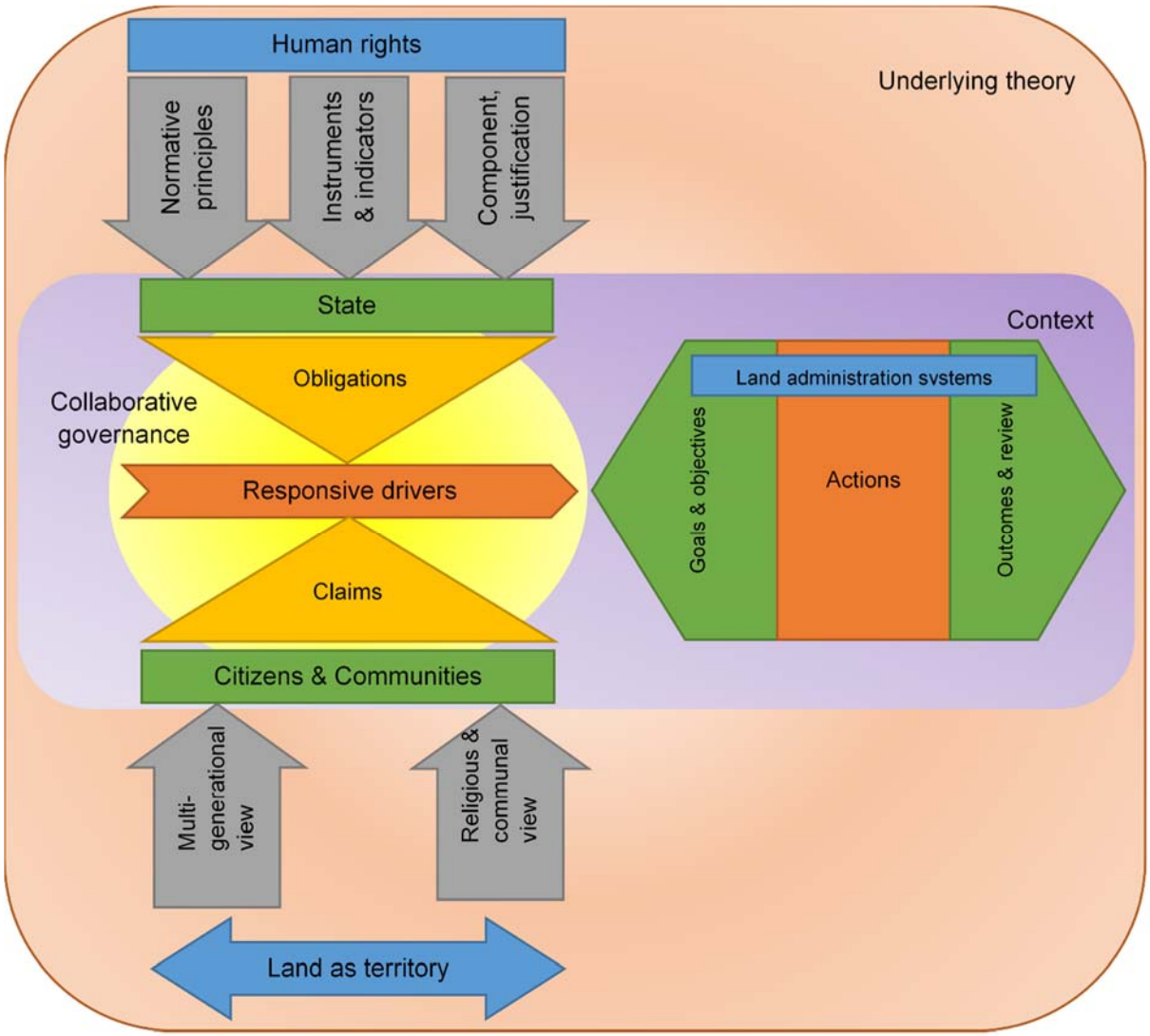

Figure 4-3 A new model for democratic land governance

A new model for democratic land governance is thus derived – see Figure 4-3. In this model the state is illustrated as drawing from human rights as a set of normative principles guiding development, as instruments and indicators for evaluation of development, as a component of development, and as the underlying justification for development (Cornwall & Nyamu-Musembi, 2004). Thus informed, the state is directed by the human rights tradition to fulfil its obligations to land rights-holders by initiating cadastral systems development to address human rights-related deficiencies in the current status quo. This is the top-down approach of the human rights tradition. The bottom-up approach sees people as individual citizens and communities of land rights-holders who draw on their understanding of land as territory – with corresponding horizontal obligations to one another and incorporating a multi-generational, socio-cultural, religious view of land – to claim their right to use and/or control land. (Horizontal obligations are illustrated in the figure by means of arrows on either side of the 'Land as territory' block.) This claim drives their desire for cadastral systems development. The two approaches meet and need to find mutual acceptance and understanding through a setting of collaborative governance, drawing from Emerson, Nabatchi & Balogh (2012), which affirms and extends the democratic values in the previous model. To the right of this, and arising from this interaction, are goals and objectives, actions, outcomes and review processes. These all exist within a particular context and form components of the LAS, as presented in the next chapter.

4.7 SUMMARY

In this section, a HRBA to development is defined as stemming from the human rights tradition. Per this tradition, citizens and communities are rights-holders who can hold states to account regarding the realisation of their rights, which is referred to here as their vertical obligation. States are obligated as duty-bearers to respect, protect, promote, and fulfil human rights. Adherence to a HRBA to development empowers the needy to claim their rights, promotes transparency of governance, and encourages active, free, and meaningful participation in development processes. But following a HRBA to development is not without its challenges. Other than the implementation challenges, there is the challenge related to the questionable universality of human rights: the 'West and the Rest' debate. The issue of horizontal obligation – the obligation of rights-holders to uphold the rights of other rights-holders – may contribute to addressing this challenge, because the types of rights are then understood on an equal footing.

The argument for land rights was presented (see Section 4.4) in which it was noted that the right to occupy and use land is not a recognised human right, though it may be a human rights *issue*, especially in a developing, African context. A HRBA to land rights is important in highlighting the social and cultural importance of land, as opposed to viewing land simply as a commodity to be bought or sold. This resonates with the distinction between Eurocentric human rights and the *ubuntu* approach. Differences aside, the human rights tradition places the onus for the recognition and protection of land rights squarely on the shoulders of states, as (vertically obligated) duty-bearers. Individuals, community leaders, and communities shoulder some of the responsibility as (horizontally obligated) duty-bearers.

Adopting a HRBA to land is acknowledged to be pro-poor. While poverty eradication is noted to be a naïve goal, poverty *reduction* is something that can be achieved and should be at the forefront of development, especially developments involving land. Acknowledgement of the importance of land as a social, cultural, and even religious asset is imperative for cadastral systems development that is sensitive to the needs and beliefs of customary land rights-holders in Africa. The model of democratic land governance is presented as a pro-poor, HRBA to development of land, and is modified to accommodate the views presented above.

5 THE 3S FRAMEWORK

It was proposed in the problem statement (Section 1.2.1) that cadastral systems development should not only aim for ***success*** and ***sustainability***, but ***significance*** too (see Figure 5-1). ***Success*** is the achievement of goals. Where the process of development is continuous or has a long timeline, as in developments related to land reform (Williamson, 2000; Whittal, 2008), then ***sustainability*** should also be an objective. Goals should arise from citizens' or communities' needs and should be of ***significance*** for them. Hence ***significant*** LAS yield positive impacts for land rights-holders in a manner that addresses their specific land-related needs.

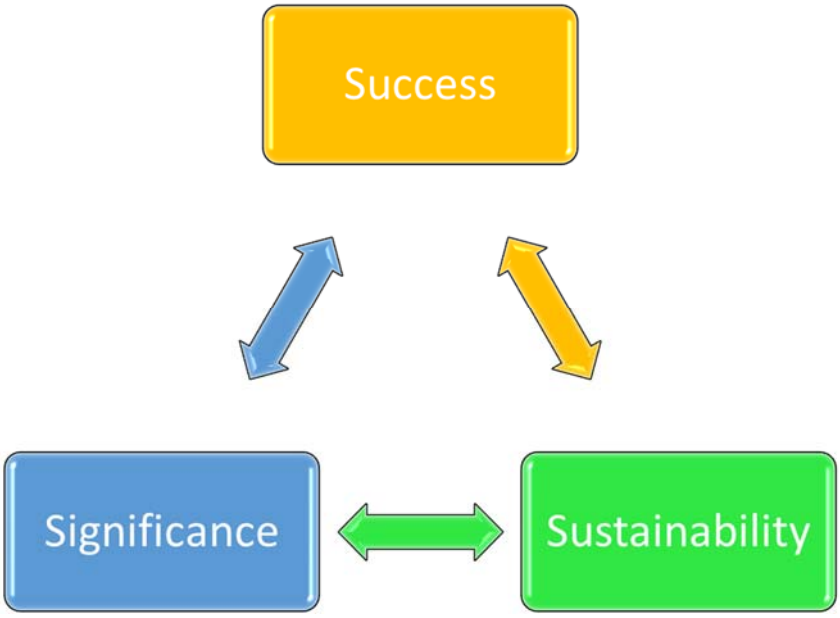

Figure 5-1 The inter-related goals of Success, Sustainability, and Significance: the 3S's

Referring to Figure 3-4, the relevant components of the frameworks listed in Table A-1 are here identified and synthesised into the conceptual framework. The framework is presented as a table per evaluation area at the beginning of each of the following sub-sections (Table 5-1 to Table 5-4 and Table 5-6), and the complete framework is presented as Table 5-7. Five evaluation areas are identified from the literature: underlying theory, LAS context, change drivers, change process, and review process. These form the headings in this chapter. These areas are comprised of different aspects that form the sub-headings of each area. These are further broken down into elements, **written in bold**, per the abstraction and simplification of complex real-world phenomena mentioned in Section 3.2. Explanations and justifications are given of the different elements. These are context-specific and hence do not form part of a generalisable set. Descriptions need to be derived for each case independently, as shown in Part 4. A common set may eventually emerge if enough cases are investigated (theoretical saturation), but each case would still need to be investigated for its own context-specific descriptors and also to assess whether any of the listed elements are not relevant to the context.

5.1 IDENTIFYING UNDERLYING THEORY

Change agents tend to adopt methods with which they are familiar and that were successful in the past. The theory informing development hence goes unspoken and unnoticed. Conscious decisions at the theory level are important, especially when seeking to undertake cadastral systems development in contexts differing from well-understood western norms, because the

value and meaning of land to land rights-holders is context-specific (Borras & Franco, 2010). Hence adopting appropriate theory for development is important to achieve ***significance***, leading to ***success*** and ***sustainability***.

Table 5-1 Aspects and elements of Underlying Theory

Aspects	Elements	Potential indicators
Theories of tenure reform	Identifying theory on a continuum of land reform theories	Conservative theory Democratic adaptation theory Hybrid adaptation theory Incremental approach Evolutionary replacement theory Collective replacement theory Systematic titling
Understanding land in its social context	Attitude towards human and land rights	Acceptance / rejection
	Justification for development	Aligned to normative principles
Goals for development	Gap analysis	Identifying problems / needs
	Measures of Success	Aligned to goals

5.1.1 Underlying 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 (Royston, 2013; Chitonge et al., 2017). The *replacement theorists* support the substitution of customary land rights (living, uncodified customary law – see Section 1.3.3) 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*.

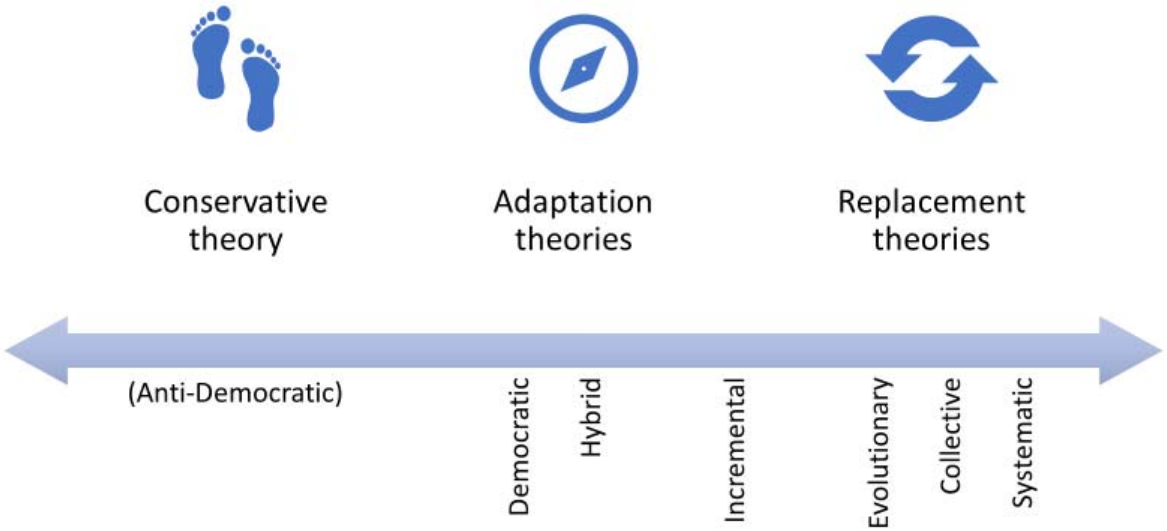

Figure 5-2 Three schools of land reform theories

Between the replacement and conservative extremes lies a third school of thought (Royston, 2013): 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 (1993a: 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 5-2 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 tenure reform theories. Neither do the theories exist in isolation from one another on the continuum, but they may overlap in certain scenarios (Barry & Augustinus, 2016). The section begins with an overview of the arguments for and against replacement vs. conservation positions.

a) Overview: replacement or conservation?

Replacement theorists consider living customary land tenure to be a hindrance to the development of land markets and modernisation of the economy, and propose to replace it with an apparently better-suited tenure system, namely private property rights (Arko-Adjei, 2011). For replacement theorists, titling and registration are seen to be the means of solving land management and administration problems in Africa. This is perceived to foster successful land development, increase credit opportunities, and promote the development of land markets (Platteau, 1996; de Soto, 2000; Nkwae, 2006). Arko-Adjei (2011) summarises 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 hence hinder development.
- Common property related to customary systems (the "African commons", cf. Okoth-Ogendo, 2002) is archaic and likely to disappear in the future as tenure evolves towards individualisation.

The 'tragedy' of the African commons occurred when colonialists declared them to be *terra nullius* and hence proclaimed imperial inclusion within colonial boundaries, resulting in transfer of land rights from the indigenous communities to the colonial power, the replacement of indigenous LAS by a new, 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 (Okoth-Ogendo, 2002; Arko-Adjei, 2011). "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" (Okoth-Ogendo, 2002: 8).

Although a legacy of colonialism in Africa is the enduring legal pluralism of the colonially-derived legal system and African customary law, Western concepts of land rights are not necessarily successfully transplanted into African contexts, particularly peri-urban and rural contexts. "Ambiguities, ambivalence, inconsistencies, bureaucratic and logistic bottlenecks, and, as a consequence, land-related problems have bedevilled land transactions in [some African countries] … where land titling and registration were carried out in a large scale" (Nkwae, 2006: 37). Despite the best intentions of post-independence policy-makers, the African commons endures and is starting to be legally recognised in more and more contexts on the continent (Okoth-Ogendo, 2002).

Some scholars have strongly criticised the introduction of land titling and registration in Africa, especially in sub-Saharan Africa (see e.g. Platteau, 1996). 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 (Lahiff, 2007). Bruce (1993b: 51) warns that comprehensive tenure reform programmes 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* (2017: 25), "Land titling is a questionable means of securing tenure and is thus not necessarily appropriate as a way to increase investment in land."

b) Conservative theory

Conservative theory sees living customary tenure as providing sufficient tenure security (Chanock, 2001) because "land acts as a social, political and economic tie between kinship groups" (Nkwae, 2006: 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 (Okoth-Ogendo, 2002; Nkwae, 2006; Arko-Adjei, 2011; Akrofi & Whittal, 2013). Such African customary tenure systems are based on social legitimacy through kinship and ethnicity (Bruce, 1993b). Land titling programmes in these sorts of contexts may fail because titling breaks down the social structure of rural African communities (Nkwae, 2006). Hence, *de jure* tenure security may erode pre-existing, socially embedded *de facto* tenure security.

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 (2008: 215) shows that this view is biased and that alternative perspectives stress "the consultative, even democratic, dimensions of chiefly power" (with reference to Chanock, 2001). 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 (Delius, 2008). It is worth highlighting again (see Section 1.3.3) the assertion 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 an associated feudal, anti-democratic version of customary land rights, tenure and administration (Chanock, 1991; Claassens, 2008).

Bruce (1993b) 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 traditional leadership's abuse of power or their ineffectiveness as land administrators. Hence, as noted by Ubink & Quan (2008) and Kingwill *et al.* (2017), and as reported in Section 4.3, 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" (Kingwill, Hornby, et al., 2017: 402). Democratic adaptation theory provides an alternative.

c) Democratic adaptation theory

> *"The answer is not to ignore or try to sweep away customary systems … The solution is to find new legal guarantees that are based on recognition of the normative frameworks underpinning customary tenure." (Hornby et al., 2017: 31)*

Due to the overlay of colonial and apartheid influence, modern customary tenure systems may carry little resemblance to pre-colonial customs. Current practices may hence be anti-democratic and unconstitutional (Claassens, 2008). Democratic adaptation theory highlights the need for democratisation, justice (particularly around gender equality), and accountability. In the face of a colonially-inspired, 'communal' land tenure system with concomitant abuses of power (Chanock, 1991, 2001; Claassens, 2008), the goal is to clarify existing land tenure relationships (Nkwae, 2006) 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 (Hornby et al., 2017) 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 recognising social and off-register tenures that already exist 'in the shadow of' the dominant legal system of property rights (what Kingwill *et al.* (2017) 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 recognised (Arko-Adjei, 2011: 38). By focusing attention on anti-eviction measures, democratic land administration and governance, gender equity in land allocation, and locally accepted evidence (Kingwill, Hornby, et al., 2017), land rights-holders may be protected from human rights abuses at the hands of traditional leaders acting under the authority of the State (Chanock, 1991, 2001; Claassens, 2008). 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 South Africans who live in extra-legal situations" (Kingwill, Hornby, et al., 2017: 390).[11]

d) Hybrid adaptation theory

Hybrid adaptation theory allows communities to decide "which rights are important and should be recorded" (Arko-Adjei, 2011: 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 (DLA, 1997). 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" (Royston et al., 2015: 4, 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 (Alcock & Hornby, 2004). Where such local practices are 'overwritten' by official structures, the pre-existing norms and practices may persist 'underneath' the official structures (Royston, 2017).

Royston (*Ibid.*) refers to the complexity of land tenure, power relations, and social responsibilities as an 'entanglement' that confounds attempts at formalisation. In property 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,

[11] It must be highlighted that recording of complex relationships rather than registration of individual rights-holders, and plans rather than approved survey diagrams, are entirely possible instruments for improving tenure security – the latter is deliverable by the current surveying community (the 'edifice' does not need to stand in the way but can stand alongside and even enable).

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" (Royston, 2017: 232). Even in situations of land reform that resulted in registered titles, customary norms may persist (Bruce, Migot-Adholla & Atherton, 1994). 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" (Bruce, 1993a: 41, see also Kingwill, 2011).

Hence, Bruce, Migot-Adholla & Atherton (1994) suggest a shift away from systematic titling programmes 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 achieve greater tenure security (Hornby et al., 2017).

e) 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 programmes 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" (Arko-Adjei, 2011: 37). The provision of registered titles is not entirely rejected but is instead considered to be a long-term objective (*Ibid.*). 'In the meantime' (Royston, 2013), extra-legal, off-register tenure practices may be made visible through recognition rather than replacement (Hornby et al., 2017). 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" (Platteau, 1996: 75).

On the replacement side, proponents advocate for registered title but incrementally and in response to demand (rather than spontaneously). Bruce, Migot-Adholla & Atherton (1994) 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.* (2015) 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) (Augustinus, Lemmen & van Oosterom, 2006; Lemmen, 2010). 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" (Royston, 2013: 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 (Arko-Adjei, 2011). Royston (2013) cautions that such a solution might last a lifetime.

f) 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."* (Bruce, 1993a: 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" (Platteau, 1996: 29). This idea is illustrated in the continuum of land rights (UN-HABITAT, IIRR & GLTN, 2012) – see Figure 4-1 – 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 (Platteau, 2000) – goals that are often shared by cadastral innovators and land administrators (van der Molen, 2003; Bennett *et al.*, 2010; Jones & Land, 2012).

Platteau (1996; 2000) clearly shows that these aims are not always achieved, especially with reference to sub-Saharan Africa (see e.g. Akrofi, 2013; Barry & Danso, 2014). 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" (1996: 73, emphasis added) and calls such an assumption "naïve". Whittal (2014: 17) concurs: "The assumptions underlying evolutionary land rights thinking require critique [because] change is not always unidirectional" 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 (Platteau, 1996; Arko-Adjei, 2011). However, it fails at the point of formalisation and registration of private property rights in the context of sub-Saharan Africa (Platteau, 2000). In some contexts, land registration has led to improved credit access, higher land values, increased investments in land, and higher output / income (Feder & Nishio, 1999). 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 (Roth, 1993; Feder & Nishio, 1999). 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 (Nkwae, 2006). 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.

g) Collective replacement theory

Collective replacement theory draws on socialist ideologies (Bruce, 1993a) and focuses on non-individualised outcomes of land tenure reform (Nkwae, 2006). Such 'African socialism' (Bruce, 1993a) aims to address social and economic inequality. Okoth-Ogendo (1993) describes two versions. The first is that of nationalisation of all land for the purposes of redistribution to beneficiaries in collectives via leasehold. This approach may characterise customary tenure systems wherein the State represents the successor to the tribe (Bruce, 1993a). A distortion of this approach was the South African Native Administration Act 38 of 1927 that gave the Governor-General draconian powers as the 'supreme chief' (Chanock, 2001; Claassens, 2008).

The second version focuses on improving production through collective farming villages, known as *Ujamaa* in Tanzania, and the *co-operative d'amanagement rural* in Benin (Okoth-Ogendo, 1993; Nkwae, 2006). The objectives of such schemes were:

1. Equitable distribution of resources;
2. Democratisation 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 (Lahiff, 2008). However, in South Africa, political and legislative resistance to subdivision of large farms and inadequate financial support to poor land reform beneficiaries has *forced* beneficiaries into collectives through pooling their limited resources. These collectives are termed Communal Property Institutions (CPIs), which includes trusts and Communal Property Associations (CPAs), and some of them comprise hundreds of households (*Ibid.*).

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 (Bruce, 1993a). Hence, most CPIs in South Africa have not met their statutory obligations (Lahiff, 2007). Likewise, the *Ujamaa* in Tanzania and similar collective schemes in Ethiopia (Bruce, 1993a) and Mozambique (Unruh, 1996, 2001; de Quadros, 2003) have not lived up to expectations. It appears that proponents of collective replacement theory draw from a communal paradigm (see Section 1.3.3) that assumes people will want to work and live together in communities and fails to recognise the individual rights within customary land systems. Bruce (*op. cit.*.: 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.

h) Systematic titling

De Soto (2000) 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) (Barry & Roux, 2012) 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 (Feder & Nishio, 1999; de Soto, 2000; Griffith-Charles, 2004; Steudler, Törhönen & Pieper, 2010).

De Soto's approach has been met with some criticism (Cousins *et al.*, 2005; Arko-Adjei, 2011):

- The formalisation process is costly, and the result is increased land values that are inaccessible to vulnerable groups and hence 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 (2007) 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 formalised 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 (*Ibid.*). 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 (Burns *et al.*, 2006). 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 (Deininger & Goyal, 2012).

Systematic land titling and registration programmes should only be adopted in situations where customary tenure is weak or absent (Quan, 2000; Nkwae, 2006), where land is becoming valuable due to urbanisation or population growth, and when land is being redistributed as part of a land reform programme (Bruce, Migot-Adholla & Atherton, 1994). But even under such circumstances, the arguments presented in this section strongly suggest the exercise of caution. Bruce (1993a) 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 programmes 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.

5.1.2 Understanding land and setting goals

The prevailing **attitude towards human rights and land rights** serves to reveal the underlying theory. Western, rights-based approaches tend towards individualisation which is realised in the formalisation of land ownership (Borras & Franco, 2010). By contrast, a broadly African view of human rights embraces a mixed communal and individual conception of land rights based on the *ubuntu* ideology (Mubangizi & Kaya, 2015). 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 (Figure 5-2). Conservative theory favours preservation of traditional forms of land administration, while replacement theories value more centralized, limited, and formal rules and procedures.

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 (Mitchell, Clarke & Baxter, 2008; Griffith-Charles & Sutherland, 2013). If it is accepted that titling is directly related to improved tenure security (Durand-Lasserve & Selod, 2007; Shipton, 2009; van Asperen, 2014), as per the replacement side of the theory continuum, then a measure of success may be the numbers of land parcels registered (see e.g. Deininger, Hilhorst & Songwe, 2014). Some researchers argue that titling *decreases* tenure security in certain circumstances (Feder & Nishio, 1999; Mitchell, Clarke & Baxter, 2008; Barry & Roux, 2013), as per the conservative side of the theory continuum. Such failure may be attributed to application of inappropriate theory for those contexts. A more appropriate approach may be one of the adaptation theories. The measures of success should hence be aligned directly with the goals as informed by the underlying theory.

The goals for land reform determine the conceptual end state**.** For ***significance***, this is linked to context-specific needs (**gap analysis**) informed by an understanding of the meaning of

landholding. All role-players should identify the differences between the current situation and the desired situation and from this formulate goals for the intervention. A successful intervention results in the closure of the gap between the initial state and the end state. This occurs when the goals for change are met. The context-specific citizens' and communities' needs inform goals as well as the states' obligations to initiate – see Figure 4-3. If these motivations for cadastral systems development are brought into alignment, ***success*** relates to ***significance***, which fosters ***sustainability***.

It is cautioned that the scenario painted above is utopian in its presentation of the participants being of one mind and goals as static and non-competing. There is likely a divergence of world views and conceptual understanding of the end state of cadastral systems development. Goals may be competing and even shifting (Whittal, 2008), which is typical of 'wicked' contexts (Barry & Augustinus, 2016). Getting to the end state therefore requires good leadership (Cousins, 2016), not only of the development process, but also from within each interest group – see Section 5.4.

5.2 UNDERSTANDING THE LAS CONTEXT

Table 5-2 Aspects and elements of the LAS context [12]

Aspects	Elements	Potential indicators
Land policy	Recognition and protection of existing land rights	Existing land rights defined, recognised, protected
	Class-conscious and gender-sensitive	Promoting marginalised people's land rights
	Improving productivity and livelihood	Improved agricultural productivity
Land governance	Active participation	Including all stakeholders from the outset
	Equitable access	Ensuring equitable, pro-poor access
	Transparency, clarity, simplicity	Enabling efficient and effective land administration
	Accountability and the rule of law	Institutions accountable, laws respected
	Appropriate technology	Fits context and capacity
Strategic level	Possibly changing land rights type	Identifying which rights are insecure / inappropriate and why
	Improving tenure security	Improving legitimacy, legality, and/or certainty
Implementation level	Land recording / registration mechanisms	Type: Deed / title / certificate / other Approach: systematic / sporadic, voluntary / compulsory
	Land tenure information system	Clearly defined standards, significant for context Integrated record of rights and land Land and rights clearly identified

As part of a country's national development plan, land policy forms the highest-level instrument for stating the strategies and objectives for the social, economic, and environmental use of land (Törhönen, 2004; Enemark, 2005) – see Figure 1-4. Below this are the strategic (management) and implementation (operational) levels, followed by the review process (Steudler, 2004; Yilmaz, Çağdaş & Demir, 2015) – see Section 5.4.2. From new policy usually flows new legislation and

[12] Throughout this and the following tables, including those in chapters 8 and 9, references to legal and administrative processes include those relevant to African customary laws and institutions.

hence practice. Customary needs, norms, and values (especially as would qualify as living customary law) should form part of the process of policy and legislation formulation. Without active participation, there is likely to be a disconnect between policy and needs, and hence ***significance*** of outcomes for the community will suffer, ***success*** will be inappropriately measured, and ***sustainability*** will be unlikely.

5.2.1 Land policy

In the light of the HRBA, the addition of the 'pro-poor' prefix adjusts the focus of land policy to "protect and advance the land access and property interest of … poor people' (Borras & Franco, 2010: 10). Hence a land policy that makes these interests the subject of a national development plan is intentionally pro-poor. But it is not sufficient for a land policy to be labelled as 'pro-poor'. It must be pro-poor in process and outcomes (Franco, 2008; Borras & Franco, 2010). Achieving pro-poor land policy hence requires the **recognition and protection of existing (customary) land rights** in a way that is **class-conscious and gender-sensitive** while **improving productivity and livelihood** (Borras & Franco, 2010). These three elements are discussed below.

Pro-poor land policies should promote the protection of poor people's existing land rights. This involves both defining the existing rights on paper and recognising these rights in reality (Borras & Franco, 2010), and constitutes the crux of delivering ***significant*** land tenure to recipients. A pro-poor land policy recognises that the interests of the poor are plural and that 'the poor' by no means refers to a homogeneous group. This distinction is notably absent in de Soto (2000) – see von Benda-Beckmann (2003) and Cousins *et al.* (2005). Gender and class differences exist in customary settings and pro-poor land policies need to consider the differential impact of the land policy among the poor (Berry, 2009; Borras & Franco, 2010). They should also promote, not undermine, marginalised groups' (including women's) distinct land rights. Likewise, pro-poor land policies should promote the distinct land rights of ethnic, racial, and caste-related groupings of people to their territorial claims, particularly in settings of ethnic diversity. To this end, land policies should aim for transparency, inclusivity, accessibility, and equity – see below regarding land governance (Zevenbergen *et al.*, 2013). They should also contribute to more intensive land and labour use. Land reform policy should not decrease agricultural productivity. Rather, for ***success*** and ***sustainability***, the poor should be supported to acquire skills and resources to effectively utilise the land (Amanor, 2012).

5.2.2 Land governance

Trust is built when institutions govern well, promoting use of the LAS to transact in land. This fosters ***sustainability*** and is also important for ***success***. Good land governance promotes trust and tenure security, and hinders bribery and corruption (Akrofi, 2013). The following principles are emphasised, both during the process of cadastral system development and for land administration thereafter (drawing from Arko-Adjei, 2011; and Hull & Whittal, 2013):

- **Active participation** by all land rights-holders in decisions pertaining to cadastral systems development from the outset, ensuring **equitable, pro-poor access** to land and land information for all potential land rights-holders.
- **Transparency, clarity, and simplicity** regarding decision-making processes and customary laws, including the procedure for land allocation and transactions, to enable efficient and effective land administration. In customary contexts, clarity is also required for ascertaining who has what rights (possibly family rights, possibly overlapping) to which land (possibly with variable boundaries) and when (if these are temporal). This may require clarification of

the ambiguities surrounding authority and legality due to colonial or apartheid interference into pre-colonial customary land administration (Bruce, 1993a; Cousins, 2002).

- Institutions, both social and public, must be held **accountable** and follow the **rule of law**, as per their obligation to protect land rights-holders' interests. For ***significance***, this means that law needs to be broadly defined to include statutory, customary, or religious laws as observed by land rights-holders (von Benda-Beckmann, 2001), preferably subject to the constitution as ultimate legal authority to avoid conflict (Bruce & Knox, 2009; Knight, 2010).

Transparency and accountability are especially important for safeguarding against power plays by elites (Cousins, 2002). The **use of technology** is helpful in this regard and is noted by Hull and Whittal (2013) to be a means of promoting good governance in cadastral systems development. As cautioned in Section 5.3.2 below, the adoption of technology should be ***significant*** for the context. Byamugisha (2013) advocates for low-technology and simple procedures, such as the STDM (Lemmen, 2010), but these approaches may still reflect a western approach and not reach far enough in accommodating realities of African customary tenure.

5.2.3 Strategic level

A primary motivation for cadastral systems development is the **improvement of tenure security** (Hull & Whittal, 2016). This is realised at the strategic (management) level of LAS. **Changing land rights** along the land rights continuum (towards more formalisation) – see Figure 4-1 – is seen by some as a primary means of improving tenure security. Rejecting the formalisation approach for all cases, Whittal (2014) highlights that improved tenure security may arise independently of the specific land rights regime, even when land rights are less formal.

Per hybrid adaptation theory and to foster ***significance***, any change in land rights type should be voluntary and at the land rights-holder's initiative or in consultation and cooperation with the relevant land authorities (Arko-Adjei, 2011; van Asperen, 2014). If improved tenure security is the desired outcome, then Whittal's (2014) triple indicators of tenure security should be assessed for potential improvement before embarking on changing land rights type in the hope that improved security will result. Important considerations are:

- What rights in land are currently held, which of these are insecure, and why (Bruce, 1993a; Alden Wily, 2004)?
- Can legitimacy, legality and/or certainty be improved with the existing land rights type (Whittal, 2014)?
- Is the land rights type in use inappropriate indicating the need for changing the rights type, in the eyes of which role-players and why (cf. Quan, 2000)?

It is worth highlighting again the point made in Section 1.3.4: improvements to the cadastral system *may* have an impact on rights types, but not necessarily. As discussed above, some researchers see formalisation as the dominant means of improving tenure security, whereas others assert that existing, customary forms of tenure already provide sufficient tenure security. Cadastral systems development in the latter context will focus on improving tenure security without changing land rights types.

5.2.4 Implementation level

If pro-poor goals have been set at the policy level, and suitable objectives laid out at the strategic level, the realisation of these broader aims should follow at the implementation level. Elements of the implementation level are the **land recording mechanism**, and the **LTIS**.

The (formal) registration of land rights is typically either deed- or title-based. Comparison of title registration systems against deeds-based systems in developing contexts indicates a consensus

that title registration systems provide greater tenure security, but at greater cost, and that deeds-based systems are more practical for registration of land rights (Törhönen, 2004; Johnson, 2008; Deininger & Feder, 2009). However, there is a need for alternative, unconventional, innovative approaches based on local practice (van Asperen, 2014), especially in customary settings, to ensure ***significance*** (see e.g. Lemmen, 2010; Zevenbergen et al., 2013). This is because, in such contexts, land access and control are socially derived while dispute resolution usually relies on negotiation. Recognition of off-register, customary land rights should thus involve mediation of these social processes (Cousins, 2002).

The process of registration or recording may be systematic or sporadic, voluntary or compulsory. Zevenbergen *et al.* (2013) suggest an initially sporadic approach until there is sufficient support from the community for a systematic approach to be implemented. Van Asperen (2014) proposes a group approach, whereby the rights of well-defined and cohesive groups may be recorded at the same time (see also Byamugisha, 2013), following collective replacement theory. For ***sustainability***, transactions in land that take place after recordal / registration need to be reported, and where necessary, registered, else the LAS quickly becomes outdated and irrelevant (Cotula, Toulmin & Hesse, 2004; Kingwill, 2017).

For ***successful*** LAS, whether related to registered or off-register land rights, it is important to have clearly defined, acknowledged and accepted standards for location and demarcation (where appropriate) of land rights, land recordal / registration, dispute/conflict resolution, and land-use planning and control (Steudler, 2004; Arko-Adjei, 2011). All adopted standards should be ***significant*** for the context (Steudler, 2004; Enemark, McLaren & Lemmen, 2015). Thus, the benefits of technology adoption and accuracy specifications should be evaluated against their cost and fitness for purpose (Bandeira, Sumpsi & Falconi, 2010; Arko-Adjei, 2011; Ali, 2013; Zevenbergen *et al.*, 2013). Where the record of the location of land rights requires measurement by a surveyor (whether professional or 'barefoot'), the techniques of surveying are not limited to high precision, costly solutions for provision of location and extent of landholding (see Section 1.3.4). Many different types of technology have been tested for speed of surveying at reduced cost, including community-based solutions requiring no more than a GPS-enabled smartphone (Enemark, McLaren & Lemmen, 2015).

Where possible, it is recommended that the cadastre (spatial record) and land rights record / registry be integrated into a single cadastral system for efficiency and to avoid unnecessary duplication of information (Steudler, 2004; Bandeira, Sumpsi & Falconi, 2010; Hull & Whittal, 2013). Plots or allocations (which could have fluid or undefined boundaries, could vary with time, or could relate to overlapping rights and family/communal rather than individual rights) should be uniquely identified to faithfully link the land rights-holders to the land and associated RRRs (Bandeira, Sumpsi & Falconi, 2010). Such is the practice reported in Matolweni village in the Eastern Cape Province of South Africa, where both the traditional and local authorities (Department of Agriculture) kept spatial records of land allocations (Hull et al., 2016). As highlighted in Section 1.3.4, plots need not be geometrically defined in the cadastre, but a continuum of accuracies (from text only to point, line, polygon, and polyhedron) may be drawn on to record the spatial location of the land right.

5.3 Responsive Change Drivers

Change does not happen in a vacuum, and Table 5-3 identifies some of the possible drivers of change processes related to cadastral systems development. Drivers are here called *responsive* because needs arise out of a dynamic socio-cultural context: as the context changes, so the drivers

should adapt too. Understanding the drivers of change is important for identifying the goals of development.

Table 5-3 Aspects and elements of Responsive Change Drivers

Aspects	Elements	Potential indicators
Demand	Economic	Land markets, taxation where appropriate, affordability of LAS
	Political	Political will
	Social	Improved well-being Improved tenure security Poverty reduction
	Legal	Addressing legislative deficiencies
	Administrative	Improving LAS
	Environmental	Addressing climate change and environmental management
Supply	New technology	Adopting appropriate technology
	New theories or methods	Identifying what should be recorded and why
	New policy	Addressing land rights-holders' needs

5.3.1 Demand-based drivers

The drivers of change relate to supply and demand (Conning & Deb, 2007). Demand-related drivers refer to internal or external issues (Emerson, Nabatchi & Balogh, 2012) that drive the need for change in the cadastral system. External issues relate to pressures outside the system boundaries. Pressures arise from increased population growth and urbanisation (**socio-economic**), climate-change response and environmental management (**environmental**). These pressures drive the demand for proper planning and administration of settlements (**political, legal and administrative**) (Burns *et al.*, 2006; Bennett *et al.*, 2010), requiring development of the cadastre. Changes in land policy, driven by **political** will, can also demand development of a cadastral system (Byamugisha, 2013). For ***significance***, there should be a balance between pressures driven by the state (top-down) and arising from contextual needs (bottom-up) – see Figure 4-3.

Internal issues may be deficiencies in the current system. Deficiencies relate to land markets, taxation, affordability (**economic**), functioning of LAS (**administrative**), well-being and uncertainty (**socio-economic, legal and political**). Per replacement theory, a well-functioning land market is desirable (Griffith-Charles & Sutherland, 2013). This, and land taxation, were the initial reasons for developing a LAS (Williamson & Ting, 2001; Steudler, 2004; Williamson *et al.*, 2010; Yilmaz, Çağdaş & Demir, 2015). Increased land market activity is an indicator for measuring success if an active land market is the goal of cadastral systems development (Mitchell, Clarke & Baxter, 2008). In customary settings, improved land market and land taxation have less relevance. However, there are forms of land-based revenue generation even in these settings. In many customary settings of South Africa, local chiefs require compensation for land allocations (Alcock & Hornby, 2004; Hull *et al.*, 2016) which can play a role for development of the cadastral system as long as allocation stays in the hands of the chief and the chief operates in the best interests of the community. It could have the opposite effect if cadastral development threatens this source of income. Such has been Zulu King Zwelithini's response to debates on land expropriation currently underway in South Africa (Nicolson, 2018).

Cadastral systems development may be driven by a demand for affordability (Törhönen, 2004; Deininger & Feder, 2009; Bandeira, Sumpsi & Falconi, 2010; Arko-Adjei, 2011; Zevenbergen *et al.*, 2013). High costs of formal land transactions may discourage continued registration usage,

leading to the proliferation of off-register transactions (Barry & Roux, 2012, 2013). Increasing affordability hence links with ***sustainability***. LAS may need to be improved to address contextually relevant shortcomings (Chimhamhiwa *et al.*, 2009; Arko-Adjei, 2011; Akingbade *et al.*, 2012). Improving the affordability and efficiency of LAS may improve their ***success*** and ***sustainability***.

Mitchell, Clarke & Baxter (2008: 470) maintain that the "purpose of land administration projects should be conceived as [a] means to improved well-being." This is linked to poverty reduction (Mitchell, Clarke & Baxter, 2008; Griffith-Charles & Sutherland, 2013; van Asperen, 2014; Yilmaz, Çağdaş & Demir, 2015) and improved tenure security: Enemark, Hvingel and Galland (2014) found that, without secure tenure, residents in informal settlements face the constant threat of eviction. Tenure security is enhanced by improving legality, legitimacy, and certainty (Whittal, 2014). One aspect of uncertainty is related to 'wicked' societal problems (Emerson, Nabatchi & Balogh, 2012). Barry & Fourie (2002) assert that cadastral systems may be used in 'wicked' contexts. Uncertainty can drive groups to collaborate towards the goal of reducing uncertainty, which in turn fosters interdependence as groups realise that they cannot resolve certain problems on their own (Emerson, Nabatchi & Balogh, 2012). Improving well-being and working collaboratively towards reducing uncertainty fosters ***significance***.

5.3.2 Supply-based drivers

Regarding supply as a driver for development (Conning & Deb, 2007), technological advances create new ways of problem solving but may pose new threats. **New technology** enables LTIS and provides opportunities for meeting the goals of good governance (Hull & Whittal, 2013) – see Section 5.2.2. While new technology can be a driver for change (Chimhamhiwa *et al.*, 2009; Borzacchiello & Craglia, 2012), it is not a panacea for current deficiencies (Burns, 2006; Akingbade *et al.*, 2012; Enemark, Hvingel & Galland, 2014; Furuholt, Wahid & Sæbø, 2015). Using new technologies only leads to ***success, sustainability*** and ***significance*** in contexts where the users have the capacity to adapt to the change (Whittal & Barry, 2006).

New theories or methods may also supply new opportunities for cadastral systems development. While technical developments focus on how to visualise and record data, theoretical developments concern what data should be visualised or recorded and why (Griffith-Charles & Sutherland, 2013). Where the answers to these questions relate to land rights-holders' needs, ***significance*** is assured.

New land policy is closely followed by legislative changes for policy initiatives to be enacted in practice – see Section 5.2.1. In South Africa, the first democratic government made land policy a top priority and new legislation drove the land reform process (Groenewald, 2003). This was, and still is, a supply driver for change in the cadastral system. As above, if new policies and legislation address land rights-holders' needs, ***significance*** is assured, leading to ***success*** and ***sustainability***.

5.4 The Change Process

Table 5-4 lists the aspects and elements of the change process. Again, context should be considered first in order to align the process of change with the context-specific requirements of land rights-holders. These requirements arise from both the historical and current context. The other aspects of the change process are 'getting to the end state', including elements that describe *how* change is implemented, and 'working together', including elements of collaboration and partnership.

Table 5-4 Aspects and elements of the Change Process

Aspects	Elements	Potential indicators
Community / country context	Historical background	Actively engaging legacies of the past
	Current context	Identifying land rights and tenure systems Identifying capacity issues Embracing adaptability and flexibility
Getting to the end state	Good leadership	Committed, unbiased, impartial, accepted Having realistic expectations, vision and faith
	Build on existing practice	Incorporating local knowledge and institutions Avoiding organisational multiplicity
	Time to completion	Allowing sufficient time
	Implementing change	Using satisficing and incremental approaches Using pilot projects
Working together	Effective, sustainable engagement	Including all stakeholders from the outset Addressing power dynamics Allowing all voices to be heard
	Handling equity	Managing cultural differences Building on existing practices
	Resolving disputes	Using legitimate methods and institutions

5.4.1 Country / community context

The country / community context for change includes the **historical background** as well as the **current context**. Implementation of ahistorical land policies may incur problems of social conflict and political instability while undermining the legitimate claims of the poor (Borras & Franco 2010). Simple awareness and acknowledgement of the historical background (Steudler, 2004) is insufficient. Cadastral systems development also needs to actively engage the imbalances of the past (Nkwae, 2006; Nxumalo & Whittal, 2013; van Asperen, 2014) while ensuring ***sustainability*** for future development.

The current context includes the full range of different land rights and tenure systems. The context for cadastral systems development may relate specifically to one or more of these rights and tenure types, especially in cases of multi-layered tenure as are evidenced in developing contexts (Törhönen, 2004; van Asperen, 2014; Hull *et al.*, 2016). Land may exist outside of the formal land tenure system (Enemark, Hvingel & Galland, 2014) and hybrid forms of tenure may seek to mediate the boundaries between registered, customary (official or living) and off-register tenure forms (Cotula, Toulmin & Hesse, 2004; Cotula, 2007; Knight, 2010; Freudenberger *et al.*, 2013). The identification, acknowledgement, respect, and support of all tenure systems, as suitable for their given context, is therefore important for ***significance*** (Törhönen, 2004; Deininger & Feder, 2009; Arko-Adjei, 2011; van Asperen, 2014).

Van Asperen (2014) identifies a lack of institutional and community capacity as a reason for the failure of LAS reform in sub-Saharan Africa (see also Dodero, 2010). If institutions lack capacity for upgrading then the development process may eventually fail (Enemark & van der Molen, 2008; Arko-Adjei, 2011). Also, the land rights-holders' ability to participate in, influence, and adapt to improvements in the cadastral system should be considered. For ***success*** and ***sustainability***, education and effective communication are important for ensuring that all role-players are included in the process (Enemark & van der Molen, 2008; Ali, 2013; Agunbiade, Rajabifard & Bennett, 2014). This is especially important with regards to appropriate information and communication technology adoption (Burns, 2006; Whittal, 2008; Borras & Franco, 2010; Akingbade *et al.*, 2012; Enemark, Hvingel & Galland, 2014).

If an excellent LAS remains static in time, it may eventually cease to be relevant and fail (Enemark, 2005; Arko-Adjei, 2011). ***Sustainability*** is linked to constant adaptation to a changing tenure environment and thence ongoing matching to the country or community context (Williamson *et al.*, 2010; Zevenbergen *et al.*, 2013). Arko-Adjei (2011) identifies two aspects of adaptation: adaptability to tenure dynamics, and adaptability to institutional dynamics. Tenure dynamics may arise in response to changes in legislation or socio-cultural context (*Ibid.*). These changes relate to movement along the triple vertical axes of Whittal's (2014) model of land rights, *vis* legality, legitimacy, and certainty. In response to such change, there is a need for the cadastral system to be responsive to local conditions and local norms and processes (institutional dynamics), avoiding a standardised approach (Deininger & Feder, 2009) and embracing ***significance***.

5.4.2 Getting to the end state

Per the rational-comprehensive model (RCM) of planning (Hobbs & Doling, 1981), the planning cycle can be broken down into several stages (see Figure 5-3). First is the setting of goals, followed by information-gathering. The generation of alternative plans, and the evaluation of these alternatives to determine the optimum strategy, follow. Implementation of the chosen strategy is followed by monitoring to ensure that the plan is ***successful***. The cyclical nature of the model stems from a systems perspective, wherein it is recognised that the outcomes of the process influence the environment, which in turn influences the goals. This is alluded to in Figure 4-3: outcomes and review influence the context, which influences the (responsive) drivers of development. In other words, the process of change plays a role in reconstructing the context.

The RCM is criticised (*Ibid.*) for being too idealistic. The idea is that the planner should examine *every possible alternative* approach to realising the goals of development, evaluate them all, and hence derive an optimum solution. This is impractical – time and cost are but two of the limiting factors. It is also criticised (Dodero, 2010) for being yet another example of the imposition of Western principles in developing contexts, at the expense of local knowledge, which challenges ***significance***. Dodero links the RCM with replacement theory.

Alternatives are the satisficing and incrementalism approaches (Hobbs & Doling, 1981). The incrementalism approach focuses on small, incremental changes rather than on the achievement of future goals, as per adaptation theory. Adopting a phased approach to land reform (Burns *et al.*, 2006) is an example. In the satisficing approach, rather than seeking the *optimum* approach, developers and planners settle for a *satisfactory* approach. The concepts of fit-for-purpose land administration (Enemark, McLaren & Lemmen, 2015) and good-enough governance (Grindle, 2004) resonate with the satisficing approach.

The fit-for-purpose concept has recently become topical, especially following recent publications on fit-for-purpose land administration (Enemark et al., 2014a; Enemark, McLaren & Lemmen, 2015), but it is acknowledged that this is not a new concept. Steudler (2004) used the indicator 'suitable to circumstances', which is synonymous. Barry (2018) shows that similar terms have been in use since the late 1800's and early 1900's. He also cautions against adopting a fit-for-purpose approach derived from the recent publications as if these were 'how-to' manuals for land administration reform. Such an approach runs the risk of insensitivity to context and upsetting the delicate balance of "power relations, social relations and social norms in the community that is supposed to benefit" (*Ibid.*: 383) – see the following section for an elaboration. Hence, he suggests that fit-for-purpose approaches should include both the bottom-up and top-down aspects of democratic land governance, including monitoring, evaluation and support. These refinements of the RCM are here proposed as viable means of the change process.

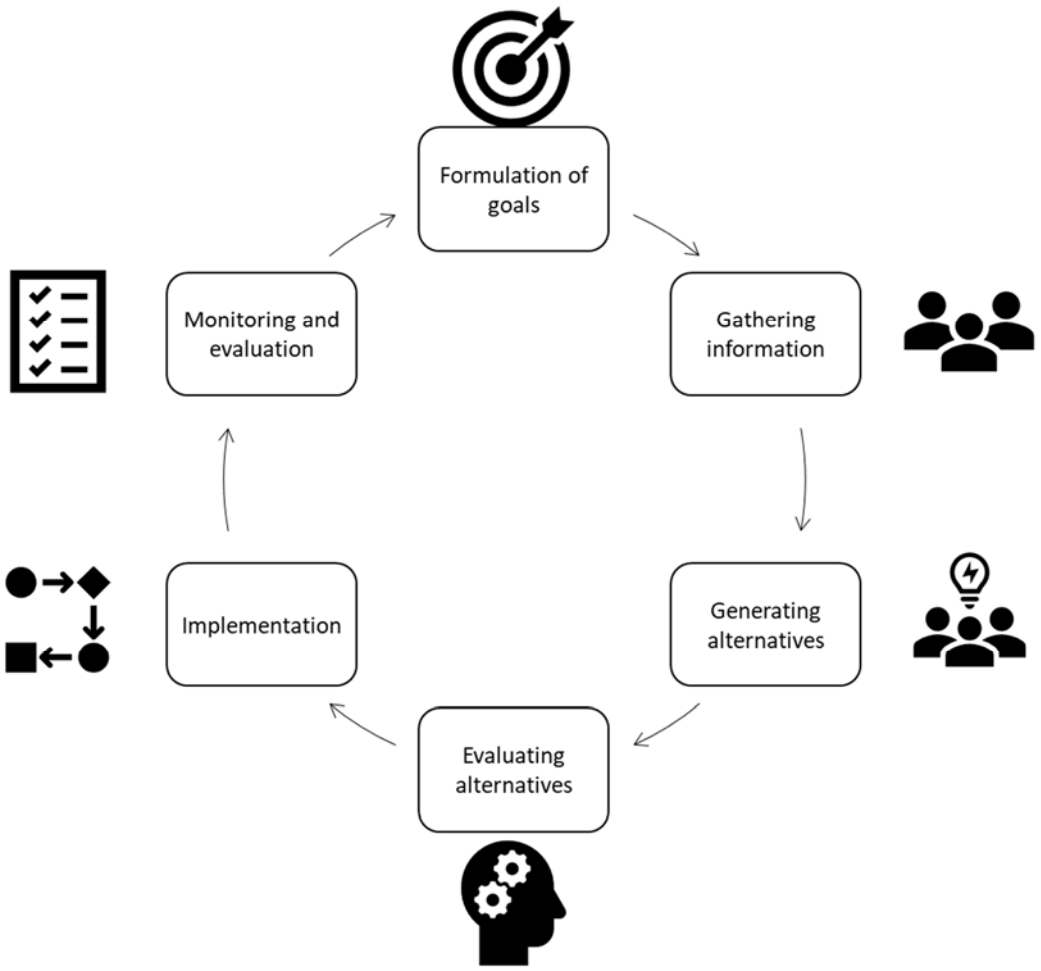

Figure 5-3 The rational-comprehensive model of planning.

In practice, before any change is undertaken, it is usual for the participants to identify and agree on the problems with the current situation, and to have some conceptual idea of what getting to the end state should look like. The presence and commitment of a **strong leader** may initiate and ***sustain*** collaboration by different parties towards a common goal, especially when goals are competing and contradictory. Strong leaders should be committed to the process of development and be unbiased and impartial with respect to the outcomes and preferences of participants (Akrofi, 2013). For ***success*** and ***sustainability***, they should have sufficient vision and faith in the process to overcome resistance to change. Such vision should be tempered by realistic expectations.

But such 'sinless Saviours' (cf. Mutua, 2001) do not exist in the real world (Akrofi, 2013). Leaders may be corrupt and driven by personal desires that are not shared by the community (Amanor, 2008). In the real world, the *ubuntu* ideology is often not practised (Kasanga & Kotey, 2001; Akrofi, 2013) – instead corruption is the norm (see e.g. Igboin, 2016). In the context of communal land rights, leadership may be contested (Comaroff, 1978) and the ***success*** of a development initiative may rest on the community's acceptance or rejection of those in leadership roles, whether customarily or legally defined (Akrofi, 2013; Zevenbergen *et al.*, 2013). Development programmes should be stalled where there are no good leaders and the intervention should focus first on identifying and raising up community-approved leadership.

Cadastral systems development that **builds on existing practice** (Borras & Franco, 2010; Zevenbergen *et al.*, 2013), incorporating local, indigenous knowledge and local institutional

arrangements (***significance***) for accessing land, allocating land rights, and resolving disputes (Burns *et al.*, 2006; Williamson *et al.*, 2010; Fox, 2015), has a greater likelihood of ***success*** and ***sustainability*** and may also avoid organisational multiplicity (Törhönen, 2004; van Leeuwen, 2014; Hull *et al.*, 2016). Organisational multiplicity occurs when formal (e.g. municipal) organisations have different, or even contradicting, rules for land administration to less formal (e.g. customary) organisations, leading to decreased tenure security (Törhönen, 2004).

Getting to the end state also takes **time**. It is important that sufficient time is allowed for the realisation of the goals of development (Williamson, 2000; Byamugisha, 2013). Burns *et al.* (2006) recognise that land administration reform (which includes cadastral systems development) may take anything from less than three years to more than 15 years to complete. Barry (2018) notes that it may take a generation (20 years) before people living in customary contexts adopt new LAS. Attention is drawn to the apparent disparity between these typical timeframes and the frequency ranges suggested by Williamson (2000) in his model of social analysis (Table 5-5). This model comprises four levels and the definition and enforcement of property rights are important elements at the second level of analysis, while governance issues are emphasised at the third level. The time frames for reform at these levels are in the order of tens to hundreds of years (level two) and from one to ten years (level three).

Table 5-5 Economics of institutions (after Williamson, 2000)

	Level	Change rate	Description
1	Social embeddedness	100 to 1 000 yrs.[13]	Norms, customs, traditions, culture, religion
2	Institutional environment	10 to 100 yrs.	Rules, constitutions, legislation, **property rights**
3	Governance	1 to 10 yrs.	Contractual relations
4	Neoclassical analysis	continuous	Price adjustments, resource allocation

Many land administration reform projects have failed through not recognising the complexity of the task (Royston, 2017) and through trying to do too much too quickly without recognising these economic and social timeframes (Burns *et al.*, 2006). Long timeframes can be a challenge for governments operating within four- to five-year election cycles, as well as donors who need to see results quickly as a justification for their investments. Hence, **implementing change** should proceed along satisficing and incremental (phased) approaches. There are no quick fixes when it comes to land administration reform (*Ibid.*), but the developed system does not have to be perfect; it only has to be good enough (de Zeeuw & Lemmen, 2015) for the needs of the time, expecting that incremental change will be ongoing. In the same vein, the importance of using pilot projects is well-documented (Burns, 2006), and a phased approach sits well with proponents of incremental adaptation theory. For ***success, sustainability*** and ***significance***, the methods and instruments used for implementing change should be contextually relevant and sensitive.

5.4.3 Working together

Participation is important from the outset in understanding differences in the worldviews of cadastral system developers, the state and land rights-holders. Collaborative governance (Emerson, Nabatchi & Balogh, 2012) emphasises that from the start all stakeholders should be working together to agree on the end state (the resulting cadastral system, incorporating the nuances described in Section 1.3.4), the context-specific indicators used to measure achievement, the processes of implementation to get there, and whether the intended consequences of

[13] In the current era of globalisation and rapid advances in technology, this timeframe could be contested, and change may now be happening faster than was identified two decades ago.

improved community well-being are realized. Achieving a high level of participation (Arnstein, 1969) is not easily accomplished and so is expanded here.

Effective and *sustainable* engagement begins with "getting the 'right' participants to the table" (Emerson, Nabatchi & Balogh, 2012: 11). This is an important starting point because it ensures that all relevant voices are heard, and that development does not promote the interests of some over others. The 'right' participants include all stakeholders in the land under question. Such 'co-management' (Zevenbergen *et al.*, 2013; van Asperen, 2014) can empower communities to take part in decision-making processes that impact their lives (Franco, 2008) and represents top-down / bottom-up interaction as depicted in Figure 4-3. For example, van Asperen (2014) and van Leeuwen (2014) both attest to the effectiveness of local land committees in facilitating customary land administration. Such an approach promotes democratic land governance because local land committees may represent the bottom-up aspect implementing the top-down goals of land policy. Committee members should be selected from and by the community (Arko-Adjei, 2011) to promote public participation and ownership of the development process (Filmer-Wilson, 2005). This facilitates ***significance*** for participants, with fewer unintended negative consequences (Emerson, Nabatchi & Balogh, 2012), leading to greater ***sustainability***.

