

# Land Titling Suitability Classification Theory

Michael BARRY, Canada and Rosalie KINGWILL, South Africa

**Key words:** Evaluating title suitability, title maintenance, land registration effectiveness

## SUMMARY

We present a methodology comprising a three part classification theory and framework for evaluating if land titling is suitable in a particular situation. It simultaneously provides a tool to analyse what remedial action might be required in situations where land titles have been implemented, but do not yield the desired outcomes. We suggest it is suitable for adaptation to interventions that use Fit-for-Purpose land administration and/or pro-poor land recordation. It can also serve to identify deficiencies in land governance. The methodology should be useful for policy makers, land professionals, officials, politicians and community organisations to analyse a situation and determine if a proposed titling project should proceed or not. It also provides a rationale for representatives of affected communities to make recommendations regarding tenure. Where titles have already been issued it becomes a tool to guide where remedial action is necessary. Land titles are suitable in some situations. In others, they are not suitable, yet they are still implemented, often grounded in ideology rather than a proper analysis of the local situation (Kingwill 2017a, b, c, 2018). The Land Suitability Classification theory draws on the Technology Acceptance Model (TAM) used in management information science, and the Theory of Reasoned Action on which it is based. TAM holds that an effective information system, such as a registration system or land records system, is one where users find it useful and easy to use: landholders actually use the system or there is a strong probability that they will use it in future. The second theory is the efficient market hypothesis that evaluates how well a hypothesis fits a financial market. There are four classifications in our Land Titling Suitability Classification theory: strong, semi-strong, semi-weak and weak. These can be measured by the presence or absence of critical success factors (CSFs) for the system to work. In strong situations, all the CSFs are in place. People use the system, or are likely to use it in future. In a semi-strong situation, some of the CSFs are missing and some landholders may not use the system; i.e., they may not register transactions in land as some CSFs are absent. However, it may be possible to create these CSFs, and so registration should be considered, but only if mechanisms are available to advise and support landholders regarding registration of transactions. In semi-weak situations, titling is ill advised, as landholders are unlikely to register transactions as a number of CSFs are absent and it may not be possible to create them. They may evolve in future, however. In weak situations, land registration is unlikely to be effective at all. It is not suited to the circumstances.

# Land Titling Suitability Classification Theory

Michael BARRY, Canada and Rosalie KINGWILL, South Africa

## 1. INTRODUCTION

We present a methodology and system of theories to evaluate and diagnose titling suitability in particular contexts. The main component is a simple classification framework for analysing whether land titles, or an alternative form of documentary record of land interests, are suited to a particular situation. The framework can be adapted to any situation where documents are contemplated or have been implemented as part of strategies to improve tenure security. Examples include titles, Certificates of Tenure, Letters of Residence (Barry and Kingwill 2020, Fit-for-Purpose land administration, pro-poor land recordation, the Social Tenure Domain Model and systems that use unstructured or semi-structured data such as multi-media interviews as proposed in the first author's Talking Titled system (Barry et al 2002, 2013, Barry and Asiedu 2016). We focus on land registration and land titling as the illustrative diagnostic context, including rights that are eligible for upgrading to title, such as in South Africa.

The classification framework addresses a gap in assessing land title suitability and titling support services in land policy. It should be particularly useful for policy makers when developing operational plans to implement policy. Politicians require simple messages when communicating policy to the public, including people who are not land experts. At the macro-level the methodology may also point to gaps in governance structures and processes, which can thereby be addressed to improve overall land governance. At the community level, the framework is valuable for people who represent communities, e.g., NGOs, land professionals and lawyers, to have an easily communicable and convincing rationale to present to officials or the courts concerning tenure security. We use four classifications for assessing titling suitability in particular situations: strong, semi-strong, semi-weak and weak.

Each category is assessed according to the critical success factors (CSFs) that are necessary for the programme to achieve the desired policy goals and objectives. CSFs emanate from management science and information systems theory, defined as a set of enabling conditions, characteristics or variables that have a direct, serious impact on the viability of an organisation, programme or project. These factors must perform excellently for a project to succeed (Miller 1985, Business Dictionary N.D). In this case, we apply CSFs to titling or some other form of land records system.

In the case of a 'strong' classification, all the CSFs are in place and the message is to proceed with a titling or titling upgrading programme. In the event that titles are already in place, there should be demonstrable evidence that they are working very well, including rights that are due for upgrading to title. In semi-strong cases, titles are recommended but certain title maintenance activities are necessary to ensure they are effective. A number of CSFs need to be put in place. In cases where titles have already been implemented, an evaluation of the situation would show

that title maintenance activities are necessary. In weak and semi-weak situations, a significant number of CSFs are missing and implementing a titling programme is ill advised.

The authors have developed the classification theory in consequence of more than 35 years' experience respectively in research, consulting, and working in local government, land administration and land tenure security. Countries where the authors have worked include South Africa, Canada, Ghana, Kenya, Nigeria, the Philippines and Somaliland. They have also consulted relevant literature in many other African and South-East Asian countries as well as Latin America. Much of the illustrative context in the paper is based on work in South Africa, as that is where the bulk of our work has occurred. The part of the theory presented in Table 1 adapted the classifications used in the efficient market hypothesis, which evaluate strong or weak fits with financial markets, to land title suitability. Figure 2 draws on various versions of the Technology Acceptance Model (TAM) which is an information systems theory that models how users come to accept and use a technology (Davis 1989). TAM is based on the Reasoned Action Approach, which is a social prediction theory (Fishbein and Ajzen 1975, 2010). TAM holds that an effective information system is one that people use; and a land record system is an information system. The question that informs the title classification framework is, if people do not use the registration system to effect transactions in land through sales, inheritance, divorce, separation, gifts, and so forth, then what? The strong – weak continuum provides a tool to analyse the constituents that are needed for titles to work in known situations. This can inform strategies to implement titling or not; or to maintain titles; or alternatively, avoid implementing them altogether. The methodology is essentially a diagnostic tool and we do not address alternatives to titling in this paper.

The paper proceeds as follows. We discuss the problem context and the main types of strategic options or channels that may be available for transacting in land. We then present the suitability classification framework, followed by a 'causal process framework' for identifying and evaluating factors that influence registration usage while also determining the critical success factors in a particular situation.

## **2. PROBLEM CONTEXT**

The theory that individual land titles create tenure security and opportunities for economic growth based on titled land providing collateral for loans has been advocated since the 1840s (Shipton 2009). The theory is attractive to policy makers as it is very simple. It also aligns with the economic theories of titling that support political objectives of privatisation, which has predominated in western market economies for two centuries. It has often been promoted evangelically as a solution to promoting development in colonial or post-colonial contexts defined as 'developing economies'. It has rarely been accompanied by analysis of complex, multi-agent situations and legacies found in societies with legal pluralism.

We have found no policies in the contexts in which we have worked that are linked to examining the critical factors that have to exist for the policy to succeed. This is not surprising as they were often implemented to promote certain political ideals linked to liberalisation and land enclosures, the ideas behind which have had widespread traction over a long period of time.

Land held under individual title is thus commonplace in developed economies but also, significantly, in many developing economies amongst a strata of the population. Yet, titles do not work as intended simply by virtue of their creation (Cousins et al 2005, Kingwill 2014, 2017 c, 2018). They work if the factors critical to their success exist or strategies are in place to create the CSFs in a particular situation. Diverse customary or hybrid systems of land tenure in developing economies exist alongside titling programmes, and are testimony to competing ideas and conditions for property reforms (Cousins et al 2005, Kingwill 2008, 2013, 2014, 2021). Our titling suitability thesis is built around observations over many decades that numerous titling programmes have done damage in a range of contexts, such as the development programmes that were implemented in parts of Africa post World War II (Shipton 2009) and many contemporary examples that are highly problematic. The critical factors for titling to succeed were not carefully considered prior to implementing the programmes or as part of the process of evaluating and maintaining them. Nowadays, some interventionists are more conscious of avoiding situations that Coetzee *et al* (2001) acerbically refer to as ‘ivy-league educated consultants’ who drop out of the sky to dispense what they regard as superior knowledge to locals who are supposedly eager to absorb their largesse. Locals tend to understand their situation very well!

Problems with ill-conceived titling programmes have been widely described in the literature and we do not pursue them in detail here. In brief, introducing titles, or any system of documentation or land records, is a radical intervention that results in social change that alters human relationships and the governance thereof. Titles thus foment structural change which is likely to be resisted or contested, unless local adaptations or compromises are made (Kingwill 2013, 2017c, 2018, 2021). Changed power relations facilitate land grabbing by political elites in a settlement and by powerful individuals within a household (Barry and Danso 2014). These transformations occur at all the socio-political scales from families, households and communities through to officialdom.

The imposition of titles or records is based on the assumption that people will alter their behaviour and social norms when titles or certification systems are introduced (see Figure 2) and embrace a title or record system when transacting in land or defending their land from being grabbed. The question is, why should they if it threatens familial and social relationships and networks that provide known social security? Instead, they may choose to use systems which have served them well in the past, even if these may be associated with forms of patronage, clientelism and patriarchy (Anciano 2018, Geyer 2023), or choose to adapt both the title system and pre-title systems to serve their interests in a changing world. Seen in this way, transacting ‘off-register’ is not regarded as a transgression but a rational channel that to transactors makes social and economic sense (Kingwill 2013, 2014, 2017b, c, 2018, 2021, Geyer 2023).

Off-register transacting involves versions of formal or informal private conveyancing or oral agreements. Private conveyancing systems are not inherently problematic. Some well-developed property markets still use them. However, in systems such as South Africa where the courts only recognise registered transactions once land is on the register and/or financial institutions only issue mortgages on a clean title, off-register transactions are problematic. One economic consequence is they can freeze the formal land market. For example, financial

institutions may not issue loans using land as collateral in areas where many titles are cloudy. Buyers have to take out personal loans— if they can access them (Barry and Whittal 2016). Cloudy titles can also severely impact land use planning and land administration if the de facto owner is not the registered owner. Property rights cannot be used to impose land taxes, expropriate land for service installation or cover engineering service and other utility bills.

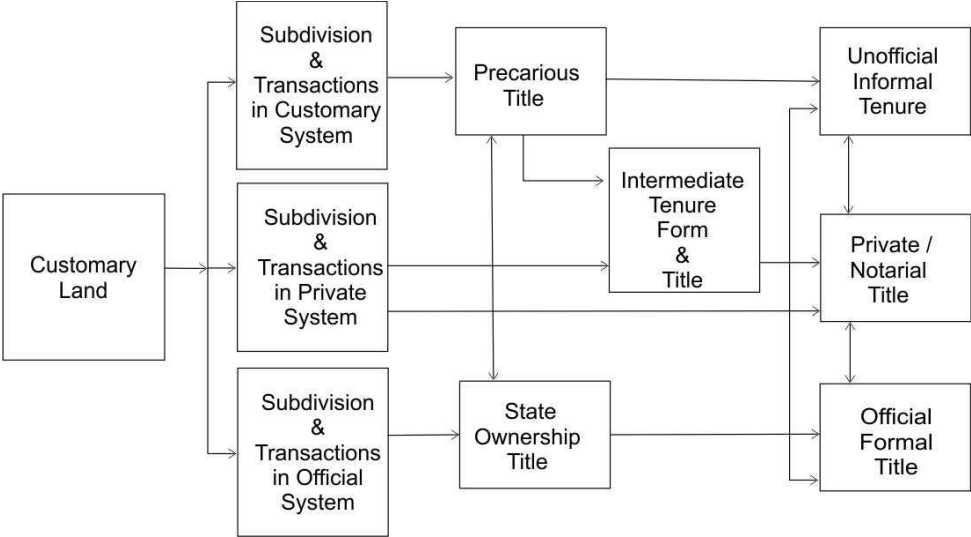
South Africa's state-subsidised housing programme illustrates the challenges of cloudy titles that result from off-register transactions when viewed through the lenses of the formal property system. The country has implemented one of the largest known state-subsidised housing programmes in the world. As a consequence, it has also resulted in one of the largest titling programmes. Since 1994, when the first fully democratic elections took place, over 4 million housing opportunities have been created. Of these, approximately 2 million are houses on land held in individual ownership with title deeds registered in the Deeds Registry (Rust 2018, CAHF 2018, Department of Human Settlements 2018-2019). A significant number of these have changed hands off-register. (71point 4 2019, 2022a, b; Robey & Meltzer, 2020; Buthelezi 2020; Masiko-Kambala 2021; Kingwill & Barry *in litt*) This has created a number of problems. Off-register transactions are not recognised in law and this means that owners, sellers and buyers may encounter a range of difficulties that may impede their ability to settle deceased estates, open accounts and access services, including financial services. It certainly impedes state investment in infrastructure that requires clean title and compliance with planning and other regulations (Barry and Roux 2016b, Charman et al 2017, Barry 2019, Manona 2022, Kingwill 2022, Chief Registrar of Deeds 2022). These problems do not necessarily manifest immediately upon transaction, but often down the line when title may be clouded across more than one generation of heirs or transactors. There are many known cases where this has led to tenure insecurity. Some off-register purchasers have lost their land or risk losing the land as the seller is still the registered owner. There are numerous cases of sellers or their heirs attempting to reclaim the land and actually evicting the buyers (Kingwill 2013, 71point4 2022b, Barry 2020). The first author encountered a case in the field where the court evicted the buyer. The buyer then attempted to demolish improvements he had made to the property. The case became iconic to community members, and officials and lawyers in the town who all know about the 'Yellow House' and its problems (Barry and Roux 2016b).