Due to differential power dynamics, all participating stakeholders are unlikely to have equal power to participate at the same level (Peters, 2004). Engaging all stakeholders should include empowering marginalised participants (e.g. women and orphans) such that all relevant voices *may* be heard (Cobbah, 1987). Different opinions may be weighed against each other and some may be found to be more urgent, realistic, or achievable than others. But in all cases the speaker deserves to be heard because the human rights principle of equity declares that all opinions, or needs for expression, have equal voice. Socio-cultural sensitivities may influence the degree to which all voices *can* be heard, especially where human rights are not given prominence. Care needs to be taken to balance cultural norms against expectations stemming from a HRBA – see **handling equity** below.

All land rights-holders should be part of the change process and engaged from the outset – it is not enough for them to simply be consulted. For those whose voice cannot be directly heard (including the unborn and the deceased, considering inter-generational interests in land from a broadly African view of human and land rights), adequate representation needs to be sought – their rights should not be ignored (Akrofi, 2013). Inexperience, poverty, communication barriers, education barriers, etc. are no excuse for the implementers of change to accept anything but the highest level of participation, which is citizen power (Arnstein, 1969).

Practically, getting all the 'right' stakeholders to participate in the development, and ***sustain*** participation for as long as necessary, is not easy. It requires a strategy for protecting and promoting the right to participate. Clear and effective dissemination of information, in local languages (Uvin, 2007), is critical for initial engagement as well as continued motivation (Johnson, 2008). Participants should be reminded of the mutually-agreed benefits of the process (Burns, 2006). Due regard also needs to be given to the cost of participation, which may not only be economic. Participants may need to leave productive fields or family to engage in participatory processes. Opponents to development may face the cost of ostracization. Cost should thus be broadly defined and should not be a deterrent. And neither should concern over safety. The safety and security of those who choose to opt in or out of the process should be promoted.

From a human rights perspective, all stakeholders are viewed on an equal footing. Land, and processes involving land, should be accessible to all community members without discrimination (Arko-Adjei, 2011). But holding human rights in tension may mean **handling equity** differently, because such thinking may meet with opposition in some (non-Western) socio-cultural contexts.

Care should be taken not to allow disputes over equity to break up the entire collaborative and development process. There are many cultures in the world in which some people – due to their position in society, gender, wealth, genetics, lineage, or some other inherent or acquired trait – are afforded more respect and more rights than others. Cadastral systems developments that challenge such entrenched cultural norms are likely to fail (Borras & Franco, 2010; van Asperen, 2014).

For ***significance***, the cadastral system developer's 'need' to ensure equity in the development process should be weighed against the community's cultural norms and their 'right' to treat people differently. Handling equity means acknowledging "the moral equivalency of all cultures" (Mutua, 2001: 207), i.e. not promoting one cultural ideal (e.g. treating everyone the same) as superior to any other (e.g. having different rules for men and women). Development processes should manage cultural differences proactively and build on existing practice (Borras & Franco, 2010; Zevenbergen *et al.*, 2013) without judgement or prejudice. The principle is that it may be better to overlook perceived injustices to facilitate the development process and achieve a greater good in the end. This is what it means to hold human rights in tension. Trying to change practice without addressing the cultural or religious root of such practices is putting the cart before the horse. Perceived injustices are better addressed through cultural and/or religious reform. This is the ambit of social workers, missionaries and others.

Conflict during the process of change can scupper cadastral systems development. Cousins (2002) notes that conflicts over land rights are inevitable during processes of change and hence should not be ignored or treated as an exception. Attempts to change the nature of land rights, whether initiated from the top-down or bottom-up, can themselves cause conflicts to emerge as has happened in Mozambique (Schreiber, 2017) – see Section 8.1.3. Lund (2002: 11) explains that this is because:

> *"the issue of land is … one among a range of issues over which political and legal struggles intertwine, where local powers and less localised power structures interact and where political and cultural symbols of power and authority are brought into play."*

This 'entanglement' (Royston, 2017) of property, power, authority, culture, and politics means that it is not possible to develop the cadastral system without upsetting associated social, political and cultural relations. Hence **dispute resolution** mechanisms should be carefully formulated to include negotiation and arbitration arrangements that are acceptable, appropriate, legal (formal or African customary law) and supported by all relevant stakeholders (Cousins, 2002; Zevenbergen et al., 2013). For ***significance***, they should be linked to knowledgeable and legitimate organisations (Arko-Adjei, 2011). Knowledgeable organisations are those that know and understand the relevant land rights and tenure system. These organisations should be acknowledged as legitimate by all stakeholders (Byamugisha, 2013). Where local communities already have dispute resolution mechanisms in place, these should be embraced and incorporated into the new system as much as possible (Zevenbergen *et al.*, 2013) as long as they are not illegal. Dispute resolution mechanisms should also be clear and simple, accessible, transparent, and affordable (Arko-Adjei, 2011). In addition, they should be efficient to ensure that land-related disputes are settled quickly (Ali, 2013).

5.5 Review Process

The review process is an important part of the development cycle, as evidenced in the RCM (Figure 5-3). Table 5-6 lists the aspects and elements to be considered under the review process,

beginning with the rationale for review, what is being reviewed, the timing of reviews, and who does the reviewing.

Table 5-6 Aspects and elements of the Review Process

Aspects	Elements	Potential indicators
Why	Ensuring success, sustainability, and significance	Assessing achievement of goals Assessing impact of intervention Assessing sustainability of development
What	Outcomes	Using context-specific indicators
	Impact	Assessing well-being
When	Well-defined intervals Throughout development process	Built-in monitoring mechanisms
Who	External reviewers	Independent, knowledgeable, skilled
	State organisations	Giving feedback on LAS
	Community	Giving feedback on impact

5.5.1 Why review?

Without adequate review, it is unclear whether the goals of development have been achieved and hence ***success*** may not be measured. The impact of development will also be uncertain, leaving ***significance*** unknown. Acknowledging that cadastral systems development happens in dynamic contexts, without review it is not possible to adapt drivers to changing contexts, which impacts on ***sustainability***.

5.5.2 What is reviewed?

To determine the ***success*** of the intervention, **outcomes** are evaluated against suitably defined, contextually appropriate indicators to see whether the objectives are met (Steudler, 2004). Comparing outcomes against land rights-holders' needs is a measure of the ***significance*** of the intervention. Primarily, the goals of development should be the focus of the review process because attainment of goals is the primary measure of ***success***. Any identified shortfalls will become drivers of further change (Akingbade *et al.*, 2012; Legovini, Di Maro & Piza, 2015; Yilmaz, Çağdaş & Demir, 2015). Indicators for attainment of goals should be clearly formulated at the outset of the development process and should be measurable, precise and unambiguous (Kim, 2005; Mitchell, Clarke & Baxter, 2008). These indicators are linked to the underlying theory and its associated assumptions, norms, and values, as well as informed by contextual elements, as motivated earlier.

An important assessment that should not be ignored is the **impact** of the intervention and the resulting cadastral system on the society in question. These impacts could be socio-cultural, economic, political or institutional. There are winners and losers in any redefinition of property rights (Nyamu-Musembi, 2007), and it is usually the poor and vulnerable who lose out the most (Cousins *et al.*, 2005). "Understanding the impact of land administration projects on the well-being of communities is an important, but difficult task" (Mitchell, Clarke & Baxter, 2008: 469) because well-being is an ill-defined concept and cannot be directly observed or measured. Well-being, especially when understood inter-generationally, implies that the impact on environmental ***sustainability*** should also be reviewed.

5.5.3 When is it reviewed?

Reviews should be carried out at **well-defined intervals**, **throughout the development** (Steudler, 2004). Monitoring mechanisms should be built into the programme design (Conning & Deb, 2007), taking cognisance of the concern that upholding human rights is a long-term goal (Filmer-Wilson, 2005). Since cadastral system change processes are never-ending (Whittal,

2008), expected benefits should be continuously reviewed and the cadastral system should be responsive to a changing environment, as described in Section 5.3. The review process should be transparent in order to avoid the chance of political capture (Conning & Deb, 2007).

5.5.4 Who reviews?

To eliminate bias, the reviewing authority should be an **external independent board** (Steudler, 2004). They should have the requisite skills to carry out a faithful evaluation (Liket, Rey-Garcia & Maas, 2014) and should preferably be knowledgeable about the pertinent issues. In this regard, evaluations should be designed in consultation with relevant stakeholders. The first of these is the **state**, which provides feedback on the functioning of the LAS. Secondly and of equal importance, the **community** can provide grass-roots feedback critical to assess ***significance***. This increases the quality of the results through building trust, creating shared values, and stimulating creativity (*Ibid.*).

5.6 SUMMARY

Customary land tenure reform has a poor track record. It is suggested that this arises from a mismatch between how developers and customary land rights-holders understand land. As a means of bridging this gap, and in fulfilment of Objective A, a conceptual framework for guiding cadastral systems development in the context of customary land tenure reform is proposed: the 3S framework – see Table 5-7 below. The framework is derived from existing, published frameworks and human rights literature, using a research synthesis methodology. Aspects of human rights, land rights, and a broadly African view of land are assimilated into a model of democratic land governance (Figure 4-3). This model recognises the vertical and horizontal obligations of the state and land rights-holders towards each other within an environment of collaborative governance to achieve shared development goals. Human rights and *ubuntu* ideologies are presented as informing (rather than prescribing) the interactions of these respective stakeholders. It is shown that conceptualisations of human rights need to be held in tension with competing understandings of rights, while strict adherence to the ideologies is not likely to lead to ***successful*** development. But, through collaborative governance and under good leadership, with a sound understanding of the historical and present context, and building on existing practice, all parties may agree on development goals that emanate from pro-poor policy and have ***significance*** for land rights-holders. The benefit of a satisficing approach is highlighted, as realised in the current push for fit-for-purpose standards and good-enough governance.

The five evaluation areas – underlying theory, LAS context, responsive change drivers, change process, and review process – are posited to be relevant to cadastral systems development in any context. This is also true of the associated evaluation aspects, and many of the elements. At the aspect level, the framework may have global applicability for land administrators. Because the focus for this research is on cadastral systems development in the context of customary land tenure reform, the elements of the framework and associated explanations are geared towards customary, developing contexts. Land administrators and cadastral systems developers operating in these contexts may find the conceptual framework useful for ensuring development that satisfies the objectives of ***successfully*** and ***sustainably*** meeting goals that are ***significant*** for all land rights-holders concerned.

To test this proposition, the conceptual framework is validated and extended through several case studies. The results gleaned from these case studies (see Part 4) are used to further refine the framework in keeping with the helical nature of scientific research (Barry & Roux, 2013; Hull, 2014) and in fulfilment of Objectives B and C.

Table 5-7 Conceptual framework for guiding cadastral systems development in customary land rights contexts

Areas	Aspects	Elements
Underlying Theory	Theories of tenure reform	Identifying theory on a continuum of land reform theories
	Understanding land in its social context	Attitude towards human and land rights
		Justification for development
	Goals for development	Gap analysis
		Measures of Success
Land administration system context	Land policy	Recognition and protection of existing land rights
		Class-conscious and gender-sensitive
		Improving productivity and livelihood
	Land governance	Active participation
		Equitable access
		Transparency, clarity, simplicity
		Accountability and the rule of law
		Appropriate technology
	Strategic level	Possibly changing land rights type
		Improving tenure security
	Implementation level	Land recording / registration mechanisms
		Land tenure information system
Responsive change drivers	Demand	Economic
		Political
		Social
		Legal
		Administrative
		Environmental
	Supply	New technology
		New theories or methods
		New policy
Change process	Community / country context	Historical background
		Current context
	Getting to the end state	Good leadership
		Build on existing practice
		Time to completion
		Implementing change
	Working together	Effective, sustainable engagement
		Handling equity
		Resolving disputes
Review Process	Why	Ensuring success, sustainability, and significance
	What	Outcomes
		Impact
	When	Well-defined intervals
		Throughout development process
	Who	External reviewers
		State organisations
		Community

Part 4: Case Studies

In Part 4, the chosen cases of cadastral systems development are tested against the conceptual framework. The intention is to check whether the areas, aspects, and elements identified in the conceptual framework are present in these different cases, and whether anything emerges from the data that can be added to the framework. Data collection and analysis proceeds as described in Chapter 3.

Research question 4 asks which cases are appropriate for this study. The reader is reminded that this was addressed in Chapter 3. Cases are drawn both from Europe and southern Africa. The former is understood to represent 'good practice' for the European context and forms the basis for existing formal cadastral systems in Africa. Customary land tenure reform is a current and topical challenge in the latter context, and Chapters 8 and 9 take up this topic.

The summary tables in the following chapters convey the strengths and weaknesses of each case, highlighting context-specific descriptors of the elements. Through analysis and consideration of the evidence presented in the following chapters, each of the cases is assessed against the conceptual framework to determine whether, and how well, each element is addressed in the case. Each element is assessed using context-specific descriptors for that element. The descriptors are assigned values of 5, 3, or 1 for satisfactorily addressed, partially addressed, and not addressed, respectively. These values appear under the column 'Desc. Eval.' for 'Descriptor Evaluation'. Taking the mean of the values of the descriptors for each element, elements are then positioned on a 5-point Likert scale – see Table 5-8. These values appear under the column 'Elem. Eval.' for 'Element Evaluation'. Emergent elements are added in *italics*. This analysis addresses research question 6: What is learned from the preceding analysis? Question 7 (How can the conceptual framework be refined?) is taken up in Chapter 10. Research question 5 – identifying strengths and weaknesses of the conceptual framework – is partially addressed in these case studies and chapter 11.

It is acknowledged that taking a straight mean of the descriptor values assumes that the descriptors are equally weighted, and that this may not be the case. Some descriptors may well be more influential than others on their corresponding elements and aspects. However, it is cautioned that applying a quantitative value to a qualitative descriptor may be inappropriate. Assessing the relative importance of different descriptors lends itself to bias and interpretation. Hence, the intent here is not for statistical evaluation of descriptors and elements, but rather to allow for a general sense of how well the conceptual framework is able to reveal successes and shortcomings in each of the different cases. In this way cases may be compared with each other at the element level, taking the context-specific descriptors into account.

Table 5-8 Likert scale for assessing elements in case studies

5	4	3	2	1
Satisfactorily addressed	Adequately addressed	Partially addressed	Inadequately addressed	Not addressed

6 GERMANY

With funding gratefully received from the FIG Foundation PhD Scholarship, I carried out a research trip to Germany and the Netherlands in September / October 2014. The purpose of the trip was to witness first-hand how cadastral systems development is done in these first-world countries. The interviews and observations were focused on gaining an appreciation of the state of development of the respective cadastral systems of these two countries, including the process of development to reach this state, and the review process. As the conceptual framework was not fully developed in 2014, some of the elements of the framework were not expressly interrogated. To rectify this, a second round of interviews via email was conducted in August / September 2017 and May 2019, with questions specifically targeted at filling in the gaps in the data from the previous data collection. This represents both theoretical sampling (see Section 3.3.1) and the helical nature of data collection in grounded theory type research (see Section 3.1.2).

In the rest of this chapter, the German case is submitted. After a brief country description, the case is assessed using the conceptual framework's evaluation areas, aspects and elements as headings.

6.1 GENERAL INFORMATION

In Germany, there are 16 *Länder* (federal states). Surveying is the responsibility of the *Länder* (Gundelsweiler, Bartoschek & De Sá, 2007), hence there are 16 different surveying authorities. Depending on the federal state, there are different ministries in charge of surveying (see Figure 6-1). To harmonise these fragmented responsibilities, the AdV was created in 1949 (G02, 2014). Membership of the organisation is voluntary, but all 16 *Länder* as well as the Ministries of the Interior; Defence; and Traffic, Construction and City Development, are represented (Zeddies, 2010).

The member authorities collaborate to regulate and standardise official surveying and mapping, to create a primary database of standardised geospatial reference data, and to provide the infrastructure for this data in e-government. These functions form the basis of the AAA® model, comprising AFIS®, ALKIS®, and ATKIS®. AFIS® is the official control point (geodetic) system. ATKIS® is the official topographic and cartographic information system. ALKIS® is the official real-estate cadastral information system (Gundelsweiler, Bartoschek & De Sá, 2007). These three standards are being unified into the AAA® model (G02, 2014).

Prior to the introduction of the AAA® model, in 1976, the automated property register (ALB) and automated cadastral map (ALK) were introduced. ALB contained the technical description of the land parcel (location, size, use, buildings). ALK was a map only (G01, 2014). Due to large data redundancy and inconsistent data structures, there was a need to amalgamate the two into ALKIS®, in combination with a redesign of ATKIS® (Hawerk, 2001). ALB and ALK were deemed to not be sufficiently future-oriented (Gundelsweiler, Bartoschek & De Sá, 2007), hence the design of ALKIS® represents a pro-active approach to cadastral systems development (G03, 2014).

The objectives of the amalgamation were to reduce redundant data management and move to a unified data model (improving efficiency), to make use of the opportunities created by modern technologies, and to standardise systems and operations (Hawerk, 2001). Hence, ALKIS® was introduced as the first cadastral database to be completely designed according to ISO standards (Gundelsweiler, Bartoschek & De Sá, 2007). The system was phased in from 2008 till 2015 (G01, G03, 2014).

Figure 6-1 Cities visited and ministries responsible for surveying and the cadastre in Germany (from Zeddies, 2010)

6.2 UNDERLYING THEORY

6.2.1 Understanding land and identifying theory

a) Attitude towards human and land rights

The State's obligation to respect, protect, promote, and fulfil the human rights needs of its citizens does not feature as a motivation for cadastral systems development in Germany. There is an assumption that the State's obligations to its citizens were already being met under ALB/ALK, and there is no need for change (G02, 2014, 2017). The migration to ALKIS® is not addressing any human rights deficiencies in the previous system but was "continuing to ensure security of property – the number one priority – by realising also the security of data" (G03, 2017). Failure to address human and land rights in the development process may indicate a failure of the State to uphold its obligation.[14] By ignoring human and land rights in the development process, the State runs the risk of developing a new system that does not cater for the needs of the land rights-holders.

b) Justification for development

Four different justifications were identified: improving efficiency, reducing redundancy, modernisation (Hawerk, 2001), and economic development (Gundelsweiler, Bartoschek & De Sá, 2007; Riecken & Seifert, 2012). These justifications are backed up by the assumption that adopting improved technology would lead to positive outcomes (G01, G02, 2014). The justifications are evaluated against the continuum of land-related theories (Figure 5-2) as determined by assessing the normative principles informing development. Because the realisation of human rights is assumed and the justifications for development are mostly process- and market-oriented, it appears that Western ideals strongly influence the development process. The assumption that adopting improved technologies leads to positive outcomes is also mostly valid in developed contexts (Furuholt, Wahid & Sæbø, 2015). This is what is expected of a modern, European nation. The underlying theory therefore appears to favour formalised land tenure, and the justifications for development are aligned with this.

6.2.2 Goals for development

a) Gap analysis

Regarding the migration to ALKIS®, the problems have been identified as outdated systems (ALB and ALK) that are not future-oriented and have high redundancy and low efficiency (G02, 2017). The need coming from the public is for a modern, efficient, user-friendly, future-oriented cadastre able to address current concerns (Gruber, Riecken & Seifert, 2014) such as climate change, demographic changes, and land use restrictions (Riecken & Seifert, 2012). The conceptual end state is a modern cadastral system that assists the nation to address these problems and needs.

b) Measures of success

Although there was no formal evaluation process (G02, 2014) – see Section 6.6 – several indicators of ***success*** were identified in the interviews and associated literature – see Table 6-1. These measures of success all relate either specifically or generally to the identified problems and needs. Hence the measures of success are aligned to the goals for development.

[14] It should be noted that this obligation could be extended to non-citizens such as refugees and immigrants too. This topic is taken up in Section 6.5.1.

Table 6-1 Measures of success in the migration to ALKIS®

Indicators	Interviewees	Literature
Reduced redundancy	G01, G02, G03 (2014)	
Clearly defined processes	G03 (2014)	
Improved efficiency	G01, G02, G03 (2014)	(Gundelsweiler, Bartoschek & De Sá, 2007)
Doing more with less staff	G01, G02 (2014)	
Improved quality	G01, G02, G03 (2014)	(Hawerk, 2001; Gruber, Riecken & Seifert, 2014)
Reduced mistakes made	G03 (2014)	
Improved standardisation	G01, G02 (2014)	(Hawerk, 2001; Gundelsweiler, Bartoschek & De Sá, 2007; Riecken & Seifert, 2012)
Integration with international organisations	G01, G02 (2014)	(Gundelsweiler, Bartoschek & De Sá, 2007; Zeddies, 2010; Gruber, Riecken & Seifert, 2014)
Improved accessibility	G03 (2014)	(Gundelsweiler, Bartoschek & De Sá, 2007)
A general impression of improvement	G01, G02 (2014)	

6.2.3 Evaluation

Table 6-2 Evaluation of German case against Underlying Theory

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Theories of tenure reform	ID theory on continuum	Systematic titling	5	5
Understanding land in its social context	Attitude towards human and land rights	Ignored in development process	1	1
	Justification for development	Improving efficiency Reducing redundancy Modernisation Economic development	5 5 5 5	5
Goals for development	Gap analysis	Outdated, inefficient vs. modern, future-oriented cadastral system	5	5
	Measures of Success	See Table 6-1	5	5

In Table 6-2, because human and land rights are ignored in the migration to ALKIS®, the element 'attitude to human and land rights' is marked as 'not addressed'. The descriptors of the other elements are present and 'satisfactorily addressed'.

6.3 LAS CONTEXT

6.3.1 Land policy

The elements of pro-poor land policy were poorly represented in the German case study. This is partly due to the pro-poor focus of the conceptual framework which is juxtaposed with the relative prosperity of the German nation.

a) Existing land rights

The framework identifies the need for pro-poor land policy to define, recognise, and protect poor people's existing (customary) land rights. The interviews suggest that the system may be failing Gypsies and refugees because their land rights are not represented in ALKIS®, which only secures those rights that are represented in the *Grundbuch* (land registry). Regarding these formal land rights, Germany has very strict privacy laws (N01, 2014). "Access to owner information in the

cadastre is restricted for privacy reasons… Personal information is protected in ALKIS®" (G03, 2014). The system guarantees and protects formal land rights.

b) Class and gender

The German cadastre appears to assume a homogenous society. It does not appear to recognise differential impact, nor does it seem to promote marginalised or vulnerable people's distinct land rights (such as women, Gypsies and refugees).

c) Productivity and livelihood

Productivity and livelihood are not expected to be improved through the migration to ALKIS®. Land use is expected to be influenced more by the state of the economy than the state of the cadastre (G03, 2017). This is possibly because the cadastral system under ALB/ALK was already adequately serving the needs of the agricultural sector. ALKIS® is merely building on that good practice. It does not appear as if the migration to ALKIS® negatively affects agricultural productivity.

6.3.2 Land governance

a) Active participation

Trust is important for users to make use of the system, and good land governance promotes the trustworthiness of the cadastral system. This begins with active participation – see Section 6.5.3. From that section, we learn that active participation is partially addressed in the German case.

b) Equitable access

As mentioned above and in Section 6.5.1, the system of registered land rights "overlooks" the off-register land rights of certain people groups (G02, 2014). Thus, while all registered land rights-holders are afforded equitable access to land and information on land, the same is not true of Gypsies, refugees, and others "not in the *Grundbuch*" (G03, 2014).

c) Transparency, clarity, simplicity

Through an emphasis on standardisation, all users are ensured of access to the same system from anywhere in the country. "Users can use the internet to access most information as raster or vector data" (G03, 2014). Through modernisation of the cadastral system, transparency, clarity, and simplicity are ensured. The migration to ALKIS® simplifies the ALB/ALK system (Gundelsweiler, Bartoschek & De Sá, 2007) by reducing redundancy and improving efficiency. ALKIS® allows users to obtain information on property values, subject to Germany's strict privacy laws (G01, 2014). Also, the process of migration was made transparent through the sharing of information via the working groups (G03, 2017).

d) Accountability and the rule of law

The conceptual framework calls for accountability of public and social institutions in their respective roles in cadastral systems development and land administration thereafter. Surveyors and cadastral offices in Germany are regularly audited to make sure they are adhering to agreed standards and pricing. If they have been found to have acted in bad faith, they may be required to pay a fine or have their licenses revoked (G03, 2014). In this way, accountability is built into the system and the public are safeguarded against unscrupulous land administrators.

e) Appropriate technology

A justification for development was the modernisation of the cadastral system, which involved the use of appropriate, new technology. As befitting a modern, developed country, this included

centralisation of services and access to land information via the internet for registered users, while protecting privacy (G01, G02, G03, 2014). This topic is covered further in Section 6.5.3.

6.3.3 Strategic level

a) Changing land rights type

Changing land rights type did not form part of the migration to ALKIS® as the migration was only considering those rights already represented in the old ALB/ALK cadastral system.

b) Improving tenure security

The provision of tenure security is a fundamental requirement of the German cadastre (Hawerk, 2001; Riecken & Seifert, 2012). ALKIS®, like its predecessors in ALB and ALK, had to ensure that this provision was guaranteed. But the migration was not involved in *improving* tenure security, because the system already provides sufficiently secure tenure to those whom it represents (G02, 2017).

6.3.4 Implementation level

a) Recording / registration

Per Section 5.2.4, land rights may be recorded by deed or title or some other approach, and the process of recording rights may be systematic or sporadic, voluntary or compulsory. In Germany, land rights are registered by title, registration of land rights is compulsory, and all properties are already registered (Hawerk, 2003).

b) LTIS

Improved standardisation was a significant driver for the migration to ALKIS®, as noted by all the sources consulted:

> *"ALKIS® provides a unified basic dataset/database for the nation to which each* Land *can add other information. The basic cadastral map looks the same for all* Länder *because it is based on GeoInfoDok standards put together by AdV" (G01, 2014).*[15]

The accuracy of the German cadastre is as accurate as modern equipment and methods will allow (G03, 2014), being to a precision of less than 5 cm in urban areas and 8 cm in rural areas (G02, 2014). All relevant information is recorded in the cadastre, such as designation, location, size, and use (Hawerk, 2003). ALKIS® is said to be reliable, serving as a guarantee of land rights (G01, 2014) (Hawerk, 2001, 2003; Riecken & Seifert, 2012). The German cadastre is noted to be trustworthy, enjoying the "public faith" (Hawerk, 2003: 6). To view cadastral information online there is no cost, but to download the data there is a small fee (G03, 2014).

The registry and the cadastre are 'interlinked' not integrated, i.e. they are the responsibility of two separate organisations: the cadastre is the responsibility of the *Länder,* and the registry is regulated by federal government under the Ministry of Justice (G01, 2014; G02, 2017). Both systems in combination give the complete description of *de jure* and *de facto* land tenure (Hawerk, 2003). "The long-term view is to eliminate redundancy and connect the two institutions through Spatial Data Infrastructure (SDI), linked by parcel number" (G03, 2014). This linking is possible because plots are uniquely identified in the German cadastre (Gundelsweiler, Bartoschek & De Sá, 2007; Zeddies, 2010; Gruber, Riecken & Seifert, 2014).

[15] Here *Land* is the singular of *Länder.* The GeoInfoDok is a document of clearly defined standards governing ALKIS®.

The case study highlighted the importance of the following concerns: *de/centralisation of services*, *multi-purpose cadastre*, *being up-to-date*, and *providing user-friendly access* to information. "The most important thing for users is easy access" (G03, 2014). The LTIS should also support multiple purposes beyond mere recognition of rights. "We make the cadastre fit for multi-purposes. The cadastre is designed to be user-friendly, exportable, and using uniform standards" (G02, 2014). Regarding de/centralisation, developed countries can make use of the benefits of having a centralised LTIS that is accessible to everyone via the internet. The advantage is that there is no duplication of information, meaning there is less chance of conflicting information in the database.

6.3.5 Evaluation

Table 6-3 Evaluation of German case against LAS context

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Land policy	Existing land rights	Guarantees and protects registered land rights	5	3
		Overlooks off-register land rights	1	
	Class and gender	Assumes homogenous society	1	1
	Productivity and livelihood	No effect	3	3
Land governance	Active participation	See Section 6.5.3	3	3
	Equitable access	Overlooks off-register land rights	3	3
	Transparency, clarity, simplicity	Ensured	5	5
	Accountability and the rule of law	Ensured	5	5
	Appropriate technology	Centralisation of information Ease of access via the internet Privacy of information assured	5 5 5	5
Strategic level	Changing land rights type			
	Improving tenure security	Guarantees and protects registered land rights	5	3
		Overlooks off-register land rights	1	
Implementation level	Land recording / registration mechanisms	Compulsory registration by title	5	5
	Land tenure information system	Clearly defined standards Relevant, accurate, reliable, affordable information Interlinked registry and cadastre Plots uniquely identified Centralised services Multi-purpose cadastre Up-to-date-ness User-friendliness	5 5 5 5 5 5 5 5	5

The conceptual framework has highlighted several areas for concern in the German case. The existing land rights of poor and marginalised people-groups, such as Gypsies and refugees, are not specifically accommodated in the cadastral system. Hence the element, *class and gender*, is marked as 'not addressed' in Table 6-3. The system focuses only on formal land rights. While these are well-described and recorded in ALKIS® and the *Grundbuch*, other rights types are not defined, hence the element 'existing land rights' is marked as 'partially addressed'. Changing land rights type was noted to be irrelevant for the German case at present and is greyed out in Table 6-3.

The only identified shortcoming of the LTIS is the fact that the cadastre and registry are not integrated into one system. This is being addressed, however, and the two are very well interlinked through the parcel identifier. Thus, the LTIS element is 'satisfactorily addressed'.

In Section 6.5.3 it is shown that some elements of *working together* are covered in the German case, but others are absent or 'partially addressed'. Hence 'active participation', as an element of good governance, is only 'partially addressed' here. The case has also shown that equitable access is only assured for registered land rights-holders, thus it is also 'partially addressed'. Transparency, clarity, simplicity, and accountability are supported by the adoption of appropriate technology in ALKIS®.

6.4 CHANGE DRIVERS

6.4.1 Demand-based drivers

Demand-based drivers identified in the German case link with the previously identified justifications for cadastral systems development: economic development (land market and taxation), reduced redundancy and modernisation of the system (improving the LAS).

a) Economic

The demand for taxation was an initial driver for the establishment of the cadastre in the beginning of the 19th century (Riecken & Seifert, 2012; Gruber, Riecken & Seifert, 2014). This was during Napoleon's reign and was motivated by the need for a just basis for taxation to raise money to fund his war efforts (G02, 2014). Now, only ALKIS® provides the information base for taxation (G01, 2014). The migration to ALKIS® had to ensure that this centuries-old driver of cadastral development, and primary purpose of the cadastral system, was still being met.

Regarding affordability, surveyors were expected to purchase new software and learn how to use it, at their own expense (G01, G03, 2014). Land rights-holders were protected against fee increases – see Section 6.5.3. As the modelling of ALKIS® is more efficient than ALB/ALK, the investment is expected to pay for itself. Four of the *Länder* have already implemented free and open data policies to further improve the affordability of ALKIS® data (G02, 2017).

b) Administrative

Deficiencies in the ALB and ALK model were identified as justifications for the migration to ALKIS®: data redundancy and no consistent data structure (G01, 2014). The amalgamation also served to enable the new system to realise new possibilities, such as 3D cadastres (Gruber, Riecken & Seifert, 2014; Riecken, Gruber & Seifert, 2015).

c) Social

Improving well-being is linked (in the conceptual framework) to the provision of tenure security. The previous systems (ALB and ALK) were already providing sufficient tenure security (G02, G03, 2014) (Hawerk, 2001; Riecken & Seifert, 2012), and the new system continues this good practice (G02, G03, 2017). Thus, while not a definitive indicator of improved well-being (because well-being is a multi-dimensional variable), the guarantee of secure tenure partially fulfils this element.

d) Political, legal and environmental

Four contextual pressures were identified as drivers: land insufficiency, political will, urban planning, and disaster management. In the German context, the first three translate to a federal initiative (political will) regarding consumption of land (land insufficiency) to reduce urban sprawl (urban planning) (G01, 2014). Urban planning and disaster management are also

addressed by Gruber *et al.* (2014). The former relates to environmental concerns around noise pollution (a directive of the European Union) and energy consumption, while the latter relates to simulations of disasters such as flooding. ALKIS®, as a component of the AAA® data model, needs to meet these demands. Hence the need for a modern, up-to-date cadastral system.

6.4.2 Supply-based drivers

a) New policies and technologies

Supply-based drivers stem from new technologies, policies, or theories. The first two of these were drivers in the migration to ALKIS®. National policy required that staff be reduced and turnover improved (G02, 2014), which could only be achieved by adopting new technology (Hawerk, 2001). This has the added benefits of improved security features and the provision of a platform for future developments (G02, 2014) such as the 3D cadastre (Gruber, Riecken & Seifert, 2014). Adopting new technologies requires capacity development, including education and training. "Licensed surveyors needed to have an open mind about the new system. AdV needed to communicate with them, educate and train them about ALKIS®" (G01, 2014).

b) New theories

New theories indicate what should be recorded and why (Section 5.3.2). A future-oriented cadastre integrates all information in the public sector so that data is collected for topographic mapping and the cadastre at once. "By 2030 there should be a clear view on land use and land cover" (G03, 2014) – the desire is for all object-related data to be collected at once and represented within one LIS. This is suggestive of the influence of theory as a driver of development.

6.4.3 Evaluation

Except for the social and theory elements, all elements in the Responsive Change Drivers evaluation area are 'satisfactorily addressed' in the German case, as noted in Table 6-4. The social element is only represented by the provision of tenure security, and the evidence for theory driving development was insubstantial, hence these are 'partially addressed'.

Table 6-4 Evaluation of German case against Change Drivers

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Demand	Economic	Cadastre as basis for taxation	5	5
		Improved affordability	5	
	Political	Reducing urban sprawl	5	5
	Social	Providing tenure security	3	3
	Legal	Reducing urban sprawl	5	5
	Administrative	Improving LAS	5	5
	Environmental	Addressing noise pollution, energy consumption, and disaster management	5	5
Supply	New technology	Increased efficiency	5	5
		Improved security	5	
		Future-oriented	5	
	New theories	Integrated topo-cadastre	3	3
	New policy	Reduced staffing and improved turnover	5	5

6.5 CHANGE PROCESS

6.5.1 Community / country context

a) Historical context

The reunification of the Eastern and Western German states required that a cadastral system be re-introduced into the former socialist (Eastern) states. This was "a big task for the surveying professionals … The fastest and easiest way was to introduce the same systems that have been in operation in the western states of the republic" (Hawerk, 2001: 1). The legacy of a divided nation required active engagement. This practice continues with the migration to ALKIS® as old survey diagrams are scanned and incorporated into the new system to allow for a historical view of the situation (G03, 2014). Every change to a land parcel is documented so that the original situation can be restored in the case of disputes. This is referred to as 'versioning' (Riecken, Gruber & Seifert, 2015).

b) Current context

Landholding is predominately by ownership or leasehold. The land registry is called the *Grundbuch*, and "if a person is not in the *Grundbuch*, they are invisible" (G03, 2014). Hence:

> *"Other people groups, like gypsies, who do not own or lease land, have nothing to do with the cadastre. They are overlooked by the system, but not disadvantaged. Gypsies are assigned rights to set up camp on (usually) public ground." (G02, 2014)*

The land tenure system in Germany focusses only on formal land ownership. While there are no informal settlements (G03, 2014, 2017) (Hawerk, 2003), there are other types of less formal land tenure – Gypsies and refugees [16] have rights to occupy and/or use land – but these land rights-holders "are overlooked by the system" (G02, 2014). They are neither supported nor protected by the formal cadastral system. Only those whose rights are recorded in the *Grundbuch* have formally secured land tenure: "Only the rights in the *Grundbuch* are legal – no exception! Therefore, the content of the *Grundbuch* is secured by the State" (G03, 2017).

The migration to ALKIS® required institutional and community capacity building, including education and training.

> *"Some* Länder *are well-resourced, others not so much. It is complex because of needing to bring together many participants, each with their own interests / roles: surveying authority, licensed surveyors, customers." (G01, 2014)*

The AdV needed to communicate with licensed surveyors, educate them, and train them to use ALKIS®. In the German context, this may relate to community capacity, as the surveyors represent the community of users of the cadastral system. Regarding institutional capacity, "From 2008 to about 2011 the cadastral offices were not happy with the new ALKIS® system. But there was motivation to continue, despite negative feedback" (G03, 2014). The National Mapping and Cadastral Agency (NMCA) offices of the various *Länder* had to be supported by AdV to complete the migration.

Regarding adaptability, part of the driver for the migration to ALKIS® is improved standardisation. In the German / European context, institutional standardisation is desirable, and

[16] Interviews were conducted in September 2014, before the major refugee crisis hit Europe in 2015.

the land tenure system is mostly stable. Hence adaptability to tenure and institutional dynamics is not particularly relevant in this context.

6.5.2 Getting to the end state

a) Good leadership

The migration to ALKIS® was:

> *"… decreed by the Ministry … There was a certain amount of risk involved since there was no certainty that the new system would in fact be better than the old. The first year was critical as there is always some initial resistance to change" (G03, 2014).*

Good leaders need vision, which includes the willingness to take calculated risks and commitment to overcome resistance to change. Having realistic expectations is linked to risk: had the vision exceeded the industry's capacity to adopt the new system, the migration to ALKIS® would have failed. But the ***success*** of the project, despite teething problems, indicates that the expectations of the leadership were realistic and their faith in the industry to adapt was well-founded.

Good leaders also need community acceptance, which is linked to being unbiased and impartial. In Germany, the change process was driven by the 16 NMCA offices. As part of the government, NMCAs must be unbiased and impartial in their work (G02, 2017). The rule of law is strictly followed in Germany (G03, 2014), so having unbiased, impartial leaders is assumed. This is not to say that the political structure is devoid of corruption, only that it may be safe-guarded against by having a clear process of moderation and a common understanding of goals, shared with the common working groups of Ministry, NMCAs, and licensed surveyors (G03, 2017). Using common working groups also builds up community acceptance (*Ibid.*).

b) Building on existing practice

Although mostly relevant to the customary land tenure context, the notion of building on existing practice exists because ALKIS® was based on the existing ALB and ALK models. The new system drew from the strengths of the old system and extended these into new areas.

c) Time to completion

Initially it was thought that, although the migration was a complex process, it would be finished in a very short time (Hawerk, 2001). Budgetary constraints slowed the process down, so that the end date target was reviewed. The revised hope was for all 16 Länder to have adopted the new system, migrated to it, and implemented it by the end of 2015 (G02, 2014).

> *"The process [of migration to ALKIS®] began in 1995! The first standard was defined in 2002, first implementation in 2008, and the benefits are only being felt since 2013 – that's nearly 20 years from idea to benefits! The initial desire was for the first system to be ready by 2002. It actually took 10 years more than expected, nearly double the expected time!" (G03, 2014).*

d) Implementing change

The identified phases in the migration to ALKIS® are the pilot phase, migration to cadastral offices, and adoption by licensed surveyors (G03, 2014). There were several pilot projects used to check implementation. At the end of the pilot phase, the ALKIS® software was approved with the ability to handle the new cadastre. Cadastral offices could then migrate to the new software, and licensed surveyors needed to adapt to the new requirements for data provision (e.g. shapefiles with attributes rather than simply coordinates as per the previous system) (G03, 2014).

Concerning the methods and instruments for getting to the end state, two important considerations were raised in the migration to ALKIS®. Firstly, outsourcing, using public-private partnerships, was an essential means of handling the technical difficulties (G01, G03, 2014). Even so, teething problems were experienced, and the system performed worse before it improved (G03, 2014). Secondly, the importance of engaging all role-players was highlighted. This included having regular meetings with land surveyors who would be the ultimate users of the system, to make sure that the system design was appropriate for their needs.

6.5.3 Working together

a) Engagement

The purpose of the AdV is to provide a unified, harmonised, standardised platform for the coordination of the surveying activities of the different *Länder* (G02, 2014). Through the AdV, the different *Länder* can collaborate to find solutions to common challenges (G03, 2014). Effective and sustainable engagement begins with getting the right people to the table from the outset. To ensure that the needs of the system users and land rights-holders are accommodated, local land committees (or equivalent user groups) should form part of the engagement. Effective, on-going communication, keeping costs down, and ensuring the safety of all participants, are all important for the ***sustainability*** of the process.

"All stakeholders were included in the design of the system so as not to overlook anyone, though it's true that you can't please everyone" (G02, 2014). 'All stakeholders' means "Everyone, though not everyone is aware that they need [ALKIS®]. The target groups are: planning, construction, land management, infrastructure, taxation, and land registry" (G02, 2014). Regular meetings were held between the AdV and licensed surveyors to ensure their opinions were considered. Certain AdV staff were seconded to the offices of different stakeholders for a time. On their return, these seconded staff shared with the AdV their experiences and the needs of the group. Overall, it appears that the AdV tried to make sure that all stakeholders were engaged from the outset and that their voices were heard.

Regarding keeping costs down, the migration actually cost the licensed surveyors because they needed to make investments of new hardware and software, hence:

> *"… surveyors wanted to increase their fees to recover these new costs. The fees were not increased; to remain up to date and relevant, licensed surveyors had to adopt ALKIS® as the new technical standard" (G01, 2014).*
>
> *"ALKIS® is a technical innovation. It is part of the professional behaviour of a licensed surveyor to adopt technical innovations, such as using GNSS [Global Navigation Satellite System] for measurements of the cadastre" (G03, 2017).*

To assist surveyors to absorb this new cost, funding was given to the NMCAs to test the new system and to facilitate data collection (G03, 2017). The cost of the new system was borne by the State and the service providers, not the public. In this way, the needs of the land rights-holders, the general public, were elevated above the needs of the service providers, the licensed land surveyors, in order to ensure ***sustainability*** and so as not to disadvantage land rights-holders. Here cost is purely economic, and no mention is made of other dimensions of cost.

Guaranteeing the safety of participants was not expressly addressed in the migration to ALKIS®. In volatile or politically charged contexts, such as contexts involving communal land tenure reform, the safety of participants or those that opt out of the process may be a concern. The German context was not volatile in 2014, and hence safety was not a concern. However, safety

should still be addressed in the process of development. From the previous paragraph, we see that if licensed surveyors had decided not to adopt ALKIS®, their livelihoods may have been threatened as they may have been unable to continue working. But the migration to ALKIS® was motivated by a need for uniformity and standardisation. This goal would not be realised if some had adopted the new standard and others had not. Hence the AdV provided support to licensed surveyors to assist them to migrate to the new system.

b) Handling equity

The population of land rights-holders is assumed to be homogenous and supportive of human rights ideals, such as the equality of all citizens (G02, 2017). However, as was noted in the previous section, the country is inhabited by people groups who may have different understandings of land and human rights, namely the Gypsies and refugees. The dramatic increase in the numbers of refugees since the crisis in Syria from 2015 may place pressure on the system to accommodate their needs. "The refugee influx did not affect the formal land tenure, but it did affect issues of city planning as there was an increased demand for living space in a short period of time" (G02, 2017). The population of the country has become more diverse since 2014, so handling equity may be becoming a concern.

c) Dispute resolution

Concerning the migration to ALKIS®, there were no reported disputes between stakeholders and the authorities (G02, 2017). The common working groups of all parties worked together to reach consensus on the goals and procedures for their attainment. Where consensus could not be reached, the decision of the Ministry prevailed (G03, 2017).

6.5.4 Evaluation

Table 6-5 Evaluation of German case against Change Process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Community / country context	Historical background	Active engagement with a divided past	5	5
	Current context	Registered rights recognised	5	4
		Off-register rights overlooked	1	
		Institutional and community capacity-building	5	
Getting to the end state	Good leadership	Realistic vision, commitment, faith	5	4
		Unbiased and impartial	3	
		Community acceptance	5	
	Build on existing practice	Adopt and adapt existing good practice	5	5
	Time to completion	Taking longer than anticipated	3	3
		Not rushing it.	3	
	Implementing change	Using pilot projects and phasing	5	5
		Using public-private partnerships	5	
		Actively engaging all role-players	5	
Working together	Effective, sustainable engagement	Engage all role players from outset	5	4
		Effective, on-going communication	5	
		Narrow view of cost	3	
		Not guaranteeing safety of all participants	3	
	Handling equity	Diversity not accommodated	1	1
	Resolving disputes	Reaching consensus on goals	3	3

Most of the relevant descriptors of elements of the *Community / country context* are 'satisfactorily addressed'. The only concern relates to the land rights and tenure types. While there is acknowledged diversity of people groups inhabiting the country, they are not accommodated in the cadastral system. As the population of these people groups increases, this omission is bound to cause problems and should be addressed. This descriptor is hence noted as 'not addressed' in the table, giving an overall result for the element 'country context' as 'adequately addressed'.

Likewise, most of the relevant descriptors of elements of *Getting to the end state* are 'satisfactorily addressed' in the case study. The only flag for concern is regarding the failure to acknowledge that leaders may exhibit bias and favouritism, resulting in the leadership element also being 'adequately addressed'.

The biggest flags are raised around *Working together*. For the most part, engagement is effective and sustainable. Deficiencies in the case study relate to a one-dimensional understanding of cost, and failure to acknowledge that safety may be a concern for participants. Hence engagement is also marked as 'adequately addressed'. Handling equity was 'not addressed', as expected, because this is a concern for more diverse contexts. As the diversity of the context increases due to the influx of refugees, handling equity may become a more prominent concern. Lastly, some of the case study data pointed to an acknowledgement of efficient and effective dispute resolution, though this was only 'partially addressed' in the literature or the interviews.

6.6 REVIEW PROCESS

> *"There has been no formal evaluation process. Based on experience, the migration to ALKIS® will bring benefits. It was decided to spend Euros on improving the system rather than on evaluating improvement. Improved technology should lead to more efficiency and positive outcomes." (G02, 2014)*

> *"Success is 'measured' by a general impression of improvement only. The staff keep a record of the number of mistakes identified, and each year this is getting better… Assessment is by general discussion: are you happy with the system?" (G03, 2014)*

6.6.1 Why review?

From the quotations above, it is clear that there was no review of the migration from ALB/ALK to ALKIS®. Hence the guarantee of ***success*** and ***sustainability*** through ensuring ***significance*** cannot be made.

6.6.2 What is reviewed?

a) Outcomes

The outcomes should be reviewed against the goals, objectives, and needs that were identified as drivers for development, using suitably defined indicators that are measurable, precise, unambiguous, and aligned to the underlying theory. From the quotations above it is obvious that *nothing* has been formally reviewed in the migration to ALKIS®. Funding was directed at development and not allocated to reviewing the outcomes of the development. Instead, stakeholders' opinions were considered, giving a *general impression of improvement* – a very imprecise 'indicator' that is neither measurable nor unambiguous. Outcomes were not evaluated against goals or needs, and no clear indicators were used.

b) Impact

Some *Länder* have evaluated the impact of fees on the NMCA and licensed surveyors, with no noted change (G02, 2017). In Section 6.4.1, improved well-being was linked to the guarantee of tenure security. Hence regarding fees and tenure security, well-being is partially, implicitly assessed. Ensuring environmental sustainability was identified as an objective for ALKIS® by Gundelsweiler, Bartoschek & De Sá (2007). It also features as an objective in future-oriented cadastral developments (Gruber, Riecken & Seifert, 2014). Because aspects of environmental impact are of concern for the government and the European Union, these objectives may be reviewed.

6.6.3 When is it reviewed?

Development projects should be reviewed at well-defined intervals, frequently, on an on-going basis, throughout the development process, ensuring transparency. Because there was no formal review process, these criteria were not met in the German case.

6.6.4 Who does the reviewing?

There were no **external** reviewers appointed to review the migration to ALKIS® (G02, 2014), but the State and community did give feedback. The **State** reviewed the pilot projects before general implementation of the new software (G03, 2014). And the **community** of licensed surveyors provided their feedback (G02, 2014). It appears that this 'grassroots' feedback, constituting a 'general impression of improvement', is the most significant form of review conducted in the migration to ALKIS®.

6.6.5 Evaluation

Table 6-6 Evaluation of the German case against the Review process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Why	Success	Not addressed	1	1
	Sustainability	Not addressed	1	1
	Significance	Not addressed	1	1
What	Outcomes	Not addressed	1	1
	Impact	Community well-being	3	3
		Environmental sustainability	3	
When	Well-defined intervals	Not addressed	1	1
	Throughout development process	Not addressed	1	1
Who	External reviewers	None appointed	1	1
	State organisations	Reviewed pilot projects	3	3
	Community	General impression of improvement	5	5
How	*Funding*	*Allocating sufficient funding to the review process*	*1*	*1*

The review of the migration to ALKIS® was woefully inadequate. The decision not to allocate any funding to monitoring and evaluation (M&E) is short-sighted and could have had disastrous outcomes. This has given rise to a new aspect for review: *How is the review process promoted?* This is achieved by *allocating sufficient funds* at the beginning of the development cycle. Merely relying on the community of users for their opinion on the functioning of the new system is far too subjective and biased. It does not protect against abuse of the system by unscrupulous parties.

6.7 SUMMARY

By evaluating the migration to ALKIS® through the lens of the conceptual framework, the following shortcomings of the case are identified:

1. There is no acknowledgement of the State's obligation to uphold human and land rights. This is an important omission, especially considering the plight of refugees and other marginalised and vulnerable groups now taking up residence in the country.
2. There is no acknowledgement of the need for unbiased and impartial leaders. While the leadership of the project was reportedly good, exhibiting commitment to the cause and the ability to weather setbacks, this criterion is missing and should be addressed.
3. Handling equity is not addressed because there is an implicit assumption that the population, as represented by the cadastre, is homogenous. This assumption is challenged and the need for more sensitivity towards people with different worldviews and backgrounds is highlighted.
4. Likewise, there is no acknowledgement of class-consciousness and gender-sensitivity in the land policy.
5. There should have been a proper review process in place to ensure that the goals were satisfactorily met.

The following are identified as areas requiring improvement:

1. There should be a greater focus on improving affordability and well-being and reducing uncertainty as drivers for development. Cost, well-being, and uncertainty are all multi-dimensional variables and greater attention needs to be given to their multi-dimensional nature.
2. There needs to be a greater awareness of the diversity of land rights and tenure systems in existence in the country. The cadastre focuses too narrowly on registered land rights and doesn't recognise off-register modes of land tenure.
3. The expectation for surveyors to absorb part of the cost of the new system could have led to its breakdown had they not had the capacity to cover this cost. Cost should not be a deterrent to development. Nor should safety, and the safety of participants should have been addressed.
4. More attention needs to be given to procedures for handling disputes.
5. Attention should be given to improvements in productivity and livelihood emanating from cadastral systems development to ensure that development doesn't negatively impact on agricultural productivity.
6. Though registered tenure is secure, the process of development did not consider how to ensure that it remained secure in the new system. It was assumed that, because the old system guarantees tenure security, the new system would too. Ensuring and improving tenure security should be an explicit goal.
7. The registry and the cadastre are separate systems managed by separate authorities. This is a Constitutional imperative and cannot be changed, but it would have been better if these could be integrated into one system rather than being two separate yet interlinked institutions.
8. The impacts of cadastral systems development on community well-being and environmental sustainability should be explicit goals of development.
9. The State should give feedback on the functioning of the cadastral system at all stages of the development process, not just after the pilot phase.

7 THE NETHERLANDS

7.1 GENERAL INFORMATION

As in Germany, the cadastre in the Netherlands was introduced under the influence of Napoleon (N01, 2014), who needed a means of raising money to fund his activities. Surveying work began in 1812, and a fiscal cadastre covering the entire country was completed by 1832 under King William I (after the fall of Napoleon). While this work was underway, it was decided in 1825 to merge the legal land registers and the cadastre into one department within the Ministry of Finance. The reason for the merger was to improve efficiency. Despite strong opposition by lawyers at the time, the merger was a success and gave birth to the Netherlands Cadastre and Land Registry Agency (Wakker, van der Molen & Lemmen, 2003), aka Kadaster. Since then Kadaster has continued to develop to meet modern demands and make use of new opportunities. The Agency has become one of the leading cadastral organisations in the world (N04, 2014).

In 2000, the Netherlands government embarked on a three-year programme called Streamlining Key Data. The rationale behind the programme was to create better government through reducing the administrative burden imposed on the public and business community, improved responsiveness to social problems, and modernisation of service provision (van der Molen & Welter, 2004). A complete reorganisation of the government data infrastructure followed, yielding a system of authentic registers (aka key or base registers). Authentic registers need to satisfy 12 requirements grouped under 5 headings (*Ibid.*):

a) Transparent legislation
    1. The register is governed by law
    2. Users are obliged to report errors
    3. Government is mandated to use authentic registers
    4. Liability issues are clear
b) Transparent finances
    5. Costs are kept reasonable and expenditure is made transparent
c) Content and structure
    6. The purpose and content of the register is clearly defined
d) Explicit responsibilities and procedures
    7. Clarity concerning the owner of the register and the suppliers of data
    8. Clarity concerning accessibility of the register
    9. Stringent quality assurance
    10. Users of data shall be involved in decision-making about the register
e) Part of the system
    11. The register's place within the system of authentic registers is clear
    12. Control of the register rests with an administrative body under the responsibility of a minister

The most important of the authentic registers are the register of persons, register of companies, cadastral register, register of geographic information, register of buildings, and register of addresses (*Ibid.*). The last four are the responsibility of Kadaster. This places Kadaster at the heart of efficient, effective, and legitimate property governance in the Netherlands.

During my research trip, I learnt about several examples of cadastral systems development both underway and complete. These are:

- Renewal of outdated systems to accommodate new needs – the renewal project

- A new way of subdividing properties without survey – Splits
- A voluntary, participatory land consolidation process – voluntary re-allotment
- Standardising land registration processes online
- Automated updating of the topographic base map [17]
- Using crowdsourcing in boundary surveys
- Several examples of Kadaster International's experience abroad, including in Rwanda, Lesotho, and South Africa

Except for the Kadaster International experience, these are examples of improvements being made to a well-functioning cadastral system. Because these improvements are being enacted by a well-funded, long-established world leader (N04, 2014), the processes used may be regarded as reflecting 'good practice' for similar contexts. The experience of Kadaster International represents attempts by a leading, Western-based organisation to bring about cadastral systems development in contexts more in line with the context for application of the conceptual framework developed in this research.

7.2 UNDERLYING THEORY

7.2.1 Understanding land and identifying theory

a) Attitude towards human and land rights

The transparency and accessibility of cadastral information in the Netherlands was cited as evidence that human rights are "not an issue" (N01, 2014).

> *"Human rights are embedded in our constitution... In practice the Cadastre … is considered impartial and follows transparent rules and regulations in its workings which apply to all parties in society. Because of that we are – in practice – not subject to human rights issues." (N05, 2017)*

As in Germany, there is an implicit acceptance of the human rights tradition, but the obligation of the State is not made explicit in the development process. This is again viewed as a shortcoming of the process of cadastral systems development.

b) Justification for development

The same four justifications appeared in the Netherlands case as in the German case: economic development, improving efficiency, reducing redundancy, and modernisation. The importance of adopting the latest technology and reaping the benefits of this (van der Molen & Wubbe, 2007; de Zeeuw, 2015b) is closely linked to modernisation. Development in this regard concerned the difficult and long-overdue project of replacing the outdated COBOL-based operating system [18] at the core of Kadaster's applications. A new structure is envisaged that can accommodate modern demands such as recording 3D rights (N01, N09, 2014). It is hoped that this renewal project will also improve efficiency of operations (N02, 2014).

Improving efficiency is also a justification for the voluntary land re-allotment project (N03, 2014). Here efficiency relates to the process of identifying fragmented land parcels, collaboratively

[17] Included because the cadastral map is linked to the topographic map in the Netherlands. These interviews also contain information about the process of development that has been followed.
[18] COBOL is an acronym for Common Business-Oriented Language.

consolidating parcels to reduce fragmentation, and the resulting improvement in agricultural productivity.

Improved efficiency was also a justification behind improvements to the Netherlands government's operating procedures: the move to e-government and e-land administration (van der Molen & Wubbe, 2007) and development of authentic registers (van der Molen & Welter, 2004; Vos, 2011). The problem was duplication of data in different databases creating the need to reduce redundancy, and a multiplicity of different access points, leading citizens "searching for specific information [to get] lost on the internet" (Vos, 2011: 2). Vos (*Ibid.*) links these improvements to the operations of the Netherlands cadastre, including standardisation of land registration procedures.

These justifications allude to the normative base for development. As in Germany, the normative base is strongly associated with Western-type ideals emanating from adherence to formalisation-type theories. The formality of the land tenure system in the Netherlands is supported by de Zeeuw (2015b: 7): "The main concept of the system of land registry and cadastre is the recording of the relationship between persons and land, through a *formal right*" (emphasis added).

The dominance of land titling theory in development thinking was evident from respondent N04 (2014), who affirmed the link between land registration and economic development. This thinking was supported with reference to Rwanda – "they have a vision for an open investment climate to foster economic development" – and Ethiopia – "the motivation [for cadastral systems development] is economic development" (*Ibid.*). Although this theoretical base strongly influences cadastral development in the Netherlands and abroad, development practitioners are open to adjusting their approach in accordance with the context for development:

> *"Sometimes, when we come to other countries, we need to come out of our comfort zone from the system we know. We think 'this is it', but this is not it! This is where we came from after several hundred years." (Ibid.)*

7.2.2 Goals for development

a) Gap analysis

Kadaster "are constantly engaging with customers to see what they want" (N04, 2014). "Serving customers' needs has always been an objective of our Agency" (de Zeeuw, 2015b: 9). Per requirements 2 and 3 of authentic registers (see Section 7.1), the Netherlands government is obliged to use Kadaster's products, and Kadaster are obliged to create a means for their clients to give feedback (N08, 2014). This makes the identification of problems and needs easier. The identified problems and needs giving rise to cadastral systems development in the Netherlands are listed below:

1. Renewal of an outdated system to accommodate new needs and support international investors (N01, 2014) (de Zeeuw, 2015b);
2. Improving efficiency and participation (N02, N03, 2014);
3. Adjusting feedback mechanisms (N08, 2014);
4. Introducing new systems to enable registration of complex 3D rights, which promotes investment (N09, 2014) (Stoter *et al.*, 2016);
5. Clarity, reliability, simplicity, efficiency, and accessibility of government services (van der Molen & Welter, 2004; van der Molen & Wubbe, 2007; Vos, 2011).

b) Measures of success

The measures of success should be aligned with the goals. These are summarised in Table 7-1.

Table 7-1 Measures of success of cadastral development at Kadaster

Indicators	Interviewees	Literature
Increased subdivisions	N02 (2014)	
Numbers of hectares exchanged	N03 (2014)	
Numbers of parcels registered	N04 (2014)	
Customer satisfaction	N01, G03, N07 (2014)	
Reduced complaints	N01 (2014)	(Louwsma, van Beek & Hoeve, 2014)
Doing more with less staff	N01, N07, N09 (2014)	(van der Molen, 2010)
Improved accessibility	N02 (2014)	(van der Molen & Wubbe, 2007)
Improved efficiency	N01, N07, N08 (2014)	(Wakker, van der Molen & Lemmen, 2003; van der Molen & Wubbe, 2007; Vos, 2011)
Improved quality	N07 (2014)	(de Zeeuw, 2015b)
A general impression of improvement	N07, N08 (2014)	(Wakker, van der Molen & Lemmen, 2003; Louwsma, van Beek & Hoeve, 2014)

7.2.3 Evaluation

Table 7-2 Evaluation of Netherlands case against Underlying Theory

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Theories of tenure reform	ID theory on continuum	Systematic titling	5	5
Understanding land in its social context	Attitude towards human and land rights	Ignored in development process	1	1
	Justification for development	Improving efficiency Reducing redundancy Modernisation Economic development	5 5 5 5	5
Goals for development	Gap analysis	Outdated, inefficient vs. modern, future-oriented cadastral system	5	5
	Measures of Success	See Table 6-1	5	5

As with the German case, human rights are assumed not to be an issue for cadastral development. This may be the case, but failure to address the State's obligations in this regard is a shortcoming of the development process, hence this element is 'not addressed' in Table 7-2. All other indicators are 'satisfactorily addressed'.

7.3 LAS CONTEXT

7.3.1 Land policy

a) Existing land rights

The current cadastral system ensures that existing rights and newly created land rights are legally protected (N01, 2014). This constitutes the basis of ensuring tenure security. However, considering the pro-poor emphasis of land policy in the conceptual framework, it should be noted that no mention was made in any of the interviews or secondary literature of the protection and promotion of *poor people's* existing land rights, either in the Netherlands or in Kadaster International's work abroad.

b) Class and gender

References to class-consciousness and gender-sensitivity are absent.

c) Productivity and livelihood

The only indicator related to pro-poor land policy that was identified was regarding improving productivity through the intensive use of land and labour. This was in relation to the voluntary land re-allotment project (N03, 2014) (Louwsma, van Beek & Hoeve, 2014).

7.3.2 Land governance

a) Active participation

Land governance begins with active participation by all land rights-holders in decisions pertaining to cadastral development – see Figure 7-1. Participation is something that the Netherlands are good at – see Section 7.5.3. This was supported in the interviews (N02, N04, 2014) and literature (Louwsma, van Beek & Hoeve, 2014).

Figure 7-1 A surveyor (right) discussing the subdivision of a property in Zwolle, Netherlands, with the client (left)

b) Equitable access

The publicity principle (Wakker, van der Molen & Lemmen, 2003: 6) states that "all documents concerning transactions on the land market should be eligible for public inspection". This includes being able to find out who has what rights to which land parcels (Vos, 2010). Through satisfaction of this principle, the criterion of equitable access may be addressed. Considering that a significant majority of the population have internet in their homes (N03, 2014), equitable access is ensured through making services available online, either for free (N08, 2014, referring to the topographic base map) or at minimal cost (N03, 2014, referring to cadastral information). For users who do not have internet access, cadastral information is also available at walk-in offices (*Ibid.*).

c) Transparency, accountability, and the rule of law

Transparency is facilitated by the digitalisation of the cadastral system, and this helps to root out corruption (N04, 2014). Transparency is also an attribute of the authentic registers: there should

be transparency of legislation (following the rule of law) and of finances (account must be given for all expenditure) (van der Molen & Welter, 2004; Vos, 2011). Hence accountability and the rule of law are also satisfied.

d) Appropriate technology

The use of appropriate technology was noted to be a means of ensuring good land governance (see Section 5.2.4). The Netherlands Kadaster makes use of modern, state-of-the-art survey technology (Figure 7-2). Mention has already been made of the use of web portals as a contextually appropriate technology. Standard geographic information systems software is referred to as an appropriate tool for cadastral development (N03, N06, N07, N08, 2014). The use of e-government services for electronic submission of deeds and integration of data sources is also highlighted as contextually appropriate (van der Molen & Wubbe, 2007).

Figure 7-2 Recording boundary positions using GNSS in Zwolle, Netherlands

7.3.3 Strategic level

a) Changing rights type

As in Germany, changing land rights type was not a goal for any of the cadastral developments studied in The Netherlands. However, the work of Kadaster International should take this element into consideration. Their work is largely motivated by the desire to register land rights for improved tenure security (N04, 2014). Prior to such, emphasis should be placed on identifying the appropriateness of existing rights, their security, and whether change is required. This should be built into the design of the development project (N04, 2017).

b) Improving tenure security

Providing and improving tenure security is a well-established goal for the Netherlands Kadaster (Wakker, van der Molen & Lemmen, 2003; de Zeeuw, 2015b). Per Whittal (2014), legitimacy, legality, and certainty may be used as indicators of tenure security. The former is identified as an aim of the introduction of data infrastructures and authentic registers (van der Molen & Welter, 2004). Improvements in legality and certainty appear in the Splits programme (N09, 2014),

computerised processing of land registration (Vos, 2010), and in the development of authentic registers (Vos, 2011).

7.3.4 Implementation level

a) Recording / registration

The nature of the land recording / registration mechanism in the Netherlands is a deed registration system (Wakker, van der Molen & Lemmen, 2003; Vos, 2010; de Zeeuw, 2015b). The registration of land rights has been compulsory since 1824 (Wakker, van der Molen & Lemmen, 2003) and all properties are registered (de Zeeuw, 2015b).

b) LTIS

Standards are clearly defined in the land registration project (van der Molen & Wubbe, 2007; Vos, 2010) and the automated updating of the topographic map (N06, N08, 2014). The Land Administration Domain Model (Lemmen, van Oosterom & Bennett, 2015) provides a standard for any country wanting to implement a LAS (N04, 2014). It also influences developments towards 3D cadastres (Stoter, Oosterom & Ploeger, 2012).

The accuracy of the Netherlands cadastre is on par with that of Germany, being at the centimetre level (Wakker, van der Molen & Lemmen, 2003), and improvements to boundary accuracies are ongoing (de Zeeuw, 2015b). Concerning reliability, "Any improvement needs to be tested and shown to be 'waterproof' " (N04, 2014). Reliability is built into the Splits programme (N02, 2014), online land registration (N09, 2014), and automated updating of the topographic base map (N06, 2014) through checks on certain conditions. Some conditions relate to the legality of actions, while others relate to the secure identification of users (Vos, 2011). Lastly, concerning affordability, cadastral information on any property in the Netherlands is easily accessible by anyone for a small fee – "so no-one is disadvantaged" (N01, 2014). "Using the e-cadastre, users have to pay €4 to get information online, but €15 if they use the walk-in office. This policy tries to stimulate online use." (N03, 2014)

When land registration and cadastre are executed in one, integrated organisation with semi-independent status, as per Kadaster, this works better than when it forms part of the State and in two different ministries (N04, 2014). As mentioned earlier, the Netherlands cadastre and registry have been integrated into one organisation since 1825. Plots are also uniquely identified, and the cadastre covers the entire country (N09, 2014).

Prior to June 2006 there were 15 provincial deed registries (van der Molen & Wubbe, 2007), meaning that "a deed concerning immovable property had to be recorded several times in different regions" (Vos, 2010: 6). The introduction of e-government made electronic submission of deeds possible, resulting in a national (centralised) deeds registry (van der Molen & Wubbe, 2007; van der Molen, 2010; Vos, 2010).

The multi-purposes of the Netherlands cadastre include providing legal security of tenure, facilitating the land market, and supporting government services such as urban planning, environmental management, and land taxation (Wakker, van der Molen & Lemmen, 2003; de Zeeuw, 2015b). Van der Molen & Wubbe (2007) indicate that this would not be possible without a digital environment of e-government.

The provision of up-to-date services was a motivation for the automatic generalisation of smaller scale maps from large scale maps (N07, 2014). "Everything changes all the time – we have a very busy country – and it's quite a job to keep the database up-to-date" (N06, 2014: 2). Land registration data captured in the authentic registers also needs to be kept current (Vos, 2011).

Regarding user-friendliness, several examples were noted. The Splits programme introduced a user-friendly, efficient, and accessible way of quickly subdividing a property without the immediate need for land surveyors (N02, 2014). A user-friendly web portal also forms a feature of the voluntary land re-allotment project (N03, 2014). Improving the feedback system on the topographic base maps through use of ArcGIS online has resulted in a substantial increase in user feedback and error-checking (N08, 2014). And the move to e-government has necessitated a 24-hour, online presence from Kadaster to respond to users' requests for information or assistance (van der Molen & Wubbe, 2007).

7.3.5 Evaluation

Table 7-3 Evaluation of Netherlands case against LAS context

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Land policy	Existing land rights	Guarantees and protects registered land rights	5	4
		Lack of pro-poor emphasis	3	
	Class and gender	Assumes homogenous society	1	1
	Productivity and livelihood	Addressed in voluntary land re-allotment	3	3
Land governance	Active participation	Ensured	5	5
	Equitable access	Ensured	5	5
	Transparency, clarity, simplicity	Ensured	5	5
	Accountability and the rule of law	Ensured	5	5
	Appropriate technology	Ensured	5	5
Strategic level	Changing land rights type	Investigate appropriateness of existing land rights before undertaking land registration projects	3	3
	Improving tenure security	Legitimacy, legality, and certainty addressed	5	5
Implementation level	Land recording / registration mechanisms	Compulsory registration by deed	5	5
	Land tenure information system	Clearly defined standards Relevant, accurate, reliable, affordable information Integrated registry and cadastre Plots uniquely identified Centralised services Multi-purpose cadastre Up-to-date-ness User-friendliness	5 5 5 5 5 5 5 5	5

All elements are 'satisfactorily addressed' for land governance and the implementation level. Changing land rights type is the only element that is 'partially addressed' at the strategic level. This element was marked as irrelevant in the German case and is only relevant here because of Kadaster International's work in developing contexts, where it is important to identify which rights are insecure and why.

Deficiencies are noted at the policy level. There is no mention of class-consciousness and gender-sensitivity in the Netherlands case, so this element is marked as 'not addressed'. Existing land rights are defined, recognised, and protected, but emphasis on the land rights of the poor is

lacking, hence this element is noted as 'adequately addressed'. These two deficiencies are contextually motivated, but for policy to be pro-poor they should be present. The only mention of improvements to productivity and livelihood were regarding the voluntary land re-allotment programme, hence this element is noted as 'partially addressed'.

7.4 CHANGE DRIVERS

7.4.1 Demand-based drivers

a) Socio-Economic

As with Germany, the initial purpose of the Netherlands cadastre was a means for raising land tax. The provision of tenure security is a more recent mandate of the government (Wakker, van der Molen & Lemmen, 2003; Vos, 2010). Improving affordability was also a driver for most of the development projects studied (see e.g. van der Molen & Welter, 2004). Land consolidation is linked to improved well-being as a mixture of individual benefit for landowners or lessees, and "common benefits for the society as a whole" including environmental protection (N03, 2017). Contextual needs, which relate to the bottom-up aspect of land rights-holders' claims (see Figure 4-3), was a significant driver for the voluntary land re-allotment process, where the initiative came from the farmers themselves in conjunction with government (N03, 2014) (Louwsma, van Beek & Hoeve, 2014).

b) Administrative

The modernisation of the LAS towards improved efficiency and accessibility (van der Molen & Welter, 2004; Vos, 2010) relates to a reduction in complexity and uncertainty, especially regarding registration of 3D rights in complex building rights situations (N09, 2014) (Stoter, Oosterom & Ploeger, 2012; Stoter *et al.*, 2016).

c) Environmental and legal

Climate change is not a *direct* driver of cadastral systems development (N03, 2017). While measures of energy conservation are expected to increasingly impact on the value of real estate (leading to additional need for information), climate adaptation (e.g. flood protection) may lead to new public restrictions and/or responsibilities. Energy compliance certificates and public law restrictions are expected to form an integral part of, or be linked to, the cadastral information suite (N05, 2017). These are expectations for the future and have not been drivers of cadastral systems development to date.

Land insufficiency was identified in the context of Kadaster International's work abroad, specifically dealing with land grabs (N04, 2014). It was also addressed in voluntary land re-allotment (N03, 2014), and is part of the reason behind the need for a 3D cadastre. Environmental management and urban planning were drivers for land re-allotment (Louwsma, van Beek & Hoeve, 2014) and an outcome of cadastral development towards a multi-purpose cadastre (Wakker, van der Molen & Lemmen, 2003; de Zeeuw, 2015b). Urban planning was also an outcome of the development of a multi-purpose cadastre (Wakker, van der Molen & Lemmen, 2003; de Zeeuw, 2015b). Urban planning is linked to e-government, the introduction of SDI (van der Molen & Wubbe, 2007), and the need for a 3D cadastre (Stoter, Oosterom & Ploeger, 2012).

d) Political

Political will is a driver of the renewal project (N01, 2014). There was also political pressure for the land re-allotment project to succeed (N03, 2014), and political will drove the Rwandan land

registration programme supported by Kadaster International (N04, 2014). This represents the top-down approach of the State's obligations towards land rights-holders (see Figure 4-3).

Donor involvement is noted to be a significant driver for the work of Kadaster International in Rwanda, Lesotho, and Kenya. "Donors make promises of money contingent on there being a land registration system in place" (N04, 2014).

7.4.2 Supply-based drivers

a) New technology

> *"In the future, the buyer and seller could use cell phones and mark their boundaries using an app, uploading the information to Kadaster. Using Electronic Identification Devices, their identities are verified." (N09, 2014)*

With reference to Section 1.3.4, such predictions are already being realised around the world. New technologies provide new opportunities that act as drivers for cadastral systems development (Wakker, van der Molen & Lemmen, 2003). Laser scanning, photogrammetry, mobile mapping, BIM (building information modelling), and drone technology are opening up further possibilities in this area (Jazayeri, Rajabifard & Kalantari, 2014).

The Netherlands Kadaster has been making use of new computer technology since the 1980s and keeping up to date with modern computer systems and new user requirements is the driver behind the renewal project (N01, N04, N09, 2014). Electronic submission of deeds, automated updating of databases, and on-line data distribution are some of the opportunities created by e-land administration (van der Molen & Wubbe, 2007; Vos, 2010) necessitating a restructuring of the organisation (van der Molen & Welter, 2004; van der Molen, 2010). Improvements to the topographic base map have been made possible through new technologies such as 3D viewers, laser scanning, and mobile mapping (N06, 2014).

With new technology comes concerns over the institutional and/or community capacity of adoption. In some instances, new software had to be developed in-house (N03, N02, 2014) or this was outsourced (N01, 2014) to meet the needs of the different development projects. Enhancing capacity is a concern of Kadaster International, because their work involves bringing in new concepts and systems to contexts that lack the know-how to adopt them:

> *"It is important to identify and train someone on the ground who will be the local expert and can use and maintain the system: the 'clever boys'. For* **sustainability***, you need ownership of the system and the tools and capacity to maintain it. Maintenance is a very important issue!" (N04, 2014).*

b) New theories

Arnstein's (1969) theory about public participation influenced the development of the voluntary land re-allotment project (Louwsma, van Beek & Hoeve, 2014). Theoretical propositions have also influenced the development of a system for registering 3D property rights (Stoter, Oosterom & Ploeger, 2012). In both cases, these theories have suggested what should be recorded, why, and (in the voluntary re-allotment case) how.

c) New policies

Land registration and cadastral development are both highly political, and it is important for development to fit land policy (N04, 2014). Policy is noted to be important for "providing the framework for operational activities" (van der Molen & Wubbe, 2007: 3). Policy influences legislation, and changes in legislation can create opportunities for development, for example the

electronic submission of deeds (van der Molen, 2010). Sometimes the existing political and legal climate can hinder change, and legislation may need to be amended to accommodate new ideas (N01, 2014, and see Section 7.5).

7.4.3 Evaluation

Most of the demand drivers are present in the Netherlands case. The evidence for the improvement of well-being is superficial, hence the 'social' element is marked as 'partially addressed' in Table 7-4. Climate change was not identified as a driver for cadastral systems development in the past, but it is expected to have an influence in the future. For this reason, the 'environmental' driver is also 'partially addressed'. As per the German case, the evidence of theory influencing development is insubstantial, hence this element is also 'partially addressed'. Urban planning (identified in the German case) was present. The Netherlands case introduces two new demand drivers: donor involvement (particularly relevant for Kadaster International) and contextual needs (relating to the bottom-up aspect of democratic land governance). All the supply drivers were identified in the Netherlands case.

Table 7-4 Evaluation of Netherlands case against Change Drivers

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Demand	Economic	Cadastre as basis for taxation Improved affordability	5 5	5
	Political	Political will driving development Donor involvement	5 5	5
	Social	Providing tenure security Addressing contextual needs	3 3	3
	Legal	Land insufficiency and urban planning	5	5
	Administrative	Improve LAS	5	5
	Environmental	Expected for the future	3	3
Supply	New technology	Providing new opportunities Requiring capacity development	5 5	5
	New theories	Influencing what should be recorded, why, and how	3	3
	New policy	Policy influencing development Development influencing policy	5 5	5

7.5 CHANGE PROCESS

7.5.1 Community / country context

a) Historical context

The Netherlands' cadastral heritage is traced to the influences of Napoleon and King William I (Wakker, van der Molen & Lemmen, 2003; Vos, 2010; de Zeeuw, 2015b). There is both awareness and acknowledgement of this legacy. Active engagement is not addressed because cadastral development has not been used to address injustices in the past (when compared to the cases of Germany and South Africa). This is not a consideration on Netherlands soil but should be a consideration in the former Netherlands colonies. Decolonisation is topical in South Africa at present, whereby the influence of colonisation is questioned and alternatives to the status quo are sought (van Heerden, 2017). The intention is to find alternatives to oppressive colonial vestiges in education, legislation, and administration. Cadastral systems development in post-colonial contexts should take the need for decolonisation into account.

b) Current context

Institutional and community capacity influence the ***success*** and ***sustainability*** of development: where the capacity to adopt new systems is lacking, development will likely fail. Education and training are therefore important (N04, 2014). This is an element of the current context that influences cadastral systems development related to voluntary re-allotment (Louwsma, van Beek & Hoeve, 2014) and 3D cadastres (Stoter, Oosterom & Ploeger, 2012).

Land rights and tenure systems in the Netherlands are all formally recorded. "There are no problems with informal and illegal settlements" (de Zeeuw, 2015b: 6), even after the influx of refugees (N05, 2017). Regarding Kadaster International's influence abroad, "Our department of Foreign Affairs is very active in promoting land rights and institutions to support them world-wide, and we have a close cooperation with them in the LAND-program" (*Ibid.*).[19] This is in line with the government of the Netherlands' aim to support policies that improve security in societies, in order to assist those societies in developing and prospering in the long term. Establishing LAS as a means of promoting land rights is one way in which this aim is realised (N04, 2017).

7.5.2 Getting to the end state

a) Good leadership

Showing commitment to the process of development is important for ***sustainability***. For Kadaster International's work in developing contexts, this involves identifying and training up individuals who can be the local experts (N04, 2014). These individuals should be invested in the development and drive the implementation and maintenance of the system. Unfortunately, experience has shown that they may use their new skills to find better employment elsewhere, leaving a vacuum of skills and leadership behind. Hence, commitment is an important attribute of good leadership. Commitment is also important from the highest level (van der Molen & Wubbe, 2007; Louwsma, van Beek & Hoeve, 2014): if there is donor pressure for development but the government is not in agreement with the project, "don't even start" (N04, 2014).

Good leaders need vision and faith to overcome obstacles to development. As far back as 1825, when King William I decided to integrate the registry and cadastre, his vision and commitment were tested through opposition by lawyers (Wakker, van der Molen & Lemmen, 2003). More recently, during the voluntary re-allotment project, the software required to guarantee legal certainty was not available and had to be developed in-house. Project leaders needed vision to see the intended outcome despite the lack of available resources, and faith in the software developers to be able to deliver a suitable product (N03, 2014). By contrast, faith in software developers was misplaced when it came to the renewal project. Vision and faith need to be balanced by realistic expectations. The renewal project has been underway since 1996. Twice already external companies have tried to complete the project and have failed (N01, 2014). This is due to the complexity of the laws and regulations involved (N04, 2014).

Corruption was highlighted as a concern: new developments create opportunities for corrupt people to wrest land away from the intended beneficiaries (N04, 2014). This is an unintended consequence of development that should be guarded against (see Section 7.6 below). Unbiased and impartial leaders are needed to protect land rights-holders against such system abuses.

[19] The Land Administration for National Development (LAND) programme is a partnership between the Netherlands Ministry of Foreign Affairs and Kadaster. It aims to help set up sustainable and fit-for-purpose land administration using practical solutions to enhance tenure security in countries with no LAS in place, or to improve existing LAS (Tomberg & Valkman, 2016).

> *"Good leadership can never be guaranteed, even though intentions might be good … To some extent stakeholders have to trust the 'leader'." (N03, 2017)*

Like in Germany, community acceptance did not feature as a leadership attribute in the Netherlands. However, it should be a concern for Kadaster International's involvement in projects outside the Netherlands, especially in developing contexts where leadership structures may be contested. Use of locally sourced and trained experts may be a step in this direction (N04, 2014).

b) Building on existing practice

Getting to the end state is facilitated by building on existing practice**.** In the Netherlands case, this includes crowdsourcing of cadastral boundaries (N08, 2014). Existing legal and cadastral frameworks were also used during the first phase of development of a 3D cadastre. The second phase builds on the lessons learnt from the first phase (Stoter, Oosterom & Ploeger, 2012; Stoter *et al.*, 2016).

For Kadaster International, relying on local and indigenous knowledge and institutions was noted as a possible remedy to unrealistic expectations (N04, 2014). Identifying and training individuals from the community allows them to draw on their inherent understanding of local customs and practices, coupled with learnt knowledge of the system under development, to ensure ***sustainability*** and ***significance*** of development.

c) Time to completion

Taking sufficient time was noted as a concern with regards realistic expectations. For Kadaster, the renewal project, now in at least its third iteration, may only be complete in 2020. The initial plan, in 1996, was for the project to be completed in two years (N01, 2014). Likewise, the Splits project took five years when the initial plan was for 2 to 3 years (N02, 2014). Conversely, registration of the whole country of Rwanda was completed in four years, one year less than was planned (N04, 2014). This ***success*** is partly attributable to the use of fit-for-purpose standards and methods:

> *"You have to do it 'quick and dirty' else people may start to grab land ahead of the process to claim larger plots. Go quickly and implement something, and then take the next 400 years to improve it!" (N04, 2014)*

d) Implementing change

Pilot projects were used to test the exchange of information between countries (N01, 2014); to create, test, and use templates for new land registration processes (*Ibid.*); to develop a new way of subdividing parcels (N02, 2014); to test the voluntary re-allotment process (N03, 2014); to develop a 3D property registration system (N09, 2014); and to test a method for crowdsourcing political boundaries (N08, 2014). Some of these were "pilots in production" (N02, 2014), i.e. the new product was being used while it was still under development and users were invited to give feedback to the developers.

After the pilot is successfully completed, the recommendation is to incrementally implement the new development (van der Molen & Wubbe, 2007). Initially, there were no planned phases for the renewal project. Only after initial failure was the project split into parts and development focussed on completing certain aspects before moving to the next aspect (N01, 2014). Digitalisation of the land registration process was introduced in three phases (Vos, 2010), and the creation of a 3D cadastre is being done in two phases (Stoter, Oosterom & Ploeger, 2012; Stoter *et al.*, 2016).

Successful implementation also requires the use of appropriate methods and instruments for the context. Following are some recommendations in this regard (N01, N02, 2014):

- Going with the cheapest tender is not always the best option, because this may lead to unrealistic expectations and stalled projects.
- When using the latest technologies, it is important to bring in knowledgeable experts to train users, else the state-of-the-art technology remains inappropriate for the context.
- New systems should be developed and implemented in parallel with existing systems when it is too costly to shut them down.
- New developments should also meet all the existing legal requirements and use technologies that are accessible for the intended users.

It was noted in Section 7.4.2 that sometimes the legal framework hinders development. Policy and legislation can also become outdated. Hence developments may influence policy: "Kadaster is able to influence land policy to accommodate [new] requirements" (N01, 2014).

7.5.3 Working together

a) Engagement

The Netherlands have extensive experience in the area of engagement, having developed a Polder Model of consensus since the Middle Ages (Vos, 2010). This is reflected in the current obligation on users of authentic registers to report any errors (see requirement 2 on page 92). Because there is "no punishment for not reporting errors and nobody who actually checks if people are reporting errors" it is difficult to check how well this obligation is upheld (N11, 2019). What is evident is that "the amount of feedback for almost every register is growing" (*Ibid.*) – see Table 7-5. This is attributed to improvements in the ease of giving feedback rather than the legal obligation. "What works about the law is that it gives responsibility towards governments to create a feedback system, towards data providers to assess the feedback and of course also to data users" (*Ibid.*).

Table 7-5 Amount of feedback received by users of authentic registers (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018)

Authentic register	Feedback (2016)	Feedback (2017)	% change
Kadaster	38 005	37 997	0
Persons	26 456	28 554	+8
Commercial	9 272	10 918	+18
Buildings and addresses	6 684	9 575	+43
Large-scale topography	2 072	4 500	+117
Vehicles	4 327	1 307	-70
Topography	215	539	+151

Another area of engagement is in the constitution of a mandatory customer board that can influence any changes Kadaster is proposing:

> *"Representatives from all municipalities, notaries, and other users form the customer board and they are informed of any future developments. They take it to their user group so that they can prepare their working processes for the change. A change like the renewal of the core system is discussed at length – it is a very participatory process." (N01, 2014)*

Both of the above examples serve to highlight the customer-oriented, service mentality that has been growing since 1994, when Kadaster became independent from the State. "They are

constantly engaging with customers to see what they want" (N04, 2014). But perhaps most significant in this regard is the ethos of Kadaster to be a service-centred organisation – this is a stated objective of the organisation (de Zeeuw, 2015b). Such a philosophy facilitates effective *working together*: "The vision of a land administration organisation should be: how can we serve society to be as efficient and effective as possible?" (N04, 2014).

Getting the right people to the table is insufficient if their voices are not heard. For the voluntary land re-allotment project, the use of web portals enabled equity in this regard (N03, 2014), provided that all stakeholders have equal access to online services (see Section 7.3.4). Facilitation was important to ensure that power differentials did not result in some participants being disadvantaged during face-to-face participation (N03, 2014). Attention was also given to cost as a possible deterrent to participation. Financial costs were mostly compensated, and subsidies were made available to pay for the new deeds and processing costs. Looking at cost more broadly, "Social, emotional and personal physical costs, if any occur, are typically not reimbursed as people participate on a voluntary basis" (N03, 2017).

Education and communication are also crucial for on-going, effective engagement. Customer boards play an important role in communicating new developments to their user groups "so that everyone is aware of forthcoming changes and what to expect" (N01, 2014). Effective communication was important for farmers expressing their views around the table during the voluntary re-allotment project (N03, 2014).

Communication is also important for Kadaster International's work abroad. In Rwanda, monthly community meetings are held to discuss developments, "and these moments were used to explain the process" of land registration (N04, 2014). In El Salvador, the lack of an awareness campaign led to unscrupulous opportunists disinvesting people of newly acquired land rights, because the rights-holders did not understand the value of their title (*Ibid.*).

b) Handling equity

The concerns over power differentials noted above are evidence that not all participants stand on an equal footing. "Of course, we *try* to treat people on an equal footing, and it helps that we have no direct interest in the area and therefore may be considered as an independent party that facilitates the process … but we do not know what happens outside the meetings" where land owners could put pressure on others to steer the outcome in their favour (N03, 2017). Issues of equity are especially relevant for development into different rights contexts than those of the developer, as is the case for Kadaster International.

c) Resolving disputes

Collaboration is bound to lead to disputes, and effectively resolving disputes facilitates successful participation. For land re-allotment, "Disputes or potential disputes are first discussed collaboratively, as other landowners might be of help in arranging a better appreciated solution" (N03, 2017). Disputes are resolved through mediation, drawing on the relevant knowledge of the facilitators (*Ibid.*). Accessibility is important for building good communication (N03, 2014). Where each of these indicators are in place, the likelihood of disputes is decreased.

7.5.4 Evaluation

Active engagement of the historical context was lacking, and this should be present in developments seeking to address colonial legacies. For the current context, the capacity of institutions and community to adopt new developments was 'satisfactorily addressed'. Lacking are clear acknowledgements of more diverse land rights and tenure systems, and adaptability to

tenure and institutional dynamics. These are concerns for cross-cultural development into customary contexts. Hence the element 'current context' is 'adequately addressed'.

Table 7-6 Evaluation of Netherlands case against Change Process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Community / country context	Historical background	Actively engaging colonial legacies	1	1
	Current context	Registered rights recognised	5	4
		Institutional and community capacity-building	5	
		Clear acknowledgement of diversity	3	
Getting to the end state	Good leadership	Realistic vision, commitment, faith	5	4
		Unbiased and impartial	3	
		Community acceptance	3	
	Build on existing practice	Crowdsourcing Using local experts	5 5	5
	Time to completion	Taking longer than anticipated Doing it 'quick and dirty'	3 3	3
	Implementing change	Using pilot projects and phasing Using appropriate methods and instruments Developments influence policy	5 5 5	5
Working together	Effective, sustainable engagement	Legal obligation facilitated by ease of feedback	5	4
		Effective, on-going communication	5	
		Keeping costs down	3	
		Guaranteeing safety of all participants	1	
	Handling equity	Not adequately addressed	1	1
	Resolving disputes	Supportive environment for change	3	3

Regarding *Getting to the end state*, as with the German case, the necessity of ensuring that leaders are unbiased and impartial was 'partially addressed'. For cross-cultural development and development in customary contexts, such as the work done by Kadaster International, avoiding organisational multiplicity and community acceptance of leadership are both important. The use of locally sourced and trained experts goes some way to ensuring the latter, but is insufficient, which is why 'community acceptance' is also 'partially addressed'.

Adopting and adapting existing good practice, mentioned in the German case, was also identified in the Netherlands case regarding crowdsourcing and using local experts. While it is acknowledged that development should work within existing political frameworks, where these restrict the possibilities for new improvements, development practitioners should be able to influence policy to allow for innovations.

Regarding *working together*, effective engagement is 'adequately addressed'. More attention should be given to the cost of engagement, broadly defined. Ensuring the safety of participants

was 'not addressed'. Handling equity was again absent from the case study, and this is again a concern, especially in cross-cultural and customary development context.

Lastly, dispute resolution was addressed in the voluntary land re-allotment project. It is acknowledged that Kadaster's approach is generally conducive to a supportive environment for change that avoids conflict. Taking this general ethos into consideration, resolving disputes is labelled as 'partially addressed' in Table 7-6.

7.6 REVIEW PROCESS

7.6.1 Why review?

The following reasons were given for conducting reviews of the projects described:

- getting feedback from clients (N02, N07, N08, 2014) as part of the legal obligation on authentic registers (N03, N08, 2014),
- improving the product (N01, N02, 2014),
- assessing the impact of developments (N04, 2014), and
- assessed their ***success*** (N03, 2014) and ***sustainability*** (N04, 2014).

7.6.2 What is reviewed?

a) Outcomes

The participatory focus of Kadaster ensures that land rights-holders' needs are taken into account (N04, 2014), and this is a stated objective of the agency (de Zeeuw, 2015b). The use of appropriate indicators to measure the outcomes is highlighted in the conceptual framework, but these were not addressed in the case study. For example, there are "no specific indicators" for review of the land re-allotment project (N03, 2017).

Unintended consequences are a surprising outcome of development. For example, in simplifying the land ownership database, an attribute for nobility registers was deemed to be out-dated and deleted. Even though this was done in consultation with customers, it resulted in a court case and a lengthy procedure to reinstall the attribute (N01, 2014). Another unintended consequence arises from the use of crowdsourcing. To check the topographic base map for errors and define boundaries, users can upload pictures to support their edits. There is the possibility that someone might upload inappropriate content (N08, 2014).

b) Impacts

Impact is assessed in terms of community well-being and environmental sustainability. The former includes socio-cultural, economic, political, or institutional impacts. Examples were identified in Section 7.4.1. Well-being wasn't directly measured in the land re-allotment project (N03, 2017), although land re-allotment does impact environmental sustainability (Louwsma, van Beek & Hoeve, 2014).

7.6.3 When is it reviewed?

"There are many review moments … Developments are never finished because organisations grow and, once implemented, the questions will come" (N04, 2014). "Pilots in production" (N02, 2014) are an example of allowance being made for users to provide feedback throughout the development process.

7.6.4 Who does the reviewing?

a) External reviewers

Organisations including the World Bank and Global Land Tools Network were mentioned as external reviewers (N04, 2014). The main stakeholder for the renewal projects was identified as the notaries, with whom there is close cooperation (N01, 2014). Adjustments to the cadastral system are made in consultation with notaries and other users (see the references to participation above), and their feedback is important. Notaries are also regarded as an external, independent organisation in the land re-allotment project. They are mandated to review the deeds before registration (N03, 2017).

b) State and community

State organisations using cadastral information are obliged to provide feedback (N01, N08, 2014). Hence there is a dedicated claims and complaints department in Kadaster, as well as a 24-hour helpdesk. This also serves the community (N01, 2014). Doing 'pilots in production' is another way of getting grass-roots feedback from the community using the cadastral system. Social media was useful for getting feedback from users related to the automated updating of the topographic base map (N07, 2014). And, as mentioned previously, the use of crowdsourcing opened Kadaster up to a whole new group of users with feedback to give (N08, 2014).

7.6.5 How is it reviewed?

As with the German case, a new aspect was identified in the Netherlands case: *how is the review process conducted*? In the German case, this was linked to funding, but this was 'not addressed' in the Netherlands case. Instead, for the Netherlands, *accessibility* and *transparency* were noted to be important. Due to the obligation on users to provide feedback on system processes, it has become necessary for Kadaster to design user-friendly, easily accessible feedback mechanisms (N08, 2014). In the land re-allotment project, "all people sit together to discuss their wishes regarding the new allocation … and negotiate until a plan is developed that has the approval of all participants" (N03, 2017). In this way, the transparency of the process is ensured.

7.6.6 Evaluation

Several reasons were given for why reviews take place. Most significantly for this case is the legal obligation on authentic registers to receive feedback from users of the registers. Impact (which is linked to ***significance***), ***success*** and ***sustainability*** are associated motivations.

Regarding what is reviewed, there was good awareness of the need to link outcomes to the goals of development as derived from the needs of land rights-holders. However, no identification of the indicators used for doing this was found, hence this element is 'partially addressed' in Table 7-7. Unintended consequences were noted as providing a review point.

Regarding when review happens, in some instances, reviews are ongoing, throughout the development process. Intervals for review were not clearly defined, hence this element is also 'partially addressed'.

Regarding who does the reviewing, external organisations were mentioned, but their role was not clearly defined. Getting feedback from State organisations and the community using or impacted by development is a high priority for Kadaster, so these are 'satisfactorily addressed' in Table 7-7.

Lastly, *how reviews are done* is added as an additional aspect of the review process. Ensuring *accessibility* through user-friendly feedback mechanisms was identified as important for

Kadaster, while *transparency* was highlighted in the land reallotment project. *Funding* was 'not addressed'.

Table 7-7 Evaluation of Netherlands case against Review process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Why	Success	Improving the product	5	5
	Sustainability	Assessing success and sustainability	5	5
	Significance	Assessing impact	5	5
What	Outcomes	No specific indicators used	3	4
		Unintended consequences identified	5	
	Impact	Community well-being	3	3
		Environmental sustainability	3	
When	Well-defined intervals	Partially addressed	3	3
	Throughout development process	Partially addressed	3	3
Who	External reviewers	World Bank, GLTN, notaries	3	3
	State organisations	Legally obligated	5	5
	Community	Legally obligated	5	5
How	*Funding*	*Not addressed*	*1*	*1*
	Accessibility	*User-friendly, ease of access*	*5*	*5*
	Transparency	*Negotiating solutions*	*3*	*3*

7.7 SUMMARY

The following shortcomings of cadastral development in the Netherlands and under the influence of Kadaster International are identified:

1. No attention is given to human and land rights in the context of cadastral development. For the goal of ***significance*** to be met, this oversight should be addressed.
2. Climate change was not explicitly identified as a driver for cadastral development in any of the literature reviewed or the interviews conducted. Given the Netherlands' proximity to the ocean and low-lying topography, this should be a concern.
3. Having unbiased and impartial leaders, and avoiding organisational multiplicity, are details missing from the element *getting to the end state*. The former is important for all development contexts, while the latter is particularly important for cadastral development in developing contexts under the influence of Kadaster International.
4. For cross-cultural development and to rectify the injustices of the colonial legacy, actively engaging the historical background and adaptability to dynamics of tenure and institutions are particularly important.
5. For the element *working together*, handling equity and ensuring the safety of all participants were not addressed. Again, these are important considerations for developing contexts.
6. For the LAS context, class-consciousness and gender-sensitivity is the only element that is inadequately addressed.
7. For the review process, the indicators themselves were not adequately specified. Well-defined intervals were not set for review, and neither was transparency of the review process ensured. Funding was not specified for reviews.

The following indicators and elements are identified as needing improvement:

1. Regarding drivers, improvement of well-being should be more explicitly addressed.
2. Community acceptance of leaders (and the institutions they represent) is important in all contexts.
3. Acknowledgement of existing land rights and tenure systems is present in the Netherlands but should be more explicit for Kadaster International's work in developing contexts.
4. Attention needs to be given to the multi-dimensional nature of cost as a possible deterrent to effective engagement.
5. Dispute resolution should be built into development programmes.
6. More attention needs to be given to defining, recognising, and protecting the land rights of the poor, both in the Netherlands and in developing contexts.
7. Regarding Kadaster International's involvement in developing contexts, clear identification is required of the appropriateness of existing land rights, which land rights need strengthening, and why they need strengthening.
8. The impact of development on community well-being and environmental sustainability should be given more prominence in the review process.
9. Lastly, reviews were mostly conducted by the community of users of Kadaster's services, and by Kadaster itself. External, independent, knowledgeable reviewers should be brought in to assess the process of cadastral systems development.

8 MOZAMBIQUE

Drawing on the lessons learned in the previous chapters, where the conceptual framework was applied in developed, European contexts, the conceptual framework is now used in the context of *customary* land tenure reform. It is expected that the development of the conceptual framework was biased towards developed western cadastral systems development as discussed in Section 1.5, and that this bias may not be revealed in the first two European cases. However, in the two southern African cases presented, those of the Mozambican and South African land reform projects, this bias is expected to become apparent and facilitate the extension or modification of the conceptual framework to align not only with formal law and practice but also with practices in customary settings in both countries.

The Mozambican case is a purely desktop study wherein published, secondary sources are used to evaluate the usefulness of the framework. The South African case draws on a combination of primary data collected through first-hand interviews with key informants and focus groups, as well as published, secondary data, as explained in Section 3.3.2.

8.1 INTRODUCTION

Beginning with competition for land from pre-colonial times, the development of land administration in Mozambique until the present is described. This description forms the backdrop for the following evaluation of land administration and cadastral systems development using the conceptual framework.

8.1.1 Competition for land: pre-colonial to civil war

Competition for land has been at the heart of Mozambique's history. Pre-colonial empires competed for control over the fertile floodplains of the Limpopo and Zambezi Rivers. Later, the same agricultural land, as well as the highland areas where cotton, tea, and other cash crops flourished, became sought after by the Portuguese colonisers. With several different people groups taking an interest in and competing for land, the land-holding pattern became fragmented, reflecting racial and socio-economic divisions. The Portuguese settlers tended to occupy the most fertile land, while some of the indigenous population were left with only marginal farmland (Tanner, 2002). The spark of dissatisfaction was lit, inevitably leading to an armed struggle for independence "simply to oust the Portuguese and get their land back" (*Ibid.*: 6). Independence from colonial rule came in 1975, and most of the Portuguese settlers left, taking with them their knowledge and skills; the indigenous population had not been sufficiently educated under colonial rule to take up where the colonisers had left off (UN-HABITAT, 2005).

After independence, the Liberation Front of Mozambique (FRELIMO) nationalised all land and embarked on a socialist-based development programme, including the introduction of State farming and the socialisation of rural areas (*Ibid.*). Free markets, international capital, and decentralised control over political and economic resources were seen as contrary to the ruling party's ideals of economic advancement and social equity (Kloeck-Jenson, 1998). They intended to increase agricultural production and promote investment, but instead left most customary land rights-holders disappointed (Tanner, 2002). Due to lack of skills and capacity, the State proved incapable of realising its goals, and by the mid-1980s "it was clear that the government's agricultural policies were not working and were contributing to an economic crisis" (UN-HABITAT, 2005: 31). Political differences within FRELIMO led to the formation of the opposition Mozambican National Resistance (RENAMO). Under FRELIMO, traditional leaders had been largely ignored and cultural practises mostly banned. The government had attempted to replace

them with modern state institutions and practices (Kloeck-Jenson, 1998), following replacement theory. This resulted in a strong anti-government mood, particularly in the rural areas. There had also been no major land redistribution following independence. RENAMO exploited these tensions and disappointments, and a lengthy civil war followed, backed by the South African and Rhodesian governments (Tanner, 2002; UN-HABITAT, 2005). Millions of people fled to neighbouring countries, and many more became internally displaced persons (IDPs).

8.1.2 Competition for land: from peace to the Land Law

Relief came in the unlikely form of a severe drought in 1991-1992 that forced FRELIMO and RENAMO to come together. The drought had exacerbated the economic problems and caused even more people to flee the land. There was also intense international pressure for a peace accord, and FRELIMO was beginning to introduce the political changes demanded by RENAMO (Tanner, 2002). The General Peace Agreement signed in October 1992 ended 17 years of civil war and 25 years of armed conflict in the country (Tanner, 2002; Van den Brink, 2008).

Competition for land quickly became a major issue as millions of refugees and IDPs returned to 'their' land. The State lacked the capacity to carry out a structured resettlement plan, and instead left the process in the hands of customary authorities. Customary LAS had survived the influences of colonialism and civil war and were adept at settling customary land-related conflicts (de Quadros, 2003), but many returnees faced conflicts of a different nature: they found 'their' land occupied by those with private interests. The government had distributed land rights to private investors and government officials with little thought for smallholder farmers, reinforcing their marginalisation and impoverishment (Myers, 1994; Kloeck-Jenson, 1998). 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 (Kloeck-Jenson, 1998).

Investors were encouraged by the State to bring abandoned, empty land into production again, only to find returning refugees or IDPs claiming rights to the land. Because ownership of all land vests with the State, "the idea that people were returning to 'their' land 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" (Tanner, 2002: 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. Hence:

> *"Many claimants … felt that they have a legitimate legally-based right to the land, and are unwilling to relinquish their control. When more than one individual feels that they have valid rights, and none is willing to relinquish rights, a conflict occurs. These convictions that claims are legitimate makes many land disputes especially complex and acrimonious. Ultimately, government and civil society will be faced with an enormous task as they attempt to disentangle these overlapping rights and determine who will hold rights to the land. This will be an expensive and politically difficult process." (Myers, 1994: 615)*

Thus Tanner (2002: 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.

The Constitution provides rights to land for all Mozambicans (though the State retains ownership) and equal rights for women (UN-HABITAT, 2005). The 1995 National Land Policy (Government of Mozambique, 1995) 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 recognised and accepted customary systems of land allocation

and conflict resolution and provided for their accommodation in land legislation (Tanner, 2002). 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" (Van den Brink, 2008: 1). The drafting of the Land Policy and the Land Law were both highly participatory endeavours that sought to recognise customary land rights-holders' interests and practices, and hence the "Mozambican case offers important lessons at a time when land policy and reform is high on the agenda in many African countries" (Tanner, 2002: 1).

In Chapter III of the 1997 Land Law, a right to land known as a DUAT [20], or right of use and benefit of land, is established. It is "roughly comparable to a lease" (Van den Brink, 2008: 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 can be acquired as follows:

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

8.1.3 Implementation issues

Weak governance and a lack of capacity meant that implementation of the new law was lacking, and many communities failed to register their land rights, leaving them legally invisible and vulnerable to exploitation (Schreiber, 2017). Pressure on land for investment created challenges for rural communities, sometimes leading to conflict. The challenge was to balance community needs and development priorities and, in 2006, the Community Land Initiative (iTC [21]) was established to try and realise this balance (Mole, Monteiro & Quan, 2012). The iTC provided support to communities to secure their use rights through delimitation or demarcation of plots (see Section 8.3.4) and facilitated the formation of partnerships between communities and external investors. The programme also increased awareness of land rights among customary land rights-holders and established natural resource committees that enabled communities to receive their share of natural resource taxes paid by commercial investors. It also provided support for emerging commercial farmers, resolved boundary disputes, and issued land certificates in conjunction with the provincial cadastral offices (Schreiber, 2017). It does all this through bringing together "international donors that work with NGOs, communities and government to strengthen formal land claims in rural areas" (apolitical, 2017: 2). Through such initiatives, land pressure and conflicts could be reduced and land use planning and sustainable environmental management could be improved (Mole, Monteiro & Quan, 2012).

However, by 2009, up to 50% of granted DUATs were not being productively used. Widespread concerns about land speculation and land grabbing were accompanied by allegations of corruption in the drawn-out DUAT application process. Community and institutional capacity were lacking to effectively implement land delimitations and certifications. And the delimitation process itself, which was supposed to reduce land conflicts, ended up causing conflicts between and within communities trying to agree on the boundaries of their lands (Schreiber, 2017). In response, a cadastral support programme was launched to move the provincial cadastral services

[20] In Portuguese, *Direito de Uso e Aprovetamento dos Terras.*
[21] In Portuguese, *iniciativa para Terras Comunitárias.*

from being paper-based towards e-cadastral services. The result was the Land Information Management System, SiGIT [22], which, by the end of 2013, was installed on the computers of 10 of the provincial cadastral offices as the first phase of development. Unfortunately, a political crisis saw funding for the project severely curtailed in 2016. Thankfully the effect of SiGIT was already being felt: from May 2007 to July 2016, the iTC registered and assisted nearly four times as many delimitation certificates as had been registered from 1999 to 2006 (*Ibid.*).

In response to challenges arising from urbanisation, climate change, and rural investment, in 2015 the government launched the *Terra Segura* (Secure Land) programme. The overall goal of the programme is to "contribute to creating the conditions for the country to develop in a sustainable manner and ensure the promotion of responsible investments" (The World Bank, 2017: 5). The objectives of this programme are to grant five million DUATs to peasant farmers and to delimit four thousand communities by 2019. Using conventional methods of land tenure, regularisation would take too long and be prohibitively expensive, and so the fit-for-purpose approach to land administration was evaluated for its applicability to the *Terra Segura* programme (Balas *et al.*, 2017).

From the foregoing, the forces influencing the development of land administration and the Mozambican cadastre should be evident. The process of arriving at the 1995 Land Policy and 1997 Land Law, their subsequent implementation with support from iTC and *Terra Segura*, and the on-going challenges associated therewith, form the subject of the rest of this chapter. Here, cadastral systems development is again assessed through the lens of the conceptual framework.

8.2 UNDERLYING THEORY

8.2.1 Understanding land and identifying theory

a) Attitude towards human and land rights

Under the Constitution of Mozambique, the State guarantees fundamental human rights and freedoms. This is in line with the recommendation by Kloeck-Jenson (1998: 245) of the Land Tenure Centre at the University of Wisconsin-Madison that a national bill of rights should be formulated to clearly "articulate the rights and obligations of each individual and group … [with particular] … attention … on protecting the rights of historically disadvantaged groups, especially women." Tanner (2002) highlighted that the 1995 Land Policy adopted "a rights-based approach that took as its starting point an analysis of *existing* local land rights" (pg. 21; emphasis in the original). It sought to guarantee the equality of men's and women's rights and to defend human rights in general (UN-HABITAT, 2005). The 1997 Land Law, compiled through a broad consultation process involving a wide range of role players with interests in land, reflects "*an underlying reality that is genuinely African*" (Tanner, 2002: 49; emphasis in the original). Yet, despite legislative protection, Norfolk & Bechtel (2013) report that traditional practices that contravene human rights prevail. It seems that this 'African reality' persists in the face of 'Western' notions of human rights, with consequent tensions – see Section 4.3. Bicanic, Nielsen & Sehested (2014) report that the State needs to be reminded of its role as duty-bearer and encouraged to be a stronger supporter of community rights.

Tanner (2002) mentioned the need for *changing attitudes*, especially concerning tenure rights of women, if the 1997 Land Law is to achieve its purpose. Given that ownership of all land vests in the State, he noted that government officials also needed to change their attitudes to acknowledge

[22] In Portuguese, *Sistema de Gestão de Informação sobre Terras.*

the rights of customary land rights-holders as legitimate. This shift towards a rights-based approach is reflected in both the 1995 Land Policy and the 1997 Land Law (UN-HABITAT, 2005). Norfolk and Bechtel (2013) note that such paradigm shifts are necessary to ensure that the social and cultural mores of the implementers of legislation do not stand in the way of inclusivity.

b) Justification for development

The justification for development arises from the normative principles emanating from the underlying theory, and these are seemingly in conflict, as illustrated by Tanner (2002). Firstly, even though the Constitution established the State as the owner of all land and natural resources, local people continue to think in terms of 'their' land. Secondly, the 1995 Land Policy was influenced by the norms and practices of Mozambican land rights-holders. Yet the political change in the country since 1992 has resulted in land acquiring new status as a commodity with productive value. It seems that demand for land may have been influenced by a combination of socialist principles and capitalist logic.

The post-war political climate favoured investment, and a land rush was soon underway. 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 (2002) notes that these approaches were misaligned with the reality of rural Mozambique. To address this impasse, rather than beginning with investigating and amending outdated legislation based on European practices, lawyers drafted a new law that reflects the underlying reality. They did this in consultation with various stakeholders, social scientists, NGOs, and farmer representatives. The result is the 1997 Land Law that Tanner (*Ibid.*) notes has avoided irrelevance and instead matches as best as possible the actual sociology of rural land use.

Notwithstanding the above, "the theoretical expectation was that with more secure tenure, the [community] associations and their family members would invest in the land" (EDG, 2014: 40). The development of the 1997 Land Law and subsequent land administration reform were strongly influenced by land titling theory (LTT). We see this in Tanner (2002), who refers to the need for citizens of Mozambique to unlock the capital value of their land, and Myers (1994), 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 (2013), 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.

State land administration in the post-war period was "profoundly out of step with" the prevailing customary land tenure systems (Unruh, 1996: 12). This *mismatch* extended even into the support work by iTC: "initial responses to iTC calls for proposals largely reflected potential service providers' predetermined objectives and demonstrated little awareness of land tenure conditions or practical needs" (Quan, Monteiro & Mole, 2013: 4).

To sum up, it appears that the theoretical foundation for the changes witnessed in Mozambique is that land titling leads to economic development (LTT). 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.

8.2.2 Goals for development

a) Gap analysis

Mozambique's land policy goal is summed up by Monteiro, Salomão & Quan (2014: 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 realising this goal. While the Land Law recognised customary land rights, unless communities registered their holdings with central government, their rights remained invisible to would-be investors. Hence the iTC was established to assist communities to register their land in the government cadastre and to enable them to negotiate with potential investors (Schreiber, 2017). Allied goals are to secure rights to land and natural resources, to reduce poverty, and ensure economic growth (EDG, 2014).

Several problems with achieving these goals needed to be addressed. These problems all relate either specifically or generally to the goals of improving tenure security, ensuring land access, and promoting sustainable development:

1. Ineffective implementation of legislation (Tanner, 2002; EDG, 2014)
2. Weak institutional and community capacity (Tanner, 2002; Van den Brink, 2008; Mole, Monteiro & Quan, 2012; Bicanic, Nielsen & Sehested, 2014)
3. Overlapping responsibilities of public entities (Tanner, 2002)
4. Lack of clarity in interpretation of the 1997 Land Law, especially regarding community consultations, leaving communities vulnerable to land grabbing (Van den Brink, 2008; Monteiro, Salomão & Quan, 2014)
5. Inefficient administrative processes (Mole, Monteiro & Quan, 2012; Norfolk & Bechtel, 2013), including dispute resolution mechanisms (Unruh, 1996)
6. Ineffective use of land under granted DUATs (Monteiro, Salomão & Quan, 2014)
7. Lack of visibility of legally secured community land rights (Balas *et al.*, 2017; Schreiber, 2017).

b) Measures of success

In keeping with the replacement theory underlying development, the most notable measure of ***success*** is the numbers of land parcels registered (Norfolk & Bechtel, 2013; EDG, 2014; Balas *et al.*, 2017; Schreiber, 2017; The World Bank, 2017). Community / user satisfaction was also noted regarding the adoption of a fit-for-purpose approach to land administration (Balas *et al.*, 2017). Reductions in the cost and time taken to record a DUAT are proposed measures of success of the *Terra Segura* programme (The World Bank, 2017), although Balas *et al.* (2017) note that the current pace and cost are prohibitive to the realisation of the programme's goals.

8.2.3 Evaluation

From the drawing of the Constitution to the 1995 Land Policy and subsequent 1997 Land Law, the development approach has been rights-based. The tension between rights-based approaches and broadly African values is noted, hence the attitude towards human and land rights is 'partially addressed' in Table 8-1. This signifies that there may be a need for developers to address the mismatch between the underlying theory of development and the lived experience of customary land rights-holders, hence the theory type is also 'partially addressed'.

The need for improved tenure security and promoting investment for economic growth have informed the development goals. These goals and the related measures of success are aligned with the identified conceptual end state, *vis* improved tenure security for customary land rights-holders and an improved climate for investment. These elements are hence 'satisfactorily addressed'.

Table 8-1 Evaluation of Mozambique case against Underlying theory

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Theories of tenure reform	ID theory on continuum	Mismatch between replacement theory of developers and normative principles of land rights-holders	3	3
Understanding land in its social context	Attitude towards human and land rights	Adopting a rights-based approach	3	3
	Justification for development	Improved tenure security Promoting investment for economic growth	5 5	5
Goals for development	Gap analysis	Ensuring equitable land access Improved tenure security Improved climate for investment	5 5 5	5
	Measures of Success	Numbers of land parcels registered Community satisfaction Improved efficiency and affordability	5 5 5	5

8.3 LAS CONTEXT

8.3.1 Land policy

a) Existing land rights

Mozambique has a civil law system in which legislation is the primary source of law. Thus, customary law in Mozambique must be interpreted and legislated in order to have force. Recognition and protection of existing land rights is a fundamental principle upon which the 1997 Land Law and associated regulations were built. Integration was a key concern: the legal team wanted to avoid a plural interpretation of land rights wherein customary and legal rights are separated. Instead they sought to integrate customary rights and institutions into the legislation (Kloeck-Jenson, 1998; Tanner, 2002). Such is extended to dispute resolution mechanisms too (Unruh, 1996; de Quadros, 2003) – see Section 8.5.3. The Land Law hence recognises existing customary land rights with full legal protection – the customary DUAT. *De facto* occupation of land by people displaced from their former homes, whether those were once urban or rural, for 10 years or more without objection, is recognised as good faith DUATs. "These customary and good faith forms of occupation are still the main ways in which the rural poor get land rights, and they can be proved through oral evidence provided by local community members" (Norfolk & Bechtel, 2013: 11).

Raising awareness is important – investors and communities need to be alerted to existing rights in an area – because these rights might not be documented. Land rights-holders needed *support* towards becoming aware of the Land Law and their associated land rights (Kloeck-Jenson, 1998). "For the first time the rural population learned that it had rights and that any kind of new activity in areas it occupied had to be done through local consultation" (de Quadros, 2003: 3). This is especially true in situations of transient and communal land rights, such as grazing, water, and farming rights (Tanner, 2002). Investors were known to use their influence and the community's ignorance to remove communities from the land. Communities were likewise known to make demands of investors for infrastructure, schools, clinics etc. Such demands discouraged investors from partnering with communities (de Quadros, 2003). Hence the Land Campaign, and later the iTC, worked to raise awareness of land rights among communities and investors (Negrao, 1999;

Schreiber, 2017). Braathen (2016) recommends advocacy work at the community level to assist land rights-holders to claim their rights.

b) Class and gender

Despite a Constitution that expressly recognises gender equity (Kloeck-Jenson, 1998) and women's land rights (de Quadros, 2003), Tanner (2002: 49) notes that:

> *"The tenure rights of women are … still far from being fully addressed, and even staff from the more enlightened NGOs need support to fully achieve the kind of mental transition that is needed if the 1997 Land Law is to achieve its potential as an instrument for development and social change."*

His reference to "mental transition" harks back to the need for changing attitudes mentioned in Section 8.2. Although the Constitution affords men and women equal rights, "evidence from many areas showed that within customary systems, women did *not* enjoy equal rights to men, and that at times of divorce or inheritance, they very often lost all rights to land they had been farming and using to support their families" (*Ibid.*: 22, emphasis in the original). While UN-HABITAT (2005) mentions the National Gender Policy as a means of challenging the prevailing attitude of male dominance in the country, Tvedten (2011: 3) notes that the balance of power in Mozambique still rests with men:

> *"… they are generally better off in terms of employment and income as well as education and health; they control land and other basic means of production … and for most women the social costs of not living in a conjugal union with a man are still high."*

Norfolk & Bechtel (2013) and the EDG (2014) note that these trends are changing. In CGCRNs [23] and community associations, it is reported that women are beginning to occupy leadership positions and actively contributing to the group's operations. Braathen (2016) notes that women are increasingly taking up leadership positions at all levels of government. This success is partly attributed to the influence of the iTC in assisting communities to negotiate with investors and improve tenure security (Quan, Monteiro & Mole, 2013; EDG, 2014).