The costs of cleaning up these titles is prohibitive and we have concluded elsewhere that it is not practical to fix the title ex post facto by means of 'title adjustment' (TA) which is a legal mechanism in South Africa involving lawyers or magistrates who serve as title adjustment commissioners (Kingwill and Barry *in litt*). Many of these situations are what we would label 'semi-strong'; and rather than try to fix the problem ex post facto by means of title adjustment, which is financially onerous and time consuming, the state and civil society should intervene to advise and support people in registering transactions.

### **3. Multiple Agent – Multiple Transaction Channels**

Using the discussion in Barry and Augustinus (2016), we provide a generalised example of the strategic options available to landholders when transacting in land. Figure 1 depicts the channels, process flows and structures that people may use in strategies to effect land

transactions in an urban or peri-urban customary society. It is a generalised adaptation of the detailed graphics in Durand-Lasserve *et al* (2013, 2015) for Mali, where the features identified by the authors have many comparable features to South Africa and elsewhere. It can be deduced that a number of agents would be involved in land transactions in any of these scenarios.



**Figure 1. The Land Transaction Process Flow in Plural Administration Systems** (Barry and Augustinus 2016, Durand-Lasserve *et al* 2013, 2015)

Drawing on marketing theory, people choose a transaction and/or tenure securing strategy (a ‘channel’) that will afford the highest level of security at a social and monetary cost that they can afford and are willing to pay (Kotler and Keller 2012). This is providing they have not been influenced by emergencies that cloud their judgement or other issues that force them to act out of desperation. Transaction costs are estimated in terms of affordability; costs or social obligations associated with patron-client, kinship and other power relationship; costs associated with access to information; and levels of impedance (difficulty) estimated by ability to interact with the official land administration system. The ability to access and interact with official systems may be compromised by governance issues such as bureaucratic and legal quagmires, administrative inefficiencies, corruption in land administration and forged documents (Barry and Augustinus 2016). The motivational antecedents or factors that influence a decision are illustrated in Figure 2 below.

In the case studies described in Durand-Lasserve *et al* (2013, 2015) there are three channels through which a land transaction may occur:

- (1) The customary channel where transactions tend to occur through customary leadership structures without involving state structures. In some jurisdictions, e.g. Ghana, the process may involve both state and customary institutions (Barry and Danso 2014),

- (2) The public channel, where transactions occur using the official processes and structures by registering titles or deeds. In most cases, at least in urban situations, the authorities hope that this is the channel that landholders use or will use.
- (3) The private channel, where developers sell plots using notarial deeds through a form of private conveyancing. In some jurisdictions, this is not a legal strategy. In South Africa, for example, the private channel may also be used by community groups in urban areas to facilitate transactions where landholders themselves, rather than the state, hold the package of documents that constitute the chain of de facto title. The law does not recognise these, and it can be expensive and difficult – sometimes impossible - to clean up these titles so that they do comply with the law (Barry 2020, Kingwill 2017a, b).

Barry and Augustinus (2016) discuss the notion of channels as ‘strategic options’ and also how tenure management systems and social norms evolve over time.

We now present the classification theory.

#### 4. Land Title Suitability Classifications

Table 1 provides the classifications we have alluded to above, with added synthesis of ideas in Kingwill and Barry (*in litt*). The description for each classification is based on evidence gathered by the authors in a range of research projects. Each case or planning scenario requires examination of the classifications and adaption of the table to the relevant situation. As noted above, we are using land titling as the illustrative context. The table, which is populated by appropriate descriptions of what is strong or weak and combined with CSFs, can, however, be adapted for any land record system. It is thus a methodology and a diagnostic tool, rather than a blueprint or prescription, and though each case represents a generic, it may have features that are unique. The factors exemplify what may be observed in particular situations and descriptions should be articulated for each classification.

**Table 1 Land Title Suitability Classifications** (Kingwill and Barry *in litt*)

Strong	There is a very strong probability that all landholders will register sales or inheritance of properties in a region or settlement. There are likely to be no or minimal claims on the land outside of the nuclear family and the registered title holder. Landholders trust the registry system. Governance is likely to be good and there is little chance of landholders being deprived of their rights through fraudulent manipulation of the registry by politicians, officials or local elites or registry errors. Landholders may use their registered land as collateral, but this is not necessarily a CSF it simply indicates that the system is working well. The CSF is people register their transactions, i.e., they use the registration system.
Semi-Strong	Landholders view titles positively, possibly as one of a range of tools to provide tenure security. However, they may not register secondary transactions for various reasons indicating that certain Critical Success Factors (CSFs) may be absent or not be performing to the required level. Landholders may not trust the

	<p>state system to protect their rights (See Figure 2 below). One scenario is that when the title holder dies there may be many claims on the land by family members, and so for family members it is best to retain an antecedent on the title as a symbol of the family and avoid registering an inheritance which would likely spark family disputes (Kingwill 2013, 2014, 2017a). Landholders may consider the financial costs too high to warrant registering a sale of the property, or they may be influenced by other cost factors such as governance factors, procedural difficulties in registering and lengthy time delays. Inefficiencies among various agencies, state and non-state, may dissuade parties to a transaction from registering. They may be suspicious of mortgaging the property or fear they might lose it because their income streams are sporadic, seasonal or unpredictable. Power and governance factors, such as the activities of local elites, political factions, gangs or officials may dissuade people from registering.</p>
Semi-Weak	<p>Landholders consider titles to be useful in recording that they have land rights which provides some protection against land grabbing by the state or well-connected elites. Due to the presence of a broad constellation of interests in a particular unit of land, involving people in the family, local community, and perhaps nationally and internationally (e.g. a diaspora that remits money home), a number of complementary measures are used to prove ownership and provide safeguards for the collective interests. However, transfers are avoided as are mortgages (Barry and Augustinus 2016, Kingwill 2013, 2014, 2017b). In one scenario, if forced to provide a name of a transferee, the family provide the name of a family member regarded as a custodian and not an owner, challenging the existing proprietary principles of title since alienation by the custodian is not customarily permitted (Kingwill 2013, 2014). While documents are held in high esteem and safeguarded as proof of ownership in contests over land or for accessing consumer services, a strategy using a document may be one of several strategies to defend their land rights. On its own, a document or certificate is not sufficient evidence in certain circumstances, and owners may indulge in ‘forum shopping’ to combine various strategies to defend their rights. These strategies may include the employment of land guards or militia as ‘security’ to prevent land grabbing or in some cases to actually grab land (Barry and Danso 2014, Barry 2006). Documents provide important evidence where disputes reach a point of adjudication, providing the dispute resolution forums act in harmony, which is not guaranteed, especially if there is a culture of forum shopping. Court judgments may be inconsistent and tend not to provide clear principles for adjudication in this category. The judiciary and the police themselves may be compromised.</p>
Weak	<p>Individual land titles may be an anathema or an obstacle to collectively held rights and/or there is likely to be strong resistance to registration. Societies that identify as ‘indigenous’ may accept a collective title on the grounds of indigenous rights, but use oral tradition and oral history to determine internal rights, rather than paper documents. This approach applies to family lineages, locally constituted groups with local recognition of membership; groups to whom land has been</p>