Land access is noted to be a key indicator of welfare for rural families (Strasberg & Kloeck-Jenson, 2002). Hence, a focus of pro-poor land policy should be promoting the distinct land rights of ethnic, racial, and caste-related groupings of people to their territorial claims. While the new Land Policy was being drawn up, it was therefore crucial that the interests of smallholders were considered and protected (Kloeck-Jenson, 1998). To this end, the delimitation approach (see Section 8.3.4) allows local communities to define themselves and the areas over which they lay claim. The approach is flexible and participatory, and "can be applied to traditional units based on clans or chieftainships, extended families or simply a group of neighbours" (Norfolk & Bechtel, 2013: 12). Social preparation – see Section 8.5.3 – also allows communities to identify and define their distinct rights of use and access to land and natural resources (Monteiro, Salomão & Quan, 2014).

Pro-poor land policies need to consider the differential impact of the land policy among the poor. One way of doing this is to tax according to the ability to pay. Customary DUATs are hence generally exempt from paying land tax, although Tanner (2002) notes that some customary land users are very wealthy. Wealthier, more powerful, and better-connected community members are able to "negotiate deals at the expense of poorer community members, who may find their

[23] *Comite de Gestao Communitario de Recursos Naturais* or Committee for Community Management of Natural Resources

customary rights expropriated without compensation" (Norfolk & Bechtel, 2013: 6). This is especially true regarding common property resources, such as communal grazing lands, forests, and water sources. These resources are crucial for the survival of poorer community members.

c) Productivity and livelihood

Following the war, communities gathered around formerly secure and productive lands. Consequent overutilization of such lands led to their degradation, decreased agricultural productivity, and resulted in food insecurity (Unruh, 1996). The Land Law was designed to promote socio-economic development as part of the objective of promoting investment and economic growth. If effectively implemented, the Land Law may help local communities engage in sustainable agricultural development (Tanner, 2002; de Quadros, 2003).

Van den Brink (2008) noted that some local communities and private investors secured DUATs over exceptionally large tracts of land – larger than they could productively use. By closing off large tracts of land for the exclusive use of the community, delimitations were seen as an obstacle to development, despite the Land Policy's commitment to community-investor partnerships (de Quadros, 2003). These tracts were lying under-utilised, in contravention of the Land Policy objectives (see also Monteiro, Salomão & Quan, 2014; and Schreiber, 2017). Van den Brink (op. cit.) suggested stricter imposition of land taxes to discourage such speculation. Better land administration may also discourage speculation and improve productivity, because the State may then monitor whether DUATs are fulfilling their investment plans (Norfolk & Bechtel, 2013). This increase in speculation led to the amendment of the Regulations to require political approval for customary DUATs (see Section 8.4.1).

Per Mole, Monteiro & Quan (2012), the iTC was established expressly to support local communities and investors to work together: making productive use of the land without compromising anyone's land use rights. Insecurity of tenure is thought to discourage long-term agricultural investment and inhibit the productive use of land, while security of tenure is presumed to enable customary land rights-holders to negotiate with investors (Norfolk & Bechtel, 2013).

8.3.2 Land governance

a) Active participation

Active participation was a foundational feature of the process of developing the 1995 Land Policy and 1997 Land Law. Engaging all role players at the outset of the change process was a key to its ***success*** (Unruh, 1996; UN-HABITAT, 2005). The Policy itself called for the active participation of Mozambicans as partners with investors. The definition of a local community as a juridical personality (Tanner, 2002) – see Section 8.5.3 – paved the way for active participation of communities in land and natural resource management. By being involved in the process of defining and delimiting their land rights, communities are empowered to move away from poverty towards independence (Tanner, 2002; Norfolk & Bechtel, 2013).

In rural areas, the Land Law mandates local communities to take active participation in land-related matters (Norfolk & Bechtel, 2013). It was hoped that this would foster participatory and democratic rural development leading to peace and stability (de Quadros, 2003). However, as is pointed out in Section 8.5, the consultation process was far from perfect, being "widely criticised as superficial, conducted without sufficient preparation or representation on the part of the community, not incorporated into legal agreements and not followed up" (Norfolk & Bechtel, 2013: 44). It is not sufficient for the law to stipulate a participatory process; there must be active participation in practice too. Hence, the iTC developed the social preparation approach to ensure

that communities had real ownership of their rights to access and use land and the associated natural resources (Monteiro, Salomão & Quan, 2014). Participatory mapping is promoted by Balas *et al.* (2017) as another means of ensuring that communities are actively involved in the definition and securing of their land rights. Such practices promote the ***significance*** and ***sustainability*** of land rights recording.

b) Equitable access

Equitable access to land and its natural resources for Mozambicans as well as investors, regardless of gender, is a fundamental principle of the Land Policy (Tanner, 2002) and should aid towards the promotion of peace in the country (Unruh, 2001). This is realised in the co-titling principle of the Land Law, which grants every community member equal rights to common property (Norfolk & Bechtel, 2013). Yet, despite the promotion of equity in the Law, land conflicts have increased (Quan, Monteiro & Mole, 2013). Schreiber (2017) notes that conflicts arose when the iTC consulted with different levels of community leadership. In Mozambican rural communities, there are three level of leadership: the village leader, the leader of a group of villages, and the paramount chiefs. Community delimitations differed depending on which leader was consulted.

c) Transparency, clarity, simplicity

For good governance, administrative processes need to be transparent, clear, and simple. Prior to the drafting of the Land Law, there was decided lack of clarity concerning who had what rights to which land (Unruh, 1996), how these rights were acquired, and who had the authority to distribute rights to whom (Myers, 1994; Kloeck-Jenson, 1998). There was likewise a lack of transparency regarding the granting of concessions, which were given without the consent of the affected community (Myers, 1994). A lack of transparency also allowed for land grabbing and corruption to flourish (Kloeck-Jenson, 1998). While the Land Law may have clarified some of these concerns, van den Brink (2008: 2) noted that the "DUAT registration procedure is a cumbersome, highly centralised, and bureaucratic process." He suggests that simplification of the processes and greater transparency would facilitate a reduction in extra-legal land transactions. De Quadros (2003) and Norfolk & Bechtel (2013) concur that a lack of simplicity inhibits investment. Improving transparency, clarity and simplicity should improve efficiency of service delivery too. Limited capacity of SPGC [24] offices has meant that some communities faced delays of up to two years before receiving their DUAT certificates (Schreiber, 2017). Again, SiGIT helped to improve efficiency of service delivery, and *Terra Segura* is meant to streamline the methodologies involved in land delimitations (Agência de Informação de Moçambique, 2015; Schreiber, 2017; The World Bank, 2017).

d) Accountability and the rule of law

Myers (1994) notes that the State caused confusion and conflict through lack of clarity, transparency and adherence to its own laws and procedures regarding the granting of concessions over land. According to Monteiro, Salomão & Quan (2014), the process of community land delimitation promotes accountability within local communities. This is because all participants in the delimitation process are aware of the locations of the boundaries and can therefore hold their leaders to account (Norfolk & Bechtel, 2013). Accountability was also improved through the use of e-land administration (Schreiber, 2017).

[24] *Serviços Provinciais de Geografia e Cadastro*, or Provincial Geographic and Cadastre Services

e) Appropriate technology

Appropriate technological solutions can support the attainment of good governance. Trinidade (2004) notes that QuickBird satellite images provide an appropriate technological solution to land delimitations in urban informal settlements. Such an approach is supported by van den Brink (2008). The use of *inappropriate* technological standards is reported by Norfolk and Bechtel (2013) in Zambèzia. There, the SPGC insisted on land demarcations with precise surveying services. Because no-one in the area could provide such services – de Quadros (2003) notes the severe lack of private land surveyors in the country – none of the 104 applicants received a finalised title document. By contrast, the EDG (2014) reported that, in Moussorize and Manica, SPGC technicians were using transparent overlays on outdated topographic maps to record the positions of DUATs. Neither approach is deemed desirable. By contrast, the SiGIT mobile application (Balas *et al.*, 2017) offers different solutions based on need and circumstance. Achievable precisions ranged from as low as 18 m, to as high as 0,2 m for differential GNSS.

8.3.3 Strategic level

a) Changing rights type

Myers (1994) noted that debates around the new Land Policy needed to consider the types of existing land rights, which land rights would be permitted under the new Land Law, the means of transferring land rights, and how land disputes would be settled. The appropriateness of the land rights types in Mozambique was brought into question when the State nationalised all land. The notion of State ownership was counter to the lived experience of most Mozambicans, who saw their use right as equivalent to ownership. The solution was to allow the DUAT to be tradeable, and for such transactions to be taxable. Hence the State retains ownership, but land rights-holders can still benefit from their economic asset in land (Tanner, 2002).

UN-HABITAT (2005) note that informal land rights in urban areas are insecure, especially when land is traded on the informal land market. In rural areas, pressure on land and demand from investors threatened local land rights (Mole, Monteiro & Quan, 2012). Per LTT, individual titling is seen as a remedy to such a threat, but Norfolk & Bechtel (2013) note that titling programmes can worsen the situation, especially for rural women and other vulnerable groups. The Land Law grants communities and good faith occupants recognition of their existing land rights without the need for titling, although lack of documentation leaves them vulnerable to exploitation by investors (Bicanic, Nielsen & Sehested, 2014).

b) Improving tenure security

Improving tenure security was a key objective of the 1995 Land Policy and the 1997 Land Law. Improving tenure security is achieved by improving the legitimacy, legality, and/or certainty of land rights (Whittal, 2014). Tanner (2002: 1) notes that the Land Law "gives *legitimacy* to practices already followed by the vast majority of the population" (emphasis mine). This legitimacy was extended to include customary laws and land management systems (Tanner, 2002; UN-HABITAT, 2005; Norfolk & Bechtel, 2013), including customary forms of evidence of land rights (Kloeck-Jenson, 1998). Similarly, the Land Policy and Law were seen as legitimate by most Mozambicans due to the participatory processes surrounding their drafting. The recognition of customary laws and institutions in the 1997 Land Law improves their *legality* (Tanner, 2002; EDG, 2014; Monteiro, Salomão & Quan, 2014).

Despite the legitimacy and legality of land rights, perceptions of tenure security are reportedly low. This relates to questions of efficiency and capacity of the land administration institutions. It also stems from a lack of documentation of land rights, hence NGOs advised communities to delimit their land and apply for certification of their land rights (UN-HABITAT, 2005). Inefficient

land administration processes have led land rights-holders to trade in DUATs off-register, leading to *uncertainty* regarding who actually has *de facto* rights of use and access to land (Van den Brink, 2008; Schreiber, 2017).

8.3.4 Implementation level

a) Land recording

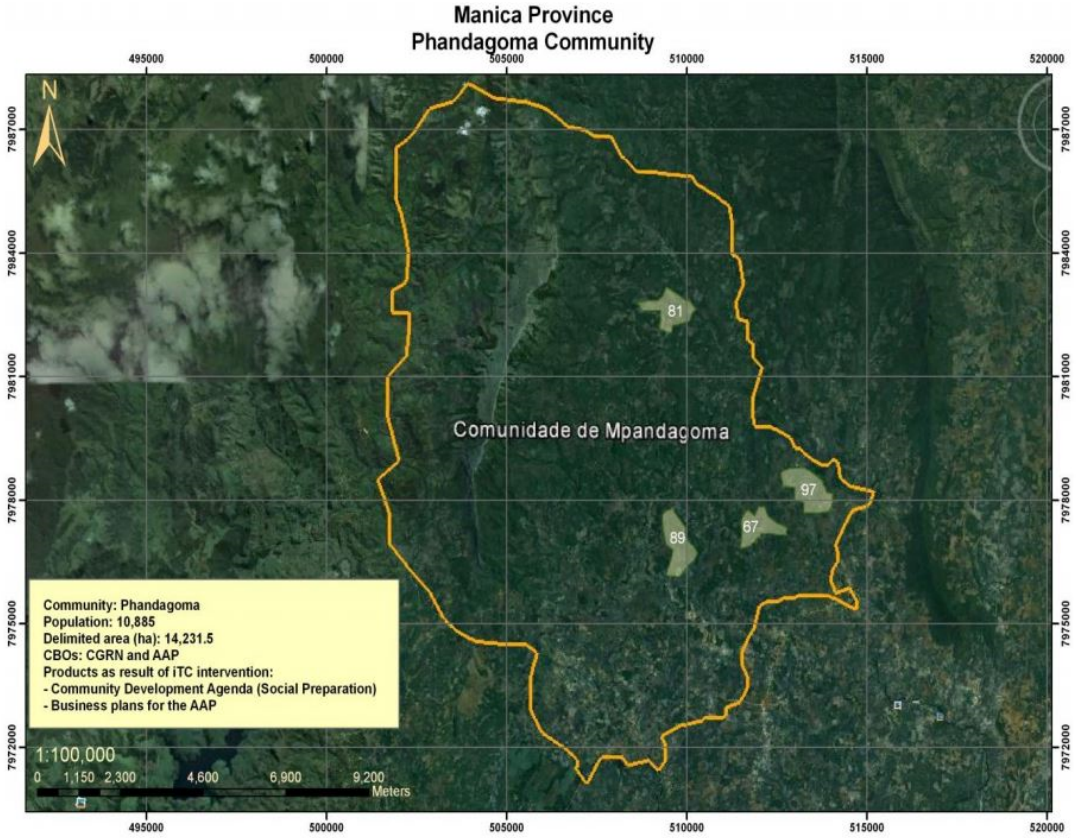

Figure 8-1 A combination of delimitation (yellow border) and demarcation (smaller, numbered figures) in Manica Province (Quan, Monteiro & Mole, 2013: 26)[25]

In Mozambique, land rights are recorded by certification (delimitation of customary and good faith DUATs) or titling (demarcation of granted DUATs). The records are kept in the cadastral title registry, under the Ministry of Agriculture, and the real property register, under the Ministry of Justice (Norfolk & Bechtel, 2013). Demarcation requires the placement of concrete boundary markers using high precision land surveying techniques, whereas delimitation does not require any boundary markers, and the positions of the boundaries can be fixed using hand-held GNSS with position accuracies of 10 to 20 metres (Bicanic, Nielsen & Sehested, 2014). Hence demarcation is much more expensive than delimitation, although de Quadros (2003) notes that delimitations are by no means cheap exercises. The "primary goal" of delimitations "should be to strengthen the rights of local communities so that they can negotiate more meaningful partnerships with private investors" (Strasberg & Kloeck-Jenson, 2002: x). Proof of delimitation may be by expert witness or oral evidence, in recognition of the high illiteracy rates in the country

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(UN-HABITAT, 2005; Norfolk & Bechtel, 2013). Maps of delimitations are registered with the SPGC (Norfolk & Bechtel, 2013). An example is shown in Figure 8-1.

The approach is sporadic or voluntary for customary and good faith DUATs, but compulsory for granted DUATs. Delimitations were initially prioritised according to need, with regions of conflict or planned investment receiving attention first. Where neighbouring communities disagreed over their shared border, the Law allowed for partial delimitation of the disputed border only (de Quadros, 2003). Occupiers of land under customary or good faith DUATs may also apply for demarcation and title if they so wish (UN-HABITAT, 2005). Due to the lack of registered delimitations decreasing tenure security for customary DUATs, van den Brink (2008) recommends adopting a systematic approach to recording and delimiting customary land rights. To this end, the first component of the World Bank-funded *Terra Segura* programme is the systematic delimitation and recordal of customary DUATs in selected districts (Frey, 2017; The World Bank, 2017). Hence the approach is in keeping with the recommendation of Zevenbergen *et al.* (2013) who suggest an initially sporadic approach, followed by systematic recording once community and institutional capacity has been sufficiently strengthened.

b) LTIS

Successful LAS adhere to clearly defined standards. The Land Law Regulations provide such for the acquisition of rights, the role of the SPGC, and the RRRs of land rights-holders (de Quadros, 2003). Legal standards were adopted to govern community consultations, land delimitations, and partnerships entered into between communities and investors (Monteiro, Salomão & Quan, 2014). Social preparation (see Section 8.5.3) followed a standardised methodology for delimiting community land rights (Schreiber, 2017), but The World Bank (2017) noted that there was a lack of standardised methodology for delimitation and demarcation of individual, good faith occupations, leading to increased land-related conflicts and a growing informal land market. To remedy this, the Bank is providing support to the government in the implementation of the *Terra Segura* programme. Balas *et al.* (2017) highlighted the need for quality control procedures and standards to ensure the successful implementation of the *Terra Segura* programme. Associated with this, SiGIT was built according to recognised standards and principles.

The conceptual framework recommends LTIS that record relevant and accurate information reliably and affordably. Relevance is synonymous with ***significance*** in the context of this research and is associated with the currency of information. Prior to the drafting of the 1995 Land Policy, two pilot projects were undertaken in an attempt to register individual plots in the Massaca region (de Quadros, 2003). The first pilot revealed that spatial definition of individual plots was extremely costly, and the dynamic nature of customary land tenure meant that registered titles quickly became outdated. The second pilot showed how using existing customary territories improved the ***significance*** of the record, and hence the ***success*** of the project.

Trinidade (2004) remarked on the difficulties of using outdated aerial photographs when mapping land rights in the *Josina Machel* informal settlement in Manica. Using cheaper yet current satellite images, out-dated records were updated and an upgrading plan was developed (Trinidade, 2004; UN-HABITAT, 2005). In many municipalities, insufficient attention had been given to keeping land records up-to-date (UN-HABITAT, 2005). Norfolk & Bechtel (2013) reported that NGOs and the iTC have failed to keep records of land delimitations in some provinces.

Balas *et al.* (2017) note the importance of keeping land records up-to-date if the SiGIT application is to become fully operational. They suggest a harmonised methodology for individual demarcations and community delimitations to improve accuracy and currency of land information. *Terra Segura* is also meant to improve the reliability of the cadastral system (Agência

de Informação de Moçambique, 2015). This includes procedures for securing data at the collection, processing, and storage stages, which reduces the opportunities for corruption and increases the public confidence in the LAS (Balas *et al.*, 2017; Schreiber, 2017). Through strengthening of the LIS, the programme is also meant to allow for integrated, synchronised data from various stakeholders in land towards the realisation of a multi-purpose cadastre (The World Bank, 2017). User-friendliness was acknowledged as an important contributor to the successful adoption of the SiGIT mobile application for securing land rights (Balas *et al.*, 2017).

The cadastre and registry are not integrated into one institution in Mozambique. "Full registration of DUATs … requires both cadastral title registry, through the National Department of Lands & Forestry … in the Ministry of Agriculture, and property registration, through the Real Property Registry … in the Ministry of Justice" (Norfolk & Bechtel, 2013: 11). When the Land Law and regulations were being drafted, the integration of the cadastre and registry was considered, but it was deemed not possible at the time (de Quadros, 2003). Hence, as in Germany, there are different ministries registering the cadastre and the land registry respectively.

Per Kloeck-Jenson (1998) and Tanner (2002), one of the objectives of the 1997 Land Law was the decentralisation of land and natural resource management, and the devolution of power over land to the district level. The motivation for such is the encouragement of participation, legitimacy of procedures (***significance***), and improvement of State capacity. This is realised through the creation of 33 municipalities that manage land administration and planning in urban areas, though rural land administration remained centralised at national level (UN-HABITAT, 2005). It was recommended that rural land administration should also become decentralised to allow for improved accessibility and relevance of services (Van den Brink, 2008; Quan, Monteiro & Mole, 2013; EDG, 2014; Monteiro, Salomão & Quan, 2014; Schreiber, 2017). The iTC hence adopted a decentralised approach to avoid problems of irrelevance. Likewise, SiGIT was decentralised to the SPGC (provincial) offices across the country (Schreiber, 2017).

To realise the goal of economic development, the 1997 Land Law had to make it possible for land rights to be transferred (UN-HABITAT, 2005; Van den Brink, 2008). Although land remained the property of the State, the Law allows for the transfer of land use rights from communities to investors (de Quadros, 2003), and for the sale of DUATs, subject to conditions. While customary and good faith DUATs could be transferred subject to reapproval by the State, the procedure for transferring granted DUATs is lengthy and cumbersome, leading rights-holders to transfer off-register (Schreiber, 2017).

8.3.5 Evaluation

The definition, recognition, and protection of existing land rights feature prominently in the Land Law and Policy. The need for raising awareness of existing land rights was acknowledged. Hence this element is 'satisfactorily addressed'. Marginalised people's distinct land rights are promoted, with an increasing acceptance of women as equals. Yet, because there is still much room for improvement in this regard, the 'class and gender' element is 'partially addressed' in Table 8-2. Promotion of productive use of the land was also a primary objective of the Policy, but land speculation and tenure insecurity have inhibited agricultural productivity. Hence this element is also 'partially addressed'.

The evidence for good land governance was mixed. Although communities and investors alike are mandated under the Land Law to consult and even form partnerships, reports show that the consultation process is imperfect. Nonetheless, the process of arriving at the Land Law and Policy is lauded as being exemplary for its inclusivity and the active participation of a variety of stakeholders. Similarly, the Land Law and the Constitution claim to promote equitable access to

land for all Mozambicans, but reports show that power dynamics and gender issues persist. Hence these elements are both 'partially addressed'.

Transparency, clarity, and simplicity of land administration services appear to be woefully lacking in the Mozambican case, hence this element is 'not addressed'. Accountability is improved through the land delimitation process, and the Land Law is generally clear about how rights should be recorded. Persistent problems with the implementation of the Law result in this element being 'adequately addressed'. Regarding the use of technology, there were reports of the use of outdated technology on the one hand, and overly sophisticated technology on the other hand. There are also instances of the use of appropriate technology for the context, and developments are continuing in this regard, hence this element is 'partially addressed'.

Table 8-2 Evaluation of Mozambique case against LAS Context

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Land policy	Existing land rights	Awareness, definition, recognition, protection of existing land rights	5	5
	Class and gender	Promoting marginalised people's land rights Increasing acceptance of women as equals	3 3	3
	Productivity and livelihood	Land speculation inhibiting improved productivity	3	3
Land governance	Active participation	In law, not in practice	3	3
	Equitable access	In law, not in practice	3	3
	Transparency, clarity, simplicity	Complex, cumbersome, bureaucratic processes	1	1
	Accountability and the rule of law	Ensured through community land and e-land administration	5	4
		Implementation problems	3	
	Appropriate technology	Mixed results	3	3
Strategic level	Changing land rights type	Recognition of existing land rights	5	4
		Titling programmes may increase vulnerability	3	
	Improving tenure security	Legitimacy, legality, and certainty partially addressed	3	3
Implementation level	Land recording / registration mechanisms	Voluntary / sporadic certification (customary or good faith DUAT) Compulsory title (granted DUAT)	5	5
	Land tenure information system	Clearly defined standards	5	4
		Relevant, appropriately accurate, reliable, affordable information	5	
		Integrated registry/record and cadastre	1	
		Plots, parcels, rights clearly identified	5	
		Urban LAS decentralised; rural LAS centralised	3	
		Cadastre not yet mature enough for multi-purpose	1	
		Up-to-date-ness	5	
		User-friendliness	3	
		Transferring rights	5	

All the elements of the Strategic level were present in the Mozambican case, but due to noted concerns of tenure insecurity and appropriateness of land rights types, 'changing rights type' is 'adequately addressed' and 'tenure security' is 'partially addressed'.

At the implementation level, attention was given to the land recording and registration mechanisms. Most elements of the LTIS were also present, although it is noted that the registry and cadastre are not integrated into one system. Attention was given to debates around centralisation or decentralisation of services, and the need for up-to-date records. There was very little reference to developing the cadastre towards being multi-purpose. Transferring rights was noted as an important function of the LTIS in Mozambique. Hence, overall, the 'LTIS' element is 'adequately addressed'.

8.4 CHANGE DRIVERS

8.4.1 Demand-based drivers

a) Socio-economic

Following the liberation struggle and civil war, when many people fled their lands, vast tracts of land were left unoccupied. Outsiders were quick to swoop on these 'empty' lands and lay claim to them (Tanner, 2002; Norfolk & Bechtel, 2013). Different groups of people – IDPs, the State, foreign and local investors, colonial-era landowners – were in conflict due to multiple claims over the same land (Myers, 1994; Unruh, 1996; Strasberg & Kloeck-Jenson, 2002; de Quadros, 2003). Tanner (2002) reports that, in the lead-up to the formulation of the 1995 Land Policy, a land rush was underway.[26] The poor, vulnerable, and marginalised (including women) were easily exploited by powerful elites (Van den Brink, 2008). That is why the recognition and protection of existing, customary land rights under the 1997 Land Law was so important. Yet problems within the law itself, as well as application of the law, have encouraged land grabbing and speculation: because DUATs can be allocated for free, investors and communities have laid claim to large tracts of land that they are not able to productively utilise (Van den Brink, 2008; Quan, Monteiro & Mole, 2013; Frey, 2017; Schreiber, 2017). Mole, Monteiro & Quan (2012: 3) report that the land registration processes are inefficient and poor rural communities are unable to access the system "leaving them exposed to the risks of land grabbing." This is where the iTC's influence was necessary to assist communities to register their land rights and hence to strengthen their tenure (EDG, 2014; apolitical, 2017).

Mole, Monteiro, and Quan (2012) noted how the rationale behind iTC was to find balance between community needs and investment pressure – marrying the top-down and the bottom-up approaches (see Figure 4-3). Quan, Monteiro, and Mole (2013) highlighted that iTC's initial approach was demand-driven: the assumption was that communities would approach iTC for assistance in securing their rights and resolving land conflicts. "These assumptions proved misplaced" (*Ibid.*: 4) and iTC had to work hard to assess the needs of local communities. In its evaluation of the iTC, the EDG (2014) criticised the iTC for setting targets that did not sufficiently feature community interests.

Contextual needs were identified in the Netherlands case. These relate to the bottom-up aspect of land rights-holders' claims. In Mozambique, the drafting of the 1995 Land Policy and the subsequent 1997 Land Law, Regulations, and Technical Annex, were all highly participatory

[26] Over a decade later, urgent land management is still needed to counter an unregulated scramble for land in response to Mozambique's growing population (Agência de Informação de Moçambique, 2015).

processes designed to accommodate, as much as possible, the needs of land rights-holders (Tanner, 2002). Community-based input also featured prominently in informal settlements upgrading (Trinidade, 2004).

The primary objectives of the Constitution and the Land Policy were to secure land rights and promote investment for economic development (Unruh, 1996, 2001; Kloeck-Jenson, 1998), particularly in rural areas. A functioning land market and land taxation are seen as necessary for realising these goals. But State ownership of all land is at odds with the principles of a land-based market economy (*Ibid.*), hence the 1997 Land Law was designed to make provision for the sale of DUATs. The State could also gain through the imposition of taxes on these transfers (Tanner, 2002; UN-HABITAT, 2005). This has led to some instances of people opting not to register their land rights to avoid having to pay the land tax (Trinidade, 2004), even though the tax rate is criticised for being too low (Tanner, 2002; Norfolk & Bechtel, 2013). Another consequence of improved tenure security and a functioning land market is that land becomes more valuable and competition over land increases (Kloeck-Jenson, 1998).

A further problem has been the *collection* of the land tax, for which municipalities and the SPGC lack capacity (de Quadros, 2003; UN-HABITAT, 2005). Communities are obligated, under the Land Law Regulations, to pay the annual land tax. Norfolk & Bechtel (2013) suggest including awareness and acceptance of this obligation into community-investor partnership agreements. The collection of land taxes was improved through SiGIT, which was able to automatically calculate the amount owing and issue notifications for payment (Balas *et al.*, 2017).

The Policy made it clear that both local communities and investors alike should benefit from new investments (Tanner, 2002; Monteiro, Salomão & Quan, 2014). Yet 10 years after its drafting, UN-HABITAT (2005) noted that most municipalities were neither able to provide sufficient housing for their populations, nor secure tenure for formal investors. Van den Brink (2008) highlighted the need to first secure the rights of local communities to enable them to negotiate with investors. Only once communities had secure tenure, could they begin negotiating with investors for access to natural resources. The 1997 Land Law supposedly creates the conditions that make this possible (Mole, Monteiro & Quan, 2012).

Through the provisions of the law, communities can delimit their land and register community tenure rights. With the ensuing improved tenure security, investors should know with whom to negotiate, and the community may be enabled to provide access to natural resources (Norfolk & Bechtel, 2013; Quan, Monteiro & Mole, 2013; EDG, 2014). However, the EDG (2014) reports that certification and delimitation alone have not been sufficient to stimulate investment and reduce poverty. Limited institutional and community capacity constrain investment potential. Further, negotiation is not without its challenges, and securing land rights while also promoting investment is difficult (Bicanic, Nielsen & Sehested, 2014). Hence, in April 2006, six international donor agencies established the iTC. Known as the 'G6', these agencies are the UK Department for International Development (DFID), the embassies of the Netherlands and Denmark, Irish Aid, Swedish SIDA, and the Swiss Agency for Development. Funding was continued by the Millennium Challenge Corporation (MCC) in the second phase of the programme, beginning in 2009 (EDG, 2014). Their aim was to support the Mozambican government to register community land rights in the government cadastre and to empower them to negotiate with investors (EDG, 2014; apolitical, 2017; Schreiber, 2017).

Improving ***sustainability*** of investment is an aim of the *Terra Segura* programme adopted in 2015 (The World Bank, 2017). The programme is expected to benefit households through surveying of land parcels, communities through delimitation and certification of their land rights, citizens receiving granted DUATs that are an enabler for investment, and the country's population

in general through increased efficiency of land administration services. Well-being could be improved by releasing the 'dead capital' that customary land rights-holders hold in land, empowering them to take charge of their own investments, increasing their standards of living, and leading ultimately to Mozambique's independence from the support of external agencies (Tanner, 2002; EDG, 2014). Mole, Monteiro & Quan (2012) report how community-based ecotourism and community-investor partnerships have improved community well-being by reducing poverty and improving employment. These opportunities were made possible through the influence of iTC in securing community tenure and supporting the formation of partnerships. There is still a need to shift priority towards family-based, smallholder agriculture for improved well-being of the most vulnerable and marginalised citizens (Braathen, 2016). The World Bank (2017) notes that the *Terra Segura* project speaks directly to the Bank's goals of ending extreme poverty and boosting shared prosperity. The importance of such ventures is highlighted by Bicanic, Nielsen & Sehested (2014) and Monteiro, Salomão & Quan (2014). They indicate that basic living standards need to be improved before communities can be expected to engage in responsible land administration.

b) Administrative

While securing land tenure is necessary (Norfolk & Bechtel, 2013: 6), good land administration is also important for poverty reduction (Monteiro, Salomão & Quan, 2014). Improving the LAS was an objective of the 1995 Land Policy because the national system was operating "in an extremely debilitated form, with a very poorly functioning, and poorly coordinated land titling procedure, a lack of a central institution for adjudicating overlapping claims … and virtually no capacity for enforcement" (Unruh, 1996: 15). Hence Myers (1994: 605) noted that land tenure reform, including the legal and administrative components, was "one of the most important issues facing the new government." To this end, the establishment of a single, national cadastre with digital land records was envisaged (UN-HABITAT, 2005). In response to several of the problems identified in Section 8.2, such as overlapping mandates and lack of institutional capacity (Tanner, 2002; de Quadros, 2003), there was a noted need for effective, efficient land administration (EDG, 2014; Monteiro, Salomão & Quan, 2014; The World Bank, 2017) including effective monitoring and evaluation procedures (de Quadros, 2003; Braathen, 2016). More specifically, the following LAS improvements were identified as drivers for development:

1. *Improving and digitising the cadastre*. The desire for a national land cadastre was first expressed in the 1995 Land Policy (UN-HABITAT, 2005) and remains unfulfilled (Balas *et al.*, 2017; Schreiber, 2017; The World Bank, 2017). Balas *et al.* (2017) report on the use of SiGIT to replace paper-based systems.
2. *Improving capacity*. Capacity development has been a significant driver for reform of the Mozambican LAS (Tanner, 2002; Mole, Monteiro & Quan, 2012; Quan, Monteiro & Mole, 2013; Monteiro, Salomão & Quan, 2014; Schreiber, 2017) – see Section 8.5.1.
3. *Improving efficiency*. Improvements to the cadastre and LAS led to improvements in the time taken to process delimitations and issue DUATs (Balas *et al.*, 2017; Schreiber, 2017). Efficiency is also enhanced through improved procedures and better governance (UN-HABITAT, 2005; Monteiro, Salomão & Quan, 2014; Balas *et al.*, 2017) leading to improved reliability of the cadastral and land administration services (Mole, Monteiro & Quan, 2012; Balas *et al.*, 2017) – see Section 8.3.4.
4. *Improving surveying control*. The establishment, densification, and maintenance of a nationwide geodetic network is crucial to the smooth running of a national cadastral system (The World Bank, 2017) if precise boundary demarcations are to be realised. For less precise delimitations, this is less of a concern.

One of the objectives of the 1995 Land Policy was the simplification of administrative procedures. UN-HABITAT (2005) reported that as many as 103 administrative steps were required for the registration of a DUAT. Such "excessive bureaucracy … has encouraged corruption" (*Ibid.*: 55). Schreiber (2017) and the World Bank (2017) report that the process of applying for private DUAT rights was complex and costly. Reducing complexity is hence a driver for development, and the Mozambique government is engaged in developing a single, integrated methodology that will simplify the DUAT application process (The World Bank, 2017). Such an integrated methodology was used to reduce costs for the *Terra Segura* project by optimising and customising resources and activities (Balas *et al.*, 2017).

c) Political and legal

After independence, there was a need to revise colonial-era legislation to bring the legal context into alignment with the new dispensation (UN-HABITAT, 2005). Per Myers (1994), the previous Land Law and Regulations were ambiguous and contradictory. The incorporation of customary forms of tenure into the statutory system was an objective (Kloeck-Jenson, 1998; Unruh, 2001) and a necessity given the civil law in Mozambique in which legislation is the primary source of law. Norfolk & Bechtel (2013: 15), citing Norfolk & de Wit (2010), mention that there are serious policy gaps and inconsistencies that require attention. Hence a driver of cadastral systems development that has emerged is that of *improving legislation*.

There was great uncertainty over land rights following the end of the civil war (see Section 8.1.2). Uncertainty arose over who had rights to which land and which State actors involved in land administration and the cadastre had responsibility (Tanner, 2002). Uncertainties remained even after the 1997 Land Law and Regulations were passed because of the existence of pre-independence legislation (specifically, the Land Registry Law of 1967) that conflicted with the new Constitution (UN-HABITAT, 2005). Reducing uncertainty was hence another driver for cadastral development. Uncertainties about the Land and Forest Laws presented obstacles to improved tenure security and investment (EDG, 2014). The World Bank (2017) notes the absence of a common methodology for issuing and monitoring of DUATs as a source of uncertainty leading to land-related conflicts, the growth of the informal land market, and serves as a deterrent to investment. Each of these uncertainties is a potential driver for further development of the cadastral system.

Political will is also noted to drive development in the land sector. Schreiber (2017) reported that the G6 donors needed to get buy-in from the government before they could implement the iTC programme. Towards the end of 2007, the iTC programme was further influenced by political will when the Council of Ministers amended the 1997 Land Law Regulations. This amendment gave the Council control of the delimitation process by requiring political approval for applications for community DUATs. This came in response to communities claiming large tracts of land that they had neither the will nor the capacity to productively utilise (see above). The amendment was met with fierce opposition from the iTC, NGOs, civil society organisations, and provincial officials. In a national community land conference held in March 2010, they won the argument and by October 2010 the requirement for political approval for community land delimitation was withdrawn. The iTC was henceforth more circumspect regarding the size of community land delimitations (*Ibid.*).

Donors such as the G6 and MCC proved invaluable in supporting the land reform process in Mozambique. Donors assisted refugees and IDPs returning to the land after the end of the civil war. USAID, through the University of Wisconsin-Madison Land Tenure Centre, supported research into the land question that informed the drafting of the 1995 Land Policy (Myers, 1994; Unruh, 1996, 2001; Kloeck-Jenson, 1998; Strasberg & Kloeck-Jenson, 2002). The FAO, Ford

Foundation, and other national and international donor agencies assisted at various stages of the process of drafting of the 1997 Land Law and associated regulations (Tanner, 2002). Community delimitations under the 1997 Land Law were carried out with support from iTC.

Donors like to see results, and this causes pressure on development processes that may lead to hasty implementation and lack of consultation (UN-HABITAT, 2005). Donors also bring their own theoretical foundations and worldviews to the negotiating table (see Section 2.1), and these can mismatch with the state and/or the land rights-holders' views and even between donors. For example, the Government of Mozambique retains ownership of all Mozambican land per their socialist ideology and as embedded in the 1995 Land Policy. The World Bank and the MCC, among others, see such socialist ideology as contradictory to their capitalist-based objectives for economic development. They see the 1995 Land Policy as inhibiting long-term investment in land. Through pressure from these international donors, the Mozambican Government has agreed to reforms that make land use rights more readily transferable (Norfolk & Bechtel, 2013).

Donors can also influence development by withdrawing funding, as happened in the wake of political upheaval in 2016. Funding was required for the continued maintenance and use of the SiGIT land information management system. Without donor support, the cadastral officials had to return to paper-based recording and manual uploading to the SiGIT system (Schreiber, 2017).

d) Environmental

The need for environmental management is another pressure causing reform. Myers (1994) and Kloeck-Jenson (1998) highlight that tenure insecurity may lead to poor management of resources leading to environmental degradation. This is a particular problem considering the devasatation of the numerous well-developed parks and reserves during the course of the decades-long civil war. Trinidade (2004) and UN-HABITAT (2005) report on environmental degradation in urban settlements due to a lack of clear planning and land tenure security. Mole, Monteiro & Quan (2012) report that environmental degradation also occurs in rural areas due to unregulated deforestation and agricultural practices. The iTC contributed to sustainable use of natural resources through financial support, delimitation of community areas, and the establishment of CGCRNs that work to defend the community's land rights and protect their natural resources. Now, applications for granted DUATs must include environmental impact assessments (Bicanic, Nielsen & Sehested, 2014).

Trinidade (2004) and UN-HABITAT (2005) highlight the need for effective urban planning to provide housing for all citizens and thus improve well-being. Balas *et al.* (2017) extend this to include planning at the rural community level. Improved land use planning goes together with increased tenure security to increase agricultural productivity, sustainable environmental management, and poverty reduction (The World Bank, 2017). Effective planning also helps to mitigate the effects of natural disasters, and the *Terra Segura* programme was initiated partly in response to pressures on land from climate change (*Ibid.*).

> *"Mozambique is among the most disaster prone countries in the world. The occurrence of natural disasters such as floods, cyclones, drought and earthquakes has consistently had a significant impact on people and the economy." (The World Bank, 2017: 8)*

8.4.2 Supply-based drivers

a) New technology

Trinidade (2004) documented how satellite imagery was used to identify land parcels and prepare a land register of the informal settlement, *Josina Machel*, in Manica. Satellite images proved quick and cheap to use compared to more conventional mapping technologies for

delimiting community lands (Van den Brink, 2008). In investigating the applicability of the fit-for-purpose approach, Balas *et al.* (2017) evaluated the usability of mobile phone technology for mapping delimitations in the field. This was linked to the SiGIT back office, with information backed up in 'the cloud', and was found to be useful for gaining control of data quality, integration between the office and the field, and improving efficiency.

It has been cautioned that using new technology only brings about positive results when the users have the capacity for its adoption (see Section 5.3.2). Lack of capacity at municipal and district levels has been a noted concern since immediately after the adoption of the new Land Law (UN-HABITAT, 2005). More recently, The World Bank (2017) reported that the existing LIS is not fully operational due to insufficient capacity to maintain it, inadequate communication infrastructure, poor data quality, and the lack of stable electrical power.

b) New theories

Tanner (2002) reported how the development of the 1995 Land Policy was guided by theory emanating from sociological research. Legal experts were mandated to come up with laws that fit the empirical evidence. This "social science input had a critical impact, constantly bringing the group back to a 'reality checkpoint' rooted in the norms, practices, and needs of ordinary Mozambicans" (*Ibid.*: 25). This input of sociological research was a driver for development of the Land Policy and Land Law.

c) New policies

The 1997 Land Law emerged out of the 1995 Land Policy. It was only once the Policy was in place, that the Land Law and associated regulations were drafted as the means of implementing the Policy (Van den Brink, 2008). The Policy set out the importance of recognising and protecting local land rights and the establishment of community-investor partnerships as a precursor to promoting investment (Strasberg & Kloeck-Jenson, 2002; Tanner, 2002). There has since been significant improvement in access to land and security of land rights for Mozambican citizens (The World Bank, 2017).

d) New approaches

An emergent element is the supply of *new approaches*. Tanner (2002) refers to the 1997 Land Law as an innovative approach to the land question. Some of these innovations include (Norfolk & Bechtel, 2013):

- the establishment of a single land use right, the DUAT, applicable to both customary land rights-holders and private investors;
- the formalisation of customary and 'good faith' occupation through the DUAT;
- the requirement for rigorous consultation with customary land rights-holders before investors may begin developing the land;
- the use of flexible approaches to the approval and spatial definition of customary and 'good faith' DUATs; and
- formalising the participation of customary land rights-holders in the management of 'their' land and natural resources.

The establishment of the iTC is also noted to be an innovative solution to the problem of securing land rights and promoting economic development (Quan, Monteiro & Mole, 2013). And finally, Balas *et al.* (2017) discuss the use of mobile phone technology and citizen data capture as innovative, fit-for-purpose approaches to cadastral systems development, as discussed in Section 1.3.4.

8.4.3 Evaluation

Political, legal, and administrative drivers were 'satisfactorily addressed' in this case. The need to reduce uncertainty and comply with donor requirements were noteworthy in the former. Improving out-dated legislation was the basis for the legal driver. The need to reduce complexity and improve the LAS were noted as administrative drivers.

Although the promotion of investment was a major change driver in this case, the economic element is only 'partially addressed' in Table 8-3 due to the noted issues regarding the collection of the land tax. The provision of tenure security is also a major change driver, but because this is still not assured, the social element is also 'partially addressed'. While climate change and disaster management were mentioned in the texts, they did not feature prominently as change drivers, and hence the environmental element is also 'partially addressed'.

On the supply side, new technologies were noted to provide opportunities for recording and delimiting land rights. The 1995 Land Policy influenced, and continues to influence, the development of land use rights recording and delimitation. Hence both of these elements are 'satisfactorily addressed'. The theoretical influence of sociological empirical research on the drafting of the Land Policy and Law is well-documented, but because this is not 'new' theory, and because this influence was only felt at the beginning of the development process, it is 'partially addressed'. Finally, *new approaches* was added as a new element with the descriptor *using innovation*, because innovation may be methodological as well as technical.

Table 8-3 Evaluation of Mozambican case against Change Drivers

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Demand	Economic	Cadastre as basis for taxation	3	3
		Improved affordability	3	
		Promoting investment	3	
	Political	Reducing uncertainty	5	5
		Political will driving development	5	
		Donor involvement	5	
	Social	Providing tenure security	3	3
		Addressing contextual needs	3	
	Legal	Improving legislation	5	5
	Administrative	Single, national cadastre	5	5
		Effective, efficient land administration	5	
		Reducing complexity	5	
	Environmental	Environmental impact assessments required	3	3
		Land use planning to mitigate effects of climate change	3	
Supply	New technology	Providing new opportunities	5	5
		Requiring capacity development	5	
	New theories	Guided by sociological theories	3	3
	New policy	Policy influencing development	5	5
	New approaches	*Using innovation*	5	5

8.5 CHANGE PROCESS

8.5.1 Community / country context

a) Historical background

The historical context was described in Section 8.1. This context shaped the drafting of the Constitution, Land Policy and Land Law, as well as the associated Regulations. The historical context provided the impetus for transformation and the need for improved security of land tenure and opportunity for economic investment. One of the 1997 Land Law's alleged triumphs is the recognition and protection of existing customary land use rights as legitimate, based on historical occupation. Historical context is also accommodated in customary land delimitation, (Tanner, 2002). An "historical profile" is defined at community information meetings prior to delimitation (Bicanic, Nielsen & Sehested, 2014: 12). This is important for documenting displacement and resettlement during Mozambique's tumultuous past, and to establish how community boundaries have changed over time (Schreiber, 2017). UN-HABITAT (2005) attest that, through the 1995 Land Policy, the government sought to promote post-war reconstruction. Tanner (2002: 47) maintains that the 1997 Land Law "redresses the wrongs of the colonial era, and allows all socio-economic categories to use and develop their land as they see fit."

b) Current context

The current context begins with identifying the full range of land rights and tenure systems in existence in the country. The basic principle is that the State owns all land in Mozambique, while citizens and rural communities have recognised land use rights, whether registered or not. Balas *et al.* (2017: 1) note that more than 90% of the land rights are unregistered. Thus, while the law recognises customary and good faith occupations (DUATs), these will remain off-register unless occupants follow due process to record their rights. To complicate matters, multi-layered and multi-generational tenure types exist, as is typical of African customary tenure systems (de Quadros, 2003), where "one community might use an area for grazing cattle, a neighbouring community might have concurrent customary rights to collect firewood or water from that area" (Schreiber, 2017: 5). There is also a "rich diversity of indigenous tenure practices across Mozambique whose subtle differences belie clear cut categorization" (Kloeck-Jenson, 1998: 241).

Institutional capacity was a major concern in Mozambique (Unruh, 1996; Norfolk & de Wit, 2010; Mole, Monteiro & Quan, 2012). In Section 8.1 it was noted that, after the peace deal was signed and people started returning to 'their' lands, the government lacked the capacity to carry out structured resettlement. This was in part due to the Portuguese exodus and the restricted educational opportunities afforded to the local population during colonial rule (UN-HABITAT, 2005). Where formal institutions tried to allocate land rights, confusion reigned because different sectors of government were allocating rights over land without consulting other stakeholders, and overlapping allocations resulted. The SPGC was singled out as lacking capacity (Kloeck-Jenson, 1998; UN-HABITAT, 2005; Mole, Monteiro & Quan, 2012): they were "caught … off guard and poorly prepared" for the sudden interest in land following the 1992 Peace Accord (de Quadros, 2003: 10). Despite public investment that provided technical assistance, equipment and training, by 2003 there were still very few private surveyors – "less than 20 professionals and firms" (*Ibid*.: 11) – available to support the implementation of the Land Law, while some provinces had no private surveyors. Private surveyors were also severely under-resourced.

Lack of technical, human resource, and financial capacity also hindered municipalities from administering urban land, while the lack of trained judges caused delays in the processing of land disputes (UN-HABITAT, 2005). The iTC was established in part to address these capacity issues,

but struggled due to low overall land administration capacity, the virtual absence of rural land use planning capacity, and low service provider capacity (Quan, Monteiro & Mole, 2013; EDG, 2014). To build local capacity, it was decided that the iTC would use NGOs, private sector companies, and public bodies as service providers (Quan, Monteiro & Mole, 2013). Although NGOs and communities lacked the information and skills necessary to even request support from iTC (Schreiber, 2017), the capacity of service providers improved (EDG, 2014).

In response to the shortcomings of the SPGC, in 2009 the MCC launched a cadastral support programme, and by 2012 the SPGC had a new, digital land information management system, SiGIT (Schreiber, 2017). Monteiro, Salomão & Quan (2014) report increasing numbers of plot allocations as evidence that the capacity of the SPGC has been increasing. However, the political crisis in 2016 saw funding for the SiGIT programme withdrawn, and a return to paper-based land information management. Drawing on such lessons learned, capacity building is built into the methodology for implementing the *Terra Segura* programme (Balas *et al.*, 2017). This includes maintenance of the cadastral information, to keep it up-to-date. The Capacity Building Programme on Land Management and Administration (GESTERRA), which started in 2014 and was planned for completion in 2018, sought to improve land management and consolidate land administration. GESTERRA falls under the umbrella of *Terra Segura* (Locke, 2014; Christoplos *et al.*, 2016).

Community consultations are an integral part of the Land Policy and Law, but since its drafting there have been questions about the capacity of communities to effectively engage with investors (Tanner, 2002; Van den Brink, 2008; Monteiro, Salomão & Quan, 2014). Bicanic, Nielsen & Sehested (2014) note the need for institutions to support rural communities to manage their land and natural resources and realise the objectives of legislation. The problem was that community consultations by investors degenerated into a simple box-ticking exercise. The Land Law did not provide sufficient guidelines for *how* communities were to be consulted, only that they *should* be consulted. Communities often lacked sufficient knowledge and capacity to negotiate effectively with investors (Van den Brink, 2008). Hence iTC embarked on a programme called *social preparation* – see Section 8.5.3 – to improve community capacity.

The land rush following the end of the civil war was itself indicative of another contextual issue: the availability of land. Mozambique was considered to be a country in which land scarcity was not a problem (UN-HABITAT, 2005; Mole, Monteiro & Quan, 2012), although pressure on land has increased following the civil war, especially in the most fertile and productive regions (Myers, 1994; Unruh, 2001; Balas et al., 2017). Access to housing has been a problem in urban areas. This has led to an increase in informal settlements on land that is not suitable for development (Trinidade, 2004; UN-HABITAT, 2005). In rural areas, there was a high demand for land and natural resources (Bicanic, Nielsen & Sehested, 2014), but the SPGC was unable to provide information on land availability (Mole, Monteiro & Quan, 2012). Rural communities also faced the difficulty of having their common property resources overlooked in allocations to investors. These resources are crucial to their livelihoods (Norfolk & Bechtel, 2013). Hence, effective community consultations are extremely important (Monteiro, Salomão & Quan, 2014).

The political, legal, and socio-economic context shapes the change process. The 'land question' was noted as a point of potential instability that could lead to a return to armed conflict (Unruh, 1996). The drafting of new legislation was influenced by the strongly competing capitalist and socialist ideologies on the types of land tenure systems that could be accommodated in the country following the civil war (EDG, 2014). Slow implementation of the Land Law was linked to political motives (Tanner, 2002) and the political climate led to the withdrawal of funding for SiGIT (Schreiber, 2017). Being politically independent is mentioned as one of the reasons for the

success of the iTC (*Ibid.*). Bicanic, Nielsen & Sehested (2014) reported that some communities lacked faith in the ability of the State to enforce their legal land rights. The current country context is summed up by Balas *et al.* (2017) as being highly culturally diverse and technologically limited.

The 1997 Land Law creates the conditions for change that is "gradual and well managed … through the adaptation of local structures to modern land management methods (and vice versa)" (Tanner, 2002: 1). This adaptability to tenure and institutional dynamics is important for ***significance*** of cadastral systems development involving customary land tenure systems because customary tenure systems are time-dependant and multi-layered – see Section 8.3.4, with reference to registered titles becoming out-dated. By recognising the legitimacy of customary practices, the Land Law accommodates this flexibility and adaptability (*Ibid.*). It does not specify procedures for every cultural context, but rather recognises and enables customary tenure systems to function according to their cultural norms. This is facilitated by the definition of the local community (see Section 8.5.3), which was specifically formulated to incorporate the dynamic and adaptable nature of customary tenure (de Quadros, 2003). Norfolk & Bechtel (2013) commend the land delimitation process for its flexible and participatory approach, which is necessary given the large variation in size and structure of rural communities (Quan, Monteiro & Mole, 2013). The EDG (2014) recommended that flexibility and adaptability be built into iTC programmes to ensure ***significance*** of interventions for the community's needs.

8.5.2 Getting to the end state

a) Good leadership

Advice has been, and is being, sought at various stages of the change process, and this should contribute to ***successful*** development. Input from knowledgeable experts was sought during discussions that laid the foundation for the 1995 Land Policy. Experts represented NGOs, specialists, and academics, such as the Land Tenure Centre at the University of Wisconsin-Madison and the FAO (Unruh, 1996; Kloeck-Jenson, 1998). Examples were studied from similar nations that had successfully integrated customary and formal land management systems. Legal experts were instrumental in drawing up the new Land Policy, Law, and Regulations (Tanner, 2002). Land administration experts suggested the iTC programme for securing tenure and promoting investment (Schreiber, 2017). Teams of experts are involved in setting up the Natural Resource Management Committees (CGCRN) in rural communities (apolitical, 2017).

Identifying locally-sourced 'champions' may assist in driving the change process. This was raised in Section 7.4.2 as a capacity issue related to adopting new technology. Similarly, Mole, Monteiro & Quan (2012: 5) noted that "the success of iTC's approach to securing land and natural resources rights depends on the presence and *capacity* of good local service providers" (emphasis added). Norfolk & Bechtel (2013) acknowledge the need for training and supporting community 'champions' for dealing with land and gender issues. Community facilitators are also identified as an important part of social preparation (Quan, Monteiro & Mole, 2013) – see Section 8.5.3.

Community acceptance of leaders is important for successful adoption of development initiatives. Tanner (2002) relates that, despite legal imperfections and implementation problems, the 1997 Land Law had strong support from local communities, reflecting their support of the legal team. Balas *et al.* (2017) note that the successful adoption of mobile technology for securing land rights was only possible when the community trusted their younger members who were quick to learn how to use it. Hence, trust, support, and acceptance among different players at various stages of the development process are important for ensuring ***significance*** and, consequently, the project's ***success***.

Good leaders have realistic expectations about what can be achieved. Tanner (2002: 13) notes that, initially, "the policy makers of the day and their technical advisors were grossly underestimating the challenge". Similarly, the Maputo Municipality's strategic objectives for improving land administration in the city were considered to be "overly ambitious" for not taking into account the constraints of institutional capacity (UN-HABITAT, 2005: 56). The initial, demand-driven approach of the iTC was also shown to be unrealistic, as was the national directorate's attempt to change the Land Law to require political approval for community delimitations (Schreiber, 2017) – see Section 8.4.1. Conversely, Balas *et al.* (2017) report that care was taken to make sure that the *Terra Segura* programme could achieve its objectives (although Christoplos *et al.* (2016: 5) call these objectives "overambitious"). This was done through establishing a fit-for-purpose methodology, quality control procedures and standards, innovative tools, and capacity building programmes.

Good leaders are also committed to the process, which is a necessary trait for overcoming resistance to change. Tanner (2002: 4) notes that simply writing new laws and policies does not translate immediately into changed practices – it is an "extremely complex challenge" requiring commitment and dedication to the task, as well as a sound and carefully considered plan of action. Although misguided, the National Directorate also showed commitment in the face of strong opposition to changing the Land Law as mentioned above (Schreiber, 2017). Thankfully, as noted in Section 8.4.1, they eventually backed down when their approach was shown to be incorrect. By backing down and heeding the voice of opposition, the leadership showed maturity.

Finally, good leaders should have vision and faith, and be unbiased and impartial. The example mentioned above is one of misguided leadership, where leaders showed poor vision and lack of faith in the provincial governors. Regarding bias and impartiality, Myers (1994) and Unruh (1996) noted that government officials were complicit in land grabbing and the exploitation of vulnerable communities after the cessation of armed conflicts. At the local level, communities may still suffer under unscrupulous leaders and investors who make land deals at the community's expense (Bicanic, Nielsen & Sehested, 2014).

b) Building on existing practice

Getting to an end state that is ***significant*** for land rights-holders requires the acknowledgement, adoption, and adaption of existing practices. In Mozambique, this principle was fundamental to the drafting of the new Land Policy and subsequent Land Law. The Law was drafted with broad consultation with various stakeholders (Tanner, 2002). Key to this achievement was the acknowledgement and respect of local and indigenous knowledge and institutional arrangements, legitimising occupation under existing customary and 'good faith' arrangements (UN-HABITAT, 2005; Bicanic, Nielsen & Sehested, 2014).

Prior to the drafting of the 1995 Land Policy, a thorough sociological analysis of existing customary law and institutional practices was undertaken. It was found that customary land management accounted for over 90% of land access and use in the country. By working with customary land rights-holders, the boundaries between community lands could be identified, even after years of abandonment during the civil war (de Wit *et al.*, 1995, 1996; cited in Tanner, 2002). Tapping into such local, indigenous knowledge was important in securing community consultation and participation in the management of natural resources, using customary norms and practices. It also proved essential in the delimitation of customary DUATs to secure customary land rights while allowing investors negotiated access to resources held on customary land (Tanner, 2002).

Building on existing practice is also necessary for avoiding organisational multiplicity. Prior to the drafting of the Land Law, Myers (1994) reported confusion and ignorance among land rights-

holders, both customary and private, regarding land rights and how they were granted. This confusion arose due to there being two systems of land administration and dispute resolution running in parallel: the customary and the statutory. Schreiber (2017: 22), quotes Carrilho, the former deputy minister of agriculture, who raised concerns over the "populist and romantic idea of traditional communities". His concern related to the empowerment of traditional leaders in rural areas, leading to different sets of rules being applied in urban and rural areas. Such organisational or institutional multiplicity could create confusion, undermine democracy, and reduce economic investment.

The intention of the Land Law was quite the opposite: one law accommodating both customary norms and practices and private land use rights under the DUAT system. The Land Law sought to fully legitimise customary land rights while making allowance for private land use rights to be defined over customary land in consultation with the effected community. The recognition of customary land rights was in response to the acknowledgement that the customary institutions governing rural communities were responsible for 90% of Mozambique's land (Tanner, 2002). Hence it made sense to adopt or adapt existing good practice. Another positive aspect of traditional practices that has been incorporated into the Land Law is that of consulting the family and community members concerning land allocations (UN-HABITAT, 2005).

c) Time to completion

In Mozambique, two approaches to land reform were initially attempted: 1) surveying family sector plots and issuing them with use rights, and 2) organising farmers into associations and registering land use titles in the name of the association. Both approaches were found to be too slow to be of practical use. Instead, community land delimitations were proposed as a "quick and cost-effective way of securing local land rights" (Tanner, 2002: 24).

The 1997 Land Law was drawn up with a long-term timeframe in mind. The actual drafting of the Law allowed time for reviewing of policies and the institutional context, developing new legal instruments, and allowing time for implementation. At least ten years were allocated to the entire process, from consultation to implementation (*Ibid.*).