	<p>restituted to a collective such as a Communal Property Association (CPA) in South Africa where individuals cannot be registered on the title. The state may document the boundaries of the land claimed by a particular society or community, which is obligatory in the case of CPA. In some cases, this boundary may remain a frontier as opposed to a precisely defined fixed boundary line until the latter has been negotiated between neighbouring and other interested parties, including the state.</p>
--	--

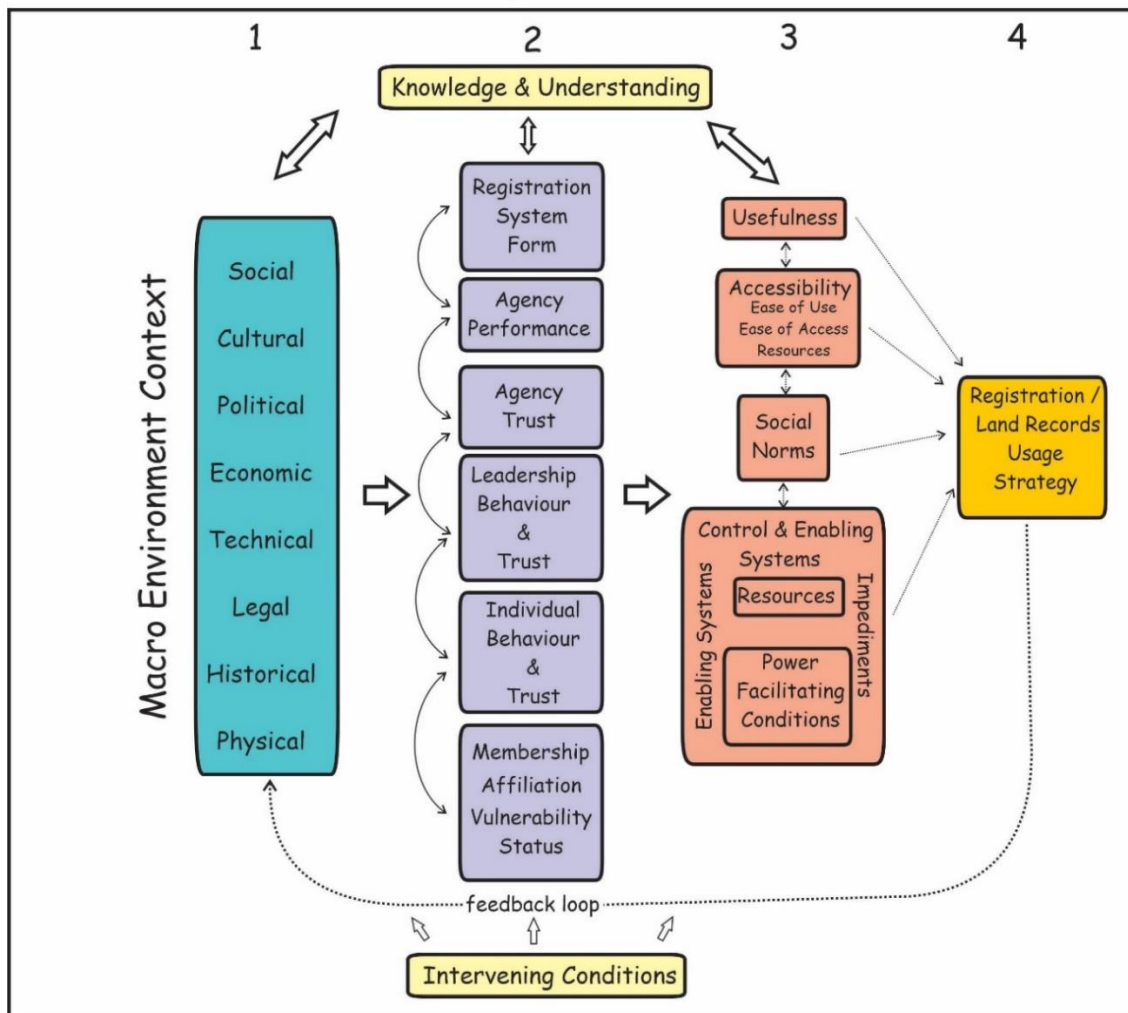
We now discuss, in general terms, some of the factors and antecedents of title that cause people to register or not register transactions or to use some other form of land record system. The CSFs are drawn from Figure 2 below.

## 5. Motivational and Critical Success Factors for Registration

Figure 2 represents a causal process theory that can be used to explain and predict land registration usage, or usage of any land record system. It can be adapted to any one of the three channels presented in figure 1. It is a framework to diagnose, measure, explain and predict users' (landholders') beliefs and attitudes, intended behaviour (i.e. likelihood to register) and actual behaviour (i.e. do they register / have they registered?). It is a means to predict landholders' likelihood to register prior to a project being implemented. It can serve as an aid to explain why landholders use the system or do not register as part of monitoring and evaluation of existing projects.

Figure 2 below is a model that adds more detail to the classifications in Table 1 and strengthens the ability to predict the likelihood to register as it shows various motivational factors, rather than purely the status quo as shown in Table 1. It provides a representation of groups of causal factors that shape usage of the registration system, and also a means by which to predict usage if one or more of the factors listed in columns 1 – 3 are changed. These add more flesh to the CSFs needed for registration to succeed and the framework serves as a tool to identify and define them. It draws on the Theory of Reasoned Action (Fishbein and Ajzen 1975, 2010) and a number of variations of the Technology Acceptance Model used in Management Information Science which also draw on the Theory of Reasoned Action (e.g. see Dwivedi *et al* 2009, Davis 1989).