When it comes to implementation, lengthy processes can prove frustrating. Bicanic, Nielsen & Sehested (2014) complained that it took four years to obtain delimitation certificates for just three villages. However, van den Brink (2008: 2) notes that the land delimitation process is "lengthy by design, to foster mutual understanding and to forge sound partnerships between stakeholders." But the EDG (2014) found that some community associations had been hastily drawn up to fit the short-term contracts of donors. Rapid training and demarcation of agricultural land could lead to capacity issues and land conflict in future. They criticised the iTC for relying on short-term contracts of three to nine months. In some cases, this resulted in large, unworkable conglomerates of communities as a single association when two or more associations would have been more effective. To avoid this pitfall and realise the goal of registering five million parcels and four thousand communities in five years, the *Terra Seguras* project is adopting a fit-for-purpose methodology and use of appropriate standards for the context, with incremental improvement over time (Balas *et al.*, 2017; The World Bank, 2017).

d) Implementing change

"Compared with the already challenging legislative task … implementing the law is by far the greater challenge" (Tanner, 2002: 2). Implementing change involves using pilot projects, a phased / incremental approach, and appropriate methods or instruments. In the Netherlands case, the importance of development influencing policy was noted. The Mozambique case highlights the need for *support* and *implementing legislation*.

The most prominent descriptor of 'implementing change' was that of *support*. As noted elsewhere, drawing up the Land Policy and Law relied heavily on external support offered by donors and knowledgeable experts such as the FAO and Land Tenure Centre (Tanner, 2002). External support is also required by communities seeking to secure their land rights and partner with investors (Mole, Monteiro & Quan, 2012). It is recommended that communities are supported in their consultations with investors to ensure that such consultations are not superficial (Norfolk & Bechtel, 2013; Bicanic, Nielsen & Sehested, 2014). Monteiro, Salomão & Quan (2014) call for improved community consultation guidelines to support communities' involvements in sustainable, mutually beneficial investment partnerships. The iTC was established to provide this support (Schreiber, 2017), which needs to be long-term else communities may be unable to sustain their investment (EDG, 2014).

Effective *implementation of legislation* also contributes to the ***success*** of cadastral systems development. Although imperfect, the Land Law is acknowledged to be adequate to the task of securing land use rights. It is supported by the Land Law Regulations, published in 1998, that detail how the Land Law should be implemented (de Quadros, 2003). However, several factors may inhibit its implementation, such as lack of institutional capacity, political disagreements (Tanner, 2002), shortage of private land surveyors (de Quadros, 2003), poor community consultation (Monteiro, Salomão & Quan, 2014; Frey, 2017) and because communities fail to register their land rights (apolitical, 2017).

As noted in Section 8.3.4, the results of two pilot projects influenced the content of the 1995 Land Policy (de Quadros, 2003). Multidisciplinary teams were also engaged in 21 land delimitation pilots that showed the methodology to be "viable and cost-effective" (*Ibid.*: 7). It was after a series of pilot tests on implementation of the new Land Law that weaknesses were identified, leading to the need for a supporting agency – the iTC (EDG, 2014). iTC began with a pilot project in Zambézia Province, and was later expanded with G6 funding to include Cabo Delgado, Gaza, and Manica provinces. With additional support from the MCC, iTC's influence was later expanded to include Nampula, Niassa, and Zambézia again (Mole, Monteiro & Quan, 2012). This was extended to include Tete and Sofala provinces in 2010 (EDG, 2014) – see Figure 8-2. Validating the fit-for-purpose methodology in Mozambique was also done through the use of pilot projects (Balas *et al.*, 2017).

When the complexity of the task of drafting a new Land Policy and Law became apparent, it was decied to set several intermediate objectives: policy development, drafting the law, a land conference to discuss the law, approval of the law, development of regulations, institutional development, and implementation (Tanner, 2002). Through the setting of achievable objectives, the aim of new policy and law became less intimidating. Adopting such a phased approach was also promoted by Balas *et al.* (2017) regarding the upgrading of the national cadastral services. The fit-for-purpose approach allows for incremental improvement in standards and technologies as the institutional and community capacity grows. Central to this approach is the appropriateness of the methods and instruments used at all stages of the development process (Quan, Monteiro & Mole, 2013; Balas *et al.*, 2017).

8.5.3 Working together

a) Engagement

Effective, sustainable engagement is an integral element of the change process, joining the top-down and bottom-up approaches (see Figure 4-3). It begins with getting all relevant stakeholders to the negotiating table. As has been mentioned previously, the drafting of the Land Policy and Law was a highly participatory process in which all those with interests in land were represented.

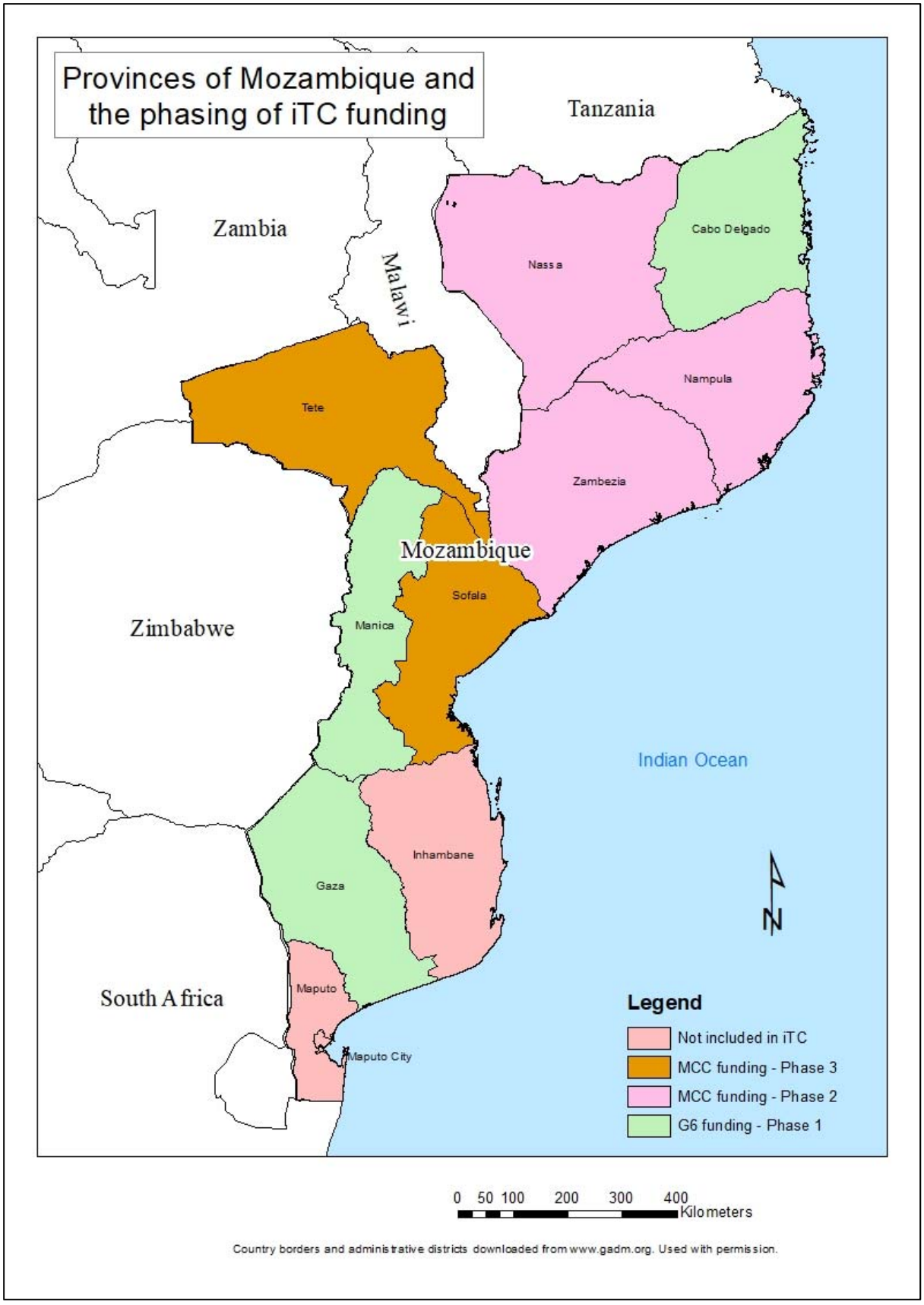

Figure 8-2 Phasing of iTC interventions by province

The iTC approach is also highly participatory, including all stakeholders with an interest in the land in question (Monteiro, Salomão & Quan, 2014). The delimitation process is also designed to engage relevant stakeholders, including representatives of the SPGC, district administration, the community being delimited and their neighbours, and NGOs acting as service providers (Bicanic, Nielsen & Sehested, 2014; EDG, 2014). Many different stakeholders and sectors of government have an interest in land. In drafting the 1995 Land Policy, it was hence very important to adopt a multi-sectoral approach. The Land Commission was therefore composed of representatives from a range of different ministries, all with an interest in land. It became evident that:

> *"… specialists working on land in different ministries and in other institutions rarely communicated professionally. Academics, technical staff and civil servants were all engaged in land related matters, but had never really come together around a unique common objective: the review of land policy and legislation." (Tanner, 2002: 18)*

Avoiding silos is hence an important consideration when engaging multiple stakeholders (de Quadros, 2003). There is a need for coordination and collaboration between institutions and sectors (UN-HABITAT, 2005; Mole, Monteiro & Quan, 2012).

After the Land Law was published in 1997, it was agreed that people, especially those in rural areas, needed to be informed about the new law and their rights. A national committee was formed by NGOs and academics to facilitate this engagement. This became known as the Land Campaign (Negrao, 1999). The Land Campaign communicated the basic elements of the new Land Law to rural communities and informed them of their land rights (Tanner, 2002; UN-HABITAT, 2005). They took an innovative approach, using graphic material such as comic books, recorded dramatizations of the comic book scripts in Portuguese and local languages, a film depicting the comic book message, posters, theatre, and producing radio shows to explain the basic tenets of the Land Law. It was decided that the messages should be positive, suggesting methods of problem solving and defence of land rights (Negrao, 1999). Radio soap operas were also used to raise awareness of gender-sensitive land rights issues (Norfolk & Bechtel, 2013).

The concept of a local community "as an entity with a clear juridical personality" (Tanner, 2002: 4) was foundational to the principles of the new Land Law. However, because Mozambique is a diverse country, both culturally and geographically, defining a local community was very difficult, bordering on impossible. The definition that was finally included in the Land Law is summarised as follows:

> *"A grouping of families and individuals, living in a circumscribed territorial area at the level of a locality … or below, which has as its objective the safeguarding of common interests" (Government of Mozambique, 1997, sec. 1; as quoted by Tanner, 2002: 29).*

The definition is noteworthy for what it leaves out as much as for what it includes. Excluded are references to kinship or lineage systems, hectares occupied or used, the numbers of community members, and community leadership structures. These omissions may be deliberate, to allow for flexibility in accommodating the variation between different local communities across Mozambique (Tanner, 2002). This lack of specificity poses a challenge, however, for those engaging with local communities, such as the iTC (Quan, Monteiro & Mole, 2013).

Involving local communities was the most prominent descriptor of the engagement element in the literature reviewed. This is because the Land Regulations specified that communities had to be consulted before land allocations could be made to private investors (UN-HABITAT, 2005). Consultations involved the drafting of a development plan in collaboration with the affected community and the prospective investor (Van den Brink, 2008). Weak consultation processes

plagued communities under pressure from external investors, leading to losses of land rights. Hence, in 2011, the Ministry of Agriculture issued a new set of procedures to guide community consultations – the *Diploma Ministerial No. 158/2011* (Monteiro, Salomão & Quan, 2014). The first of these was to create two phases to consultation. The first phase presented the details of the intended investment, and the second phase, which had to follow 30 days after the first phase, was to get the community's feedback. In this way, it is supposed that the principle of free, prior, and informed consent was followed. Secondly, new guidelines for the composition of consultation groups were drafted. Thirdly, a procedure was created for the community to recover the costs of consultation from the applicant.

The success of community consultations was still dependent on the capacity of the community to understand and engage with investors (*Ibid.*). Hence, support is offered through social preparation by which communities are made aware of their land rights and take responsibility for the use of the natural resources on the land (Quan, Monteiro & Mole, 2013). They are also made aware of the economic opportunities and risks (Monteiro, Salomão & Quan, 2014). This is intended to create a sound foundation for cooperation (Schreiber, 2017). Community facilitators, mentioned in Section 8.5.1, assist in social preparation. They need to be honest, servant-hearted, knowledgeable and able to communicate that knowledge with the community. They are chosen from amongst village leadership to promote their acceptance by the community. However, it was noted that many of the older generation lacked sufficient formal education. Younger community members had the necessary formal education but lacked community acceptance.

Consultations may be ineffective if all voices are not equally expressed and heard. iTC's interventions were designed to allow local communities to have a voice in where, when, and how investments were conducted on 'their' land (Mole, Monteiro & Quan, 2012). But defining local communities is itself not an easy task, because all community members must agree among themselves on their objectives and the extent of 'their' lands. According to the principles of co-title, "all members of the group should have an equal voice and must participate in decisions over their common assets" (Norfolk & Bechtel, 2013: 21). Historically, women's voices were suppressed in community consultations, although this tendency is reportedly changing (Norfolk & Bechtel, 2013; EDG, 2014).

Having a voice is one means by which communities are empowered as role players and stakeholders in investments on community land. The fact that communities must be consulted, and give their prior and written approval regarding applications for land, empowers them to manage natural resources and land use within their jurisdictions (Tanner, 2002; Bicanic, Nielsen & Sehested, 2014; Monteiro, Salomão & Quan, 2014). The iTC was established as a means of facilitating this empowerment (Mole, Monteiro & Quan, 2012; Quan, Monteiro & Mole, 2013). Norfolk & Bechtel (2013) advise that women should be included in CGCRNs to influence gender bias that would exist without their involvement and to promote their empowerment within the community. CGCRNs are established to give communities power over the use and management of natural resources on their land (Bicanic, Nielsen & Sehested, 2014).

One of the basic principles of the new Land Policy was the active participation of Mozambicans as partners in investments on Mozambican land (Tanner, 2002). Forming effective community-investor partnerships is important for sustainable engagement that leads to the accrual of benefits for both the community and the investor (Myers, 1994). Article 27(3) of the Land Law Regulations provides for the establishment of such partnerships (Strasberg & Kloeck-Jenson, 2002). Mole, Monteiro and Quan (2012) give examples of partnerships formed between communities and investors, with support from iTC, that are yielding benefits to both investors

and community. The examples show "how trained community associations can tap into new development opportunities and enable their members to escape poverty" (*Ibid.*: 5).

Effective guidelines on partnership development are a high priority for securing community tenure and avoiding conflict (Quan, Monteiro & Mole, 2013). Effective community consultations are crucial to the formation of viable community-investor partnerships (Monteiro, Salomão & Quan, 2014), but high costs can deter community engagement. One way of safeguarding against this is to get the investors to pay a 'caution fee' that covers the community's expenses associated with consultation and can be recovered if the consultation does not go ahead (*Ibid.*).

b) Handling equity

A key concern of the 1995 Land Policy was that development should be equitable and sustainable. During the period immediately after the war, some who were well-placed politically and economically gained large tracts of land at little cost. Those who had lost much during the war and lacked capital for investment suffered. Hence the Policy ensured that the benefits of investment should be equitably shared between investors and communities alike, and measures were put in place to safeguard the interests of rural communities (Tanner, 2002). Cultural differences are recognised in the broad definition of local community, and the Policy is built on a recognition of existing local, customary laws and procedures. The Constitution obligates the State to respect, protect, and fulfil human rights and associated fundamental freedoms (Bicanic, Nielsen & Sehested, 2014) although, as was explained in Section 8.2, there is some tension between adoption of the human rights tradition and a more broadly African worldview. In the conceptual framework, avoiding such conflicting opinions is done by building on existing practice. In Mozambique, this was done effectively in the recognition of customary rights of access and management in the Land Law (Tanner, 2002).

c) Resolving disputes

Using acceptable, supported, and appropriate methods linked to knowledgeable and legitimate organisations is one way of avoiding disputes and ensuring that, when they happen, they are amicably resolved (Norfolk & Bechtel, 2013). Building on existing practice is one way of ensuring that the dispute resolution methods and institutions are accepted as being legitimate by all involved parties, which improves their ***significance***. Communities perceive local-level conflict resolution to be fair and legitimate (Strasberg & Kloeck-Jenson, 2002). Hence the 1995 Land Policy and Article 24(1) of the 1997 Land Law recognised customary rights and institutions, including the role of local leaders in preventing and resolving conflicts (Tanner, 2002; UN-HABITAT, 2005).

The issue of *evidence* is discussed by Unruh (1996, 2001): prior to the drafting of the Land Law, customary forms of evidence were of lower legal standing than documentary evidence. In disputes between communities and private investors, the legal system hence favoured the latter, even if communities had a legitimate claim. The Land Law thus provided for the recognition of customary forms of legitimate evidence, such as oral testimonies or expert witness (de Quadros, 2003).

Community courts, "presided over by judges elected by and from the community", were established to resolve minor land disputes (UN-HABITAT, 2005, n. 83). Yet these courts are subject to criticism regarding their impartiality (*Ibid.*). Although customary courts are known to discriminate against women, the formal system is even less accessible for rural women (Kachika, 2009; cited in Norfolk & Bechtel, 2013). Cost and language are barriers to their usefulness. CGCRNs are another platform for managing disputes at the community-investor level, but they

too lack capacity for effective management of land and funds (Quan, Monteiro & Mole, 2013). Hence iTC has engaged communities in land rights training, with some success (EDG, 2014).

8.5.4 Evaluation

Table 8-4 Evaluation of Mozambique case against Change Process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Community / country context	Historical background	Providing impetus for change	5	5
	Current context	Existing land rights recognised	5	4
		Institutional, technological and community capacity	3	
		Competing political ideologies, volatile political climate	3	
		Land availability	3	
		Accommodating flexibility and adaptability	5	
Getting to the end state	Good leadership	Committed to the process	5	4
		Using knowledgeable experts and locally-sourced 'champions'	5	
		Unrealistic expectations	3	
		Unbiased and impartial	3	
		Community acceptance	3	
	Build on existing practice	Avoid organisational multiplicity	5	5
		Acknowledge and respect local and indigenous knowledge and local institutional arrangements	5	
		Adopt and adapt existing good practice	5	
	Time to completion	Several time-dependent issues noted	3	3
	Implementing change	Using pilot projects	5	5
		Adopting an incremental approach	5	
		Development influencing policy	5	
		Acknowledging and providing support	5	
		Implementing legislation	3	
Working together	Effective, sustainable engagement	Participatory processes	5	4
		Engaging multiple stakeholders	5	
		Avoiding silos	5	
		Effective, innovative communication strategies	5	
		Consultation in law, not in practice	3	
		Investor-community partnerships	5	
		Cost deterring engagement	3	
		Guaranteeing safety of all participants	1	
	Handling equity	Ensured in Policy	3	3
		Recognising existing land rights	3	
	Resolving disputes	Recognising customary dispute resolution mechanisms	3	3
		Concerns over access and partiality	3	

Awareness and acknowledgement of, and active engagement with, the historical context were all well-represented in the case, hence the historical context is 'satisfactorily addressed' in Table 8-4.

Regarding the current context, there was good acknowledgement of the range of different land rights and tenure systems in the country, and the Land Law went further to even protect formal and customary land rights. But the implementation of the Land Law has been plagued by capacity issues, and the capacity of both institutions and communities was found to be wanting. *Land availability* was identified as having a significant impact on the current context. The political context was also considered influential in the Mozambican case. Adaptability and flexibility are built into the new legal system through acknowledgement of customary laws and institutional practices. Hence, overall, the current context is 'adequately addressed'.

Using locally sourced champions and knowledgeable experts were important for good leadership of the change process in Mozambique. Community acceptance of leaders and processes is also important for ***success*** and ***significance***. The reviewed literature suggests that communities accepted the Land Law, but there were difficulties around its implementation. It was also noted that there were initially unrealistic expectations regarding what could be achieved during the change process, particularly linked to institutional and community capacity for adoption of new procedures. There was evidence of good commitment to the process of change, even when the vision for the end state was misguided. There were also suggestions of bias and partiality, especially from local leadership structures. Hence, overall, leadership is 'partially addressed'.

The DUAT system of land rights recognition avoids organisational and legal multiplicity by recognising both formal and customary land tenure systems under one Land Law. This Law is built on local and indigenous knowledge and institutional arrangements, adopting and adapting existing good practice. Hence, 'building on existing practice' is 'satisfactorily addressed'.

Regarding time to completion, in the drafting of the Land Law and Policy, sufficient time was taken to allow for comments and reviews. But the implementation of the Law has met with the shortened timeframes of donors, leading to pressure to get results quickly. Due to this conflicting evidence, and to reflect the obvious tension between getting results quickly and allowing sufficient time for adoption of laws and procedures, 'time to completion' is 'partially addressed'.

It was noted that implementing change required *support* from external sources, and that *implementation of new laws and policies* was a major challenge. Pilot projects, an incremental / phased approach, and the use of appropriate methods and instruments were all present in the Mozambican case. Influencing policy, identified in the previous chapter, was also identified in this case.

It has been noted that the drafting of the new Law and Policy were both highly participatory processes involving all relevant stakeholders and role players from the outset. A concerted effort was made to avoid institutional silos by bringing everyone to the negotiating table and disseminating information through the Land Campaign. Likewise, *forming partnerships* was important for effective engagement. Partnerships were a key concern in the new Land Policy, and they involved communities, NGOs, and private investors. The Land Campaign used innovative methods of communicating with rural communities to teach them about their land rights under the new law, and local communities were both engaged and empowered concerning their rights and investments on their land. Costs were noted as a concern for engagement, and safety of participants was not considered in the case study. Overall, 'engagement' is 'adequately addressed'.

Handling equity was addressed in the Mozambique case. It is here noted, however, that past colonial prejudices and power differentials will have an impact on how communities and investors engage around the negotiating table. Equity in law does not equate easily to equity in practice. Similarly, although existing customary institutions and methods of resolving disputes

are recognised in the Land Law, concerns were noted regarding their accessibility and impartiality. Hence these are 'partially addressed'.

8.6 REVIEW PROCESS

8.6.1 Why review?

The EDG (2014) used outcome harvesting [27] to evaluate the effectiveness of the iTC programme with a focus on *lessons learnt* for future interventions. They suggested that such reviews should take place periodically so that interventions can be adjusted to community needs (as a means of ensuring ***significance***). De Quadros (2003) reports that the lessons learnt from systematic land registration pilots were used to inform the drafting of the 1995 Land Policy. The design of the fit-for-purpose cadastre in Mozambique also draws on lessons learnt from past experiences (Balas *et al.*, 2017). Results from a pilot study were evaluated and subsequent interventions aimed to reduce the errors and problems that had been reported. The purpose of these reviews therefore appears to be the improvement of interventions which may foster their ***success, sustainability*** and ***significance***.

8.6.2 What is reviewed?

a) Outcomes

Achievement of the goals for development is an indicator of the ***success*** of the programme. The EDG (2014) identified improved community security, conflict management, knowledge of land rights, and natural resource management as outcomes of the iTC programme. These were all identified as objectives of the Land Policy. In addition, the following objectives of the iTC were met: local community boundaries have been delimited, CGCRNs have been formed, land conflicts have been resolved, community associations have been formed, and DUATs have been approved. The World Bank (2017) notes the following goals for the *Terra Segura* programme, against which the ***success*** of the programme will be reviewed:

- Number of community delimitation certificates issued,
- Number of DUATs recorded in the cadastral system, including:
    - Percentage of DUATs recorded in the name of women,
    - Percentage of DUATs recorded jointly to couples,
- Level of customer satisfaction with the LAS,
- Time and cost to record DUATs.

In identifying outcomes for outcome harvesting, the EDG (2014) sought specific, measurable changes with clear evidence that the intervention caused the change. They recommended clear, precise reporting by service providers to improve on monitoring and evaluation (M&E). Both the EDG (2014) and Christoplos *et al.* (2016) reflected on the theories of change informing implementation of the iTC and GESTERRA programmes respectively. Such theories of change were derived from their reviews of relevant documents and interviews with affected stakeholders. The associated indicators for review are hence aligned with the context and the *derived* theory of change.

[27] Outcome harvesting "does not measure progress towards predetermined outcomes or objectives, but rather collects evidence of what has been achieved and works backwards to determine whether and how the project or intervention contributed to change" (EDG, 2014, n. 2).

Unintended consequences was raised as an outcome for review in the previous chapter, and it is of equal concern in the Mozambican case. Van den Brink (2008) notes that the 2006 Urban Regulations create uncertainty with the unintended consequence of decreased tenure security for urban dwellers. Norfolk & Bechtel (2013) report on negative and unintended consequences of land titling, being the costs associated with precise demarcation and registration of titles, the obligation to pay land taxes, time limits on the lease periods, and the potential for revocation of leases if the leaseholder fails in their obligations. An additional risk is that the leaseholder has no safety net to fall back on (in the form of good faith or customary DUATs) in case acquired rights are revoked. Unintended consequences of delimitations are that they may cause conflict between neighbouring communities that cannot agree on boundary positions (Bicanic, Nielsen & Sehested, 2014), and could exclude communities from communal land required for grazing, timber, water, etc. (EDG, 2014). Interventions aimed at saving time and cost have also led to the creation of community associations that are unworkable. It is expedient to form associations from groups of neighbourly communities, but this has led to the creation of spatially cumbersome assocations requiring community members to walk many kilometres to get to community meetings (*Ibid.*).

b) Impact

The EDG (2014) noted that community well-being was improved through partnerships with investors and the interventions of the iTC (see also Quan, Monteiro & Mole, 2013). The *Terra Segura* programme is meant to improve community well-being through increasing the efficiency of LAS (The World Bank, 2017).

Environmental sustainability is an objective of the 1995 Land Policy (Tanner, 2002) and a national development priority (Mole, Monteiro & Quan, 2012). Community land delimitations have the potential to support this objective (Norfolk & Bechtel, 2013). As a prelude to delimitations, communities engage in social preparation exercises during which they establish a "community agenda for sustainable land and natural resource use" (Quan, Monteiro & Mole, 2013: 7).

8.6.3 When is it reviewed?

- The legal group that drafted the Land Law met *monthly* during the drafting process to debate and review the points of the law (Tanner, 2002).
- A *mid-term review* of the iTC programme in early 2010 was beneficial in identifying early successes and highlighting areas for consolidation to ensure continued ***success*** (Norfolk & Bechtel, 2013).
- *Periodic, biannual reviews* of iTC's programmes are recommended by the EDG (2014) to manage diversity and flexibility across the different provinces and cultural regions in Mozambique.
- Balas *et al.* (2017) noted that a *lack of ongoing M&E* led to problems that required further intervention to rectify them.

8.6.4 Who does the reviewing?

a) External reviewers

The Land Policy, Land Law, and associated Regulations and Technical Annex were all subjected to reviews during the processes of their respective drafting. Technical and legal experts were called in from FAO and other national and international parties to give their input (Tanner, 2002). Drafts were sent to academics, journalists, international specialists and others for their comment (Kloeck-Jenson, 1998; de Quadros, 2003). The EDG (2014) recommends that reviews of iTC

support should be contracted out to knowledgeable, independent third parties for unbiased, independent feedback.

In addition to review by knowledgeable experts, the previous chapter identified consultation with stakeholders as an important source of feedback. Two such consultations were identified in the reviewed literature. Firstly, the *Diploma Ministerial* 158/2011 prescribed new procedures for community consultations that sought to resolve many of the weaknesses in the process. Monteiro, Salomão & Quan (2014) recommend systematic monitoring of the *Diploma* by the cadastral services and other stakeholders. Secondly, a review of the iTC programme was commissioned by the UK-DFID. A reference group was formed, consisting of representatives of the G6 donors, MCC, FAO, civil society, private sector organisations, and government (EDG, 2014), all of whom were stakeholders in the programme.

b) State organisations

The State, as the governing FRELIMO party, gave feedback on the draft Land Law (Tanner, 2002). "Various Government agencies" (EDG, 2014: iv) collaborated with other stakeholders to provide detailed feedback on the iTC programme. Such feedback was validated in meetings with local, district, and provincial authorities.

c) Community

- Local community involvement in the policy formulation process improved the policy's ***significance*** for them (Kloeck-Jenson, 1998).
- The local community is involved in defining and verifying the boundaries of land delimitations (Bicanic, Nielsen & Sehested, 2014).
- Social preparation gives communities a chance to feed back on their interactions with investors (Monteiro, Salomão & Quan, 2014).
- The EDG (2014) used outcome harvesting to gain grassroots feedback both from those involved in implementing change (State organisations), and from the subjects of that change (local communities).
- Validation by the community of end-users was an important aspect of the SiGIT development and implementation (Balas *et al.*, 2017).

8.6.5 How is it reviewed?

This aspect was added to the conceptual model in the previous chapters, drawing on the experiences from Germany and the Netherlands. Funding, accessibility, and transparency were the associated elements.

The EDG (2014) conducted a comprehensive review of the iTC programme, funded by the UK-DFID. Bicanic, Nielsen & Sehested (2014) also conducted a comprehensive review of the Forestry Extension for Farmers in Ancuabe project, funded by the Danish Forestry Extension. Similarly, a mid-term review of the GESTERRA component of *Terra Segura* was commissioned by the Swedish and Netherlands Embassies in Mozambique (Christoplos *et al.*, 2016). From these examples, funding for reviews of donor-led interventions appears to be available and planned.

Accessing review procedures is improved through the use of clear and practical guidelines (Van den Brink, 2008) such as the *Diploma Ministerial* 158/2011. Having distributed, decentralised information also improves the accessibility of review processes (Van den Brink, 2008; EDG, 2014). The user-friendliness of review processes also aids their accessibility. User-friendliness was a concern of the SiGIT developers, not only for general usefulness and sustainability, but also to allow for end-user validation and feedback (Balas *et al.*, 2017).

The delimitation process is *open for review* by the affected community before the final delimitation is agreed and certified (Bicanic, Nielsen & Sehested, 2014). With respect to community-investor partnerships, *transparency* is recommended by Monteiro, Salomão & Quan (2014). They advocate for formal registration of written agreements including monitoring and accountability mechanisms.

8.6.6 Evaluation

Table 8-5 Evaluation of Mozambique case against Review Process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Why	Success Sustainability Significance	Adjusting interventions to community needs (***significance***) Reducing errors (***success***) Ensuring ***sustainability***	5 5 5	5 5 5
What	Outcomes	Aligned to goals Indicators measurable, precise, unambiguous Unintended consequences identified	5 5 5	5
	Impact	Community well-being Environmental ***sustainability***	5 5	5
When	Well-defined intervals	Satisfactorily addressed	5	5
	Throughout development process	Satisfactorily addressed	5	5
Who	External reviewers	Knowledgeable experts and stakeholders	5	5
	State organisations	Feedback received from all levels of government	5	5
	Community	Involved at multiple levels	5	5
How	*Funding*	*Provided by donors*	*3*	*3*
	Accessibility	*User-friendly, ease of access* *Distributed, decentralised information*	*3* *3*	*3*
	Transparency	*Delimitations open for review* *Community-investor partnerships formally registered*	*3* *3*	*3*

The rationale for conducting reviews is aligned to the need for ensuring ***success***, ***sustainability***, and ***significance*** through evaluating the *lessons learnt.* These may be used to derive new goals or implementation strategies in future. *Sustainability of development* is a goal of the Land Law, hence this element is 'satisfactorily addressed'.

There was good evaluation of the goals of development, using well-defined indicators, specifically by the EDG (2014), and good cognisance of unintended consequences of interventions. Hence these are 'satisfactorily addressed' in Table 8-5. The indicators used for measuring the achievement of outcomes were aligned to the *derived* theory of change. This reflects the underlying theory and context. The impact of the 1997 Land Law and associated developments on community well-being and environmental sustainability were 'satisfactorily addressed'.

Regarding the timing of reviews, much of the evidence points towards on-going, frequent reviews, throughout the process of drafting the Land Law, its implementation, and the subsequent iTC programme. All the elements for *who does the reviewing* were identified in the case. For the new aspect, *how* reviewing is done, there was evidence of reviews funded by donors for specific projects, but not of the overall change process. There was some evidence related to the

accessibility of review procedures, but more attention could be given to this element. Hence these elements are 'partially addressed' in Table 8-5. Transparency is also 'partially addressed' through the delimitation process and community-investor partnerships.

8.7 SUMMARY

By evaluating the development and implementation of the 1997 Land Law in Mozambique through the lens of the conceptual framework, revised with input from the previous chapter, the following shortcomings of the case are identified:

1. There was no acknowledgement of the need to guarantee the safety of participants in the change process. Communities are called on to agree on land delimitations, and smaller groups within local communities could decide to demarcate their land holdings from within the greater community delimitation, effectively removing themselves from the community. It is not clear what the impact of such decisions on both the broader community and on the smaller family groups is, especially concerning cases of dissent regarding the delimitations and demarcations.
2. The cadastre and registry are not integrated within one organisation, and they fall under separate ministries. For improved governance and administration of land, these institutions should be integrated or better inter-linked.
3. The European cases introduced the multi-purpose cadastre as a component of the LTIS. This was not addressed in the Mozambican case, possibly because the cadastral system is not yet sufficiently developed.
4. Overall, governance of LAS needs to be improved for better efficiency. There were numerous reports of cumbersome and bureaucratic procedures leading to delays in the issuance of titles and certificates.

Several descriptors were identified as needing improvement:

1. There is a need for developers to address the mismatch between the underlying theory of development and the lived experience of customary land rights-holders. Currently, LTT is the dominant underlying theory guiding what is recorded and why. The influence of alternate theories on the recording and registering of land rights should be explored.
2. Considering that Mozambique is a disaster-prone country likely to be facing increased challenges of flooding and drought due to climate change, more cognisance needs to be taken of these influences as drivers for land policy and cadastral systems development.
3. Leadership structures guiding cadastral systems development need to be strengthened at all levels: national, provincial, and local (including community leaders). There needs to be greater emphasis on impartiality and transparency.
4. Capacity issues were prevalent. The GESTERRA project, currently underway, seeks to strengthen institutional capacity, and iTC was formed to strengthen community capacity. These efforts should be ongoing. The capacity for adoption of new technology at community and institutional level also deserves attention.
5. While the aspect *Working together* generally featured well in the case study, attention should be given to the cost of engagement and the accessibility and impartiality of dispute resolution mechanisms, especially for women.
6. There were generally good indicators of comprehensive review processes. Improvements are needed in the areas of funding for reviews and accessibility of review processes by relevant stakeholders.

9 SOUTH AFRICA

9.1 INTRODUCTION

South Africa's regrettable past needs little introduction. The Advisory Panel acknowledges that:

> *"… colonialism and apartheid had [an] overwhelmingly devastating impact on South Africa, leaving the country with highly unequal patterns of land and property ownership, and a spatial legacy that locks the majority of the population into poverty traps. This is linked to the perpetuation of chronic under development" (Mahlati, 2019: 10).*

Even before the first European settlers set foot in the Cape, conflicts over land were occurring between indigenous tribes. Land conflicts rose to new heights when European settlers arrived and claimed parts of the country as their own (Rugege, 2004). They approached land with a different paradigm of ownership to that of the indigenous people, and so began the dispossession of aboriginal Africans. After unionisation in 1910, and as a result of the Natives Land Act 27 of 1913 and the Natives Trust and Land Act 18 of 1936, most black people in South Africa were denied land ownership rights and were restricted to occupying land in reserved areas – the former homelands or Bantustans (see Figure 1-2). Some researchers suggest that these reserves totalled only 13% of the land area of South Africa, and that this situation remains today (Rugege, 2004; Kloppers & Pienaar, 2014).

This spatial inequality spurred the newly elected democratic government to pass the Restitution of Land Rights Act 22 of 1994, the core premise of which became the so-called Property Clause (Section 25) of the South African Constitution (Groenewald, 2003). The following sub-sections of Section 25 are highlighted:

(1) No-one may be arbitrarily deprived of property.

(2) and (3) Property may only be expropriated in the public interest and subject to just and equitable compensation that reflects an equitable balance between the public interest and the interests of those affected.

(4) The public interest includes land reform, although property is not limited to land.

(5) The State is obligated to pass legislation to enable citizens to gain equitable access to land.

(6) and (9) The State is obligated to pass legislation to secure the tenure of those whose tenure is insecure due to past racially discriminatory laws or practices.

(7) The State is obligated to pass legislation to bring about restitution for those dispossessed of land after the enactment of the 1913 Land Act and subsequent discriminatory legislation.

Sub-sections (5), (6) and (7) formed the premise for land reform in the 1997 White Paper on South African Land Policy (DLA, 1997): land redistribution, land tenure reform, and land restitution respectively (Kloppers & Pienaar, 2014). As explained in Section 1.3.2, land tenure reform affects four groups of people in South Africa. This research is specifically interested in the plight of people living with insecure tenure in the customary areas of South Africa. These comprise the roughly 13% of the land area allocated to black South Africans under apartheid rule, living in the former homelands.

It is noteworthy that, despite over two decades of land reform, the situation remains virtually unchanged. According to the State Land Audit (DRDLR, 2017b), it would appear that the situation has worsened since the fall of apartheid, although the findings of the audit are questioned (IRR,

2018). Nonetheless, "High levels of poverty and inequality *persist* in democratic South Africa despite a decade of government policies and budgetary realignments designed to address the legacies of apartheid and steady economic growth" (Cousins *et al.*, 2005: 1, emphasis added). Writing more recently, Cousins (2016: 1) notes that "Land reform is sinking" and asks "Can it be saved?" It is hoped that, through interrogating the South African land reform programme through the lens of the conceptual framework, the question of not *whether*, but *how* land reform can be saved for the tenure insecure in the customary areas of South Africa, will be answered.

9.2 UNDERLYING THEORY

9.2.1 Understanding land and identifying the underlying theory

a) Attitude towards human and land rights

The Constitution of the Republic of South Africa has a clear focus on the respect, protection, promotion, and fulfilment of basic human rights (High Level Panel, 2017), and obligates the State to deliver on these ideals (Section 7(2)). Acceptance of human rights principles and this obligation are evident in the White Paper on South African Land Policy (DLA, 1997). Among the principles guiding the development of the Policy is the affirmation that "tenure systems must be consistent with the Constitution's commitment to basic human rights and equality" (*Ibid.*: 16). The White Paper advocates a rights-based approach for the recognition of *de facto* land rights and to ensure that tenure reform does not result in dispossession and increased tenure insecurity for some. Through such an approach, the colonially inherited idea of exclusive rights through ownership was replaced with a 'bundle of rights understanding' (FAO, 2002; Arko-Adjei, 2011). This recognises that many different rights types can exist simultaneously over the same parcel of land (de Satgé *et al.*, 2017).

While such a commitment to human rights at the outset of South Africa's land reform journey is applaudable, there has been a departure from this course in more recent policies and legislation. The Green Paper on Land Reform (DRDLR, 2011) makes no mention of human rights obligations. The Communal Land Tenure Policy, CLTP (DRDLR, 2013a), makes only brief mention of its alignment with the Bill of Rights. Worryingly, it appears that the current political stance favours a reversion to the 'indirect rule' approach of colonial and apartheid policies, with a shift away from the rights-based approach (de Satgé et al., 2017; High Level Panel, 2017).

The human rights principles enshrined in the Constitution *are* having an impact on lived experience. Some interviewees mentioned changing attitudes towards human rights principles. Changing attitudes were largely attributed to education and exposure to more modern ways of thinking (SA07, SA08, SA09, 2017). For example, Cousins & Hall (2011) affirm that single mothers are asserting their land rights through human rights and gender equality discourses.

b) Justification for development

Development is justified by arguments deriving from the normative principles of the developers. These should be aligned with the normative principles of the beneficiaries of development – the land rights-holders themselves. Where these are misaligned, the ***success***, ***sustainability***, and ***significance*** of development are likely to suffer. The evidence suggests that such misalignment is the current situation in South Africa. Per the Advisory Panel:

> *"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." (Mahlati, 2019: 37)*

Current land policies are said to be hindering land tenure reform in South Africa (SA02, 2017). The current thinking within government appears to be regressive with a normative base that stems from an incorrect paradigm (*Ibid.*). SA06 (2017) concurs, referring to the Spatial Planning and Land Use Management Act (SPLUMA) 16 of 2013:

> *"It's unimplementable! … The reason SPLUMA can't work in communal areas is that it was put together in the mental paradigm of … conventional town planning. In many ways it's a step backwards 30 years."*

SA04 (2017) refers to the hierarchical thinking around land ownership, as depicted in UN-HABITAT's continuum of land rights (see Figure 4-1), as evidence of an inappropriate paradigm for development. The continuum places formal, precisely recorded land rights on one extreme, and off-register rights on the other. Governments and developers speak about *upgrading* off-register rights, with individual title as the pinnacle of the continuum (Cousins, 2016; de Satgé *et al.*, 2017). SA04 (2017) proposes affirmation of existing land rights and granting them equal legal status, if they offer a suitable level of land tenure security (see also Whittal, 2014). 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 (SA03, 2017) because the applied theory represents a square peg trying to fit into the round hole of living custom (Kingwill, 2017).

South African land policy has drawn heavily from the replacement side of the land theory continuum (see Figure 5-2), especially LTT as espoused by de Soto (2000; see also Cousins *et al.*, 2005). This is evident in the White Paper, wherein references are made 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 (DLA, 1997). The CLTP (DRDLR, 2013a: 9) refers to the National Development Plan, or NDP (National Planning Commission, 2012), 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." This is suggestive of a bias towards replacement theory and is further evidence of the mismatch between development thinking and living practice (Cousins, 2016, 2017). Furthermore, replacement theory aligns with a civil law legal system while South Africa has a hybrid civil, common and African customary law system in which the latter two categories of law should not be ignored or downplayed in their influence and usefulness.

While some support de Soto's hypothesis (e.g. Williams-Wynn, 2017), others argue against the supposed benefits of formalisation: "Formalisation of property rights through titling does not necessarily promote increased tenure security or certainty and in many cases does the opposite" (Cousins *et al.*, 2005: 4). Cousins *et al.* (2005) and Weinberg (2015) report that individual title may have negative, unintended consequences, to which women and children are especially vulnerable. Under customary systems of *belonging* (vs. owning – see below), land tenure has a multi-generational dimension. Rugege (2004) supports the notion that customary tenure systems provide security and support for communities. He acknowledges critics of formalisation theory who argue that the introduction of individual ownership may erode this support "and thus increase rather than reduce poverty among poor communities" (*Ibid.*: 310). Formalising rights through registration and title 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" (de Satgé *et al.*, 2017: 41). Clark and Luwaya (2017) hence call for careful scrutiny of the theory underlying the development of laws and policies.

Adaptation theories appear to have formed the theoretical basis for land reform pre-2000 (Adams, Sibanda & Turner, 1999). 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, as mentioned above, current political thinking has departed from this stance, and the CLTP currently contradicts IPILRA because it seeks to transfer full ownership of customary land to traditional authorities, depriving land rights-holders of their land rights (Centre for Law and Society, 2015). Submissions to the High Level Panel [28] support a return to development thinking that is aligned with an incremental, adaptation-based approach (de Satgé *et al.*, 2017).

c) Perspectives on landholding

Something that came through strongly in the interviews, and was supported in the secondary data, was *perspectives on landholding*. Hence this is added as a new element as shown in Table 9-1 and discussed below.

Belonging

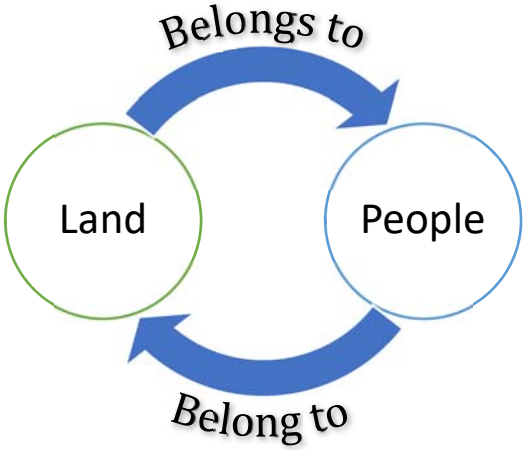

Figure 9-1 Land belongs to people *because* people belong to land

The interviews revealed strong opinions that land belongs to the people that live on and work it (SA04, SA10, 2017). The focus group members were opposed to ownership being transferred to the traditional *leaders*, which position was supported by SA09 (2017). The CLTP (DRDLR, 2013a) proposes that ownership of communal land be transferred to traditional *councils* (Loate, 2014) – see Section 1.3.3 and Figure 9-8 on page 177 – but the focus group members want the people living on and working the land to be the owners. From the customary land rights-holders' perspective, the CLTP denies them ownership rights to land (SA10, 2017). Hence, the constitutionality of the CLTP is challenged (Centre for Law and Society, 2015).

There are also strong opinions that people belong to the land:

[28] The High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change was an independent panel of eminent South Africans chaired by former president Kgalemo Motlanthe and commissioned with the task of assessing the "content and implementation of legislation passed since 1994 in relation to its effectiveness and possible unintended consequences" (High Level Panel, 2017: 30).

> *"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." (SA08, 2017)*

> *"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 conceptualise property as belonging." (SA04, 2017)*

The quotations above emphasise the multi-generational, broadly African view of land that is contrary to Western-inspired conceptions of ownership (see Section 4.3). So then, does land belong to the people, or do people belong to the land? I propose that both conceptions of belonging are correct. Land belongs to the people who live on and work it *because* the people belong to the land. It is a mutually reinforcing relationship (Figure 9-1). Under apartheid-based dispossession, black people were denied ownership of land. Yet the sense of belonging to the land remains and is made all the stronger by the dispossession. To restore the balance, post-apartheid policy seeks to return land to those previously dispossessed. However, when the 'supremacy of ownership' is introduced, people no longer belong to land in perpetuity. Land becomes a commodity and the indigenous link of people to land may be broken.

Subjects vs. citizens

The High Level Panel (2017) found that the CLTB, the CLTP, the TLGFA, the Traditional Courts Bill (TCB) (Department of Justice, 2017), the Traditional and Khoi-San Leadership Bill (TKLB) (COGTA, 2015), and SPLUMA are *all* misaligned to living custom and the Constitution. The outcome of such legislation is that people in customary areas will continue to be oppressed as subjects of a traditional leader, instead of enjoying full realisation of their constitutional rights as citizens of the country (Loate, 2014; Weinberg, 2015; High Level Panel, 2017). Such distinction between people living in urban areas, with full title to land, and those in the former homelands, "undermines the idea of one equal citizenship" (Clark & Luwaya, 2017: 20), which is unconstitutional (Mokgoroane, 2019). [29]

> *"There are people who are called subjects, and some who are citizens. The people in urban areas are citizens. Those in the rural* bundus [30] *are subjects of the chiefs. We want to change that mentality because we are not subjects, we are citizens!" (SA10, 2017)*

Per current land policy and law, the legal relationship between people and land may be compromised. People access land through the traditional leader, but, because of the 'supremacy of ownership', their rights to use land are inferior and subject to the ownership rights of the traditional council.

Owners vs. tenants

The Green Paper identifies a four-tier tenure system based on who holds rights to land (DRDLR, 2011):

1. Leasehold for State-owned land;
2. Freehold for privately-owned land;
3. Freehold with restrictions for land owned by foreigners; and
4. Communal tenure with institutionalised use rights (IURs) for communally-owned land – see Figure 9-2.

[29] Under #StoptheBantustanBills, the TCB and TKLB have been receiving opposition for this reason.
[30] In South Africa and Zimbabwe, *bundu* is a word of Bantu origin meaning the wilds, or a remote place.

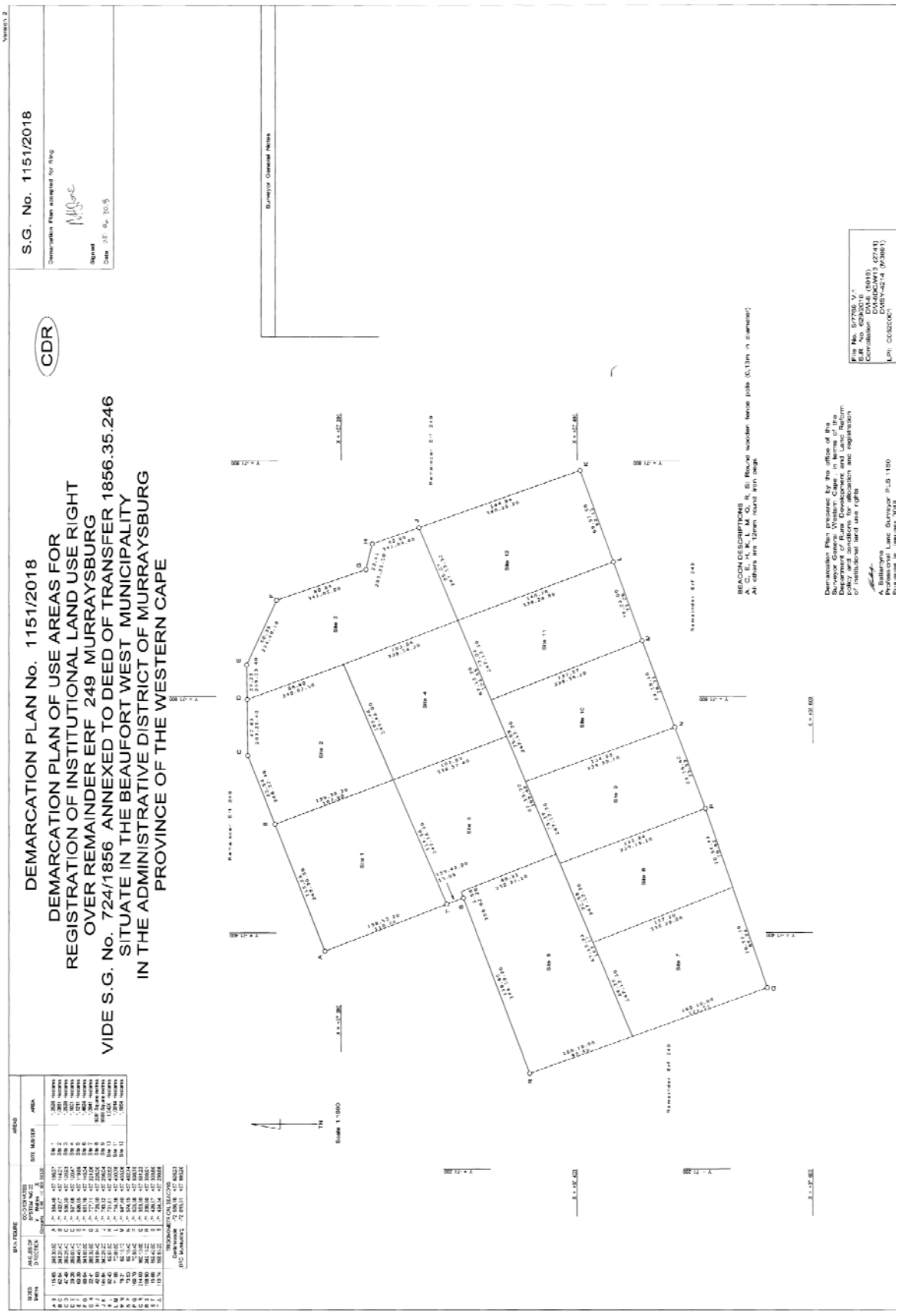

Figure 9-2 The first demarcation plan for IURs prepared by the Western Cape Surveyor-General's Office.

What is evident in Figure 9-2 is that the definition of IURs follows the 'conventional' cadastre, i.e. parcel-based, survey-accurate boundaries. This is unfortunate because, as was noted in Section 1.3.4, alternatives exist by which fluid (shifting) or fuzzy (imprecise) boundaries of plots may be accommodated by more modern conceptions of the cadastre. Such may be more in line with African customary law, and hence may be more ***significant*** for land rights-holders. Professional Land Surveyors need not be bound by the precision of their instruments, but an appropriate legal construct (land rights types, processes/rules of land access, etc.) needs to accommodate the creation of appropriate legal entities and the cadastral legal provisions to deliver them.

The State Land Lease and Disposal Policy, SLLP (DRDLR, 2013b), provides for leasehold of State land under land redistribution. Although land redistribution is not the subject of this research, it is mentioned here because the underlying thinking of the SLLP implies that "black people are not to be trusted with land" (Hall, 2014a). Hence Weinberg (2015: 18) argues that the Green Paper and the SLLP together imply that:

> *"… land ownership is neither appropriate nor allowed for most people living in the former homelands. … Instead, ownership is reserved for a small elite, condemning most people to a system of provisional tenure and state leasehold."*

The High Level Panel (2017) concurs. Confusingly, while the SLLP was published only one month before the CLTP, the former envisages leasehold while the latter envisages IURs. "Both policies apply to land in the former Bantustans … [yet neither] policy references the other" (Weinberg, 2015, n. 4). It appears that there is a need for coherent land policy that revisits the State's policy of retaining ownership and leasing land to beneficiaries. For people occupying State land, there is a concurrent need for the recognition and protection of their land rights to enable them to improve their well-being on the land (Hall & Kepe, 2017).

Kinship group tenure vs. individual or 'head-of-household' tenure

One way of addressing the issue is to recognise family-based ownership (DLA, 1997) / kinship groups (Cousins, 2007, 2008; Kingwill, 2017). "Land tenure has always existed in kinship groups" (SA02, 2017), and such kinship groups persist despite State interference (Kingwill, 2011, 2017). Within kinship groups, land rights are socially embedded, layered and inclusive (Cousins, 2008; Weinberg, 2015). Each family recognises the land rights of the family members within the kinship group. Custodians are appointed to administer the land. Under the imposition of State-driven titling programmes, it is the custodian whose name often appears on the title deed. This gives the custodian power over the other members of the group that, customarily, they do not have (SA02, SA04, 2017). Hence there is a proposal to record rights at the kinship level (High Level Panel, 2017).

9.2.2 Goals for development

a) 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 dispossession of land from black people by the original European colonisers and their descendants over the past century (Adams, Sibanda & Turner, 1999; Groenewald, 2003; Cousins, 2007). The lack of legally enforceable land rights leaves people vulnerable to exploitation by others: the State, developers, or other community members. It also leads to a lack of administrative support that opens up the possibility for corruption and further abuse of power (DLA, 1997). Hence, drawing from both the White Paper and the CLTP, land reform policy should address the following:

1. Current injustices stemming from former racially-based dispossession,

2. The legacy of inequitable distribution of land ownership,
3. Tenure insecurity,
4. Sustainable land use for increased food production and security,
5. Promoting land as a means of development and economic growth,
6. Recording and registering land rights for existing land holdings,
7. Effective land administration and spatial planning, and
8. Good (land) governance.

To do this, a unitary, non-racial system of land rights was envisaged (*Ibid.*). However, restoration is not as simple as repealing discriminatory legislation. Focus group interviewees spoke of two stages of liberation: the democratic era ushered in liberation for the nation, but as a 'class', most black people have yet to be liberated (SA10, 2017). Overlapping rights, boundary disputes, overcrowding, exploitation by traditional leaders, poverty and unemployment, and poor governance are contributing problems (DLA, 1997; Adams, Sibanda & Turner, 1999; DRDLR, 2013a). Hence, before any land tenure reform can commence, there should be a land rights enquiry to "disentangle" the complicated situation (SA04, 2017).

Insecure tenure also arises due to the " 'second-class' legal status" of customary tenure (Cousins, 2016: 10). The State subscribes to the 'supremacy of ownership' (SA04, 2017) and appears to acknowledge no land rights other than ownership as being legitimate. This leads to a lack of administrative support and service delivery in the former homelands (Cousins, 2016). Weinberg (2015) notes that the State has a responsibility towards ensuring a stable LAS and needs to increase capacity to attend to administrative problems in the former homelands. Effective land administration and legal recognition of customary land rights would facilitate the improvement of tenure security (Williams-Wynn, 2017). Such legal recognition is a constitutional obligation of the State, but to date the State has defaulted on this, leaving a dearth of legislation in the area of customary land tenure reform (Clark & Luwaya, 2017).

Evidence suggests that the approach adopted by government – the 'supremacy of ownership' – is inappropriate and is "straight-jacketing people into a system that doesn't fit their psyche" (SA04, 2017). According to the interviewees, government is not listening to the people (SA09, 2017) and is not respecting the Constitution (SA06, 2017). Their approach is based on a short-sighted vision of how they can benefit, as individuals, rather than on attending to the needs of the country (SA01, 2017). There appears to be a general lack of political will (Weinberg, 2015).

In the White Paper (DLA, 1997), government acknowledges the lack of legislative coherence and raises the need for an integrated approach to land reform. Two decades later, the same concerns are still being raised (Weinberg, 2015; High Level Panel, 2017; Mahlati, 2019). The objectives and strategic thrust of land reform remain unclear (Cousins, 2016). In the Green Paper (DRDLR, 2011), it is acknowledged that there has been a total system failure around land reform, and that the finger cannot be pointed at any one piece of legislation. Failures are attributed to inadequate implementation and enforcement of laws (High Level Panel, 2017).

b) Measures of success

According to the CLTP (DRDLR, 2013a), poverty alleviation and job creation are key indicators of the ***success*** of land reform. But poverty, unemployment, and inequality were identified as the three key challenges still facing South Africa today (High Level Panel, 2017). The White Paper (DLA, 1997) acknowledges that ***success*** and ***sustainability*** are dependent on beneficiaries' ability to access reform programmes, and on the support they receive from government. SA01 (2017) highlights the lack of support that has been provided for beneficiaries. Hence, per these measures of success, land reform appears to be failing. There is a tendency to allow numerical

goals – numbers of houses built, numbers of hectares transferred – to override the greater imperative of transformation (de Satgé *et al.*, 2017).

9.2.3 Evaluation

Table 9-1 Evaluation of South African case against Underlying Theory

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Theories of tenure reform	ID theory on continuum	Mismatch between replacement theory of developers and normative principles of land rights-holders	3	3
Understanding land in its social context	Attitude towards human and land rights	Adopting a rights-based approach Changing attitudes	3 3	3
	Justification for development	Inappropriate paradigm	1	1
	Perspectives on ownership	*Perspectives on belonging* *Subjects vs citizens* *Tenants vs owners* *Kinship groups*	*5* *5* *5* *5*	*5*
Goals for development	Gap analysis	Addressing tenure insecurity	5	4
		Lacking political and administrative support	3	
	Measures of Success	Poverty alleviation Job creation Numbers of houses built / hectares transferred	3 3 3	3

Although the Constitution affirms the human rights tradition, and the White Paper supports a rights-based approach to development, recent changes in policy formulation and implementation of legislation reveal a drift away from this alignment. Hence the attitude towards human and land rights is 'partially addressed' in Table 9-1. On a positive note, there is evidence of changing attitudes towards human rights, especially related to the role of women in customary land rights contexts.