## Causal-Process Explanation & Prediction Model



**Figure 2: Land Registration Usage Theory (Barry and Roux 2016a)**

Columns 1-4 in Figure 2 comprise interrelated sets of factors that influence the likelihood of use of the registration system. Measurement and analysis of these factors in all four columns, along with an analysis of the channels referred to in Figure 1, should inform a decision to classify a situation as strong, semi-strong, semi-weak or weak. As described above, each classification is associated with CSFs that should exist or be created in a particular situation. Columns 1 - 3 comprise the factors (antecedents) that influence users' beliefs, attitudes, behavioural intentions and actual behaviour.

Column 1 represents the macro-environment, the ingredients of which influence all the other factors. Column 2 consists of human or institutional properties, including composition, trust, behaviour, performance and status. These factors in turn lead to three conditions that critically affect usage listed in Column 3, i.e., (i) usefulness and accessibility, (ii) social norms and (iii) control and enabling systems. These critical conditions in column 3 are generated by all the

previous factors. All of these factors combined influence actual or predicted behaviour relating to system usage, which is captured in Column 4 in terms of the idea of a ‘strategy’. The strategy comprises measures or estimates of actual behaviour or intended behaviour relating to land record or registration usage.

Cutting across all the factors and conditions in the four columns are ‘knowledge’ and ‘understanding’, which are the cognitive conditions that feed into the entire process, i.e. how users consciously learn and interpret their choices in terms of their stand point in relation to the property system as a whole. ‘Intervening Conditions’ represent influences that occur while a programme or project is in process, which may affect or change factors in any of the columns.

The system is dynamic, continually changing, and systemic. Relationships are represented by arrows between different sets of factors, which, for the sake of simplicity, we have scaled down, but in reality there are myriad relationships; all the factors are related in some way. Due to its systemic nature, a minor change in one factor can cause a major change in the whole system. Figure 2 only shows one feedback loop, but in reality feedback loops occur between and within all sets of factors, including those grouped in a particular column.

We now discuss the factors in each of the columns in Figure 2.

### **5.1 The Macro Environment (column 1)**

Column 1 portrays the macro-environment that frames all the other factors in the succeeding columns. Macro factors include social, political, historical, legal, physical cultural and economic issues. These are the large-scale conditional factors that operate beyond individuals and communities as the overarching societal, political, legal and economic frameworks. An example of how macro conditions affect proposed interventions is where a donor or a consultant advocates for a new system, such as aerial imagery to record boundary positions, or a Torrens system of registration to replace a deeds system. These may conflict with existing law and practice. An analysis of the history of the situation should reveal why the existing system and laws exist, whether it is wise to change these, and what needs to be done to effect the change.

### **5.2 Institutional and human factors (column 2)**

Column 2 comprises the sets of factors related to organisations, institutions and human behaviour that operate at a relatively micro level but greatly influence the choices that are made in the stages leading up to registration.

*Registration System Form* refers to the method of recordation or registration and witnessing that will inform the ‘transacting channel’, such as customary, private or public as described in Figure 1 above. In reality, there is a continuum of recordation from oral to highly formalised forms of registration. Oral history and oral tradition are at one end of this continuum. Transactions are performed orally, possibly with some symbolic artifact or publicity procedure to effect a transaction. Historically, this scenario is likely to apply to the customary channel as depicted in Figure 1; or an indigenous channel or an informal settlement. In the case of private

conveyancing systems, records showing the chain of title are held privately by the landowner, or perhaps a lawyer or NGO. Informal settlements may have a local private register of this nature, or a book noting transactions. In parts of the USA, title insurance may accompany a private conveyancing system, where title insurance companies have title plants holding copies of the records which they can search when insuring a property, in effect a private deeds registry. A state managed deeds registry may exist in parallel with such a system, where records are held in the title plant and in the deeds registry. Deeds systems also exist as standalone systems in jurisdictions where there are no title plants. A rudimentary deeds system is a library of documents. The Registrar does very little quality control and accepts no responsibility for the quality of the records. The Registrar performs quality control in improved deeds systems, and may have some liability in the event of errors by registry staff (e.g. South Africa). However, title is not guaranteed and it is not indefeasible. It can be overturned in the event of errors by lawyers, registry staff or landowners. Guaranteed title systems are what the name implies. The state guarantees that the data on the title is correct. Subject to exceptions such as fraud, the name on the title is the owner, irrespective of whether they hold the title due to errors. In the event of an error, the 'true' owner is compensated financially through an assurance fund. They do not get their land back.

The law that determines what constitutes an acceptable transaction is likely to be a control factor as portrayed in column 2. Some jurisdictions allow for both registered and private conveyances, and thus landholders can choose the private channel or the public channel. Therefore, if they do not register transactions, it does not have a major impact on land administration as we can assume that the systems have been designed and evolved to work with what is in place. The strength or weakness of the system is situation specific. In other jurisdictions the law only recognises registered transactions. In these cases off-register transactions are problematic, and the presence of a significant number of them will mean that the classification will not be 'strong', that is, not strongly in favour of titling.

*Agency Performance* refers to agents who may be people, institutions and/or organisations involved in managing the land tenure system, specifically in administering land transactions, or people who influence the administration of land transactions. It is a governance concept but includes unofficial governance since agents are all 'governors' of sorts (Li 2007). However, since certain de facto agents may not be recognised officially, there is the risk they may not be included in purely 'governance analysis'. We thus prefer to use the term 'agents' as users themselves tend to think in terms of agents rather than governance. Examples of agents include state authorities, individuals or groups of people in state organisations, lawyers, real estate agents, customary leaders, factions within a customary group, factions in informal settlements, NGOs, politicians and family members. Agency performance, or aspects of it, are so significant as to constitute one or more CSFs in a particular situation.

Agency performance can be measured in terms of efficacy, effectiveness and efficiency. Efficacy implies the ability to produce the desired results: the ones that achieve the overarching goals and objectives. Will it work? Effectiveness implies doing the right things to make the system work, and so it is closely related to efficacy. Efficiency means doing things very well, but they might not be the right things (Checkland 1999). Using a state agency as an example, if

the state is inefficient and it takes two or more years to effect a transaction, then landholders might consider it inaccessible and not easy to use. They will then adopt alternative strategies, or channels, to effect a transaction. If the registration process is speedy, e.g. a matter of days or weeks, then landholders are more likely to register, and that is both efficient and effective.

Efficacy, on the other hand, is often neglected when titling land or introducing other forms of land records, and that is one of the concerns that gave rise to this paper. Efficacy should focus on having the right set of structures and processes, the complete set of things, to achieve the overarching goals. One may have a semi-strong classification of a situation, but without strategies to move it to a strong situation implies that the efficacy of a project or programme has not been thought through properly.