The theoretical basis for development appears to be on the replacement side of the land theory continuum. This reflects a mismatch between the normative principles of government and those of land rights-holders in customary areas. The justification for development is hence questioned concerning its ability to promote ***successful***, ***sustainable***, and ***significant*** land tenure reform, and is marked as 'not addressed' in Table 9-1.

While perspectives on ownership arise from normative principles, this was such a prominent theme in the literature and interviews that it warranted an element of its own. There is an evident mismatch between the perspective on ownership promoted by policy compared to lived experience. Current policies seek to undermine land rights of customary people, allowing them only to lease land from the State or to have IURs administered by traditional councils, thus promoting the relationship to the traditional leader as subject rather than enhancing the relationship to the State and society as citizen. The harmony of belonging is yet to be restored in the land sector.

The land-related problems are legion and are clearly defined. Principally, the issue is insecure land tenure for customary land rights-holders. This is compounded by a lack of administrative and political support, including indications of an incorrect approach, leading to a total system failure. The result is *de jure* liberation but *de facto* oppression.

The goals for development were initially aligned with addressing the problems arising from apartheid, but there has been a drift away from this stance (High Level Panel, 2017). Goals are now unclear, shifting, and misaligned to the needs of this sector of the population. Measures of success are broadly aligned to the goals, but drawing from de Satgé *et al.* (2017), there is a tendency for government to adopt a myopic approach, focusing on the details instead of addressing the bigger picture, hence 'measures of success' is 'partially addressed'.

9.3 LAS CONTEXT

9.3.1 Land policy

a) Existing land rights

South Africa has a hybrid or mixed legal system involving Roman-Dutch civil law, English common law and African customary law which is given equal weight in the Constitution. In South Africa, customary law is a hybrid of living (uncodified) and official (legislated) law with both respected as legal and legitimate as long as the living law aligns with principles of African customary law and the Constitution.

The recognition and protection of existing land rights featured prominently in the interviews and publications. Section 7 of the Constitution mandates the State to respect, protect, promote and fulfil all the rights described in the Bill of Rights, including the right to tenure security. These obligations are explained in Section 4.2.1.

The White Paper (DLA, 1997) provided for a land rights enquiry to establish what rights are held in customary land, and how they are held. There was a commitment to recognise and legally protect legitimate land rights and treat such land as if it was privately owned. This means that such land rights-holders needed to be consulted on matters pertaining to their land rights. These provisions are enacted in IPILRA (Weinberg, 2015), which provides blanket protection of property rights (de Satgé *et al.*, 2017), but policies such as the CLTP make traditional leaders the point of departure for recognition of land rights. This undermines the tenure security of their constituents (Centre for Law and Society, 2015).

IPILRA should be strengthened and made permanent for better awareness, recognition and protection of existing land rights (Weinberg, 2015; Clark & Luwaya, 2017). There is also proposal for a new land rights recordal system to record existing off-register rights and that reflects customary understandings of land rights (High Level Panel, 2017; Mahlati, 2019). Such should incorporate a land rights enquiry and make existing land rights visible (SA04, 2017). The Advisory Panel lauds the example of Mozambique's land tenure model for taking such an approach (Mahlati, 2019).

b) Class and gender

The need to promote marginalised people's rights also featured prominently. Access to the commons, such as depicted in Figure 9-3, is essential for the poor, vulnerable and marginalised, especially women. Land tenure reform should take care to protect their land needs (Adams, Sibanda & Turner, 1999). This is especially true given that, in the past, women's land rights were severely undermined (Cousins & Hall, 2011; Cousins, 2016). SA02 (2017) noted that such

discrimination is the result of the imposition of colonial thinking on customary tenure systems and is not the fault of customary tenure itself (see also Clark & Luwaya, 2017). While it is noted that women are taking a far more prominent role in decision-making (SA04, 2017), there is concern that the current paternalistic trend in policies and legislation, following the pattern of CLaRA, may prove detrimental to women's ability to access land and retain tenure thereof (Loate, 2014; Weinberg, 2015; Clark & Luwaya, 2017).

Cousins *et al.* (2005) caution that the poor are not homogenous, and land tenure reform may impact different groups in different ways, sometimes with negative unintended consequences. In this regard, formalisation may lead poorer, more vulnerable rights-holders to sell their land in exchange for cash (Clark & Luwaya, 2017). Once this is spent, they are worse off than before. SA03 (2017) noted that 'women' are also not a homogenous grouping, and distinctions need to be drawn between the impact of policies on wives, widows, sisters, daughters, mothers, mothers-in-law, etc. Differential impact is also a concern in the context of elite capture, where those in the know and with power benefit more from policies than the intended beneficiaries (Cousins, 2016).

Figure 9-3 Sheep grazing on communal land near Willowvale, Eastern Cape

c) Productivity and livelihood

Sustainable land use was a concern raised in the White Paper (DLA, 1997). Due to overcrowding and environmental degradation in the former homelands, productive land use is a necessary outcome of land tenure reform. The Green Paper (DRDLR, 2011) extends the vision for effective land use planning and optimal land utilisation. Even within the recent debate on land expropriation without compensation, the concern raised by President Ramaphosa is that nothing should be done to impinge on food security (Phakathi, 2018a). This recommendation is echoed in the report by the Advisory Panel (Mahlati, 2019). Food security is also a concern of the NDP (National Planning Commission, 2012) and the CRDP (DRDLR, 2009) as supported by the CLTP (DRDLR, 2013a). After all, "you cannot eat rights" (Muzyamba, Broaddus & Campbell, 2015: 9). However, "many land reform projects have seen declines in farm production" due to the lack of adequate post-settlement support (Cousins & Hall, 2011: 3). Kloppers & Pienaar (2014) report that 90% of transferred agricultural land is not being used productively.

SA01 (2017) noted that many farms transferred under land reform projects were already marginal. Uneducated, under-resourced, and unsupported beneficiaries are not likely to be able to make a going concern out of a farm that is already struggling. There was also an impatience expressed by beneficiaries who thought that they would immediately become commercial farmers (SA07, 2017). To ensure on-going and improved productivity, SA07 (*Ibid.*) is working

with rural farmers, donors and agribusinesses to consolidate fragmented communal farming lands.

d) Uniformity

An element that emerged as important for pro-poor land policy is that of *uniformity*. The White Paper (DLA, 1997) envisaged a unitary, non-racial, legally validated system of landholding. The Green Paper (DRDLR, 2011) proposed a single land tenure framework ensuring tenure security for all South Africans. These proposals were supported by SA02 (2017) who proposed a move away from looking at land tenure in silos (see Section 9.5.3) towards adopting a common infrastructure for the entire country. "The ideal end state is to have one common law" (*Ibid.*). This is a constitutional imperative: everyone should live under the same system (SA04, SA06, 2017) that reflects how people hold land and distributes resources equally to all, regardless of their tenure type (SA03, 2017).

It is noted in Section 9.4.2 that there have been several new policies and laws developed since 2005. This is contrary to the original intention of the White Paper, which called for a rationalisation of legislation. Some of these policies are noted to be contradictory (Weinberg, 2015). The Advisory Panel also noted the lack of clarity regarding land policy, leading to diverse interpretations and inconsistencies (Mahlati, 2019). While de Satgé *et al.* (2017) caution that seeking uniformity can obscure the complexities of diverse land tenure systems in South Africa, the High Level and Advisory Panels call for new legislation to provide a coherent framework for land reform. Such should recognise that land tenure can be improved in South Africa through its mixed legal system, directed by the principles of the Constitution. Statutes (civil law) and the courts (common law) may be used to deliver on the needs of customary landholders in line with African customary law.

9.3.2 Land governance

a) Active participation

Adams, Sibanda & Turner (1999) acknowledge that land tenure reform requires thorough public participation. The South African Constitution requires Parliament to consult with the public on legislative processes, and it was on the grounds of insufficient consultation that CLaRA was struck down (Cousins & Hall, 2011; Weinberg, 2015). Public participation formed an important part of the drafting of the White and Green Papers on land reform. Similarly, the CLTP (DRDLR, 2013a) aims to empower citizens to take part in land-related decisions. But the CLTP appears to contradict this principle by proposing that communal land be transferred to traditional councils, robbing citizens of the power to make land-related decisions. The High Level Panel (2017) noted concerns that public participation in the legislative process is ineffective.

b) Equitable access

Equitable access to land is one of the aims of the land reform policy (DLA, 1997). The White Paper (*Ibid.*) notes that the ***success*** of the land reform programme is largely dependent on the ability of potential beneficiaries to access the programme. Hence, the intention has been for decentralisation of services (see also Figure 9-7). The CLTP (DRDLR, 2013a) has, as one of its intended outcomes, the promotion of equitable access to land, but the High Level Panel (2017: 34) notes that "policy has shifted away from [the original] Constitutional imperatives such as equitable access to land, towards State ownership."

c) Accountability and the rule of law

The CRDP (DRDLR, 2009: 9) was based on a "pro-active, participatory community-based planning approach" underpinned by good governance with emphasis on accountability. The CLTP (DRDLR,

2013a) conceives of households as active citizens holding the land administration bodies (the traditional councils) accountable. However, Loate (2014) and Weinberg (2015) note with concern that the policy does not put sufficient checks and balances in place to enable such accountability. According to Loate (op. cit.), because they are not public servants, traditional councils are under no constitutional obligation to act fairly and accountably. While this may be true of their vertical obligation, the Constitution places horizontal obligation on citizens to uphold each other's constitutional rights (see Section 4.5.3). However, Loate (op. cit.) and the Centre for Law and Society (2015) note that most traditional councils are not legally constituted because they have not complied with the provisions of the TLGFA regarding their membership. Hence, they do not have the legal capacity to own land or enter into investment deals. The High Level Panel (2017) recommends that mechanisms for accountability be incorporated into an amended TLGFA. SA01 and SA04 (2017) note that there is also a lack of accountability within the DRDLR.

d) Transparency, clarity, simplicity

Lack of clarity concerning land rights is likely to constrain development (Adams, Sibanda & Turner, 1999; Cousins, 2007; Hall & Kepe, 2017). The White Paper (DLA, 1997) addressed the lack of clarity in the roles, responsibilities, and policies of land administration institutions following the end of apartheid. Similarly, the CLTP (DRDLR, 2013a) aims to provide clarity around the roles and responsibilities of traditional councils and local government. Consequently, the State has the authority, but traditional councils carry the responsibility for land administration in customary areas. The CLTP reports that there is a lack of clarity and transparency concerning "the procedures for land allocation in traditional communal tenure areas" (DRDLR, 2013a: 27). Yet three independent case studies conducted under the author's supervision (Hull *et al.*, 2016) have revealed clear, transparent and similar customary land allocation procedures in Matolweni (Eastern Cape), Ulundi (KwaZulu-Natal) and Dinokana (North West Province) – not forgetting the author's own experience of land allocation in Ingwavuma (KwaZulu-Natal) – see Figure 3-5 (see also Alcock & Hornby (2004)). However, if the CLTP's proposal of transferring land to traditional councils goes ahead, such clarity and transparency may be lost (Loate, 2014; Weinberg, 2015).

e) Appropriate technology

The use of appropriate technology can improve land governance. The White Paper (DLA, 1997) acknowledges the need to move from paper-based land administration to e-land administration and the creation of a national LIS. Concerns in this regard are noted in Section 9.4.2. SA08 (2017) acknowledged the need to digitally record the paper records of customary land rights (see Figure 9-5 and Figure 9-6 in Section 9.3.4 below) but complained of a lack of government support.

9.3.3 Strategic level

a) Changing rights type

Off-register land tenure in South Africa depends largely on conditions that restrict the tenure security and investment opportunities of land rights-holders (DLA, 1997). For customary land rights-holders, tenure conditions relate to observance of local customary law, norms and practices and acceptance by the community and traditional leader. The formalisation approach adopted by the South African government views off-register tenure as inappropriate and seeks to 'upgrade' such land rights types to legally enforceable property rights (ownership or limited real rights of a legally recognised type). This approach is enforced through the Upgrading of Land Tenure Rights Act (ULTRA) 112 of 1991. Competing and overlapping land claims in customary areas will thus need to be resolved through adjudication by the Land Management Commission and adjusted towards formalisation (DRDLR, 2013a). This is a policy challenge (Cousins, 2007) involving the identification of which kinds of rights need to be secured, who holds the rights, and

how best to secure them to avoid further disputes. It ignores the reality of fluid boundaries, overlapping rights, and other complexities of landholding under African customary law. Fixing land parcels and boundaries in space and registering owners is likely to be followed by ongoing disputes.

Taking a more conservative approach, de Satgé *et al.* (2017: 20) argue that "recognition of property through titling will not provide the answer, and that customary rights must be recognised in their own right." SA04 (2017) testified of the resilience of customary tenure systems and claimed that upgrading via the formalisation approach is "utopian". Yet, despite evidence that the evolutionary approach is not working (reflected in Whittal, 2014), it continues to be favoured by policymakers and implementers (de Satgé *et al.*, 2017).

b) Improving tenure security

"The key problem that tenure reform policy sets out to address is the underlying legal insecurity of land tenure rights" (Cousins, 2007: 284). South African land reform policy has focussed predominately on legally defining land rights (Cousins & Hall, 2011), and several laws have been passed to this end. This is in keeping with the State's constitutional obligation to provide tenure that is secure through the operation of the law (statute laws and the courts). However, the lack of a "clear and comprehensive land administration system" is noted to be "one of the largest drivers of land tenure insecurity in South Africa" (Mahlati, 2019: 40).

Cousins *et al.* (2005) note that social tenures have widespread legitimacy and concomitant *de facto* tenure security. Rights-holders "depend on friends, relatives and residents in their local area to recognise and reaffirm their land claim" (Weinberg, 2015: 21). SA08 (2017) affirmed the social legitimacy of customary tenure, wherein the community itself verifies land rights. Williams-Wynn (2017) notes the prevalence of well-defined boundaries of fences or hedges as an indication of recognised, legitimate landholding (for example, see Figure 9-4). Such social practices should be supported rather than replaced (Cousins, 2007).

Figure 9-4 Clearly demarcated residential and agricultural plots, Willowvale, Eastern Cape.

Uncertainty over land tenure discourages investment (Adams, Sibanda & Turner, 1999; Hall & Kepe, 2017), but certainty is not reliant on titling (Cousins *et al.*, 2005). Williams-Wynn (2017) noted that some rural people consider documentary evidence (such as title deeds) as conveying ownership, and occupation as insufficient evidence of their claim to the land. Others already have certainty of their land rights through occupation and consider documentary evidence only as proof of such. The documents are symbols of ownership and holding them in hand is, in the community's view, very strong evidence of tenure. Transferring the document in hand to another

is akin to re-registration in the Deeds Office. The former view corresponds with historical evidence that customary land allocations are very secure and may only be reversed when individuals are found guilty of witchcraft or other actions deemed to be wrong in the minds of the community members (DRDLR, 2013a; Hull *et al.*, 2016; Beinart, Delius & Hay, 2017). SA03 and SA07 (2017) confirm that "people still feel secured" under customary land tenure systems.

c) Choices

Another new element that emerged from the data is that of *choice*. There were indications that land rights-holders should have the freedom to choose forms of land tenure, land management, and community allegiance. The exercise of choice may foster ***significance***.

Choice of appropriate tenure system was a guiding principle of policy development in the White Paper (DLA, 1997). Government showed a commitment to supporting and developing a variety of tenure options, including group-based and individual ownership. People were encouraged to choose the tenure system that best matched their circumstances. Weinberg (2015) cautions that transfer of communal land to traditional councils constrains the tenure options available, as does fascination with an understanding of the 'supremacy of ownership'. Clark and Luwayo (2017) advise that new legislation aimed at securing land tenure should include provisions for choice of tenure. I caution that this could become very messy, with neighbours holding land with different tenures: some freehold, some leasehold, some customary.

The TLGFA permits traditional councils to administer land. The wording of the Act implies that communities have a choice in the matter, although it is ambiguous (Cousins, 2007; Cousins & Hall, 2011). According to the CLTB, the 'choice' is restricted to CPAs, traditional councils, or the Ingonyama Trust. The former is strongly opposed by the DRDLR, and the latter exists only in KwaZulu-Natal, hence the 'choice' is not universally applicable (Clark & Luwaya, 2017). It is proposed that new legislation should return to the underlying principles of the White Paper and the Constitution, and "recognise the autonomy of people living on communal land in relation to decision-making about their land" (*Ibid.*: 32). The focus group concurred (SA10, 2017), emphasising that the people who live on the land should be the ones who are empowered to administer the land.

Section 28 of the TLGFA appears to entrench apartheid-era, imposed tribal boundaries (see Figure 1-2). It is supposed that people living within such boundaries are affiliated to the relevant tribal community. There is no provision for choice. Hence the High Level Panel (2017: 59) recommends that 'traditional community' be redefined to allow for "voluntary affiliation of groups of people who share customary laws and governance structures, rather than the superimposition of tribal identities according to apartheid geography." Voluntary affiliation should extend to inter-tribal intimate partners. When the partnership ends for any reason (including death), women and minor children living with a community of different ethnic identity to their own, face eviction. It is imperative that the rights of women and minor children are protected in such instances (Downie, 2016). The TKLB (COGTA, 2015) allows for voluntary affiliation for the Khoi-San community, but not for people living in the former homelands. Clark & Luwayo (2017) suggest that voluntary affiliation would help to dismantle colonial and apartheid-era tribal constructs.

9.3.4 Implementation level

a) Land recording / registering

The CLTP (DRDLR, 2013a) calls for the creation of local land information systems, including a form of cadastre, to record rights in customary areas. De Satgé *et al.* (2017) call for land rights

adjudication that recognises the legitimacy of customary land rights through locally-based (including oral) evidence. As an example of such, SA04 and SA08 have created a locally-based record of customary land rights based on family relationships – see Figure 9-5 and Figure 9-6. While this is not perfect – only legitimate children are represented, not illegitimate ones, and it assumes a monogamous relationship – it represents a move in the right direction. It is cautioned that recording customary land rights may take decades to complete, requiring a considerable budget (de Satgé *et al.*, 2017).

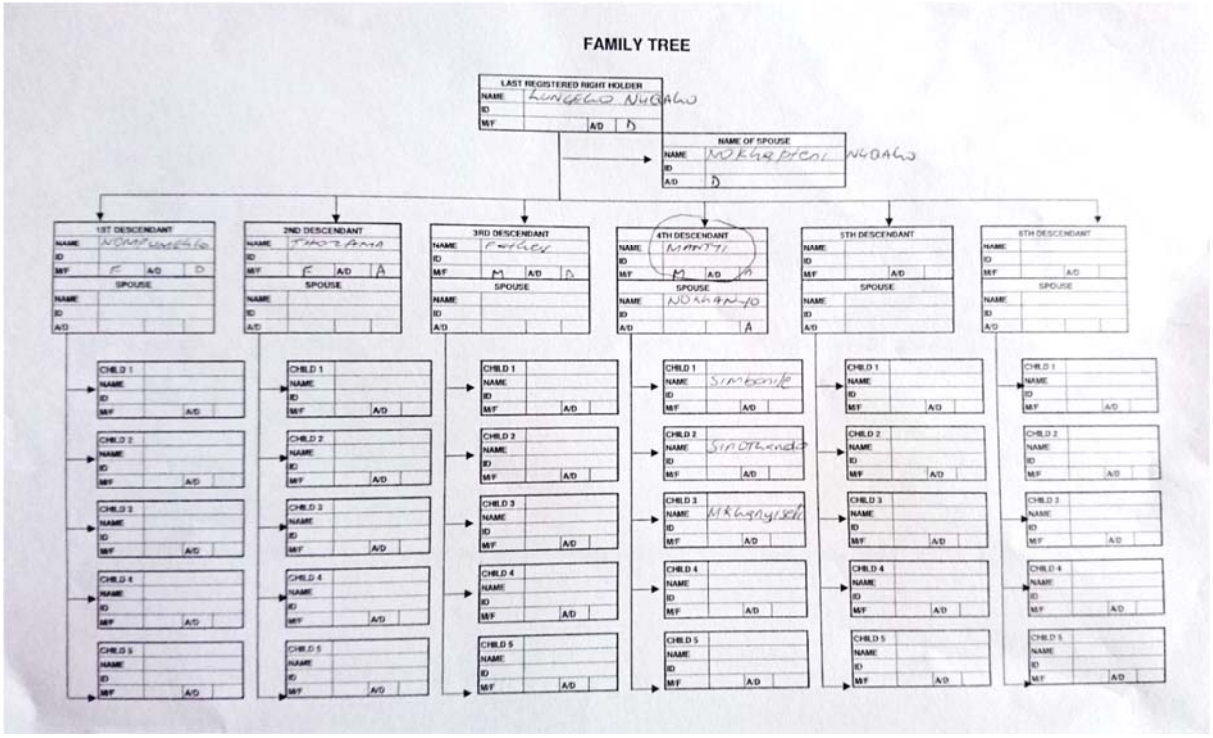

Figure 9-5 Records of household land rights provided by an NGO for customary land rights-holders, Willowvale, Eastern Cape

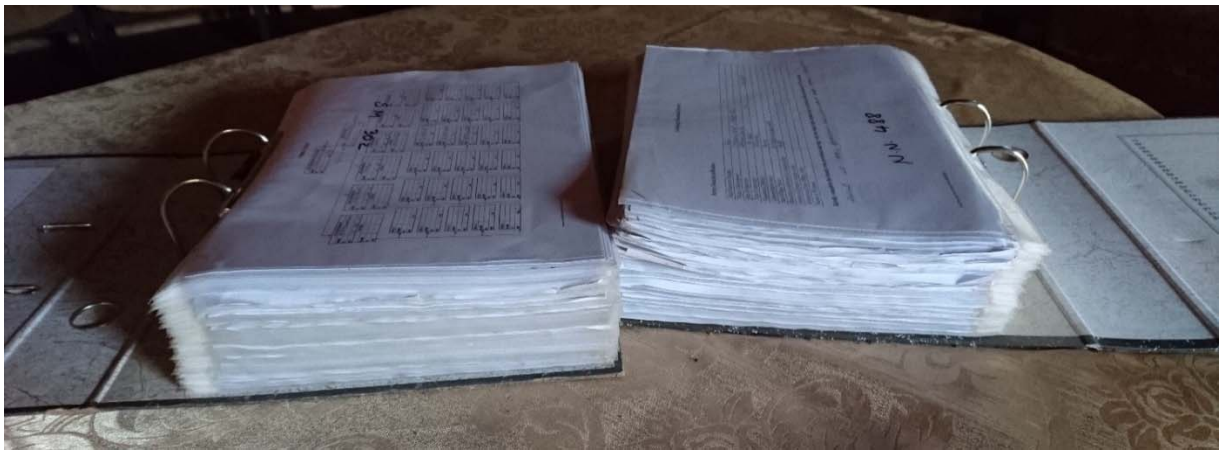

Figure 9-6 Off-register customary land rights recorded by an NGO, Willowvale, Eastern Cape

The CLTP grants title deeds to traditional councils and only IURs to individuals or families. An approach that disqualifies customary land rights-holders from obtaining title deeds is challenged for being racist (Weinberg, 2015) because most customary land rights-holders are black. Instead, the focus group (SA10, 2017) called for shared ownership of the land.

SA04 (2017) called for an adaptive approach that accommodates the inherent flexibility and multi-generational nature of customary tenure systems. He advocated recording rights at the level of the household (see Figure 9-5) with an emphasis on making existing land rights (including all the rights of the household through family relationships) visible. In keeping with the principle of choice, recording and formalising land rights should be sporadically implemented, at the land rights-holder's discretion (DLA, 1997). This is also because the State lacks the capacity for systematic and thorough land titling (Cousins *et al.*, 2005; de Satgé *et al.*, 2017).

Important considerations related to the recording of rights are expressed as *fears* by many interviewees. Failure to acknowledge or address these fears will impinge on the success and sustainability of land rights recordal. Interviewees expressed fears that registration and formalisation of land rights would result in:

- Obligation to pay rates and taxes (Cousins *et al.*, 2005; Williams-Wynn, 2017).
- Loss of land due to confiscation by the banks (Cousins *et al.*, 2005).
- Loss of communal customary identity (Rugege, 2004; Williams-Wynn, 2017).

b) LTIS

The White Paper (DLA, 1997) acknowledges the need for the cadastre to be enhanced to enable it to maintain existing standards of excellence while also accommodating the diverse needs of off-register land tenures. Boundaries in customary tenure systems are flexible and adaptable (Cousins *et al.*, 2005). Recognition of social tenure systems would need to accommodate such dynamics (Cousins, 2016) because the high standards of precision in the formal, 'traditional' cadastre are inappropriate for customary tenure systems (de Satgé *et al.*, 2017). Innovative, internationally accepted approaches such as point cadastres, the Voluntary Guidelines on Responsible Governance of Tenure (VGGTs) and STDM need to be tested for their usefulness in this regard (SA04, 2017), as tools for realising broad definitions of cadastral and land administration systems in Sections 1.3.4 and 1.3.5.

Cost can be a deterrent to the acceptance and use of LTIS (Cousins *et al.*, 2005). Formal registration following high standards of precision and accuracy is too expensive for most rural dwellers, leading to proliferation of informal, off-register transactions. This is a particular problem in urban areas, resulting in occupancy differing from the registered owner (de Satgé *et al.*, 2017; Kingwill, 2017). Innovative systems need to reliably, quickly, and cost-effectively record rights to land to effect tenure reform (DLA, 1997). New legislation should provide for affordable recordal of land rights (Clark & Luwaya, 2017).

Plots are uniquely identified under customary tenure systems (Whittal & Rikhotso, 2014; Hull *et al.*, 2016; Williams-Wynn, 2017) as shown in Figure 9-4. These are being officially recorded as IURs (see Figure 9-2). But policies such as the CLTP (DRDLR, 2013a) recognise only the outer boundary of communal land and may provide inadequate protection of the land rights of individuals and families within the outer boundary (see the 'wagon wheel', Figure 9-8).

SA06 (2017) lamented the demise of land administration in customary areas (see also Mahlati (2019)) and advocated for the establishment of locally-based land administration as described in the White Paper (DLA, 1997) – see Figure 9-7. Per the White Paper, national government is responsible for land reform (including land administration). Provincial governments are responsible for support services to the beneficiaries of land reform projects; there needs to be close cooperation between national and provincial government. Land administration is also delegated to provincial level with some of these functions being taken up at the local level bringing the situation in rural and urban areas into alignment. This facilitates ease of access of services but requires capacity enlargement.

Hence, land administration should also be a local municipality competence, linked to a unitary system (SA06, 2017). The Centre for Development and Enterprise (2008) concurs that decentralisation of the implementation level is required for successful land reform. Decentralisation facilitates access to land information and services, which helps to ensure that the record is kept up-to-date, is relevant and reliable (Clark & Luwaya, 2017). However, in customary areas, per the CLTP, the responsibility for land administration falls to traditional councils, while the ultimate authority lies with the State (DRDLR, 2013a) – see Section 9.5.1. There may hence be some conflict in responsibilities between the local municipality and the traditional councils because the top-down legislation may be misaligned to bottom-up conceptions (SA04, 2017). Adams, Sibanda & Turner (1999) and the focus group (SA10, 2017) both assert that the responsibility for land rights management should fall on the land rights-holders themselves. This reflects some of the contentions around CLaRA and other legislation that seeks to disempower communities in favour of traditional leaders.

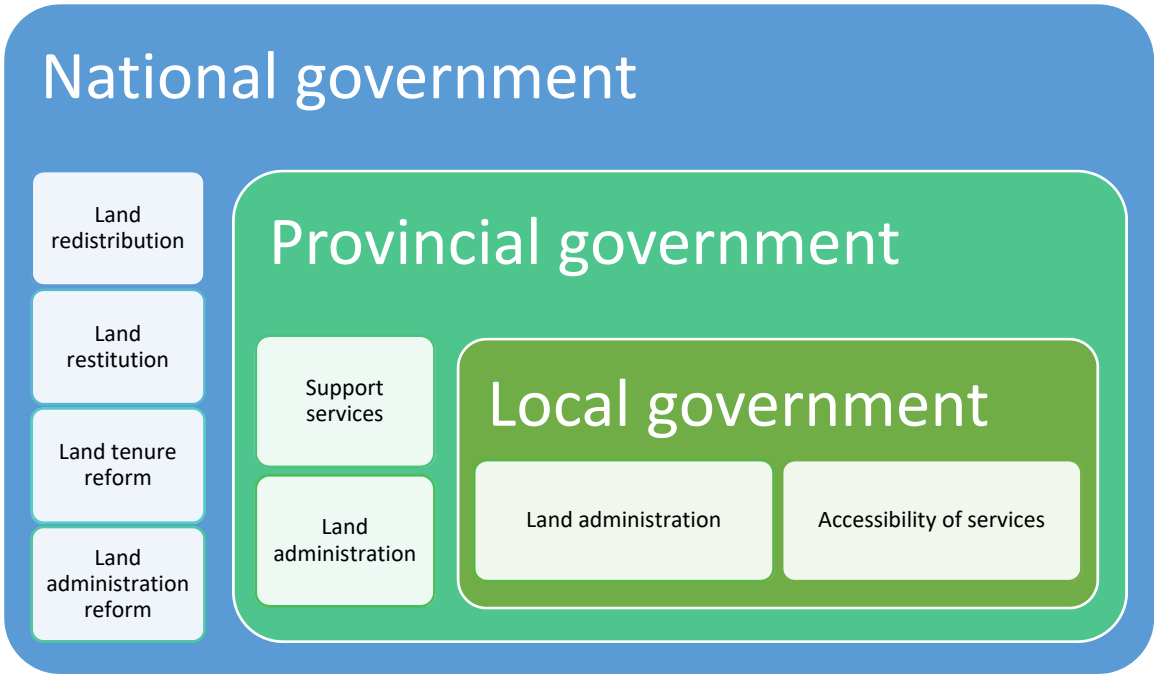

Figure 9-7 Delegation of responsibilities around land reform per the White Paper (DLA, 1997)

Despite popular rhetoric and affirmations in the White Paper (DLA, 1997) suggesting that government intends to return land to the previously dispossessed (du Preez, 2016), the government has largely failed in transferring land to land reform beneficiaries. SA01 and SA06 (2017) question whether transferring land rights to individuals and families is still on the government agenda, even though the Constitution already acknowledges customary land rights. According to the CLTP (DRDLR, 2013a), such recognition is not afforded prominence (Clark & Luwaya, 2017).

9.3.5 Evaluation

Concerning the elements of Land Policy, while existing land rights are recognised and protected under IPILRA, this is both legislatively and administratively insufficient. Too much rests on this one piece of interim legislation, hence 'existing land rights' is 'partially addressed' in Table 9-2. While there is generally improved awareness of human rights and women are becoming more involved in decision-making with respect to land, paternalistic trends in current policies appear to be undermining their influence and should be addressed. Elite capture is also noted to be undermining the effectiveness of policies meant to support the poor and marginalised. Current

policies appear to not be supporting the distinct land rights of the poor and instead appear to pander to the needs of traditional leaders. Regarding productive and sustainable land use, poor implementation, corruption and lack of support appear to be undermining the good intentions of the policies. Hence these elements are 'partially addressed'.

Table 9-2 Evaluation of South African case against LAS Context

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Land policy	Existing land rights	Recognised in IPILRA and the Constitution, but undermined elsewhere	3	3
	Class and gender	Improved awareness of women's rights vs. paternalistic trends in legislation Elite capture	3 3	3
	Productivity and livelihood	Poor implementation of well-intended policies Corruption Lack of support	3 3 3	3
	Uniformity	*Unitary system proposed but not implemented* *Uniform legislation lacking*	*1* *1*	*1*
Land governance	Active participation	In law, not in practice	3	3
	Equitable access	In law, not in practice	3	3
	Transparency, clarity, simplicity	Complex, cumbersome, bureaucratic processes	3	3
	Accountability and the rule of law	Ensured through community land delimitations and e-land administration	5	3
		Implementation problems	1	
	Appropriate technology	Mixed results	3	3
Strategic level	Changing land rights type	Dominance of replacement theories	3	3
	Improving tenure security	Legitimacy, legality, and certainty addressed	3	3
	Choices	*Land tenure type* *Management structure* *Community*	*3* *3* *3*	*3*
Implementation level	Land recording / registration mechanisms	Acknowledgement and adoption of innovative, locally-based rights recordal	5	5
	Land tenure information system	Clearly defined standards	3	2
		Relevant, appropriately accurate, reliable, affordable information	3	
		Integrated registry/record and cadastre	1	
		Plots uniquely identified	3	
		Decentralisation of some services	3	
		Multi-purpose cadastre	1	
		Up-to-date-ness	3	
		User-friendliness	3	
		Transferring rights	1	

Calls for a unitary system and uniform legislation resulted in the emergence of a new element of pro-poor land policy: *Uniformity*. From the case study evidence, I conclude that the lack of uniformity and the obfuscation of land reform due to too many laws and policies, some of them

contradictory, is a major downfall of land reform in South Africa. The decision to enact a tranche of legislation geared at different contexts (see Section 9.4.1) was possibly ill-advised. One, overarching, all-encompassing land policy and law (such as in Mozambique) would promote internal coherence while recognising and protecting all forms of land tenure in the country. The Advisory Panel makes a similar recommendation (Mahlati, 2019). Institutional coherence (but rolled out at community, municipal, provincial and national levels) needs to accompany policy and legal coherence. Legal coherence must mean retaining formal and African customary law on an equal footing, not subsuming one into the other. African customary law can become official and yet retain its local, complex, layered nature.

Concerning the Strategic Level, arguments over how best to secure off-register land tenure are influenced by the replacement vs. conservative approaches. Legislation such as IPILRA adopts a broadly conservative approach, whereas ULTRA is on the replacement side (see Figure 5-2). The question of whether existing land rights and tenure systems are appropriate depends on which side of the land theory continuum is supported. The general trend in South Africa is to view customary land rights from a replacement perspective, meaning that they are inappropriate and require 'upgrading'. Because this approach may lack ***significance*** for the land rights-holder, the element 'Recognition and protection of existing land rights' is 'partially addressed'. It is understood that even 100% effective implementation of current land policy will not improve ***significance*** for land rights-holders – the policy and legal framework that supports it is not up to the task.

The South African government has shown commitment to improving tenure security through reforming land laws, although there is still a gap in the legislation pertaining to customary land tenure. Land rights within customary tenure systems are recognised as legitimate within the community and in the Constitution. Such recognition needs to be taken up by formal institutions as well, hence this element is also 'partially addressed'. *Choice* is important in a democratic state, and it is added as an element of the Strategic level. Equality means that everyone should have equal opportunity to make choices on matters that affect them. Hence, there are proposals that people should be allowed to choose the tenure, management and administration system that best suits their circumstances. This was the original State land policy, but recent policy changes pander to traditional leaders, thus restricting beneficiary choices.

At the Implementation Level, while there appears to be over-reliance on formal land rights recordal, the acknowledgement and adoption of innovative, locally-based rights recordal is encouraging, hence this is 'satisfactorily addressed'. The ***success*** and ***sustainability*** of such records hinges on their ***significance*** for land rights-holders and how well their *fears* have been addressed. Concerning the LTIS, the registry/records and cadastre are not integrated and, according to SA06 (2017), they are not working well together. There was no awareness of the need for a multi-purpose cadastre, probably because the State is (still) grappling with more fundamental issues of rights recordal. The transferral of land rights to beneficiaries of land reform is an issue. Hence these three descriptors are 'not addressed' in Table 9-2. All other descriptors of the LTIS and land governance aspects are present but inadequately represented and are hence 'partially addressed'. Overall, therefore, the LTIS element is 'inadequately addressed'.

9.4 CHANGE DRIVERS

9.4.1 Demand-based drivers

a) Legal

SA02 (2017) noted that the stance taken by the new democratic government to fulfil its constitutional obligation towards tenure security was to identify different contexts of tenure insecurity in South Africa, and to draw up legislation for each of them. This is because each context has its own legacy that needs to be addressed (Kingwill, Royston, *et al.*, 2017). Hence the following laws were passed:

- The Land Reform (Labour Tenants) Act 3 of 1996 serves to protect the land rights of labour tenants living on commercial farms in Mpumalanga and KwaZulu-Natal (Adams, Sibanda & Turner, 1999; Kingwill, Royston, *et al.*, 2017). The Act provides a process whereby such tenants may become full owners of the land they occupy, but government has failed to implement the law, and farm evictions have increased since 1994 in opposition to the purpose of the Act (Kingwill, Royston, *et al.*, 2017).
- The Extension of Security of Tenure Act (ESTA) 62 of 1997 protects farm workers and farm dwellers from unfair or arbitrary eviction and provides the means for long-term tenure security. It applies to all people who live on farms with the permission of the owner. An unintended consequence of the act is that some farm owners have pre-emptively evicted farm dwellers (Kingwill, Royston, *et al.*, 2017).
- The Prevention of Illegal Eviction from and Unlawful Occupation of Land Act (PIE) 19 of 1998 protects people occupying land informally in urban areas from eviction (Beinart & Delius, 2017). Evictions may only take place by an order of the court, and the court must rule that the eviction is just and equitable (Kingwill, Royston, *et al.*, 2017).
- The Interim Protection of Informal Land Rights Act (IPILRA) 31 of 1996 was meant to be a short-term measure to protect existing, off-register land rights until more comprehensive legislation could be passed (Adams, Sibanda & Turner, 1999). The rights in question are customary, Permissions to Occupy (PTOs) [31], rights of beneficiaries under trust arrangements, and rights of beneficial occupation for a continuous period of five years prior to 31 December 1997 (Kingwill, Royston, *et al.*, 2017). While ESTA applies to people who have consent to occupy land, beneficial occupation under IPILRA applies whether consent is granted or not. IPILRA requires expropriation to dispossess land rights-holders of these rights, which implies the recognition of such off-register rights as equivalent to full ownership under common law (*Ibid.*).

It is noted that, of these laws, only IPILRA applies to customary tenure (Cousins, 2016). The problem is that more permanent and comprehensive legislation, meant to replace IPILRA, has not been successful. The Land Rights Bill, which aimed to provide "far-reaching tenure reform in the rural areas of the ex-homelands" (*Ibid.*: 8) was scrapped (NCOP Land and Mineral Resources,

[31] PTOs were a system of apartheid-era control over land allocations in customary land tenure. They were not surveyed but plots were roughly measured by chain or pacing and were demarcated on the ground. Positions of boundaries were recorded in community memory. Holders of PTO certificates became eligible for hut tax, and PTOs could be withdrawn for non-payment, absenteeism, and criminal activity. PTOs allowed occupation and use, but not ownership. The system allowed customary tenure rules to persist while giving families a sense of tenure security in the form of a certificate. Unfortunately, record-keeping was not well-maintained (Beinart, Delius & Hay, 2017). The author was granted a PTO over customary land in the Ingwavuma District of northern KwaZulu-Natal during the mid-2000s while living and working in the community – see Section 1.5 and Annexure D.

2004; Cousins, 2007). It was replaced with the highly contentious Communal Land Rights Act (CLaRA) 11 of 2004. CLaRA faced many challenges in its path through Parliament, and was eventually found to be unconstitutional on procedural grounds in 2010 (Cousins & Hall, 2011). The latest iteration is the CLTB (DRDLR, 2017a), but it is also facing steep opposition on the grounds that it is based in a communal paradigm (see Section 1.3.3) that is out of touch with reality (LGTN, 2017).

IPILRA is providing a necessary stop-gap to fill the dearth of legislation left behind after CLaRA was repealed. But it is interim legislation that needs to be renewed annually (Cousins & Hall, 2011), is little known and oft overlooked (Clark & Luwaya, 2017). On finding a permanent replacement, SA02 (2017) noted that "legislation needs to be driven by logical, rational, empirically-based thinking that talks to reality and complies with the Constitution." Emotion should not drive legislative development (*Ibid.*). Members of the High Level Panel (2017) have drafted proposed legislation that will hopefully fill the gap.

More than 350 years of land grabbing has led South Africa to its current predicament (Cousins, 2016). The inclusion of the property clause in the Bill of Rights was highly contested (Rugege, 2004). It came in response to such land grabs and reflected a commitment, by the democratic government, not to replicate past ills. Nonetheless, land reform has been 'captured' (see footnote 2 on page 5) by some emerging black commercial farmers, traditional leaders, white commercial farmers, and agribusinesses who are using land reform for their own benefit (Cousins, 2016; see also Hall & Kepe, 2017). Loate (2014) sees the CLTP as a State land-grabbing exercise.

Communities, "armed only with the little known and scarcely used IPILRA" (Clark & Luwaya, 2017: 20), have to defend their land rights against well-resourced elites who often have government support. When investors do follow the provisions of IPILRA and negotiate with communities, such negotiations are often unsatisfactory due to unequal power relations (see Section 7.5.3). Communities may therefore be unfairly deprived of their land rights. Such abuses of power flourish in the legal and administrative vacuum that surrounds customary land tenure reform (*Ibid.*).

South Africa's history is one of dispossession and conflict over land (DLA, 1997). Apartheid policies forced too many people to occupy too little space, and disputes inevitably arose. A major challenge in this regard is the "overlapping and competing tenure rights of people forcibly removed and resettled on land to which others had prior rights" (DLA, 1997: 11). The Green Paper aims to resolve such overlapping and competing land claims through rights adjudication and formalisation (DRDLR, 2011). The Centre for Law and Society (2015) and SA04 (2017) propose the adoption of the VGGTs (FAO, 2012), to strengthen IPILRA and prevent further land-related conflict.

b) Social

Groenewald (2003) noted that some of the objectives of land reform policy were to improve well-being and alleviate poverty (see also DLA, 1997). De Satgé *et al.* (2017) acknowledge the need for improved tenure security for the rural poor to access basic services, employment, education, health care, and improved living conditions. Clark & Luwaya (2017) also note that tenure insecurity compounds the socio-economic disadvantages experienced by people living in customary areas. Through the Reconstruction and Development Programme (RDP), which gave rise to the land reform programme, people were to be provided with opportunities to improve themselves and their quality of life (Kloppers & Pienaar, 2014). According to the White Paper, "The land reform programme's poverty focus is aimed at achieving a better quality of life for the most disadvantaged" (DLA, 1997: 31). The CLTP (DRDLR, 2013a) aligns with the Comprehensive Rural Development Plan (CRDP) (DRDLR, 2009) and the National Development Plan (NDP) in

seeking improved well-being as an outcome of tenure security. But feedback from the interviewees (SA01, SA08, SA10, 2017) suggests that government officials do not have the people's welfare at heart and are predominately looking after their own interests.

A pressure driving development that emerged from the Netherlands case (Section 7.3) was *contextual needs*. This represents the bottom-up approach as illustrated in Figure 4-3. ***Successful*** land reform rests on ***significance***, which is achieved by "a bottom-up recognition of how most South Africans access and hold land so that every South African citizen … [has] certain and secure tenure in a form that they recognise, and which is supported by institutions that they can access and that they trust" (SA03, 2017). This reflects the White Paper's approach, which is that the land reform programme should be flexible and *needs-based*, drawing on the inputs of a variety of stakeholders (DLA, 1997). Similarly, the Advisory Panel report recommends "a demand-driven land reform process in which citizens are encouraged and supported to articulate their land demands" (Mahlati, 2019: 56). Yet, recent legislation advocates for a top-down, centralised approach that threatens the existing land rights of communities (Clark & Luwaya, 2017).

c) Administrative

Land administration and record-keeping have been dysfunctional in the former homelands (DLA, 1997). SA06 (2017) noted that there has been a "vacuum of land administration" in the customary areas. This has been a key issue since before democracy in South Africa (Clark & Luwaya, 2017) and has not improved since democracy. Land rights-holders are thus unable to protect themselves and their landed interests from exploitation by investors and corrupt officials (Centre for Law and Society, 2015). Cousins (2007: 283) affirms that land administration in customary areas was "near collapse". Hence one of the goals for land reform listed in Section 9.2.2 is for improved land administration (DLA, 1997; DRDLR, 2011; Cousins, 2016). More recently, one of the recommendations of the Advisory Panel is for land administration to be adopted as the missing fourth pillar of land reform (Kgomanyane, 2019; Mahlati, 2019). Note that, per Figure 9-7, this was already highlighted as a responsibility of national government in the White Paper. Effective land administration is also noted as important for the creation of "vibrant, equitable and sustainable rural communities" in the CRDP (DRDLR, 2009: 3). Hence the CLTP mandates the State to strengthen land administration in customary areas (DRDLR, 2013a).

In the White Paper (DLA, 1997), it is noted that there will be a need for a system that can reliably and cost-effectively record rights to land established as part of the process of land reform. This is assigned as a function of the Land Rights Management Board in the Green Paper (DRDLR, 2011). Backlogs in the registration of newly acquired titles suggest that the system is unable to cope with the new demand (de Satgé *et al.*, 2017).

> *"Tenure reform is, in most cases, a complex and uncertain undertaking. The economic and other benefits flowing from it are difficult to predict, and the necessary administrative costs therefore difficult to justify… Yet, the costs of taking no action may be high." (Adams, Sibanda & Turner, 1999: 3)*

The quotation above identifies complexity, uncertainty, and affordability as issues that may influence land tenure reform. Uncertainty as a deficiency arises over who has what rights to which land. Effective land administration should be able to answer these questions. Uncertainty also exists regarding the legal status, content, and strength of land rights (Cousins, 2007). This not only leads to tenure insecurity, but also discourages investment (DLA, 1997; Adams, Sibanda & Turner, 1999) and impedes agricultural production and service delivery (CDE, 2008; Hall & Kepe, 2017). Cousins (2016) also identifies uncertainty around the goals for land reform policy, as reflected in Table 9-1.

Failure to acknowledge the complexity of the land question is one of the reasons for the poor performance of land reform (CDE, 2008). In customary land rights contexts, such complexity arises due to the diversity of situations and types of off-register tenure. These are listed in Table 9-4 on page 182. State capacity to handle such complexity is inadequate (Cousins, 2016).

d) Economic

The democratic government inherited, in 1994, a country plagued by extremes of poverty, unemployment, and inequalities of income (Kloppers & Pienaar, 2014). They identified the eradication of poverty as their most important challenge, in alignment with the first of the Millennium Development Goals (*Ibid.*). Referring to the CLTP, the responsibility for managing and securing investment and development in customary areas falls to traditional authorities (DRDLR, 2013a), but there is evidence of abuse of such power to the exclusion of local inhabitants (Loate, 2014). Hence, more than two decades after land reform was initiated, the former homelands are still characterised by extreme poverty and vulnerability. Government's attempts at addressing the issue have not only fallen short, they appear to have replicated and exacerbated the conditions they were meant to resolve (Clark & Luwaya, 2017).

As mentioned in Section 9.2.1, development premised on replacement theories relates tenure security to economic growth. Cousins *et al.* (2005) and Cousins (2017) argue against the formalisation approach favoured by government and caution that securing land rights is not sufficient for poverty reduction. Indeed, many beneficiaries of land restitution and redistribution programmes are worse off than they were before (Kloppers & Pienaar, 2014). Per de Satgé *et al.* (2017), there is no causative link between titling and poverty reduction, and land titling may encourage land grabs by elites who know how the system operates and can use it to their advantage.

There is a noted lack of development in the former homelands (SA01, 2017) that the interviewee relates to the lack of secure land rights in these areas. Development is thus constrained, and customary land rights-holders are exploited by business, especially mining in the Platinum Belt (North West Province) and former Transkei (Eastern Cape) regions (SA04, 2017). "The rights and interests of the poorest South Africans living on communal land are … sacrificed for abstract notions of economic growth" meant to benefit South Africa at the macro level (Clark & Luwaya, 2017: 22).

In the White Paper (DLA, 1997: 31), the presumption is of an "active land market supported by an effective and accessible institutional framework". Williamson *et al.* (2010: 152) attest that "land rights can exist without a market, [but] markets cannot exist without land rights." Where land rights are registered, the land market is 'formal'. In customary land rights contexts, where land rights are not registered, Chimhowu and Woodhouse (2006) show that *vernacular* land markets have existed for centuries. These land markets exist and operate outside of the formal land market, according to customary laws and institutions. Due to their legitimacy, Chimhowu and Woodhouse advocate for their acknowledgment in land tenure reform programmes. Formalisation of extra-legal land markets is unlikely to benefit the poor because, as was noted in Section 9.2.1, the link between formalisation and economic development is contested.

One of the aims of the CLTP (DRDLR, 2013a: 15) is the promotion of rights and responsibilities in the interest of rural economic development, including creating "the basis for honouring payment of rates and taxes to municipalities." But Cousins *et al.* (2005) note that liability for rates and taxes was a disincentive for beneficiaries of informal settlement upgrade schemes to remain in the formal system. Taxation was also a noted fear of customary land rights-holders reported in the previous section. Land markets and taxation therefore appear to represent a disincentive to land reform stemming from the mismatch between government thinking and lived experience.

Adams, Sibanda & Turner (1999) note that land reform needs to be budgeted properly because it is a costly undertaking. Funds must also be allocated for effective land administration (CDE, 2008). Cost of implementation was noted as one of the reasons that the Land Rights Bill was set aside (NCOP Land and Mineral Resources, 2004; Cousins, 2007), yet the overall budget for land reform remains low (DLA, 1997; Cousins & Hall, 2011; Cousins, 2016; High Level Panel, 2017). Cousins (2016) proposes increasing the budget for land reform from 0,4% to 2% of the national total. Recommendations for increased budget also appeared in the White Paper (DLA, 1997) two decades earlier. Government does not appear to be prioritising land reform, because it is not 'putting its money where its mouth is'.

Donor involvement was noted as a driver of land reform in the Netherlands case (Section 7.4.1). Donor funding is not a driver of land reform in South Africa, where land reform is being financed largely from a woefully inadequate portion of the national budget (Cousins, 2016; High Level Panel, 2017). Adams, Sibanda & Turner (1999) note that long-term budgetary commitment is required for ***successful*** and ***sustainable*** land tenure reform, because it is a time-consuming and expensive process. Although the Department of Land Affairs (DLA, now the DRDLR) received a number of grants from international donors during 1994 – 1999, the bulk of the land reform programme has been financed from the government budget (Adams, 2000). Some commercial developments in customary areas are funded by private businesses, both local and international (SA07, SA08, 2017). SA08 added that he hopes government will increase funding for the improvement of education, social upliftment, and infrastructure in customary areas.

e) Political

One of the consequences of apartheid is that South Africa is a highly segregated country. Decades after the fall of apartheid, this spatial and socio-economic inequity persists (Clark & Luwaya, 2017). An objective of land reform (White Paper) policy was hence to "foster national reconciliation and stability" (DLA, 1997: 7), updated in the Green Paper as a strategy towards "social cohesion and development" (DRDLR, 2011: 1). But post-apartheid policies and implementation thereof seem to have deepened the divide (Clark & Luwaya, 2017; High Level Panel, 2017).

Pressure to *redress* the injustices of the past is a major driver for land reform, and this was the second most prominent descriptor overall. It is reinforced by government's vertical obligation per section 25(9) of the Constitution (DLA, 1997; Rugege, 2004; DRDLR, 2013a; Loate, 2014). There is also pressure from the previously dispossessed to have the land given back to them (SA09, 2017). Yet, despite the government's "commitment to eradicating the inequalities and injustices of the past" (Kloppers & Pienaar, 2014: 678), high levels of economic and spatial inequality persist nationally (Cousins *et al.*, 2005; de Satgé *et al.*, 2017), and insecure land tenure persists in communal areas two decades after the fall of apartheid (Cousins & Hall, 2011). Government appears to lack the political will to address this and appears to be reneging on its constitutional obligations. Instead, the benefits of land reform are apparently directed away from the intended beneficiaries and towards certain elites to firm up potential political alliances (High Level Panel, 2017).

f) Environmental

A consequence of land dispossession under apartheid was severe over-crowding in the former homelands (Groenewald, 2003; Rugege, 2004), which situation persists. Environmental degradation has further constrained land availability for agricultural purposes including subsistence agriculture (SA06, 2017). The result is landlessness and land invasions (DLA, 1997). To address this, government is mandated to make additional land available (*Ibid.*), mostly through redistribution and restitution programmes (DRDLR, 2013a).

This may be addressed through improvements in tenure security that lead to improved and sustainable land use (DLA, 1997; Williams-Wynn, 2017). Without tenure security and the necessary checks and balances, when investors move onto customary land, serious environmental degradation can result (SA04, SA09, 2017). Hence an outcome of the land reform programme is an expected reduction in the risk of land degradation (DLA, 1997). There is an acknowledged need to incorporate environmental safeguards and sustainable environmental management into development planning (DRDLR, 2009, 2013a; National Planning Commission, 2012). The CLTP mandates households to practice sustainable land use and acknowledges that secure tenure is required for this. Environmental management is especially a concern given the recently felt impacts of droughts and flooding across the nation. The Advisory Panel report recommends that climate change and associated risk assessment should form a central part of the land reform process (Mahlati, 2019).

Adams, Sibanda & Turner (1999) note that insufficient attention has been given to beneficiaries of land reform projects in the form of post-settlement support and planning. The vision for land reform in the Green Paper (DRDLR, 2011) reflects the CRDP, which includes a call for effective land use planning and regulatory systems. The CLTP notes that the former homelands are characterised by ineffective or completely absent land use planning, and hence makes provision for communities to participate in State-led spatial planning and land use determinations. The main piece of planning legislation in the country is SPLUMA, and while it seeks to engage with rights-holders, it has also met with much opposition (Clark & Luwaya, 2017).

9.4.2 Supply-based drivers

a) New technology

While the White Paper (DLA, 1997) recommends the establishment of a national LIS to distribute land information to the government and the public, twenty years later SA04 (2017) notes that such a system is currently lacking. Each municipality is using their own system, with no synergy between municipalities. SA06 (2017) concurs that there is a need to digitally link each municipality to the official cadastral record as maintained by the Offices of the Surveyors-General. The Advisory Panel (Mahlati, 2019) calls for a national-level data portal to hold all land-related information. Similarly, the proposal for a new Land Records Act (High Level Panel, 2017) envisages the recording of land rights as a national competency devolved to the municipal level and linked within a national LIS. SA04 (2017) recommends that new technologies, such as blockchain and point cadastres, should be explored for their appropriateness and usefulness (echoed in the Advisory Panel report). To date, the development and adoption of new technology, including the e-cadastre Project *Vulindlela*, has not met the needs of the country regarding land tenure reform. Such should have been the foundation of the national LIS, but allegations of corruption and mismanagement have stalled progress (DRDLR, 2013c; van Zwieten, 2017b).

b) New policies

Land tenure reform in South Africa began with a review of land policy, administration, and legislation. This was required to accommodate the tenure needs of all South Africans, including the need for secured communal tenure (Groenewald, 2003). Since then, many new policies have been put in place (Cousins, 2016), but the problems of poverty and inequality persist (Cousins *et al.*, 2005; High Level Panel, 2017). Some of these policies appear to serve the interests of traditional leaders and may be more about politicking than poverty reduction. They also include few of the suggestions made during public consultations, contradict one another, do not take account of past mistakes, and undermine customary land tenure (Weinberg, 2015).

The CLTP's 'Wagon Wheel' diagram (see Figure 9-8) is one such example. The policy envisages transfer of ownership of land held by communities to the traditional council, or Communal Property Association (CPA) in the absence thereof (primary rights). Families within the traditional council's jurisdiction will hold (secondary) IURs. This policy excludes people from making decisions about the land they inhabit (Weinberg, 2015), but appears to tick the boxes of redistribution and tenure security. By transferring land to traditional councils, more of South Africa's land is seen to be redistributed into black hands, and by giving traditional councils absolute ownership, title to the land is seen to be secured. But, as noted above, the policy disempowers people living and working on the land and empowers traditional councils who do not have a track record of good land governance. These are the same concerns that were raised over CLaRA (*Ibid.*).

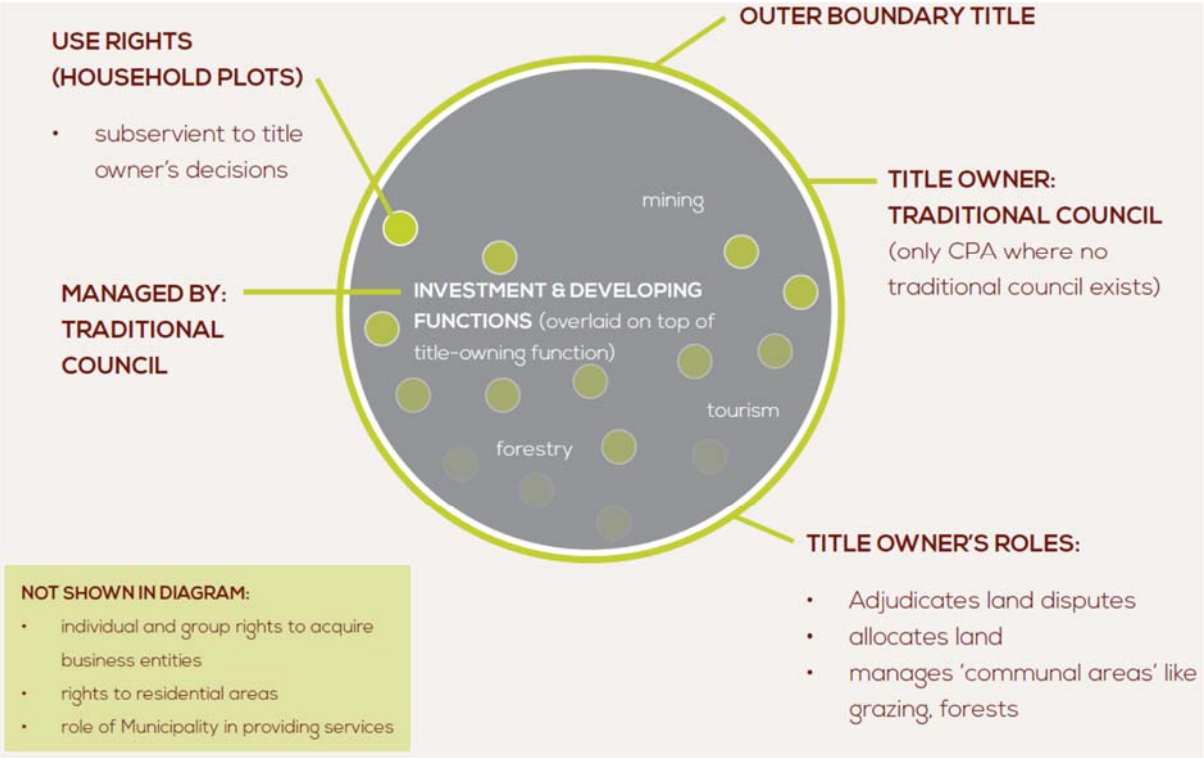

Figure 9-8 Simplified 'Wagon Wheel' diagram (Weinberg, 2015: 15, used with permission)

At the National Land Summit in 2005, government moved away from the market-based, 'willing buyer, willing seller' approach to land reform, and several new policies have been developed since (Cousins, 2016; Hall & Kepe, 2017). Despite this flurry of policies, "government has, as yet, been unable to enact and implement a law that adequately captures the nuanced ways in which people experience and regulate relations of communal tenure in their everyday lives" (Clark & Luwaya, 2017: 7). The High Level Panel (2017) noted a shift away from pro-poor policy formulation and constitutional imperatives, and towards State ownership. This shift reflects a reversion to apartheid- and colonial-era policies of denial of land rights for some, and favouritism towards others.

c) New approaches

The White Paper (DLA,1997) calls for new systems of land holding, land rights, and forms of ownership to address the problems of tenure insecurity. To this end, it is proposed (SA02, 2017) that kinship groups should be identified as potential legal persons for land ownership. Kinship groups should not be limited to the living but could include deceased ancestors and unborn descendants to reflect the lived experience of most South Africans (SA04, 2017). Such an

approach is a deviation away from the conception of individual title and requires innovative thinking (de Satgé *et al.*, 2017): "a special type of title to land ownership in rural areas" (SA07, 2017). Such could resemble the old PTO system (SA06, 2017). The development of a process to replace PTOs is currently under investigation by the DRDLR (SA05, 2017), but with weaker rights (SA06, 2017).