An overemphasis on efficiency to the detriment of efficacy and effectiveness can be problematic, especially when an indicator of the achievement of a goal becomes a major goal in itself and overshadows and effectively replaces the overarching goals. As an example, in South Africa's state-subsidised housing programme a 'deliverology' culture has taken hold. Deliverology is a neologism that means officials and politicians are evaluated according to a quantity associated with concrete objectives, in this case the number of houses and/or titles they deliver, irrespective of whether the system is working. A significant number of defective houses and a significant number of people transacting off-register show that there is a lack of focus on the overall efficacy of the programme. Moreover, it suggests a gap in the overall governance structure and processes. In general, one department in a government office may be tasked with delivering titles. Officials in that department will deliver as many titles as possible, if that is how their performance is measured and their budgets are allocated. Problems associated with the programme are someone else's problem, or even the next generation's problem. Politicians can also boast about how many houses or titles that they have delivered. A CSF to combat this 'siloism' might be a department or inter-agency working group that follows up on first registration to ensure that the system is working and that there are suitable strategies and programmes to do this. In a utopian state, there should be an organisation tasked with overall governance of the land tenure system with the powers to intervene across different structures of government and perhaps jurisdictions (national, provincial, municipal) when changes such as a titling project are underway.

*Agency Trust.* Agency trust is also related to governance. It is a measure of how landholders trust the agents and agencies involved in the registration process. If not, are they likely to register or not? Might they try to hide a transaction and choose a private channel to transact? At the simplest level, are the records and the processes to effect a transaction secure? Can fraudsters steal identities and steal the land itself or register a mortgage over a property? Can registry officials remove pages from a paper file or alter parts of a digital file to change the nature of the bundle of rights in a parcel? Are the records at risk of being stolen or destroyed? Pertinent to this discussion, corruption by officials, abuse of power by customary and/or family leaders, lack of certainty over who has the authority to approve transactions in customary societies, and land grabbing schemes involving inter alia well-connected individuals, politicians, customary leaders, family members and registry officials cause people to distrust the system. If the police and judiciary support some of the agents involved in such a scheme,

then that exacerbates the situation. People may well avoid recognised transaction channels and hide a transaction (e.g. see Barry and Danso 2014).

*Leadership Behaviour and Trust.* Building on agency trust, the behaviour of individual leaders may be an important construct. If leaders such as chiefs or elected local politicians act in the best interests of their constituents in regard to land tenure, then landholders are likely to trust them. In customary societies chiefs may claim that they own the lineage land and are empowered to sell it, where in fact the customary societal norm is that chiefs occupy a fiduciary stewardship position in the management of lineage land on behalf of the lineage members who own it collectively. In peri-urban societies, different people may claim the chieftaincy or customary family headship which have land allocation and alienation powers associated with this status. Different family members may approach different ‘chiefs’ and sell the same piece of family land to different people using a legally recognised process. In informal settlements, different factions may elect opposing leaders when negotiating with the authorities for better housing. The level of conflict over leadership and the consequences thereof influence landholders’ level of trust and their choice of channel to effect land transactions in shack rights and possibly associated expectations of being granted a state-subsidised house. They may choose to hide a transaction if they distrust individual leaders and agencies.

*Individual Behaviour and Trust.* Individuals’ behaviour within a household or extended family may be introduce important factors. As an example, in a divorce, a household head registered as the owner may sell the family land through a private channel and move out, and the new owner may evict the remaining family members (Barry 1999). Likewise, an educated family member (a family elite) may use their knowledge of the law and registration to register the land in their name and sell it. Alternatively, they may use their knowledge of the law to stop a ‘sharp practice’ sale by another family member. Lineage members may also be evicted if the family head is a widower who remarries in community of property / joint tenancy and his wife and her children claim the land when he dies.

*Membership Affiliation and Vulnerability Status.* This set of factors should be examined to check that a titling project does not encourage human rights violations. In one scenario, as noted earlier, factions may exist in a community such as an informal settlement. Membership of a particular faction may be important in accessing land in the settlement, defending property rights or affiliation may be critical for a family or individual being able to continue to live in a settlement.

Vulnerability status applies to groups of people such as women, youth and strangers and to individuals in both a broader community and within households. In the case of strangers, people who move into a customary settlement often have the status of strangers. It may take generations to be accepted as community members and there may be disputes over when the change in status occurs. A neighbour may manipulate these disputes and attempt to evict a stranger, even if their family has been there for a generation. In countries where there are high levels of legal immigration, refugees and illegal immigration, foreign nationals may be at risk of being evicted in xenophobic attacks. Vulnerable groups within a household include women, the elderly, children and extended family members.

### 5.3 Critical conditions affecting registration (column 3)

Column 3 comprises three critical conditions that influence the final endorsement or not of the registration system. They fall into three groups.

*Usefulness and Accessibility* is a positive attribute that indicates if landholders find the registration system both useful and accessible. These are both CSFs, since without them the system will not gain traction. Usefulness implies that the system serves landholders' needs better than alternative channels available to them and they are likely to use the system. Usefulness is influenced by the accessibility of the system. Is it easy to use? How easy is it to access? Can the parties to a transaction access a registry office, a lawyer or a relevant para-legal officer easily, depending on the system? What does the registration process cost in time and money? Do parties to a transaction have the money to pay the transaction costs? If so, are they willing to pay the registration costs, or would they rather allocate that money to something else?

*Social Norms* influence registration in two directions. On the one hand, the system may or may not absorb some customary social practices that involve transactions, for example, norms of succession and inheritance for registering family property. Conversely, is it the norm in a society or community to register land transactions or transfers on inheritance? Do landholders use, or are they likely to use, other channels for transacting or registering inter-generational transfers? Figure 1 above describes some of these transacting channels. Are these norms likely to change in favour of registration when a titling programme is implemented? If not, can they be changed and what is needed to do this and to sustain this as a norm? Alternatively, can the system of titling make changes to absorb social norms such as registration of family property? (Kingwill 2013, 2018).

*Control and Enabling Systems* refer to systems that enable people to register or impede or restrict them from doing so. These include power-related and resource-related control and enabling factors. Examples of power-related forces include the existing law, institutions and power brokers. The latter include local elites, gangs, intermediaries in communities who benefit from directing private conveyancing or land allocation, and family members. The latter may coerce people to register, or the property system as a whole may penalise them if they do not. Similarly, powerful actors may encourage or force people not to register. If people lack the resources, such as the money to register, what should be done to overcome this constraint? Are there subsidies and systems in place that enable them to do register?

### 5.4 Cognitive factors, including Knowledge and Understanding

Knowledge and understanding in Figure 2 refers to the general influence of education and experience of how a system works. This informs the user of the risks associated with using a particular channel and learning from problem situations. Education on its own does not necessarily cause people to register. As an example, in one South African case study, a number

of educated people and people who had years of community leadership experience had purchased off-register. One educated homeowner owned property that they had registered. They then purchased a further property off-register as an investment on the advice of a local street committee, who facilitated the sale. Similar to the iconic ‘yellow house’ case described above, the heirs of a nearby property owner instituted court action against a person who had swapped houses off-register with the deceased to have the property transferred to them. The deceased was still the registered owner. This raised an alarm among property owners who had acquired their land off-register. A number of landowners, including the educated homeowner, asked the first author to interview them so they could get advice on how to deal with their off-register purchase. They may have been advised to register their purchases, but ignored this as they had been advised that an off-register purchase strategy would work for them. It was only once they furthered their knowledge through concrete evidence of the risks associated with off-register transactions did they endeavour to register (Barry 2020). In another case study there were no street committees, but street level bureaucrats were engaged with the community. The local housing office was within walking distance. Building inspectors were active in the streets, checking if building complied with building regulations. People were interacting with the official channel continually. No evidence of off-register transactions emerged in that case study, arguably because there was continual interaction with the authorities who monitored the situation in a number of ways (Barry and Whittal 2016).

### **5.5 Intervening Conditions**

Intervening conditions acknowledge that the system is dynamic and constantly evolving to adjust to new circumstances. As a project or programme progresses, changes may occur that affect all the groups of factors in all the columns in Figure 2, and change may occur due to external forces. For example, at the macro-level a change in government may bring about a change in ideology, leading to changes in policy, law and administration structures and processes while a titling project is underway. At the micro-level, a crackdown on criminal elements or the replacement of an abusive community leader may bring about changes in agency performance and agency trust, which in turn influence all the factors in column 3.

## **6. Applying the Models**

Application of the system must be adapted to specific cases. The model we have presented does not follow a blueprint nor is it a prescription. Consider the perspective of a working group tasked with analysing and monitoring existing systems in defence of land tenure and securing land transactions and how a new system, such as a land title system might be introduced and implemented. The process is an iterative series of loops as the analysis progresses and the system is being implemented. The model could inform the following progression:

First, describe and analyse the strategies that people actually use and the process flows associated with them. Process flow analysis is common in operations management and research. Draw a set of process flow diagrams according to Figure 1 to show the channels that are being used, the channels that are envisaged, and the ones that people are likely to use after the titling programme is introduced. Who or what are the agents and agencies? What are the relevant



social networks at each stop along the way in the process, Are there ‘stops’ that suggest corruption or sharp practice? Analyse the pros and cons of each channel. Are any undesirable? Might they lead to a dead end where moving land rights into the official public channel is very difficult, expensive or perhaps close to impossible?

Devise provisional operational strategies to encourage people to use the channel that best suits their needs and fits the land administration system and the law. Adapt these as part of an analysis related to Figure 2.

Work through Figure 2 to measure actual system usage in a particular channel and predict system usage in that channel. Identify the critical success factors that will make landholders, agents and other stakeholders adopt the desired channel(s). How can they be dissuaded from using channels that the authorities consider undesirable? If this is unlikely to happen, then what? The process is likely to entail rigorous analysis of the organisational structure among government agencies, the behaviour of agents and agencies and individuals in a community, door-to-door surveys of local residents and interviews with local leaders. In our experience, it is critical to survey residents before, during and after a programme implementation. It is not enough to interview officials without considering user beliefs, intended behaviours and actual behaviours.

Develop estimates of actual usage or predictions of usage according to the usage strategy in Column 4. The description of the channel(s) that people use should describe the strategies that they use or envisage using.

Classify each situation according to Table 1 and develop CSFs for a strong classification. If a situation is considered to be semi-strong, then what are the CSFs that need to be created to move it into a strong classification. If is classified as weak or semi-weak, what alternative strategies are there to address the overarching land tenure security goals.

## **7. Conclusions**

In conclusion, the classification methodology and the guiding framework comprising Figures 1 and 2 and Table 1 provides a simple system to analyse a titling programme or any other land record system as a whole. It provides a diagnostic tool that simplifies communication, strategy formulation and evaluation involving different actors and agents. It can be used in a working group or as a tool to communicate across different sectors in the same organisation and across different organisations, and to examine gaps in governance structures and processes and diagnose likely consequences. The model also provides an alternative way of thinking about titling that avoids applying an ideologically driven motive or knee-jerk application of titling, but rather considers the circumstances on the ground and analysed in terms of state policy as well as local official and unofficial governance. It should encourage evidence based design and action.

A major question the paper addresses is what makes a registration or record system effective? Will it deliver on the policy goals and objectives? If not, then what? Should a programme under consideration be implemented at all? If so, what needs to be done beyond issuing or registering documents for an effective system?

The framework comprising Figures 1 and 2 and Table 1 should serve as a tool to explain and predict how a situation is working and/or how it is likely to unfold. Ultimately, it should guide design and action, the actual user strategies or likely user strategies in response to that design and action, and guide the strategies to monitor that design and action.

## REFERENCES

- Anciano, F 2018. 'Decolonising Clientelism: 'Re-centring' Analyses of Local State–Society Relations in South Africa', *Politikon*, 45:1, 94-111
- Barry M 1999. *Evaluating Cadastral systems in Periods of Uncertainty: A Study of Cape Town's Xhosa-speaking Communities*. PhD thesis, University of Natal, Durban.
- Barry M 2006. A Strategic Framework for Post-Conflict Land Administration Development: Hargeisa Municipality, Somaliland. UN-Habitat, Nairobi. 20 July 2006.
- Barry M, Roux L, Barodien G and Bishop I 2002. Video-evidencing and Palmtop Computer Technology to support formalising Land Rights. *Development Southern Africa* 19(2), 261-272.
- Barry M, Molero R and Muhsen A-R 2013. Talking Titler: Evolutionary and Self-Adaptive Land Tenure Information System Development. *South African Journal of Geomatics*, Vol. 2, No. 1, 1-12, February 2013.
- Barry, M and E. Danso. 2014. Tenure Security, Land Registration and Customary Tenure in Peri-urban Accra: A case study. *Land Use Policy*, 39, pp. 358-365.
- Barry M and Augustinus C. 2016. *Framework for Evaluating Continuum of Land Rights Scenarios*, Report 4/2016, August 2016. UN-Habitat / Global Land Tools Network, Nairobi.
- Barry. M & Roux, L. 2016a. Land Ownership and Land Registration Suitability Theory in State-Subsidised Housing in a Rural South African Town, *Habitat International*, 53, April 2016, 48 – 54.
- Barry M and Roux L 2016b. Study of Effective Land Registration Usage in State-Subsidised Housing. *South African Journal of Geomatics*, 5 (1), February 2016, 82 – 94.
- Barry M and Whittal J. 2016. Land Title Theory and Land Registration in a Mbekweni RDP Housing Project. *Land Use Policy*, 56 (2016), 197-208.
- Barry M and Asiedu K 2016. Visualising Changing Tenure Relationships: The Talking Titler Methodology, Data Mining and Social Network Analysis. *Survey Review*, 49 (352), 66 – 76.
- Barry M 2019. Post-Conflict Land Administration in Edendale N Wirewall Project, *South African Journal of Geomatics*, 8(1), March 2019, 57 – 68.