SA04 (2017) proposes a unitary system that incorporates existing, highly accurate, registered rights, as well as less accurate, more flexible, off-register rights. He admits that such a system can never be perfect, due to the socially embedded nature of customary land rights, but such imperfections "should be used as a basis for improving the system." SA03 (2017) proposes a simple record be kept including household name, household representative (the custodian mentioned in Section 9.2.1), household members, description of land use practices, surveyed position (point cadastre), and any other relevant information. Note that these proposals are all coming two decades after the White Paper. Nothing sustainable has happened in the interim.

Downie (2016) notes that household and dependents' information is often available in the urban housing sector as it is captured on housing lists. This is important information for recording the rights of all people in a household and is the first step in protecting the land tenure of all. This data is underutilized, but its potential in the rural sector is no less important. Although imperfect, the example from Willowvale (see Figure 9-5 and Figure 9-6) holds promise.

9.4.3 Evaluation

Table 9-3 Evaluation of South African case against Change Drivers

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Demand	Economic	Commitment to poverty reduction	5	3
		Poor implementation	3	
		Inappropriate theory	3	
		Taxation a disincentive to land reform	3	
		Insufficient national budget	3	
	Political	Promoting national unity	5	4
		Redress past injustices	5	
		Poor implementation	3	
	Social	Committed to providing tenure security	5	4
		Poor implementation	3	
		Conflicting contextual needs and State policies	3	
	Legal	Legislative gaps remain	3	3
	Administrative	Dysfunctional land administration in rural areas	3	3
	Environmental	Environmental safeguards incorporated into development planning	5	3
		Climate change and disaster management not addressed	1	
Supply	New technology	Thwarted through corruption and mismanagement	3	3
	New theories	Not addressed	1	1
	New policy	Contradictory and poorly implemented	3	3
	New approaches	Several proposals, poor follow-through	3	3

Regarding economic, political, and social drivers, there was commitment shown to poverty reduction, national unity, redress of past injustices, and tenure security. Yet poor implementation

and an inappropriate theoretical basis have hindered the execution of these goals. Legislative gaps remain, contributing to tenure insecurity, and land administration is noted to be dysfunctional in rural areas. Although there is a commitment to environmental sustainability, there was no acknowledgement of climate change and disaster management as drivers of cadastral systems development. Thus, these elements are all 'partially addressed'.

Barring new theories, every element of the aspect 'Supply' was proposed in the White Paper and is found to be deficient two decades later. Case study data reveals that new policies have been proposed, but implementation has been lacking, and the mismatch between policy and lived experience renders such approaches insignificant. There are on-going calls for innovative approaches to fill the gap of customary tenure insecurity, but nothing sustainable has been done. Perhaps tellingly, there were no references to new theories driving land reform in the case study data, only laments over the incorrect approach that is being followed by government.

9.5 CHANGE PROCESS

9.5.1 Community / country context

a) Historical background

> *"The historical legacy of South Africa necessitates land reform. Resentment over land dispossession runs deep in our society. It threatens to boil over, causing social and economic dislocation through the illegal occupation of land." (DLA, 1997: 34)*

During apartheid, it was government policy that black people could not, for the most part, own land. Land rights in the former homelands were "subservient, permit-based or 'held in trust'" (DLA, 1997: 55). Land administration was "inefficient and chaotic" (*Ibid.*). Tribal authorities, meant to administer land on the people's behalf, were appointed by the apartheid government (Groenewald, 2003) and were expected to follow the government's directives (Ntsebeza, 2003; Cousins, 2007). Although land rights were recognised under customary law, they were subject to arbitrary deprivation at the hands of corrupt traditional leaders (Rugege, 2004). As a result, land tenure in customary areas was, and still is, insecure (DRDLR, 2013a). Land tenure reform should therefore begin with acknowledgement of the pain and injustice such policies caused, and recognition of the need for restorative justice (CDE, 2008). Hence the South African government's ongoing commitment to land reform (Kloppers & Pienaar, 2014).

Cousins (2007) notes that indigenous land tenure systems have been modified through this history of dispossession, including:

- increased emphasis on individual and family rights,
- relegation of women's rights as subordinate to those of men,
- traditional leaders being used by the State as tools of indirect rule, with commensurate disempowering of non-compliant traditional leaders and related amendments to customary area boundaries (Ntsebeza, 2003),
- traditional leaders hence acquiring greater powers than they held prior to colonisation, and
- the erosion of customary systems that regulated the power of traditional leaders.

To secure the rights of people living on customary land, these modifications should be understood and confronted (Weinberg, 2015). The State hence should assume the responsibility for

protecting customary land rights-holders from the structures of traditional authority that it helped to restructure (de Satgé *et al.*, 2017).

Care needs to be taken to ensure that new legislation does not entrench or repeat past political injustices (Clark & Luwaya, 2017). For example, the focus group of customary land rights-holders (SA10, 2017) complained that new legislation, for example the CLTP and CLTB, are the culmination of previous apartheid laws. "Far from unravelling this history of dispossession, the land reform process has merely dabbled at its edges while the inequalities it set in place have in some ways been further aggravated since 1994" (Hall, 2014b: 1). Recent reform measures are seen to have reinforced, rather than eradicated, the problems of the past (de Satgé *et al.*, 2017; High Level Panel, 2017).

b) Current context

Land rights need to be understood within their social, political and historical context (Kloppers & Pienaar, 2014). These political and socio-economic conditions impact decisions made concerning land reform, for example, the role of traditional leaders (Ntsebeza, 2008). Traditional authorities appear to lack the capacity for appropriate record-keeping and maintenance (*Ibid.*). Hence, while land rights might be recognised and protected in law, administrative incapacity means that people are unable to realise them in practice (de Satgé *et al.*, 2017). SA09 (2017) expressed the need to have educated traditional leaders who can better interpret and implement government policies.

Cousins *et al.* (2005) note that communities lack the capacity to embrace formalisation of their land rights. Some evidence suggests that the concept of land rights is still poorly understood by customary land rights-holders (Williams-Wynn, 2017). Although the White Paper (DLA, 1997) identified the need for enhanced community capacity, there is often a gulf between beneficiaries' capacity and the plans of developers (Cousins, 2016). Beneficiaries of land restitution and redistribution programmes are said to lack the capacity for farming (SA01, SA09, 2017). This stems from the lack of adequate support given by the State. Education and training are vitally important, because "You can't take a farm labourer who is illiterate and think he is going to run a farm" (SA01, 2017); and "We need to educate our people regarding what it means to be a property owner" (SA05, 2017).

Training is also required for DRDLR officials tasked with administering land reform projects and providing support to beneficiaries (Cousins, 2016; Clark & Luwaya, 2017; High Level Panel, 2017). Implementation of policies and laws has been restricted by insufficient institutional capacity. This limitation was noted in both the White Paper (DLA, 1997) and the Green Paper (DRDLR, 2011), yet since then there appear to have been no plans to address these constraints and it seems as if the situation is worsening (CDE, 2008; Cousins, 2016). At national, provincial, and local levels, government appears to lack the capacity for proper land administration (Clark & Luwaya, 2017).

After tenure security and redress, the third most prominent descriptor identified in the South African case is related to the role of traditional leaders. It is difficult to define the role of traditional leaders due to the controversies surrounding these roles, especially regarding how much control they should have over land. There is also much variation in the amount of support shown towards traditional leaders. The three most dominant perceived roles that emerged were those of administrators, custodians, or owners of customary land. Further, per the CLTP (DRDLR, 2013a), traditional leaders are involved in promoting investment and development on customary land and advising government on customary matters and land reform policy in customary areas. Figure 9-9 shows the Eastern Cape House of Traditional Leaders, where some interviews took place.

The CLTP (DRDLR, 2013a: 14) confers "ultimate authority in communal area land" on the State, while traditional leaders are given administrative authority in these areas to deal with matters of custom, working hand-in-hand with local municipalities. Land allocation and dispute resolution are to be administered through the relevant structures of traditional leadership. They also communicate the needs of the community to the local municipality and suggest suitable development interventions. These roles were supported by several interviewees (SA05, SA06, SA08, SA09, 2017).

Figure 9-9 Eastern Cape House of Traditional Leaders

The CLTP recommends that ownership and control of customary land be transferred to "traditional community structures" (DRDLR, 2013a: 19). Loate (2014) and Clark and Luwayo (2017) equate these "structures" with traditional councils (see also Weinberg, 2015, and Figure 9-8). This transfer of ownership was resisted by the focus group (SA10, 2017). Clark & Luwayo (2017) also warned that the CLTP replicates the contested provisions of CLaRA regarding land ownership and extensions of traditional leaders' powers. Although Section 20(1) of the TLGFA lists land administration as a function that *may* be allocated to traditional councils or leaders through appropriate legislation, no such law has yet been passed. Nonetheless, many traditional leaders are already assuming such powers (*Ibid.*).

Interviewees tended to conceive of the role of traditional leaders as that of custodianship of tradition and culture. This role extends to the protection of the outer boundaries of community lands. "The only role the chiefs should play is to guard against invasions" (SA10, 2017), by which is meant protection of customary land against land grabs. SA02 (2017) supports this notion, but SA08 and SA09 (2017) warned that granting ownership to households within the outer boundary would allow non-community members to buy customary land and hence erode the customs and traditions that traditional leaders are supposed to protect. Such is the position of the CLTP (DRDLR, 2013a; Centre for Law and Society, 2015).

Clark and Luwayo (2017: 32) advise that the "role of traditional leaders … in land administration should be developed in a manner that is in line with, and led by, how communities conceive of this role in practice." Such recommendation is congruent with the notion of ***significance***. Considering the differential support shown to traditional leaders in various parts of the country (SA06, 2017), this might mean tailoring the role for every different context in the country. SA08 (2017) highlighted the spatial and socio-economic inequality between customary and urban

areas: "We need to move away from the dual lifestyle of people who live one way in urban areas and another way in rural areas."

Table 9-4 gives examples of some of the different types of off-register tenure in existence in South African customary land rights areas. In section 9.2.1, under conceptions of ownership, some of the different land rights and tenure systems were presented. Most notably, it has been argued that land rights in customary areas exist within lineages of kinship groups (Cousins, 2007; SA02, 2017). Due largely to such complexity of tenurial arrangements and conceptions of landholding, there is "no place in a land reform strategy for a 'one-size-fits-all' approach" (CDE, 2008: 15). "Tenure reform measures for communal land should underpin the adaptability and responsiveness of existing customary systems" (Adams, Sibanda & Turner, 1999: 1). Government's initial approach to land tenure reform was consistent with this principle (DLA, 1997; Adams, Sibanda & Turner, 1999). Clark & Luwayo (2017: 31) call for legislation to give effect to the State's constitutional obligation in a manner that is "suitable to the people whose rights are being protected" (reflecting ***significance***), including the need for flexibility. De Satgé *et al.* (2017: 48) argue for "a flexible and adaptive tenure security continuum".

Table 9-4 Off-register tenure in South Africa (Cousins, 2007; Beinart, Delius & Hay, 2017)

Situations	Continuous and uninterrupted occupation over long periods of time.
	Populations that have been relocated with corresponding land restitution claims.
	Populations that were subject to colonial policies of individualisation (quitrent) [32], although customary tenure systems persist.
	Occupation subject to the PTO system or variants of this.
	De facto individualisation as is occurring in some peri-urban areas on 'communal land'.
Types	Customary tenure without PTOs
	Old, mid-twentieth century PTOs
	Locally issued certificates, sometimes called PTOs
	Quitrent sites
	Outdated titles to land
	Ingonyama Trust PTOs and leases [33]
	Family holdings within trusts / CPAs
	Occupation on privately owned farms under disputed ownership

SA06 (2017) expressed concern that codification of customary laws would lead to the demise of customary tenure systems because it would erode their inherent flexibility. But SA04 (2017) maintains there is no way to avoid codification. He argues that statutory law is also flexible and is changing at much the same pace as customary law. Codification, he posits, does not freeze tenure systems. Rather it "records where you are coming from and where you [currently] are" (*Ibid.*). In this sense, a land rights enquiry may be a type of codification: a snapshot of who has rights to what, where, and when. For ***sustainability***, such enquiry and the cadastral system to

[32] Under the Glen Grey Act of 1894, occupants in about half of the districts in the former Ciskei, and one quarter of districts in the former Transkei, were able to obtain individual, but not private, tenure. Plots were surveyed and records are kept in the Deeds Registries Offices of King Williams Town and Mthatha. Quitrent allocations ceased in the 1920s and new allocations were made under the PTO system (Beinart, Delius & Hay, 2017).

[33] Per the Ingonyama Trust Act 3 of 1994, all land in the former KwaZulu homeland vests in the Ingonyama Trust, with the Zulu king as the sole trustee. PTOs continued to be issued until 2007 under the administration of traditional leaders. Since then, leases have replaced PTOs, with arguably a decrease in tenure security (Beinart, Delius & Hay, 2017).

which it is linked should be adaptable to changing rights and tenure systems, as highlighted in Sections 1.3.4 and 1.3.5.

9.5.2 Getting to the end state

a) Good leadership

Strong leadership is vital for the success of land reform programmes, but in South Africa at present, such leadership at national level appears to not be forthcoming (CDE, 2008; Cousins, 2016). Accusations of corruption and bias featured strongly in the interviews:

> *"We are terribly dependent on good leadership, and we are held ransom by bad, corrupt leaders at national level" (SA02, 2017).*
>
> *"The fact that the Director-General of the DRDLR is suspended [34] right now relates to 'capture' of land reform, because he was making use of his position to allocate land to friends" (SA04, 2017).*

The High Level Panel Report (2017) cites evidence of corruption by officials as a determining factor in the failure of land reform. The land rights enshrined in Section 25 of the Constitution are increasingly coming under attack from policies that favour political alliances and specific elite groups, rather than the intended beneficiaries (*Ibid.*). The Advisory Panel found that corruption is not only due to ethical lapses, but the entire land reform process (including legislation, policy and institution) is flawed such that it lends itself to corruption (Mahlati, 2019).

But it is around traditional leaders that the biggest concerns were expressed. The mantra of *inkosi yinkosi ngabantu* – a chief is a chief through the people – is being drowned out by corrupt and self-serving practices (Clark & Luwaya, 2017). Rugege (2004) asserts that land should not be left in the control of traditional leaders because of their track record of corruption and patriarchy. Some traditional leaders enter into investment deals with mining houses, tourism companies, and agribusinesses on communal land, to the exclusion of the local inhabitants (Loate, 2014). They claim that they represent the community and make decisions on the community's behalf, with little or no consultation (High Level Panel, 2017).

Land tenure reform threatens those with vested interests in land, such as commercial farmers and traditional leaders (Adams, Sibanda & Turner, 1999). Successful land tenure reform depends largely on the outcome of local-level power struggles (Cousins & Hall, 2011; Weinberg, 2015; Cousins, 2016). "It's all about power, it's all political" (SA02, 2017). The current political direction reflects fears by traditional leaders that land reform will rob them of their control of land and influence (Weinberg, 2015). Traditional leaders resist CPAs for this reason especially (Clark & Luwaya, 2017). The TLGFA, CLTP, and CLTB confer ownership of land on the traditional councils (as different from traditional leaders – see section 1.3.3), and so in these areas they may be further empowered, and community members may become their subjects (see Figure 9-8). "The problem is not that these laws recognise the institution of traditional leadership, but that they condone traditional leaders' abuses of power" (Weinberg, 2015: 14).

Good leaders consult with knowledgeable experts and learn from the experiences of others. This was demonstrated in the formulation of both the High Level and Advisory Panels which brought together various knowledgeable experts to assess the state of the nation. This enabled the Panels to make reliable assessments and to propose far-reaching recommendations. This principle should be followed in other areas such as in land rights enquiries aimed at making existing

[34] See van Zwieten (2017b) and the report by the Advisory Panel (Mahlati, 2019).

customary land rights visible (SA04, 2017). Good leaders should also heed good advice. To date, the recommendations of the High Level Panel have been largely ignored. It remains to be seen whether the Advisory Panel's recommendations will be addressed.

Both the White Paper (DLA, 1997) and the Green Paper (DRDLR, 2011) consider the experiences of other countries (see also Adams, Sibanda & Turner (1999) and Cousins *et al.* (2005)). Yet, despite coming to the conclusion that "there are no silver bullets to solving post-colonial land questions" (DRDLR, 2011: 10), policies indicate that formalisation is seen as just such a quick-fix solution (de Satgé *et al.*, 2017) – see Section 9.2.1. International reviews also raise questions around the appropriateness of titling and registration programmes for customary tenure systems (de Satgé *et al.*, 2017). Experience indicates that upgrading customary rights may erode the rights of vulnerable groups, such as women (Centre for Law and Society, 2015). International agencies such as UN-HABITAT, the Global Land Tools Network (GLTN), and Kadaster International should be consulted for their expertise in dealing with land reform issues. While there have been some such consultations, SA04 (2017) asks whether they have "turned into anything practical that we can see on the ground?" He lambastes government officials for wasting taxpayers' money and not taking such consultations seriously.

Good leaders should be accepted and supported by the people they lead. SA03 (2017) acknowledges that leaders are generally accepted and supported if they consult with communities and reflect what they want. If not, people may organise themselves against their leaders. Hence leaders must balance power with responsibility to listen to and tolerate different viewpoints (DRDLR, 2013a). Even though the assumption that traditional leaders are accepted and respected in customary areas has been challenged, political parties still assume that rural areas are under the control of traditional authorities (Weinberg, 2015). This was made clear during the discussions about CLaRA: "many people in rural areas were against traditional leaders holding absolute power over the land on which they lived" (*Ibid.*: 14). Some traditional leaders claim powers under customary law that are not recognised by the communities they serve (Clark & Luwaya, 2017). The High Level Panel (2017) notes declining levels of trust in leaders and institutions, which has a negative impact on nation-building.

The vision of the White Paper (DLA, 1997) was for a land policy and reform programme that promotes reconciliation, stability, growth and development. Government's approach was "generally sensible and realistic" (CDE, 2008: 14), but progress has been disappointing. To get land reform back on track will require vision and commitment: "Bold leadership is required now" (*Ibid.*: 22 – see also Cousins (2016)). Unfortunately, commitment to completing tasks is reported to be lacking in senior leaders of the DRDLR (SA01, 2017), as is the vision for ***sustainable*** land use (SA09, 2017). The Advisory Panel calls for a clear vision for land reform if it is to progress towards ***success*** (Mahlati, 2019).

b) Building on existing practice

To get to an end state that carries ***significance*** for land rights-holders, it is important to build on existing practice. SA04 (2017) recommends recognising existing rights as they are currently being practiced. For example, PTO legislation formalised customary rights (SA06, 2017). Hence, to accommodate customary land rights in a unified LAS, SA06 recommends starting with existing PTO records. While the PTO is static, SA04 (2017) calls for a system that is flexible and responsive to changes in land relations:

> *"In [customary land rights contexts] you find that there are rights that criss-cross, overlap, in a consensual way. I have an exclusive right to cultivation of this parcel, but as soon as I've taken off my crop, you have a right to bring your cattle over there. These rights coexist*

> *and there's no reason why a recordal system can't accommodate this, because these rights are not incompatible with each other."*

SA03 (2017) notes that current tenure policies are not aligned with the dynamics and realities of lived experience, even though this was originally proposed in the White Paper, subject to the Constitution (DLA, 1997). Land tenure reform should be built on a thorough understanding of such lived experience (Adams, Sibanda & Turner, 1999), but government policy has drifted away from this stance. Cousins (2007: 281) notes that an appropriate approach would be "to make socially legitimate occupation and use rights, as they are currently held and practised, the point of departure for both their recognition in law and for the design of institutional frameworks for administering land." To date, such legislation has not been forthcoming, and people living on customary land have no way of securing their tenure (Clark & Luwaya, 2017).

Building on existing practice avoids the imposition of systems and thinking that are misaligned to the norms and practices of land administration on the ground. Such misalignment yields *de jure* and *de facto* systems of landholding that differ, resulting in organisational and tenurial multiplicity (SA03, 2017). This was the unintended consequence of the imposition of wall-to-wall municipalities across the country. In all customary areas, and even some urban areas, there may now be conflicts between customary and statutory institutions and laws (SA04, 2017), as explored by Nxumalo (2013). The perceived 'supremacy of ownership' sees such customary institutions as being of lower legal standing than statutory institutions (Cousins, 2016; de Satgé *et al.*, 2017). This could be a result of the racially-based system of land rights introduced by colonial regimes (Adams, Sibanda & Turner, 1999; Williams-Wynn, 2017). Although the Constitution recognises customary laws and institutions as equal to statutory systems, this recognition does not permeate to the level of community and individual perceptions (SA04, 2017).

c) Time to completion

SA04 (2017), possibly using hyperbole, reckoned that 'upgrading' of off-register rights to individual title would not be successful in South Africa for another 200 to 400 years. This is, firstly, because land tenure reform requires thorough public participation (Adams, Sibanda & Turner, 1999) and, secondly, due to the resilience of customary tenure systems, as evidenced by Kingwill (2011) and Cousins *et al.* (2005). Hence the timeframe for land tenure reform stretches "way beyond the thinking of politicians and donors" (SA04, 2017). Consequently, the Advisory Panel report recommends a 20-year vision for land administration (Mahlati, 2019). This presents a challenge, as politicians and donors need to see results within fixed timeframes: the former to garner support from voters and remain in power, and the latter to justify their expenditure. More attention should be given to a satisficing approach (see Section 5.4.2) that adopts fit-for-purpose standards and recognises existing tenure systems.

d) Implementing change

The White Paper (DLA, 1997) recognised the need to provide support for beneficiaries of land reform. Such support should be provided at the provincial and local levels (see Figure 9-7). According to the Green Paper (DRDLR, 2011), support is the function of the Land Rights Management Board. But the lack of post-settlement support for beneficiaries of land restitution and redistribution projects has been a key contributing factor of the failure of land reform in South Africa (CDE, 2008; Cousins & Hall, 2011; Kloppers & Pienaar, 2014; Weinberg, 2015; Clark & Luwaya, 2017). "People are being thrown into the deep end with no clue about how to farm, how to manage, how to plan, how to put together a project" (SA01, 2017). Such lack of support threatens tenure security (Clark & Luwaya, 2017). While customary land rights are recognised and protected through IPILRA, the administrative support to realise these rights is lacking (de

Satgé *et al.*, 2017). To some, this appears to be because "government are not interested in poor black people" (SA06, 2017)!

When change cannot happen under the existing political and legal framework, it becomes necessary to change policy and legislation to suit the objectives – see Section 7.5.1. In South Africa, the Restitution of Land Rights Act was the first law passed by the democratic government in 1994 (Adams, Sibanda & Turner, 1999), which enabled the State to begin the long journey of land reform – see Section 9.4.2. Several attempts have been made to enact legislation that protects customary land rights-holders' tenure: IPILRA, the Land Rights Bill, CLaRA, and the CLTB. So far, none of these has proven adequate. Only IPILRA offers customary land rights-holders any form of protection. It needs to be enhanced and made permanent (Centre for Law and Society, 2015; Weinberg, 2015). Likewise, the CLTP is inadequate and vigorously contested (Loate, 2014; Weinberg, 2015). For the realisation of property rights, adjustments should be made to property law and land administration, including the cadastral system (de Satgé *et al.*, 2017). Such adjustments are recommended by the High Level and Advisory Panels.

In 1994, the legislative framework for land reform was inappropriate and ill-suited to the goals for land reform (DLA, 1997). Although more appropriate policy and legislation followed, "Government is [still] experiencing *serious implementation difficulties* in all of its land reform programmes" (CDE, 2008: 14, emphasis added). Cousins & Hall (2011) and Cousins (2016) noted that State capacity for implementation of land reform law and policy is inadequate. The High Level Panel (2017) found that many policies and laws were sound, but there are serious concerns around their implementation and enforcement. For example, the constitutional obligation is not entirely satisfied by the passing of legislation such as IPILRA; effective implementation is also needed, yet IPILRA is routinely ignored and undermined (Clark & Luwaya, 2017). The Advisory Panel report also noted poor implementation and shifting policies as inhibitors of ***successful*** land reform, and recommends a new Land Reform Policy Framework (Mahlati, 2019).

Land tenure reform in customary areas began with a number of test cases in 1997 and 1998, wherein ownership was transferred from the State to groups or individuals (Adams, 2000; Claassens, 2000). Despite difficulties experienced with such a formalisation approach, it appears that the lessons from these pilot projects have not been learnt, as discussed in Section 9.2.1.

A flexible and incremental approach to land tenure reform is suggested by Adams, Sibanda & Turner (1999) and Cousins *et al.* (2005). This is to focus attention on high priority areas (more densely settled or politically volatile areas) and to extend State capacity. It also facilitates safeguarding of the rights of vulnerable groups whose tenure security may be undermined through hasty implementation efforts (Centre for Law and Society, 2015). Incremental approaches should be provided in provincial law and land use management schemes (de Satgé *et al.*, 2017).

9.5.3 Working together

a) Engagement

Cousins (2016) warns that failure to acknowledge local communities as active participants in developments intended for their benefit will lead to policy formulation that lacks ***significance*** and will ultimately fail. Hence both the White Paper (DLA, 1997) and the CLTP (DRDLR, 2013a) make reference to the empowerment of communities and households in land development decisions. However, Loate (2014) notes that, under the CLTP, traditional councils may make decisions on land development and investment on behalf of their communities, effectively disempowering them and undermining the principle of free, informed and prior consent. This is also contrary to IPILRA (Clark & Luwaya, 2017). For example, SA05 (2017) described how

developers meet first with traditional leaders to discuss projects on customary land. This is ostensibly so that the traditional leaders can provide clarity for the community, but it opens the opportunity for abuse. Similarly, the Ingonyama Trust is accused of conducting deals with mining companies without proper community consultation, leading to "the deprivation of use rights and access to land" (Clark & Luwaya, 2017: 10). Worryingly, the TKLB (COGTA, 2015) empowers traditional councils to enter into agreements with *any* person, body, or institution *without consultation* (Clark & Luwaya, 2017), again undermining the provisions of IPILRA and disempowering communities.

If communities *are* engaged, power dynamics mean that the engagement is often superficial (*Ibid.*). An attitude of paternalism permeates government's approach to land reform, and customary land rights-holders are inadequately consulted about what laws and policies would be most appropriate for them (Weinberg, 2015). Instead, "the communities should play a pivotal role in land administration, working closely with the government" (SA10, 2017). The High Level Panel (2017) hence calls for agreements signed by traditional councils to be deemed invalid unless it can be shown that communities have been adequately consulted.

"The successful delivery of land reform depends not only on an integrated government policy and delivery systems, but also on the establishment of cooperative partnerships between the state and private and non-governmental sectors" (White Paper: DLA, 1997: 31). Hence the Green Paper (DRDLR, 2011) provided for the establishment of the Recapitalisation and Development Policy Programme (RDPP) to assist land reform beneficiaries in forming partnerships with commercial farmers on a risk-sharing basis. Support is reliant on the drafting of a business plan and partnership with a 'strategic partner'. These requirements are limiting for beneficiaries with limited resources, and "money released through the RDPP has sometimes benefitted strategic partners at the expense of land reform beneficiaries" (Weinberg, 2015: 19).

SA07 (2017) described how essential it is for local communities to engage meaningfully with established businesses. This makes investment possible and increases community capacity to make productive use of the land. Specialists should also be called on to advise on the best use of the land, paid for by the strategic partner. Thus, SA08 partnered with a commercial enterprise to find the best location for a commercial farm on customary land. He has negotiated an 80-year lease with them, and the partnership brings skills and resources to the community.

South Africa's Constitution obligates government to consult widely with the population (Maphazi *et al.*, 2013). Hence, the drafting of the White Paper (DLA, 1997) was preceded by a lengthy, participatory consultation process involving a wide range of stakeholders, including farmers' associations, NGOs, State officials, and concerned individuals. Similarly, the current process on amending the Constitution to allow for land expropriation without compensation involves submissions to Parliament and a round of public consultations (Phakathi, 2018b). The Green Paper (DRDLR, 2011: 1) likewise envisaged "rigorous engagement with all South Africans" to better develop tenure systems of ***significance***.

Despite these provisions, "new laws and policies reflect few of the suggestions put forward during the various consultation meetings and working groups" (Weinberg, 2015: 14). The passage of CLaRA from Bill to Act is one such example (Cousins, 2007). Cousins (2016) notes that elite capture of land reform policy has rendered voiceless the communal area residents. SA03 (2017) agrees and notes that consultation should be "thoughtful" and not mere box-ticking (see also Arnstein, 1969).

Safety is also a concern, as people who speak against development in order to protect their land rights do so at great risk to themselves (Clark & Luwaya, 2017). In some cases, anti-mining

activists have been killed for speaking out against international mining projects planned on customary land (Dladla, 2016; Carnie, 2018)! Even when communities plan their own development projects, dissenters may face opposition by the community, as noted by SA07 (2017): "You may opt out if you want, but there is peer pressure from the community. If some opt out it may spoil the project for the whole community". His reference to the need for peaceful engagement and respect of the law implied that safety was not guaranteed for those who do not 'toe the line'.

Hall & Kepe (2017) noted a severe lack of communication between government and land reform beneficiaries regarding changes brought about by the SLLP. Under the SLLP, beneficiaries can only become owners after a period of leasehold of 50 years. "This unpublicised about-turn in policy suggests political risk in the future as large numbers of people around the country discover that their expectations of gaining ownership of the land they now occupy will not be met" (*Ibid.*: 127). SA08 (2017) also complained of the lack of communication from government. SA03 (2017) concurs: "Even NGOs battle to stay informed because the [DRDLR] is so chaotic in the way it communicates."

One of the reasons for this poor communication is the silo effect. Government appears not to act as a single body, and officials and departments within government often hold differing views (Weinberg, 2015). Poor coordination between government departments has slowed land reform processes (Cousins, 2016). The Advisory Panel highlights the lack of coordination between the DRDLR, Department of Agriculture, Forestry and Fisheries (DAFF), Department of Water and Sanitation (DWS), Department of Cooperative Governance and Traditional Affairs (COGTA), and the provincial departments of agriculture, "all of which make decisions regarding land and land management" (Mahlati, 2019: 13). The Panel proposes the formation of a Land and Agrarian Reform Agency that combines the land reform function of the DRDLR with the agrarian support provided by DAFF. This disconnection between government departments is despite the admonition in the White Paper (DLA, 1997) that there should be close cooperation between departments and levels of government. The Green Paper (DRDLR, 2011) notes lack of coordination and integration as one of the main challenges for land reform. Hence the High Level Panel (2017) recommends that new laws be developed not by government departments, but rather through *ad hoc* committees spanning several interconnected areas. (Similar practices were followed in Germany and Mozambique.)

b) Handling equity

Sections 30 and 31 of the Constitution recognise the right to observe cultural and religious practices, provided that such observation is in keeping with the general provisions of the Bill of Rights. Hence customary land tenure systems must operate within the principles of equality and human dignity. In the White Paper (DLA, 1997), it was acknowledged that some customary land tenure systems do not adhere to democratic principles of human rights and equality. Popular, functional, democratic tenure systems are to be strengthened, while those in contravention of the Constitution should be replaced.

Section 39 of the Constitution and Chapter 12 (Traditional Leaders) as well as Section 6(1) of Schedule 6 (traditional courts) provides for equality of African customary law. Section 39 states:

> *"(2) When interpreting any legislation, and when developing the common law or customary law, every court, tribunal or forum must promote the spirit, purport and objects of the Bill of Rights.*

> *(3) The Bill of Rights does not deny the existence of any other rights or freedoms that are recognised or conferred by common law, customary law or legislation, to the extent that they are consistent with the Bill."*

Cousins & Hall (2011) note that the Constitutional Court challenge to CLaRA had several indirect impacts. Significant among these is increased awareness of land rights and related notions of freedom and democracy. There is also increased public support for the notion of democratised communal tenure. However, there is no evidence of cognisance of the differential impact of rights-based approaches on different cultural contexts.

c) Resolving disputes

An aim of land tenure reform is the resolution of tenure-related disputes (DLA, 1997; Groenewald, 2003). Cousins (2007) notes that lack of clarity regarding dispute resolution mechanisms can lead to anxiety over tenure security. The success of land reform hinges, in large part, on government's ability to pre-empt, prevent, and resolve disputes (DLA, 1997).

In 1995, a National Land Reform and Mediation Panel was established to resolve the many anticipated land-related disputes to emerge from the land reform process. The Mediation Panel was only planned to exist for five years and was decommissioned in 2001 (Bosch, 2003). The function of mediation of disputes has since been taken up by the Land Rights Management Facility (Lahiff, 2008). It provides support to farm workers, communal property institutions, and land restitution beneficiaries. Concerns have been raised over the cost of the legal approach adopted, which involves a high reliance on the use of courts instead of being regulated by policies and administrative processes (de Satgé *et al.*, 2017).

Following the dismantling of apartheid legislation, there was a vacuum of land administration in customary areas leaving rural people without any legitimate avenues for dispute resolution. Their only recourse is to traditional leaders or NGOs. There is no civil law administrative framework to protect them from abuses of power (Bosch, 2003; de Satgé *et al.*, 2017). The CLTP, following the lead of the TCB that was never passed, confers the role of dispute resolution to traditional councils despite opposition to such an approach (Centre for Law and Society, 2015). An accessible system for arbitration of disputes that builds on existing practice is required. A land ombudsman is also suggested (Kingwill, Hornby, *et al.*, 2017).

Hence the High Level Panel (2017) makes two proposals. The first is for a land framework law that provides for the establishment of the Office of a Land Rights Protector. The second is a land records act that includes a model of land administration that returns to the rights-based approach of the mid-90s and creates further capacity to resolve land-related disputes. The intention is the recognition of a range of existing rights as property rights in law, thus increasing the tenure security of the holders. If suitably passed into legislation, these proposals could further address the lack of tenure security in customary land rights contexts.

9.5.4 Evaluation

With reference to Table 9-5, it is not surprising that land tenure reform in South Africa is failing. Concerning the historical context for land tenure reform, despite awareness and acknowledgement of the past, the efforts currently underway appear to be inadequate. In some cases, they are even replicating the injustices of the past, hence this element is 'partially addressed'.

On the current context, there is acknowledgement of a wide range of different tenure types and situations across the country, but especially in customary areas (Table 9-4). There is a corresponding commitment to recognise different off-register tenures and acknowledgement of

the influence of political, legal, and socio-economic factors on land reform. It is noted that there is currently confusion over the role of traditional leaders, which impacts negatively on the ability of customary land tenure reform to move forward. Both institutional and community capacity were noted to be significant constraints on the ***success*** and ***sustainability*** of land reform. Technological capacity was also found to be wanting. Education and training are necessary, but not sufficient, for addressing these concerns. There was a noted awareness of the need for adaptability to tenure and institutional dynamics. This awareness has not transferred convincingly into policy or practice. It remains to be seen whether the flexibility inherent in customary tenure systems will be accommodated post tenure reform. Hence, overall, the 'current context' is 'partially addressed'.

Table 9-5 Evaluation of South African case against Change Process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Community / country context	Historical background	Replicating past injustices	3	3
	Current context	Commitment to recognise existing tenure types	5	3
		Institutional, technological and community capacity lacking	1	
		Confusion over roles of traditional leaders	3	
		Accommodating flexibility and adaptability	3	
Getting to the end state	Good leadership	Unbiased and impartial	1	2
		Power struggles	1	
		Using knowledgeable experts	3	
		Unrealistic expectations	1	
		Community acceptance	3	
	Build on existing practice	Tenure policies misaligned with lived experiences	3	3
		Organisational and tenurial multiplicity	3	
	Time to completion	Unrealistic expectations	3	3
	Implementing change	Lack of support	1	2
		Influencing legislation	5	
		Implementing legislation	1	
		Using pilots and phases	1	
Working together	Effective, sustainable engagement	Participatory processes	5	2
		Superficial engagement	1	
		Poor communication	1	
		Inadequate consultation	3	
		Investor-community partnerships	3	
		Guaranteeing safety of all participants	1	
	Handling equity	Human rights and gender equality are recognised	5	3
		Differential impact not acknowledged	1	
	Resolving disputes	Legal route inaccessible	3	3
		Customary route open to abuse	3	

The only descriptor of the aspect 'getting to the end state' that reflects positively in the interviews and publications is that of influencing policy and legislation. This is because government's focus on addressing land tenure security in customary areas, and fulfilling their constitutional obligation in this regard, has been on drafting legislation. Unfortunately, even if this new legislation was adequate (which it appears not to be), having sound legislation is insufficient. Unbiased and impartial leadership is crucially important for effective implementation. It appears that insufficient attention has been given to the acknowledgement and respect of existing practices, with the result that organisational and legislative multiplicity has ensued. Implementation of laws and policies, and support for land reform beneficiaries, also appear to be inadequate. All other descriptors are 'partially addressed' because of inadequacies highlighted in the descriptions above. Thus, the elements 'good leadership' and 'implementing change' are 'inadequately addressed', whereas 'building on existing practice' and 'time to completion' are 'partially addressed'.

Concerning the aspect 'working together', thanks to the constitutional obligation to consult, engagement with all relevant stakeholders from the outset of development is good, but problems arise with how that engagement is processed. Local communities appear to not be adequately consulted. While some partnerships are forming to assist communities to make productive use of the land, there is evidence of policy shortcomings leaving communities open to abuse. Inadequacies are noted concerning the cost of participation and the safety of participants, while communication is notably wanting.

The intent behind land reform policy, as spelled out in the White Paper, was for a rights-based approach to trump other approaches, in keeping with the provisions of the Constitution. This approach seems to be working, as evidence has shown greater awareness of human rights and acceptance of gender equality. More overt recognition of the differential impact of such an approach on the broad range of cultural contexts is advised.

Dispute resolution mechanisms are demonstrated to be inadequate. Reliance on legal avenues is costly, lengthy, and less accessible for rights-holders than customary routes. The alternative, which is reliance on traditional leaders to resolve disputes, opens rights-holders up to abuses of power and bias. The recommendations for a land ombudsman and/or an office of a land rights protector may assist to strengthen and support legitimate dispute resolution mechanisms while protecting land rights-holders. Hence, 'engagement' is 'inadequately addressed', whereas 'handling equity' and 'resolving disputes' are both 'partially addressed'.

9.6 REVIEW PROCESS

9.6.1 Why review?

Reviews were undertaken or proposed to identify problems, find solutions, measure successes, track progress, ascertain the impact of interventions, and improve transparency. The High Level Panel (2017) was instrumental in providing a number of these review points. For ***success***, it is important to have an honest appraisal of past mistakes (CDE, 2008). But new laws and policies do not take *lessons learned* from past mistakes into account (Weinberg, 2015), and many such problems are noted as being repeated (Cousins, 2016). The M&E component of the DRDLR was supposed to track the progress of the land reform goals and provide feedback on their achievement. Such feedback was made publicly available to allow for transparency and accountability (DLA, 1997). However, Cousins (2016: 8) notes the lack of data on the impact of interventions and bemoans the fact that, after more than two decades of land reform, the "agrarian structure of South Africa" has hardly changed. The focus has been on "the numbers

game" – numbers of claims settled or hectares transferred – rather than on ***sustainability*** for the beneficiaries (Kloppers & Pienaar, 2014: 696). Clark and Luwaya (2017) note that, for ***significance***, the potential impacts of interventions should be carefully assessed, else they may entrench the very conditions they are meant to address.

9.6.2 What is reviewed?

a) Outcomes

The White Paper (DLA, 1997) recognised that tenure reform focussed on upgrading could have negative *unintended consequences* such as dispossession and increased tenure insecurity for the poor and vulnerable. An unintended consequence of the repeal of former apartheid-era legislation is the dearth of land administration in the former homelands, leading to greater tenure insecurity (de Satgé *et al.*, 2017). The Centre for Development and Enterprise (2008) noted that a possible unintended consequence of tenure reform is a negative impact on food security. They anticipated two possible trajectories for South Africa: either 'nobody wins' or 'everybody loses'. The former refers to a stagnation of policy and agricultural production, the latter refers to land reform in the manner of Zimbabwe that may spin out of control.

Reviewing how customary land tenure reform has achieved its goals is difficult because, according to SA02, SA04 and SA06 (2017), it appears that nothing has happened. Other areas of land reform are also failing (Rugege, 2004): the restitution and redistribution components of land reform have not met their targets (CDE, 2008; Cousins, 2016; High Level Panel, 2017), some of them by a substantial margin (Lahiff, 2008). This is despite affirmation in the White Paper (DLA, 1997) that M&E should be built into the land reform programme. The Advisory Panel renews this call and recommends clearly articulated indicators be drafted (Mahlati, 2019).

The Green Paper (DRDLR, 2011) lists several development indicators such as shared growth and prosperity, full employment, income equality, and cultural progress. Some of these (employment and income equality) are measurable, whereas poverty and cultural progress are multi-dimensional (Statistics South Africa, 2014) and need further definition. The CLTP (DRDLR, 2013a) lists 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. Although these are all measurable, they are not indicators of land tenure reform only. Fulfilment of these outcomes could arise from other interventions, and so any measurement thereof does not imply that land tenure reform is ***successful***. The Advisory Panel noted the lack of any means of assessing whether the right of equitable land access is being realised (Mahlati, 2019). The High Level Panel (2017) calls for a new land framework law that includes clear measurement of targets to hold the State to account.

b) Impact

The High Level Panel (2017) was constituted to review the impact of all legislation passed since 1994 (SA02, SA04, 2017). Regarding land reform, although it is essential that beneficiaries are better off *after* the process (CDE, 2008), there has been little change in agrarian structure and well-being over the past two decades of land reform (Cousins, 2016). Many beneficiaries are worse off than they were before (Clark & Luwaya, 2017). SA09 (2017) expressed concern that investments in communal land should be well-planned and the benefits clearly stated.

New investments should recognise and respect existing land rights and ensure that the impact of the investment is beneficial to, and ***sustainable*** for, all concerned (Clark & Luwaya, 2017). SA03 (2017) noted that tenure that is legally secured is largely dependent on NGOs who receive most of their funding from international donors. This is unsustainable and places customary land

rights-holders in a precarious position. Environmental ***sustainability*** should also be ensured (DLA, 1997; DRDLR, 2013a).

9.6.3 When is it reviewed?

The White Paper (DLA, 1997) acknowledged the need for integrated, on-going evaluation of the effectiveness of land reform to improve transparency and accountability. The DRDLR has a M&E component that meets monthly, though their effectiveness is questioned (SA01, 2017). The Centre for Development and Enterprise (2008) recommended the establishment of a biannual report to Parliament on progress regarding land reform. Hence reviews are happening, but their effectiveness is questioned.

9.6.4 Who does the reviewing?

External reviewers are important to eliminate bias. The White Paper (DLA, 1997) acknowledged the need for consultation with stakeholders to assess the trajectory of land reform. For example:

1. Organisations based at the provincial level were used to assist in data collection and analysis.
2. Adams (2000) reported that international land reform experts from UK-DFID were appointed to evaluate the land reform programme.
3. Independent reviewers, such as the Financial and Fiscal Commission, conduct regular reviews of the land reform programme (Dawood, 2016; Financial and Fiscal Commission, 2016).
4. The High Level and Advisory Panels comprised independent experts in the various fields under evaluation.
5. The Parliamentary Monitoring Group is an independent NGO that monitors parliamentary committee meetings and makes recordings and transcripts of their meetings available online for public scrutiny.

As noted above, there is a M&E component within the DRDLR as the organ of State responsible for land reform and cadastral systems development, but the effectiveness of their services is questioned (SA01, 2017). While grass-roots feedback is an important component of the South African legislative process, Weinberg (2015) notes that such feedback is not taken seriously by the DRDLR. This reflects the attitude of paternalism that characterises government's approach (Weinberg, 2015; SA02, 2017).

9.6.5 How is it reviewed?

The M&E component of the DRDLR is State-funded, whereas independent reviewers are either self-funded or make use of donor funding. It is noted that the budget for land reform is woefully inadequate (DLA, 1997; Kloppers & Pienaar, 2014; Weinberg, 2015; Cousins, 2016). If M&E is to be funded from the same budget, then it is unlikely that funds will be directed to review rather than delivery. The M&E component was introduced to make information freely accessible to Parliament and the public (DLA, 1997). According to SA01 (2017), it is not doing its job.

9.6.6 Evaluation

Despite the good intentions laid down in the White Paper, it appears that lessons are not being learnt from past mistakes and the information on the progress of the land reform programme is not being adequately shared. The focus has been on quantity and not quality, which compromises ***significance*** with a corresponding impact on ***success*** and ***sustainability***. Hence these elements are noted to be only 'partially addressed'.

The goals of securing customary tenure and improving well-being appear to not have been met. The indicators used to measure ***success*** are inadequately defined and there have been several negative, unintended consequences. Hence 'outcomes' are 'not addressed'.

Environmental sustainability, including productive, ***sustainable*** land use, features prominently in the policies reviewed. However, community well-being is not assured, and sustainability of development is uncertain, hence 'impact' is 'partially addressed'.

Reviews appear to be happening at well-defined intervals, hence this aspect is 'satisfactorily addressed', although it is noted that the effectiveness of the reviews is questioned. Independent, knowledgeable reviewers external to the land reform programme have provided feedback on its progress, so this is also 'satisfactorily addressed'. The effectiveness of internal M&E could be improved, and consultations with affected communities should be taken more seriously by the DRDLR, so these are 'partially addressed' and 'not addressed' respectively. Lastly, because the overall budget for land reform is inadequate, and M&E draws from this same budget, the 'funding' element is 'not addressed' in Table 9-6 while 'accessibility' and 'transparency' are promoted in the White Paper but inadequately realised in practice.

Table 9-6 Evaluation of South African case against Review Process

Aspects	Elements	Descriptors	Desc. Eval.	Elem. Eval.
Why	Success	Repeating past mistakes	3	3
	Sustainability	Focus on quantity not quality	3	3
	Significance		3	3
What	Outcomes	Goals not met Indicators poorly defined	1	1
	Impact	Little positive change, some worse-off Sustainability questioned	3 3	3
When	Well-defined intervals Throughout development process	Satisfactorily addressed	5	5
Who	External reviewers	Knowledgeable experts and stakeholders	5	5
	State organisations	Improve internal M&E	3	3
	Community	Superficial engagement	1	1
How	*Funding*	*Inadequate*	*1*	*1*
	Accessibility	*Intended but insufficiently implemented*	*3*	*3*
	Transparency	*Intended but insufficiently implemented*	*3*	*3*

9.7 SUMMARY

The conceptual framework reveals several significant shortcomings concerning customary land tenure reform in South Africa:

1. The justification for development appears to lie on the replacement side of the land theory continuum, and this is noted to be inappropriate for customary land tenure reform. Hence the goals for development appear to be misaligned to the needs of customary land rights-holders. There is a corresponding lack of awareness of new theories as drivers of change.
2. There appears to be a lack of awareness of the impacts of climate change and disasters on land tenure.
3. Many traditional and national leaders are noted to be corrupt and self-serving, which severely constrains the ***success*** of development.
4. Laws and policies, and the implementation thereof, have not acknowledged and respected existing customary tenure systems.
5. There appears to be inadequate support for land reform beneficiaries. Institutional, community, and technical capacities appear to be inadequate for the proposed changes.

6. Where pilots and phasing of developments have happened, it appears that the lessons learnt from them have not been adequately incorporated into subsequent development.
7. Communication between government and citizens appears to be inadequate. Communication between government departments is also lacking, and developments are noted to have been made in silos without adequate consultation.
8. There appears to be insufficient concern for the safety of participants who opt in or out of development processes.
9. The registry and cadastre are not well-integrated in a single organisation.
10. There is no option for legal land rights recording.
11. There appears to be a lack of commitment from government to transfer formal land rights to citizens through registration processes.
12. Outcomes have not been met and citizens report that they are worse off than they were two decades ago.
13. There appears to be insufficient attention given to M&E.

Several elements are noted as needing improvement:

1. There has been a shift from an initially human rights-based approach that considered the needs of citizens, to a State-centred approach that replicates the wrongs incurred under apartheid.
2. Good leadership and dispute resolution mechanisms are inadequate.
3. Pro-poor land policy is lacking, and recent policies have shifted away from government's initially pro-poor stance. There is a need for a single, coherent land reform policy.
4. The distinct land rights of the poor, vulnerable and marginalised are not adequately protected and are even undermined.
5. The gaps in legislation and administration are significant contributions to the lack of tenure security for customary land rights-holders.
6. Good land governance and land administration are lacking.

10 GROUNDED FRAMEWORK

A conceptual framework was developed in Part 3 in line with research objective A: To develop a conceptual framework for guiding cadastral systems development. This is separately compared to four different cases of cadastral systems development in two different contexts in line with objective B: To test and extend the conceptual framework through a descriptive multiple-case study. Chapters 6 and 7 described the improvement of the German and Netherlands cadastres respectively as examples from developed contexts. Chapters 8 and 9 described the Mozambique and South African cases respectively as examples from developing contexts with a history of customary landholding. In a linear fashion, and embedded in these explorations, the conceptual framework was tested and extended, following a progressive case study approach (Section 3.1). The evaluation areas, aspects, elements and associated descriptors of the conceptual framework are identified in each case. New aspects, elements and descriptors are allowed to emerge from the data where appropriate in keeping with the principle of grounded theorising described in chapter 3.

In all cases, the five evaluation areas (underlying theory, LAS context, change drivers, change process, and review process) are present. In chapter 5, it was proposed that these would be relevant to any case of cadastral systems development. This proposition is upheld. It was also proposed that the evaluation aspects and most of the elements are valid for any cadastral systems development. This proposition is also upheld. However, being present is not the same as being adequately represented, and several shortcomings in all cases are noted. The analysis of each case also revealed some new items that are added to the framework. Thus, the conceptual framework is extended and grounded in real world evidence.

10.1 REPLICATION

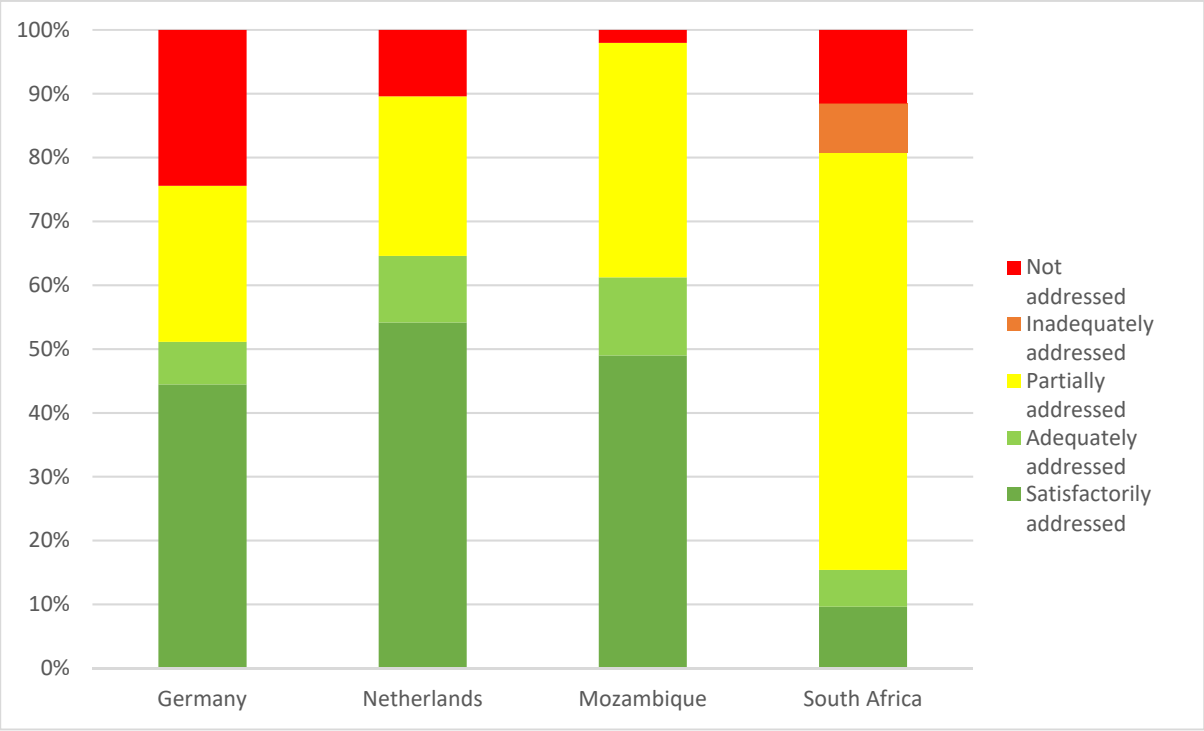

Figure 10-1 Cross-case comparison of elements

As explained in chapter 3, the purpose of doing multiple case studies is to allow new elements to emerge and for replication leading to better transferability of the findings. Literal replication is when cases are selected for their ability to produce similar findings. Germany and the Netherlands were selected due to their similar, developed contexts and hence may exhibit good practice for their contexts. Likewise, Mozambique and South Africa were selected due to their developing contexts and because they are both South African Development Community (SADC) member nations that were undergoing transitions at about the same time. The credibility of the findings is improved using triangulation as discussed in Section 3.4.

Taking all of the elements and descriptors from each case, as presented in the summary tables in chapters 6 to 9, and tallying the numbers of elements that are satisfactorily addressed, adequately addressed, partially addressed, inadequately addressed, and not addressed, Figure 10-1 is presented. The results are presented as percentages of the total numbers of elements for each case, because the cases differ in numbers of elements. This is because, as evidenced from the preceding chapters and in keeping with a progressive case study approach (Section 3.1), each case builds on the previous cases.

The total numbers of elements for each case appear in the last row of Table 10-1. The original conceptual framework had 45 elements. Although the German case added one element (*How* reviews should be undertaken), there was one irrelevant element for this context (*Changing land rights type*), hence the total number of elements for the German case is still 45. This was increased to 48, 49, and 52 as new elements emerged from the cases while the research progressed linearly through the case study analysis stage.

Table 10-1 Progressive increase in elements across cases

	Germany	Netherlands	Mozambique	South Africa
Satisfactorily addressed	20	26	24	5
Adequately addressed	3	5	6	3
Partially addressed	11	12	18	34
Inadequately addressed	0	0	0	4
Not addressed	11	5	1	6
Total	**45**	**48**	**49**	**52**

Regarding literal replication, Figure 10-1 and Table 10-1 reveal that Germany and the Netherlands produced predictably similar results due to the similarity of the contexts of the two cases. Surprisingly, Mozambique and South Africa produced quite different results, and the Mozambique case appears to be more alike to the European cases than the South African case. This may be due to the impact of international donor organisations who were influential in driving change in Mozambique.

It also appears that the Mozambican and Netherlands cases fared 'better than' the other cases, having the least number of 'not addressed' elements and the greatest number of 'satisfactorily addressed' elements respectively. However, a relative assessment of the cases is not particularly helpful due to the progressive case study approach (the same conceptual framework is under development during the course of the case study analysis) and the differences between the data types used in each case, which are not the same.

The commonality between the Mozambique and European cases is also likely to be linked to the underlying legal framework of Germany, the Netherlands and Mozambique being that of civil law.

South Africa has a much more complex hybrid legal system involving civil law, common law and African customary law.

Predictably, and as motivated at the beginning of this thesis, South Africa has fared the 'worst', with by far the least number of 'satisfactorily addressed' elements, and the most partially and not addressed. Not only is the legal system of South Africa more complex than the other cases, but its land history is also highly complex and contested. This highlights the necessity for research on South African cadastral systems development. The perspective of this research may be augmented by research on the same theme tackled from alternative perspectives and paradigms.

10.2 TESTING AND EXTENDING THE CONCEPTUAL FRAMEWORK

In the following tables, cases are compared to each other and the grounded framework. The colours are as defined above in Figure 10-1, with the addition of grey blocks for indicators that had not yet emerged. For example, *perspectives on ownership* (see Table 10-2) is an element that emerged in the South African case. It therefore did not form part of the previous case studies.

Table 10-2 Testing and extending of evaluation area: Underlying theory [35]

Aspects	Elements	G	N	M	SA
Theories of tenure reform	Identify theory on a continuum	5	5	3	3
Understanding land	Attitude towards human and land rights	1	1	3	3
	Justification for development	5	5	5	1
	Perspectives on ownership				*5*
Goals for development	Gap analysis	5	5	5	4
	Measures of Success	5	5	5	3

Table 10-2 integrates the findings from the four cases against the Underlying Theory evaluation area. The element *Attitude towards human and land rights* is not addressed in either of the European cases. This is because awareness and protection of human rights was not a consideration for development in these cases. It is partially addressed in the southern African cases due to the influence of the rights-based approach adopted by both countries' constitutions. In all cases, the underlying theory was identified and belonged mostly to the formalisation / replacement side of the continuum. It is cautioned, for the southern African cases, that this may represent a mismatch between the theory of development and the lived experience of customary land rights-holders, leading to a loss of ***significance*** and compromising the ***success*** and ***sustainability*** of development. The problems and needs driving development were clearly articulated in all cases, but in South Africa the goals and measures of success appear to not be aligned to these.

Per Table 10-3, class-responsiveness and gender-sensitivity were missing from both European cases. These omissions are related to the difference between the context of the case study and the intended context of the framework. Both elements were partially addressed in the southern African cases and are needed for ***significance***. Although the nature of the land record was clearly identified in all cases, the LTIS and land governance elements are better addressed in the European than the southern African cases. Except for the Netherlands case, the cadastre and

[35] In the following tables, 'G' represents Germany, 'N' represents the Netherlands, 'M' represents Mozambique, and 'SA' represents South Africa.

registry are not integrated, and the cadastre is not multi-purpose-ready in the southern African cases. These differences reflect expected theoretical replication arising from the differences in the state of cadastral systems development of the two groups of cases.

Table 10-3 Testing and extending of evaluation area: LAS Context

Aspects	Elements	G	N	M	SA
Land policy	Existing land rights	3	4	5	3
	Class and gender	1	1	3	3
	Productivity and livelihood	3	3	3	3
	Uniformity				*1*
Land governance	Active participation	3	5	3	3
	Equitable access	3	5	3	3
	Transparency, clarity, simplicity	5	5	1	3
	Accountability and rule of law	5	5	4	3
	Appropriate technology	5	5	3	3
Strategic level	Changing land rights type		3	4	3
	Improving tenure security	3	5	3	3
	Choices				*3*
Implementation level	Land recording / registration	5	5	5	5
	Land tenure information system	5	5	4	2

In Table 10-4, the need to improve tenure security and the LAS, reduce uncertainty, and manage the environment, are seen to be drivers for all four cases. *New approaches* was added as an element in the Mozambique case and found to be partially addressed in the South African case. The influences of climate change and disaster management are not adequately addressed in all cases except Germany. New theories have partially contributed to cadastral systems development in all cases except South Africa.

Table 10-4 Testing and extending of evaluation area: Change Drivers

Aspects	Elements	G	N	M	SA
Demand	Economic	5	5	3	3
	Political	5	5	5	4
	Social	3	3	3	4
	Legal	5	5	5	3
	Administrative	5	5	5	3
	Environmental	5	3	3	3
Supply	New technology	5	5	5	3
	New theories	3	3	3	1
	New policy	5	5	5	3
	New approaches			*5*	*3*

From Table 10-5 it is apparent that there were concerns about time to completion, handling equity, and resolving disputes in all cases. Good leadership is imperative for ***successful***

development, and in the South African case, leaders have been found wonting. Capacity, a descriptor of the current context, is essential for ***sustainable*** development. Capacity issues were identified in both of the southern African cases. The use of pilots, phasing, and appropriate methods of implementing change are adequately addressed in all but the South African case. Using appropriate methods and adopting an incremental approach fosters ***significant*** development. The historical background is acknowledged and generally engaged in all but the Netherlands case. Engagement is also well represented across all cases, although safety of participants in the development process is not adequately secured in any case, and the South African case again comes up short when compared with the other cases.

Table 10-5 Testing and extending of evaluation area: Change Process

Aspects	Elements	G	N	M	SA
Community / country context	Historical background	**5**	**1**	**5**	**3**
	Current context	**4**	**4**	**4**	**3**
Getting to the end state	Good leadership	4	4	4	2
	Build on existing practice	5	5	5	3
	Time to completion	3	3	3	3
	Implementing change	5	5	5	2
Working together	Effective, sustainable engagement	4	4	4	2
	Handling equity	1	1	3	3
	Resolving disputes	3	3	3	3

Table 10-6 Testing and extending of evaluation area: Review Process

Aspects	Elements	G	N	M	SA
Why	Success	1	5	5	3
	Sustainability	1	5	5	3
	Significance	1	5	5	3
What	Outcomes	1	4	5	1
	Impact	3	3	5	3
When	Well-defined intervals	1	3	5	5
	Throughout development process	1	3	5	5
Who	External reviewers	1	3	5	5
	State organisations	3	5	5	3
	Community	5	5	5	1
How	*Funding*	*1*	*1*	*3*	*1*
	Accessibility		*5*	*3*	*3*
	Transparency		*3*	*3*	*3*

The review process was deemed inadequate for both European cases, although the Netherlands fared better than Germany in this regard. Despite this, both cases introduced a new aspect: *how* reviews should be conducted. From Germany, we learnt that sufficient funding should be allocated to the review process. From the Netherlands, we learnt that greater transparency,

accessibility and user-friendliness improve the quantity and quality of users' feedback. Overall, Table 10-6 reveals that the review process was better-addressed in the Netherlands and Mozambique than in Germany and South Africa. To ensure that the development process and outcomes yield results that are ***successful***, ***sustainable***, and ***significant***, an adequate review process is essential.

10.3 STRENGTHS AND WEAKNESSES

The conceptual framework has been used to evaluate cases of cadastral systems development for their ***successfulness***, ***sustainability***, and ***significance*** for customary land rights-holders. Concurrently, the framework itself has been assessed for its sensitivity to customary land tenure issues and for its usefulness as a guide to ***successful***, ***sustainable***, and ***significant*** cadastral systems development. The comparison in the preceding sections has revealed that the framework does exhibit such sensitivity and is able to draw out context-specific, nuanced elements and descriptors pertinent to customary land tenures. Research question 5 considers the strengths and weaknesses of the framework. To answer this question and in keeping with the requirements for trustworthiness contemplated in Section 3.4.1, the credibility of the findings is strengthened through reflective commentary and peer scrutiny below.

10.3.1 Peer scrutiny

The conceptual framework (as it appears in chapter 5) was sent to several knowledgeable experts. Feedback was received from only one and it is presented in Appendix C. Her comments are summarised below.

a) Strengths

- Accessible and logical presentation with clearly defined steps that provide a useful way to plan land tenure reform.
- Identification of three schools of theories on land reform is useful for locating background thinking that informs the goals for change.
- The links between theories and land policy goals are useful for seeing the application of theory.
- The three goals of ***success***, ***sustainability***, and ***significance*** are useful quick references for checking processes of change.
- It is practical, comprehensive, well-sequenced, and convincing.

b) Weaknesses

- Long-term bureaucratic robustness is missing as an element of ***sustainability.***
- There could have been engagement with class dynamics and capitalism as foundational forces behind the privatisation of land rights.
- The material dynamics around property are missing.

10.3.2 Reflective commentary

Most PhD students will be able to attest to the truth of Ecclesiastes 12:12b – "There is no end to the writing of books, and too much study will wear you out" (Good News translation). With this in mind, it is acknowledged that the list of sources cited in Table A-1 – the publications used to develop the conceptual framework – is not definitive. Although care was taken when compiling the list to follow a transparent, rigorous, research synthesis methodology as explained in Section 3.2, some significant frameworks were undoubtedly left out. Others may have been subsequently developed and published. Hence, in addition to the constraint mentioned in footnote 6 on page 25 (that non-English publications were omitted), some English publications were undoubtedly

also omitted. As Solomon alludes, there is no end to new research, and hence it is not possible to include everything. However, in keeping with the progressive case study approach, the conceptual framework is merely a starting point. Frameworks that other researchers consider useful or important [36] may still be interrogated in line with the conceptual framework. New areas, aspects, elements, and descriptors can be added to the conceptual framework as appropriate.

Having used the framework to develop the four case study chapters, I can comment on it from both a practical and a theoretical viewpoint. A limitation of the study should be highlighted here: the framework is intended as a *guide*, not an *evaluation tool*. It should be used to guide change agents to consider what needs to be done to bring about ***successful*** cadastral systems development that is also ***sustainable*** by highlighting the need for ***significance***. Until such time as the framework is adopted by government, however, its utility is demonstrated through *evaluation* of change processes that have already taken place or are ongoing. Such evaluation is by necessity a snapshot of what has gone before and what interventions are currently in place. As change is a continuous process, some of the shortcomings identified in the preceding chapters may already have been addressed by the time this thesis is published, and other issues may have arisen. This is seen as a limitation of the study more than a limitation of the framework.

The conceptual framework is not intended to be all-inclusive. Every context of cadastral systems development is different, and to impose a fixed set of indicators would make it difficult to capture these contextual nuances. Rather, descriptors emerge from the data, and hence each case has added something to the original framework. At the same time, the framework has revealed omissions in each case. The use of the framework in the four country contexts demonstrates its potential broad application as substantive theory and is hence a strength and a further contribution to knowledge.

Methodologically speaking, the process of working through the data, coding and categorising interviews and documents, is laborious. But the framework assists by giving the researcher a skeleton (areas, aspects, and elements) to flesh out with rich, context-specific descriptors. Thus, it is conceivable that teams of researchers could work together on the same project using the same framework to code qualitative data, using CAQDAS as appropriate, and still allow contextual nuances to emerge. A potential weakness for the solitary researcher is the 'code swamp' (Friese, 2014): a situation wherein the researcher can become overwhelmed with too many codes. By sticking to the framework (as a skeleton) and working within a team, the code swamp may be avoided.

Finally, a weakness in the framework that the reader may have noticed in the preceding case study chapters, is that the case study reports so generated contain some repetition. This is because a descriptor in the data may relate to more than one element, so when reporting element by element (as I have done), it is necessary to refer to the same descriptor several times. This is useful for readers wanting to refer to a specific element but may be tedious for someone reading through the entire case study. The same may, however, be seen as a strength, as repetition enforces the concept.

10.4 ADDRESSING POTENTIAL BIAS

I am aware that, in assigning colours and numbers to show whether and how well an element is addressed, that the bias of the researcher may influence the results. Bias is minimised through triangulation of a wide array of sources, but another researcher may assess the same data and

[36] See the discussion on world views in Section 2.1.

decide that, for example, a descriptor is partially addressed when I have marked that it is not addressed. This may arise especially when the data related to a particular indicator is thin. Bias is a potential danger of qualitative research that is generally best allayed through data saturation: continuous collection and analysis of data until nothing new is learnt. Hence, when I have been unsure of an element, I have looked for additional sources of evidence. I have coded and re-coded, categorised and re-categorised, and returned to the data multiple times. In this regard, the case comparison has been helpful because it forces the researcher to ask why one case should fare better than another against a particular element. Only by returning to the data can that question be answered. In this way I have revisited some descriptors and refined my conclusions so that the results presented here may be considered trustworthy.

These results have emerged from the data that was interrogated and hence are reflective of the detail within the data. It is acknowledged that more detailed interviews and more extensive literature reviews may yield slightly different results because data collection has not progressed to saturation – see Section 3.3.1. However, given that the purpose of the case studies is to test the application of the conceptual framework, and not to conduct a definitive cross-case analysis, this is not seen as a limitation of the study. The analysis in the preceding chapters has shown the utility of the conceptual framework as a means of revealing nuanced elements of cadastral systems development in a variety of contexts.

Potential bias of the researcher as a geomatician has been tempered by first-hand exposure to the lived reality in customary communal areas, as well as sensitisation through readings and case studies. However, the results of the thesis are intentionally geared at cadastral systems development and presuppose an existing (probably western-inspired) system of land law, administration, rights and tenure. However, exposure to new theories and practices and acknowledgement of other forms of law improves the validity, credibility, and utility of the research.

Part 5: Wrapping up

11 Conclusions and Recommendations

11.1 Conclusions

Table 11-1 Research objectives and associated questions (repeated).

Objectives	Research Questions
A. To develop a conceptual framework for guiding cadastral systems development.	1. What theoretical framework needs to be adopted to extend existing land administration theories such that they may be equally relevant to developed and developing contexts? 2. What evaluative frameworks are already in existence and appropriate for this study? 3. How can existing frameworks be synthesised into a conceptual framework to ensure trustworthiness of the outcome?
B. To test and extend the conceptual framework through a descriptive multiple-case study.	4. Which cases of cadastral systems development are appropriate for evaluation using the conceptual framework? 5. When assessing these cases using the conceptual framework, what strengths and weaknesses of the framework are identified?
C. To propose a grounded framework for guiding cadastral systems development for customary land rights-holders.	6. What is learned from the preceding analysis? 7. How can the conceptual framework be refined?

The aim of this research has been to **develop, test and extend a framework to guide cadastral systems development in customary land rights contexts to ensure that the development is *successful*, *sustainable*, and *significant***. The first objective was to develop a conceptual framework from existing frameworks and other published literature. The adopted theoretical framework (research question 1) includes a postpositivist paradigm and critical realist ontology using a soft systems methodology as is explained in chapter 2. A research synthesis methodology, explained in chapter 3, was used to select frameworks and publications for development of the conceptual framework, in answer to research question 2. These are listed in Table A-1 on page 235. In chapters 4 and 5, the development of the conceptual framework, following this methodology, is described (research question 3). Objective A is thus satisfied. The conceptual framework is the first and most significant contribution to knowledge resulting from this research. The goals of ***success***, ***sustainability***, and ***significance*** are embedded in the framework.

Objective B was to test and extend the conceptual framework through descriptive, multiple-case study. The intention, as explained in chapters 3 and 10, was to ground the conceptual framework to ensure that it is not merely theoretical but shows sensitivity to the types of concerns related to customary land rights contexts. In chapter 3, the case selection is motivated (research question 4). The conceptual framework is tested and extended in Part 4 (chapters 6 – 9) and its strengths

Table 11-2 Grounded framework for guiding cadastral systems development in customary land rights contexts

Areas	Aspects	Elements
Underlying Theory	Theories of tenure reform	Identifying theory on a continuum of land reform theories
	Understanding land in its social context	Attitude towards human and land rights
		Justification for development
		Perspectives on ownership
	Goals for development	Gap analysis
		Measures of Success
Land administration system context	Land policy	Recognition and protection of existing land rights
		Class-conscious and gender-sensitive
		Improving productivity and livelihood
		Uniformity
	Land governance	Active participation
		Equitable access
		Transparency, clarity, simplicity
		Accountability and the rule of law
		Appropriate technology
	Strategic level	Possibly changing land rights type
		Improving tenure security
		Choices
	Implementation level	Land recording / registration mechanisms
		Land tenure information system
Responsive change drivers	Demand	Economic
		Political
		Social
		Legal
		Administrative
		Environmental
	Supply	New technology
		New theories or methods
		New policy
		New approaches
Change process	Community / country context	Historical background
		Current context
	Getting to the end state	Good leadership
		Build on existing practice
		Time to completion
		Implementing change
	Working together	Effective, sustainable engagement
		Handling equity
		Resolving disputes
Review Process	Why	Ensuring success, sustainability, and significance
	What	Outcomes
		Impact
	When	Well-defined intervals
		Throughout development process
	Who	External reviewers
		State organisations
		Community
	How	***Funding***
		Accessibility
		Transparency

and weaknesses are discussed in chapter 10 (research question 5). These chapters reflect the bulk of the research effort and further contribute to the body of knowledge through their unique descriptions of the various cases as seen through the lens of the conceptual framework.

The final objective was to propose a grounded framework for guiding cadastral systems development in customary land rights contexts. Despite its customary rights focus, the conceptual framework is found to be useful for evaluating cases of cadastral systems development in both developed and developing contexts. The testing phase applied in the different case studies highlights several shortcomings and benefits. Context-specific descriptors emerged from the data, and these were then used in subsequent case studies to test the usefulness of the incrementally-extended, grounded framework. The European cases were chosen to be evaluated first as they are upheld as examples of 'good practice'; any emergent descriptors were expected to also be relevant for southern Africa. This assumption was shown to be valid as evidenced by the tables in Chapter 10. The southern African cases added more nuanced, context-specific descriptors applicable to African customary tenure. The resulting framework hence satisfies Objective C and is grounded in reality. This appears as Table 11-2, wherein elements that emerged from the case studies are shown in bold and italics.

11.2 RECOMMENDATIONS

1. The most important recommendation is that the theory of cadastral systems development must be aligned with the lived experience of customary land rights-holders. The evidence from the two southern African cases is that developers have relied on theories with which they are familiar and that have worked well in other contexts, but these theories are inappropriate for *this* South African context. Interviewees spoke of the 'supremacy of ownership', which Hornby *et al.* (2017) refer to as 'the edifice'. A paradigm shift is required to allow all stakeholders to recognise and respect customary land rights as equal to titled ownership. Only when customary landholding is brought to the same conceptual level as other recognised forms of ownership rights, such as freehold and leasehold, will customary tenure security be improved. Much has already been made of IPILRA and the need to strengthen this piece of legislation to ensure that such recognition is practised.

2. While environmental management featured prominently in all cases, concerns over climate change and disaster management did not feature. Disasters such as earthquakes are already displacing people from their lands (Mitchell et al., 2017). Cadastral systems development, as a component of land administration, has an important role to play in recovery from disaster (UN-HABITAT, 2008; Enemark, McLaren & Lemmen, 2015; Unger, Zevenbergen & Bennett, 2016).

3. From the Netherlands, we learnt that Kadaster is successful because it is semi-independent of the State. In Mozambique, iTC's success was also attributed to their political independence. Hence it appears that it may be desirable for the agency responsible for the cadastre and land administration to be independent of the State. Then the timeframes for cadastral systems development could be realistic and not dictated to by political- and donor-based agendas. The change process will also be more likely to succeed if leaders of change processes are independent of government because political agendas may be separated from cadastral systems development.

   It is cautioned, however, that organisations require funding. In South Africa, the DRDLR gets its funding from the State. In Mozambique, iTC was donor-funded. State-funding is generally

more stable and sustainable than donor-funding. Truly independent organisations would need to collect funding from their clients, but this is not pro-poor and hence is unsuitable in developing contexts.

What is clear from South Africa is that politicians may use land issues for their own, political purposes. Land rights-holders need to be protected against this.

4. Part of the failure of land tenure reform in South Africa is attributed to the silo model of development within government. Each State department is focused on its own goals with little collaboration and sharing of ideas or objectives. If the cadastre and land administration is not made independent, then at least there should be a commitment to breaking down the silos of governance. The experiences from Germany and Mozambique are good examples of success in this regard.

5. As far as is possible, the cadastre and registry should be integrated into one system or extremely well-linked to avoid duplication, redundancy, and conflicting information. The registry should be extended to accommodate recordation; the cadastre should be extended to accommodate other forms of land location and extent that match with African customary land law and practice, as discussed in Section 1.3.4.

6. Make capacity enhancement integral to the development process. The southern African cases were hampered by capacity issues and several good ideas became unsustainable as a result. A plan for on-going post-development support needs to be formulated at the beginning of the development process.

7. Safety should be a concern that is built into development planning. Land issues are sensitive issues and lives have been lost when parties cannot come to agreement. To this end, concern must be given to cultural differences, issues relating to equity, dispute resolution, and effective engagement. There should be no assumption that all parties are approaching the concern in the same way, or with transparent and good intent. Similarly, there must be awareness that people are not homogenous, and developments may have differential impacts on different people groups. This is especially concerning for the poor, vulnerable, and marginalised.

8. There should be an independent review process and it should be built into the development plan from the outset. It should be ongoing, operating at frequent, well-defined intervals, throughout the development process. The results of the reviews should be shared with all stakeholders for transparency and to avoid corruptive influences. Reviewers should therefore be independent to the development process to give unbiased feedback. Adequate funding should be allocated and suitable indicators for ***success*** and ***significance*** should be defined concurrently with the goals of development. These should also take the ***significance*** of the development into account for land rights-holders.

9. In comparing the experiences of Mozambique and South Africa, there should be a single, clearly articulated, non-contradictory policy on land reform that aims to secure land tenure for all land rights-holders while ensuring continued and improved productivity of the land (High Level Panel, 2017; Mahlati, 2019).

10. Finally, for cadastral systems development that aims to be ***successful***, ***sustainable***, and ***significant***, developers should use the grounded framework as a guide. Practitioners should

assess interventions for any additional elements that are important for their context and assess existing elements in the framework for relevance prior to application. This is a process of naturalistic generalisation. By taking note of each of the elements, aspects and areas, the goals for development may be aligned to land rights-holders' needs, ensuring their relevance and promoting their sustainable achievement.

Figure 11-1 My wife in 2007, standing on the land on which we were to build our house (Ingwavuma, northern KwaZulu-Natal)


S.D.G.

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Appendices

A. SOURCES FOR CONCEPTUAL FRAMEWORK

Table A-1 Chosen frameworks compared to inclusion criteria

Citation	Abbreviated Title	Scope	Citations per year	Case study area/s
(Steudler, 2004)	A framework for the evaluation of land administration systems	Global	3.9	Switzerland, Sweden, Latvia, Lithuania
(Törhönen, 2004)	Sustainable land tenure and land registration in developing countries	Developing countries	1.8	Cambodia, Finland, Zanzibar, Zimbabwe
(Kim, 2005)	Towards sustainable neighborhood design	Global	0.9	Greenwich Millennium Village, England
(Burns, 2006)	International experience with land administration projects	Global	0.7	India
(Enemark & van der Molen, 2008)	Capacity assessment in land administration	Developing countries	0.8	None
(Mitchell, Clarke & Baxter, 2008)	Evaluating land administration projects in developing countries	Developing countries	3.5	Ghana, Indonesia, and Laos
(Johnson, 2008)	Building the cadastral framework	English-speaking Caribbean countries	0.4	English-speaking Caribbean
(Deininger & Feder, 2009)	Land Registration, Governance, and Development	Global	16.1	None
(Chimhamhiwa et al., 2009)	Towards a framework for measuring end to end performance of land administration business processes	Developing countries in sub-Saharan Africa	2.1	South Africa, Namibia, Zimbabwe
(Bandeira, Sumpsi & Falconi, 2010)	Evaluating land administration systems	Developing countries	3.3	Peru, Honduras
(Burns *et al.*, 2010)	Implementing the land governance assessment framework	Global	1.5	Peru, Ethiopia, Kyrgyzstan, Tanzania
(Arko-Adjei, 2011)	Adapting land administration to the institutional framework of customary tenure	Developing countries in sub-Saharan Africa	2.6	Ghana
(Emerson, Nabatchi & Balogh, 2012)	An Integrative Framework for Collaborative Governance	Global	68.8	None
(Akingbade *et al.*, 2012)	The impact of electronic land administration on urban housing development	Developing countries in sub-Saharan Africa	1.0	Nigeria
(Griffith-Charles & Sutherland, 2013)	Analysing the costs and benefits of 3D cadastres	Developing countries	0.7	Trinidad and Tobago
(Ali, 2013)	Developing a framework to apply total quality management concepts to land administration	Developing countries	0.7	Pakistan
(Zevenbergen *et al.*, 2013)	Pro-poor land administration	Developing countries	4.7	None

Citation	Abbreviated Title	Scope	Citations per year	Case study area/s
(van Asperen, 2014)	Evaluation of innovative land tools in sub-Saharan Africa	Developing countries in sub-Saharan Africa	0.5	Namibia, Zambia, Botswana
(Agunbiade, Rajabifard & Bennett, 2014)	Land administration for housing production	Global	1.0	Australia, Nigeria
(Yilmaz, Çağdaş & Demir, 2015)	An evaluation framework for land readjustment practices	Developing countries	0.0	None

Table A-2 Texts concerning human rights-based, good governance, and pro-poor approaches

Citation	Abbreviated Title	Approach
(Cobbah, 1987)	African values and human rights	HRBA, PP
(Layne & Lee, 2001)	Developing fully-functional e-government	GG
(Mutua, 2001)	Savages, Victims, Saviors	HRBA
(Wisborg, 2002)	Is land a human rights issue?	HRBA
(Finger & Pécoud, 2003)	Towards a model of e-governance	GG
(Jonsson, 2003)	Human rights-based approach to development	HRBA
(Cornwall & Nyamu-Musembi, 2004)	Putting the 'rights-based approach' to development into perspective	HRBA
(Mubangizi, 2005)	Human rights and poverty reduction	HRBA, PP
(Filmer-Wilson, 2005)	The right to water	HRBA
(Augustinus, Lemmen & van Oosterom, 2006)	Social Tenure Domain Model: pro-poor land management	PP, GG
(Franco, 2006)	Making land rights accessible	HRBA
(Kimilike, 2006)	An African perspective on poverty proverbs	PP
(Borras, 2007)	Pro-poor land reform	PP
(FAO, 2007)	Good governance in land tenure and administration	GG
(Uvin, 2007)	How 'human rights' entered development	HRBA
(Franco, 2008)	Framework for analysing pro-poor policy reforms and governance	HRBA, PP, GG
(UN-HABITAT, 2008)	Securing land rights for all	HRBA, GG, PP
(Augustinus, 2010)	Social Tenure Domain Model: what it means for the land industry and the poor	PP, GG
(Borras & Franco, 2010)	Discourses around pro-poor land policies	HRBA, PP
(Lemmen, 2010)	Social tenure domain model: a pro-poor land tool	PP
(Williamson et al., 2010)	Land administration for sustainable development	GG, PP
(Enemark, 2012)	Sustainable land governance	GG
(Enemark, Hvingel & Galland, 2014)	Land administration, planning, and human rights	HRBA, GG

B. INTERVIEW GUIDES

B.1. INTERVIEW GUIDE USED IN EUROPEAN CASES

The researcher aims to assess existing frameworks for evaluating cadastral and land administration systems (LAS) in terms of their sensitivity to good governance (GG) and human-rights principles (HRP). Whether these frameworks are suitable or "fit-for-purpose" in contexts containing high levels of poverty and poor development remains in question. Aspects of the frameworks will be assessed in terms of their suitability to a human-rights based approach (HRBA) to *cadastral* development, incorporating GG indicators where these relate to human-rights principles. Some aspects of the frameworks may be flagged as irrelevant to this approach, while shortcomings of the frameworks may be identified and added. The result will be a revised, *provisional* framework for evaluating cadastral development using a HRBA. This *provisional* framework will be tested and extended through a descriptive multiple-case study.

Through analysis of interviews, observation and secondary data (documents, reports, etc.) I aim to gain an in-depth understanding of the state of development of each country's cadastral and land administration systems, i.e. the level of accuracy and fit-for-purpose of boundary descriptions, how efficient the system is, how extensive the cadastral coverage is, how much of the records are digitised, etc. This will be followed by an understanding of how the system arrived at this state of development.

General information to be conveyed to all interviewees:

- The use of all information is in terms of the ethics policy of the University of Cape Town.
- No information will be published which will lead to your detriment.
- All information is used for research purposes only and the interviewer is a student at the University of Cape Town.
- You may refuse to answer any question and may also withdraw any information provided at any stage.
- You may refuse to let a recording be made of the interview. If you agree to a recording, this will only be used for the purposes of accurate data collection and will be reviewed to add detail to written notes and to make corrections.
- A copy of the interview summary will be provided to you so that you can verify or refute any information and add to the information recorded.

Header to all Primary Data Collection Files:

Case:			
Date:	Time:		Place:
Interviewee:		Position:	
Interviewer:	Language:		Translator:
Ethics Approval:			
Audio record:		N/Y	
Participant gave permission to use his/her name:		N/Y	
Participant wishes to remain anonymous:		N/Y	
Participant wishes to remain anonymous, but with pseudonym:		N/Y	
Pseudonym:			
Participant gives permission to be quoted and identified:		N/Y	

Interview questionnaire

Part 1 General

1. Organisation:
    a. What is the name of the organisation that you are representing?
    b. In which branch do you work?
    c. Is this a public (government) or private organisation?

2. What is your role in this organisation (describe the work that you do)?

Part 2 State of development

3. Storage and access of information:
    a. Are cadastral and land administration records stored in paper format, digital format, both, or other?
        i. If 'other' please describe.
        ii. If 'both' please explain why (i.e. are paper records currently being digitised in a move *towards* digital only, or are digital records kept merely as *backups* to paper records (or vice versa), or is this in order to serve different groups within society, etc.)?
    b. How are issues of security dealt with in terms of:
        i. Possible damage to the records (fire, flood, etc.)?
        ii. Protecting the privacy of citizens' personal information?
        iii. Liability: in case something goes wrong, who is liable?
        iv. Tampering and corruption?
        v. Any other threat?
    c. Describe how cadastral information is made accessible for all stakeholders (e.g. government, businesses, NGOs, citizens – including the poor and marginalised). Please give consideration to aspects such as:
        i. technology used,
        ii. associated costs,
        iii. clarity and simplicity of procedures, and
        iv. any others aspects that may emerge.
    d. Regarding access to information:
        i. Are any stakeholders currently overlooked or disadvantaged by the system in its current state?
        ii. What safeguards are in place to ensure equitable access to land information for all stakeholders?
    e. Turn-around time:
        i. What is the typical time delay between a stakeholder requesting cadastral information (property and/or title records), and receiving that information?
        ii. What is the turn-around time for examination of records (i.e. how long does it take for survey records to be examined and approved)?
    f. Is there a uniform standard of communication between different government sectors related to land information? Please describe.
    g. Is there a separate cadastre and land registry or one, integrated 'land agency', or other?

i. If separate, please describe the roles of the different agencies.
ii. If 'other', please describe.

4. Inclusivity and land rights:
    a. Please describe the different forms of land tenure that occur in your country context (i.e. freehold / full ownership, leasehold, customary, informal, etc.) and if possible give an indication of the percentage of the population to which this applies.
    b. How are these different forms of tenure recognised / accommodated in the land administration system?
    c. What do you understand by "land rights" and the "right to land" and can you think of any instances where these rights are excluded in your country context?
    d. What proof / evidence do stakeholders have regarding their land rights? Please provide an example if possible.
    e. What avenues exist for citizen engagement with the system (e.g. objections to development, transparency of work flow, lodging complaints, etc.)?
    f. Is land ever transferred informally in your country context (i.e. avoiding formal processes of registration of the transfer)? If yes, why, and what programs are in place / being designed to mitigate this?

5. Multi-purpose:
    a. What do you understand by the term "multi-purpose cadastre"?
    b. Describe how your cadastral system aligns with this description, especially in terms of meeting the needs of a variety of stakeholders.

6. Please give an estimate / description of the completeness of the cadastral record in your country in terms of:
    a. Recognition of land rights, restrictions and responsibilities (give a description of recognised land rights).
    b. National coverage (what percentage of the country is covered by the formal cadastre?).

7. Accuracy and fit-for-purpose:
    a. What do you understand by the term "fit-for-purpose"?
    b. Describe how your cadastral system aligns with this description, especially in terms of the different forms of tenure and applicable land rights in existence.
    c. How accurate is the formal cadastre?
    d. To what extent could the cadastral system be described as 3D?

8. What is the role of the cadastre in the Spatial Data Infrastructure (national and/or local)?

9. Would you describe the cadastral and land administration systems as "well-functioning"? Please explain your answer.

Part 3 Development programs

Having learnt what the cadastral and land administration systems currently look like, we'll move to learning how they got to this state of development. In answering the following questions please have in mind a particular programme, initiative, or sequence of events that led to the current state (or, in cases where a project is currently underway, please answer in terms of the current project).

10. Was the process of development managed through a focused project, or was there a gradual, 'natural' change (whether planned or not)? Briefly describe the project, initiative or gradual change.

The questions that follow deal specifically with cases involving planned development initiatives, i.e. there should be explicit and implicit goals and formal evaluation thereof. In cases where development has happened during the normal course of events and not as the result of a focused project, please try to answer the following questions in terms of the implicit / informal goals and evaluations.

The following questions are also suitable for 'outreach' programmes, i.e. where institutions external to a country's context have been involved in cadastral and land administration development (e.g. Kadaster and Lesotho).

11. Who were the role-players and intended beneficiaries in the development process? (Role-players could be government, public / private institutions, NGOs, consultancies, etc. Beneficiaries could be government, public citizens (poor and/or non-poor), professional bodies, etc.)

12. Regarding the rationale behind making improvements to the system:
    a. What needs were being addressed by the improvement?
    b. How are these needs related to the role-players and intended beneficiaries?
    c. How successful has the development been at meeting the identified needs?
        i. How was 'success' measured?
        ii. Who measured 'success' – internal assessment, independent assessment, or other?
        iii. What criteria were used to assess successfulness?

13. Regarding the goals of development:
    a. What were the (implicit and explicit) goals for the development project?
    b. Who set these goals?
    c. How do these goals relate to the different role-players and beneficiaries in terms of their respective identified needs?
    d. How were the goals of development assessed?
        i. By whom – internal assessment, independent assessment, or other?
        ii. At which stages of the development process?
        iii. Using what criteria?

14. How has national policy informed / hindered the making of improvements to the land administration system (including cadastre)?

15. Please describe any unintended consequences of the development, if any, and how these are being dealt with.

16. Please describe any challenges that were faced during implementation of the project and how these were dealt with.

17. How was the opinion of stakeholders (role-players and beneficiaries) voiced, heard, and accommodated into the development process (e.g. could the public voice concerns / objections to aspects of the project, were these concerns heard, and what was done about it)?

18. Regarding human rights:
    a. What do you understand by a "human rights-based approach to development"?
    b. How do you think the development process, as described, aligns with this approach?

19. If you were to do it over again (assuming you had complete control), what (if anything) would you do differently and why?

Thanks

Thank you for your time and assistance! If there is anything else you would like to add concerning any of the topics we have discussed, please do so now. If you would like to elaborate on any of the topics we've discussed you may also send supporting documents to simon.hull@uct.ac.za. I look forward to collaborating further with you in future.

B.2. INTERVIEW GUIDES USED IN SOUTH AFRICA

Questions for local authorities

The purpose of this questionnaire is to learn about your experiences of land tenure reform, especially but not exclusively related to customary land tenure reform as applied to people living in so-called 'communal areas'. I want to know what has worked and what hasn't worked and how satisfied you are with the outcome. I would also like to find out how it could have been done better, in your opinion.

Rest assured that I have no political connections and the results will be used only for my own research at UCT. I will make sure that your responses are kept completely anonymous. Also, please note that the results of my research will not benefit you directly, but I hope that my research will be used to improve customary land tenure reform generally.

- The use of all information is in terms of the ethics policy of the University of Cape Town.
- No information will be published which will lead to your personal detriment.
- All information is used for research purposes only and the interviewer is a student at the University of Cape Town.
- You may refuse to answer any question and may also withdraw any information provided at any stage.
- You may also add any information at a later stage, if you see fit to do so.
- You may withdraw from the research at any stage.

Thank you for taking the time to assist me with my project. Your contribution is appreciated.

1. General information

1.1. Please describe your role, and the role of your organisation, in the land tenure reform process.

1.2. What are the goals of land tenure reform in your area?

1.3. Please describe how land tenure reform has been enacted for one or two cases in your area.

1.4. How has the success of the project/s been measured?

1.5. What is the envisaged end state of land tenure reform in your area?

2. Drivers of land tenure reform

2.1. What needs are being addressed through land tenure reform?

2.2. How have national policies and legislation influenced land tenure reform? And has the need for land tenure reform influenced policy / legislation?

2.3. Has the availability of new technology influenced land tenure reform? If so:

2.3.1. Please describe what new technologies and how they have been used.

2.3.2. Please describe how education (to use new technology) and maintenance of new technology are addressed.

2.4. How have donors (e.g. World Bank, Millennium Development Corporation, national government) influenced land tenure reform?

3. Land tenure reform process

3.1. Who is leading the land tenure reform programme for land tenure reform projects within your jurisdiction (who decides on the project areas/liaises with the community/manages the process – if it is a unit then the unit leader)?

3.1.1. Has there been resistance to change? If so, how is it overcome?

3.1.2. Does this person have the support of the community?

3.2. If someone wants to use or occupy a new plot of land, to whom does s/he go and what is the process?

3.3. What is the timeline for land tenure reform for a particular community/village?

3.4. Before starting land tenure reform projects, were there any pilot projects done? How was the project phased?

3.5. Does the land tenure reform programme acknowledge past injustices and seek to rectify them?

3.6. Customary land tenure systems are known to be dynamic and responsive to changes in the local context.

3.6.1. What, if any, allowances have been made for such flexibility?

3.6.2. How are local norms, knowledge, and customs accommodated?

3.7. How is the local authority involved in land tenure reform projects, and are any of the responsibilities of land administration to be handed over to them once the land tenure reform is complete?

3.8. Does the local authority have institutional capacity to administer land on behalf of the land rights-holders? Please explain with reference to:

3.8.1. ICT used

3.8.2. Staffing requirements

3.8.3. Education and training requirements

3.8.4. Budgetary constraints

3.9. How was the local community engaged in the land tenure reform process?

3.9.1. Who was engaged (e.g. every individual/household head/community leader)?

3.9.2. Do you think that all land rights-holders' opinions and needs were considered?

3.9.3. At what point(s) in the land tenure reform process did engagement happen?

3.9.4. How was progress communicated to the community, and how often?

3.9.5. Do you think that anyone, due to their status in the community, or out of concerns for safety, might not have been able to engage as much as others?

3.9.6. Our Constitution affirms the equality of all individuals, regardless of race or gender, but we know that this isn't always respected in all communities. How were the needs of women, children, and other marginalised groups considered?

3.9.7. Did any disputes or conflict arise during the land tenure reform project? If so, how were these handled? If not, to what do you attribute this success?

4. Land Administration Systems

4.1. Regarding land rights:

4.1.1. What rights to occupy and use land did the community have before land tenure reform?

4.1.2. What rights do they have now?

4.1.3. What was the motivation for changing land rights types for land rights-holders?

4.2. Do people farm in the area (grow crops and keep livestock)?

4.2.1. If so, is it for subsistence or do they sell their produce in a market, or both?

4.2.2. Has agricultural productivity improved because of the land tenure reform process? Please quote evidence if possible.

4.3. Are people's land rights more secure after land tenure reform, and what makes them secure?

4.4. Regarding recording of land rights:

4.4.1. How are land rights recorded? Please describe both the format and the process of recording.

4.4.2. What information is recorded?

4.4.3. Are there clear standards for recording land rights?

4.4.4. How are plots and rights-holders identified?

4.5. If someone wants a copy of the record of their land rights:

4.5.1. How could they go about getting hold of it?

4.5.2. Are there any costs involved?

4.5.3. Is the process well known for all land rights-holders?

4.6. How are the land records going to be kept up-to-date?

4.7. Where are land records kept?

5. Review process

5.1. When, and how, was the project reviewed?

5.2. How is the project's success measured?

5.3. In your opinion, is the community better-off now than they were before? If yes, how / why? If not, do you think the situation will improve, when, and how?

5.4. Who reviewed the project, and what qualified them as competent reviewers?

5.5. How were the State and/or the community involved in the review process?

5.6. How was the review process funded?

5.7. Have there been any unintended consequences to the land tenure reform process?

6. If you would like to make any other comments or provide any other information you think might be useful to me, please do so.

Thank you very much for your time!

Questions for traditional authorities

The purpose of this questionnaire is to learn about your experiences of land tenure reform. (Land tenure reform is about strengthening people's land rights in keeping with Section 25(6) of the Constitution.) Thus far the SA government has not fulfilled this obligation. I want to know what should be done, in your opinion, to strengthen people's land rights in your community.

Rest assured that I have no political connections and the results will be used only for my own research at UCT. If you prefer, I will make sure that your responses are kept completely anonymous. Also please note that the results of my research will not benefit you directly – I am not reporting back to any local authority – but I hope that my research will be used to improve land tenure reform generally.

- The use of all information is in terms of the ethics policy of the University of Cape Town.
- No information will be published which will lead to your detriment.
- All information is used for research purposes only and the interviewer is a student at the University of Cape Town.
- You may refuse to answer any question and may also withdraw any information provided at any stage. If you don't understand any question, please feel free to ask for clarity.
- You may withdraw from the research at any stage.

Thank you for taking the time to assist me with my project. Your contribution is appreciated.

1. General information

1.1. What is your role in the community?

1.2. For how long have you held this title?

1.3. Do you think that it is a good idea:

1.3.1. for people in your community to be able to sell their land to others, without your consent / involvement? Explain the reasons for your answer.

1.3.2. For big companies to be able to buy land here and develop it without your consent? Explain the reasons for your answer.

2. Drivers of land tenure reform

2.1. What benefits or improvements have you seen / would you like to see in your community?

2.2. Why is land tenure reform necessary in your community?

2.3. What do you hope the end of this process will look like?

2.4. Is there enough land for everyone?

2.5. Why do you think the government is being slow to fulfil its constitutional obligation for land tenure reform?

3. Process of land tenure reform

3.1. How did you become a recognised leader in the community?

3.2. Does everyone recognise you as the community leader, or do some dispute your leadership?

3.3. Please describe the rights people have in your community, and who has these rights (e.g. community members have the right to live on a plot with their family, to grow crops and graze cattle in certain areas, etc.).

3.4. How do you engage with the community members and government around development?

3.5. Were there any disagreements between stakeholders around development projects? If so:

3.5.1. What were the disagreements about?

3.5.2. How were they resolved?

4. Land Administration Systems

4.1. Do people farm in the area (grow crops and keep livestock), and if so, is it for subsistence or do they sell their produce in a market, or both?

4.2. How secure are your community's land rights, and what makes them secure?

4.3. Do you as community leader record land rights - who has rights to what and where? If so how do you record these?

4.4. Who else has access to this information?

4.5. Does anyone check up on you to make sure you are doing a good job as chief?

5. Review process

5.1. Do you think that people's lives will be improved because of land tenure reform? If so, please explain how. If not, please say why.

5.2. How easy is it to provide feedback to other stakeholders?

5.3. Have there been any unintended consequences to development in your area?

6. If you would like to make any other comments or provide any other information you think might be useful to me, please do so.

Thank you very much for your time!

Questions for NGOs

The purpose of this questionnaire is to learn about your experiences of land tenure reform, especially but not exclusively related to customary land tenure reform as applied to people living in so-called 'communal areas'. I want to know what has worked and what hasn't worked and how satisfied you are with the outcome. I would also like to find out how it could have been done better, in your opinion.

Rest assured that I have no political connections and the results will be used only for my own research at UCT. I will make sure that your responses are kept completely anonymous. Also, please note that the results of my research will not benefit you directly, but I hope that my research will be used to improve customary land tenure reform generally.

- The use of all information is in terms of the ethics policy of the University of Cape Town.
- No information will be published which will lead to your detriment.
- All information is used for research purposes only and the interviewer is a student at the University of Cape Town.
- You may refuse to answer any question and may also withdraw any information provided at any stage.
- You may also add any information at a later stage, if you see fit to do so.
- You may withdraw from the research at any stage.

You may enter your responses directly into this document, or create a new document if you prefer.

Thank you for taking the time to assist me with my project. Your contribution is appreciated.

1. General information

1.1. What is your / your organisation's involvement in land tenure reform?

1.2. What, in your opinion, is contributing to the success or failure of land tenure reform in SA?

1.2.1. Do you think that individual titling of communal / customary land is the way forward? Explain your answer.

1.2.2. If not, what are the alternatives?

1.3. Why is land tenure reform necessary in South Africa?

1.4. Describe the ideal end state for land tenure reform.

2. Drivers of land tenure reform

2.1. What are the drivers of land tenure reform?

2.2. How has the availability of new technology impacted on land tenure reform?

2.3. How has South African land policy in general helped or hindered the land tenure reform process?

2.4. What was wrong with how things were before?

3. Process of land tenure reform

3.1. What needs are being addressed through land tenure reform?

3.2. Do you think customary land rights-holders' needs are being met through the land tenure reform process?

3.3. Please comment on the quality of leadership at national, local, and tribal level.

3.3.1. Can you identify any cases of corruption?

3.3.2. Does the leadership have realistic expectations of what can be achieved in the allocated timeframe?

3.3.3. Are leaders supported, recognised, and accepted by the communities they represent?

3.4. Are local norms and practices accommodated in the envisaged end product of land tenure reform?

3.5. Do you think that we are moving towards a unitary land system, or perpetuating a state of legal pluralism and organisational multiplicity?

3.6. Has the process of land tenure reform been rushed / taken too long?

3.7. Has the process of change been appropriate for the context? If yes, how? If not, why not?

3.8. How does the land tenure reform programme acknowledge past injustices and seek to rectify them?

3.9. Have capacity issues hindered land tenure reform, and if so, how have they been addressed?

3.10. How is the adaptability of tenure and institution accommodated in the envisaged end product?

3.11. Regarding collaborative governance:

3.11.1. Do you think that all relevant stakeholders are able to have their say? If relevant, please provide examples.

3.11.2. Are all stakeholders engaged from the outset?

3.11.3. Is communication on the progress of land tenure reform effective and filtering down to all relevant parties?

3.11.4. Is there sufficient awareness of the cost of participation (not only economic cost, but social too)?

3.11.5. Is there sufficient awareness of the need to ensure the safety of those who opt in or out of participatory processes?

3.12. The Constitution promotes human rights, but we know that in many contexts the rights of women, children, and other vulnerable / marginalised groups are not upheld.

3.12.1. In your experience, have you witnessed examples of this marginalisation of certain people groups?

3.12.2. How has this disjuncture influenced the land tenure reform process?

3.13. Are adequate dispute resolution mechanisms in place?

3.14. How has the current political and legal context shaped land tenure reform, and has land tenure reform influenced policy formulation?

4. Land administration systems

4.1. Has land tenure reform contributed to improved agricultural productivity and beneficial use of land?

4.2. Has there been adequate identification of the appropriateness of existing land rights, which land rights are insecure, and why?

4.3. Has land tenure reform improved tenure security, and how?

4.4. In your opinion, how should land rights be recorded?

4.5. Who should be the custodian of records of land rights?

4.6. Who should have access to these records?

5. Review process

5.1. To your knowledge, are community members and tribal authorities able to give feedback on the success and significance of land tenure reform for them? How easy or difficult is it for them to access feedback mechanisms?

5.2. Have you been involved in review processes, and if so, what were your experiences?

5.3. Was sufficient funding allocated for review?

5.4. When, during the land tenure reform process, were reviews undertaken and by whom?

5.5. Have there been any unintended consequences to the land tenure reform process?

6. If you would like to make any other comments or provide any other information you think might be useful to me, please do so.

Thank you very much for your time!

C. PEER SCRUTINY

Comments on validity of conceptual framework for cadastral systems development
5 June, 2019

1. Background

Simon Hull, a PhD candidate in the Survey Department at the University of Cape Town, approached me to comment on a chapter in his thesis that outlines his conceptual framework. In his email, he stated that one of his examiners had reflected that the conceptual framework had not been sufficiently validated and recommended self-critical reflection to address this. His supervisor, and he himself, felt self-reflection might be a biased way of validating the framework. He research methods of validation, and found that "expert validation" can be used. He then approached me, amongst others, as a consequence of having interviewed me for one of his case studies, and as a researcher who has been involved in land administration reform projects in South Africa. Simon also provided three questions that he suggested could guide the validation comments. I agreed to provide my thoughts on the chapter and I have used his questions as a way of organising my comments.

2. General comments

I read the chapter with great interest, and appreciated the very accessible and logical way Hull has expressed a field of great of complexity.

In particular, I thought his identification of three schools of theory, with descriptions of the thematic variations within them, useful for enabling a quick comparative assessment of the thinking that lies behind any proposed land administration system change. Since the thinking behind a proposed change often shapes the goals and strategies adopted, this is a key section in the conceptual framework. I don't particularly like the notion of a continuum, because the evidence on the ground is that new configurations of local land administration and tenure arrangements are constantly arising, and they don't always fit neatly into a continuum. Instead, they often show some features that go to one side of a continuum while others head in the other direction. Nevertheless, the continuum is widely accepted and as long as it isn't applied too dogmatically, it can be a useful organising principle.

3. Is this something that you could use, practically, to help guide land tenure reform projects? The idea is that the framework contains a checklist of things that have to be considered and addressed to ensure success.

Yes, I believe it is. The reiteration of the need for significance of the changes to particular contexts and the people within them, the connection between significance and success (measured in terms of the desired goal), and that these both are required for sustained outcomes, is practical and convincing. I would explicitly add an additional layer to sustainability, namely, that it also refers to long-term bureaucratic robustness. I think Hull does imply this but given the importance of this component in South Africa, it's striking that he doesn't make it immediately explicit.

The graphic at the end in the conclusion (and indeed in most of sections) neatly lays out all the system steps that need to be considered and thought through in order to effect land administration system change. It's comprehensive, well sequenced and works well as a tick list. Definitely something I will share with colleagues.

4. Are there any glaring omissions from the framework? Sensitivity to context is important. The former iteration of the framework had indicators proposed for each element, but the examiner found this to be too prescriptive, hence the framework stops at the element level. It is hoped that this is general enough to apply to all/most customary contexts while allowing context-specific nuances to emerge.

I did wonder at the relative absence of an engagement with class dynamics and capitalism more broadly. This isn't an ideological point but rather that the processes by which landed property became exclusionary and privatised are, in my understanding, tightly interlinked with the development of capitalism. That is perhaps old news, but since this framework was developed specifically to look at cadastral system development in developing contexts, and in former TBVC states in South Africa, it seems an odd lacuna. Land rights (access, use, authority) under Traditional Authorities in SA was not only transformed through colonial and apartheid "laws and practices" but was so transformed in order to create a pool of cheap labour, by pushing Africans off land while enabling some subsistence agriculture. The "norms" that underpin the land tenure arrangements mediated these functions, and continue to operate today by providing land to the poor as a social bulwark against social reproduction crises. There are also now contested as mining capital creates alliances with traditional authorities that seriously threaten the land-based livelihoods of the rural populace. However, I do concede that it isn't apparent to me how such a consideration could be built into the framework.

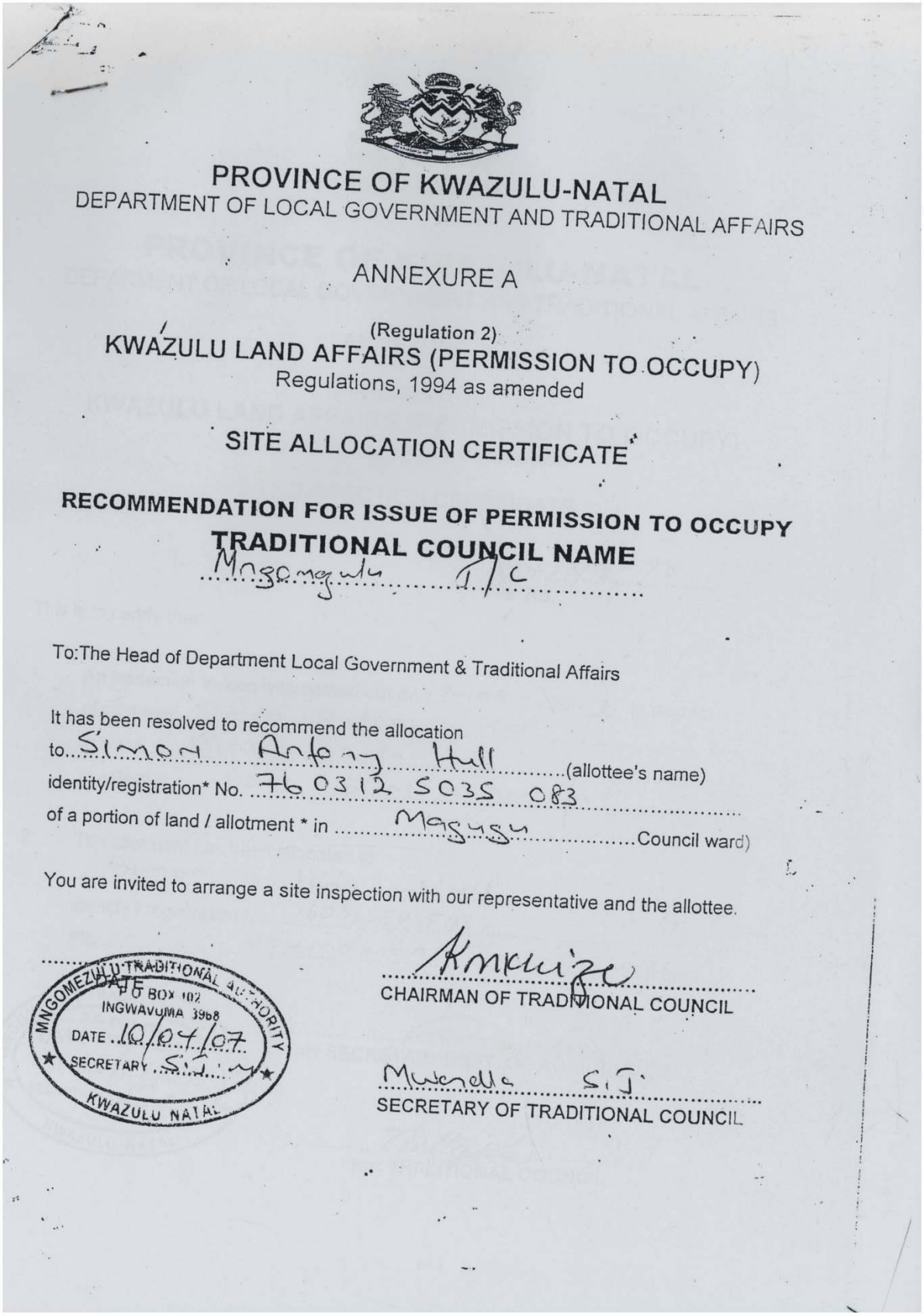
In Section 5.1.2, I thought a table that showed possible land policy goals against each of the theories would have provided a useful summary and quick reference for a practical guideline.

5. Besides the above, are there any other weaknesses in the framework, and what are its strengths?

I've discussed the strengths already but let me list them: the theory helps locate background thinking that informs the goal of the change; the three indicators (success, significance and sustainability) are useful quick references for checking a process; the links of the different theories to possible land policy goals is useful for seeing the application of theory; and the steps in the process as a whole are clear and logical and provide a useful way to plan land tenure change.

The weakness, other than the class and capitalism concern above, are relatively minor, in my view, and mostly arise because the material dynamics around property are not properly factored into the framework. Thus, for instance, arguing for good leadership of change processes is, of course, important, but leadership is unlikely to resolve some of the class conflicts arising over land and that are expressed in severe and violent struggle. Similarly, participation is always important, and it's is important that it's sustained and of sufficient depth that it ticks the box of proper and full participation. However, power dynamics block participation and can't be resolved simply through accessible language or translation or having everyone in the room. The King cannot be contradicted once he's spoken, so he should never come into a collective process until the change manager is sure there's sufficient consensus already in place. Where the framework would work well is where the divisions are not too great and the power gaps not too extreme, but other processes would be required in addition where the extremes prevail.

D. INGWAVUMA PTO



PROVINCE OF KWAZULU-NATAL
DEPARTMENT OF LOCAL GOVERNMENT AND TRADITIONAL AFFAIRS

ANNEXURE A

(Regulation 2)
KWAZULU LAND AFFAIRS (PERMISSION TO OCCUPY)
Regulations, 1994 as amended

SITE ALLOCATION CERTIFICATE

RECOMMENDATION FOR ISSUE OF PERMISSION TO OCCUPY
TRADITIONAL COUNCIL NAME
Mngomezulu T/C

To:The Head of Department Local Government & Traditional Affairs

It has been resolved to recommend the allocation
to...Simon Antony Hull.....(allottee's name)
identity/registration* No. 760312 5035 083
of a portion of land / allotment * in .....Magusa.....Council ward)

You are invited to arrange a site inspection with our representative and the allottee.

MNGOMEZULU TRADITIONAL AUTHORITY
P O BOX 102
INGWAVUMA 3968
DATE 10/04/07
SECRETARY S.J.M
KWAZULU NATAL

Kmkuize
CHAIRMAN OF TRADITIONAL COUNCIL

Mkhwanazi S.J.
SECRETARY OF TRADITIONAL COUNCIL

PROVINCE OF KWAZULU-NATAL

DEPARMENT OF LOCAL GOVERNMENT AND TRADITIONAL AFFAIRS

ANNEXURE B

(Regulation 4(c)(i)

KWAZULU LAND AFFAIRS (PERMISSION TO OCCUPY)

Regulations, 1994 as amended

SITE INSPECTION CERTIFICATE

10/4/3/3 - 78
File No.

This is to certify that:

1. An inspection in-loco was carried out on 17-05-2007 in respect of allotment Simon Antony Hill
In ward Mngomezulu
In extent 60m x 50m = 3000m²

2. The allotment has been allocated to
Simon Antony Hill (allottee's full name)
identify / registration No. 7603125035083
#for residential purpose.

MNGOMEZULU TRADITIONAL AUTHORITY P.O BOX 102 INGWAVUMA 3968 DATE 10/04/07 SECRETARY KWAZULU NATAL

for: SECRETARY DEPT. OF AGRICULTURE

for: TRADITIONAL COUNCIL

PROVINCE OF KWAZULU-NATAL

DEPARTMENT LOCAL GOVERNMENT AND TRADITIONAL AFFAIRS

ANNEXURE C

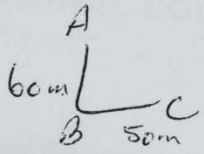
(Regulation 4(c)(ii)

KWAZULU LAND AFFAIRS (PERMISSION TO OCCUPY)
Regulations, 1994 as amended

SKETCH

10/4/3/3 - 78
File No.

Corner point description
A 60m
B 50m
C
D
E
F



(draw figure representing the allotment here (below)

The figure.....
Represents allotment.....Simon Antony Hall.....
In ward.....Mngomezulu.....
Area/district of ....Ingwavuma.....
In extent.....60m x 50m = 3000m² square meters
.....

UHULUMENI WAKWAZULU - NATA
DEPARTMENT OF AGRICULTURE
AND ENVIRONMENTAL AFFAIRS
2007 -05- 17

MNGOMEZULU TRADITIONAL AUTHORITY
P O BOX 107
INGWAVUMA 3968
DATE 10/04/07
SECRETARY S.J.

.....
for: SECRETARY DEPT. OF AGRICULTURE

Mwandla S.J
for: TRADITIONAL COUNCIL SECRETARY

Copy received by me on.....

S.A.
SIGNATURE OF HOLDER AND INITIALS