- Barry M and Kingwill R. 2020. Evaluating the Community Land Record System in Monwabisi Park Informal Settlement in the Context of Hybrid Governance and Organisational Culture, *Land*, 2020, 9, 124; 1 – 34.
- Barry M 2020. Hybrid land tenure administration in Dunoon, South Africa, *Land Use Policy*, 90(2020) 104301, 1 – 11.
- Business Dictionary N.D. Critical Success Factors.  
<http://www.businessdictionary.com/definition/critical-success-factors-CSF.html> [accessed 14.12.2022]
- Buthelezi, L 2019. Nasty truth behind the RDP housing market *Business Live* 2 May 2019  
<https://www.businesslive.co.za/fm/features/2019-05-02-nasty-truth-behind-the-rdp-housing-market/>
- Centre for Affordable Housing Finance (CAHF) 2018. Housing Finance Yearbook: South Africa country profile, Centre for Affordable Housing Finance in Africa, 7 November 2018. <http://housingfinanceafrica.org/documents/2018-housing-finance-yearbook-south-africa-country-profile/>
- Coetzee J. K, Graaff J, Hendricks F, Wood G (eds) 2001. *Development Theory, Policy and Practice*. Oxford University Press.
- Charman A, Tonkin C, Denoon-Stevens S, Demeestère R. 2017. ‘Post-Apartheid Spatial Inequality: Obstacles of Land Use Management on Township Micro-Enterprise Formalisation’. A Report by the Sustainable Livelihoods Foundation.
- Checkland, P 1999. *Systems thinking, systems practice: Includes a 30-year retrospective* (2nd ed.). Chichester: Wiley.
- Chief Registrar of Deeds, South Africa, letter to R. Kingwill 25 October 2022.
- Cousins T., D. Hornby, R. Kingwill, L. Royston and T. Trench. 2005. *Perspectives on Land Tenure Security in Rural and Urban South Africa: An analysis of the tenure context and a problem statement for LEAP*.
- Davis, F. D. 1989. Perceived Usefulness, Perceived Ease of Use and User Acceptance in Information Technology. *MIS Quarterly* 1989, 13(3), 319-339.
- Department of Human Settlements. 2018-19 Annual Report.  
<http://www.dhs.gov.za/sites/default/files/u16/2018-19%20DHS%20ANNUAL%20REPORT%20WEB.pdf>
- Durand-Lasserve, A., M. Durand-Lasserve and H. Selod. 2013. *A Systematic Analysis of Land Markets in West African Cities, Rules and Practices: The Case of Bamako, Mali*. World Bank Development Research Group, Environment and Energy Team, November 2013, Policy Research Working Paper 6687.
- Durand-Lasserve, A., M. Durand-Lasserve & H. Selod. 2015. *Land Delivery Systems in West African Cities: The example of Bamako, Mali*, Washington D.C.: International Bank for Reconstruction and Development / World Bank.
- Dwivedi, Y. K., B. Lai, M. D. Williams, S. L. Schneberger and M. Wade 2009, eds. *Handbook of Research on Contemporary Theoretical Models in Information Systems*. New York: Information Science Reference.

- Fishbein M and Ajzen I 1975. *Belief, Attitude, Intention and Behaviour. An Introduction to Theory and Research*. Addison-Wesley, Philippines.
- Fishbein M and Ajzen I. 2020. *Predicting and Changing Behavior: The Reasoned Action Approach*, New York: Psychology Press.
- Geyer, H jr. 2023 'The self-regulation of informal land uses and tenure through customary land management systems'. Unpublished paper *in litt*  
[https://www.researchgate.net/publication/368666295\\_The\\_self-regulation\\_of\\_informal\\_land\\_uses\\_and\\_tenure\\_through\\_1\\_customary\\_land\\_management\\_systems\\_2](https://www.researchgate.net/publication/368666295_The_self-regulation_of_informal_land_uses_and_tenure_through_1_customary_land_management_systems_2)
- Kingwill, R 2008. 'Custom-building freehold title: the impact of family values on historical ownership in the Eastern Cape' in Cousins, Ben and Claassens, Aninka (eds). *Land, Power and Custom: Controversies generated by South Africa's Communal Land Rights Act*. UCT press, Cape Town
- Kingwill, R 2013. 'The Map is not the Territory: Law and Custom in African Freehold: A South African Case Study'. Ph.D. Thesis, Institute of Poverty, Land and Agrarian Studies (PLAAS), University of the Western Cape, Cape Town, South Africa.
- Kingwill, R 2014. 'Papering over the Cracks: An Ethnography of Land Title in the Eastern Cape' in *Kronos: Southern African Histories*, 40.
- Kingwill, R 2017a. 'Square Pegs in Round Holes: the Competing Faces of Land Title' in Donna Hornby, Rosalie Kingwill, Lauren Royston & Ben Cousins (editors). *Untitled: Securing Land Tenure in Urban and Rural South Africa*. Durban: UKZN Press
- Kingwill, R 2017b. 'An Inconvenient Truth: Land Title in Social Context: A South African Perspective' in *Land, Law and Governance: African Perspectives on Land Tenure and Title*, edited by Hanri Mostert, Leon CA Verstappen & Jaap Zevenbergen. Cape Town: Juta.
- Kingwill, R 2017c. Land and property rights: 'title deeds as usual' won't work' Econ 3x3 August 2017 <https://www.econ3x3.org/article/land-and-property-rights-title-deeds-usual-won%E2%80%99t-work>
- Kingwill, R 2018. 'Title Deeds for All — Nice idea versus complex praxis' . Daily Maverick 17 October 2018
- Kingwill, R 2021. 'Customary Law and Land Ownership in the Eastern Cape in William Beinart, Rosalie Kingwill & Gavin Capps (editors) *Land, Law and Chiefs: Contested Histories and Current Struggles*, Johannesburg: Wits University Press.
- Kingwill, R 2022 Personal Communication, R. Kingwill email to Chief Registrar of Deeds, South Africa, 11 August 2022.
- Kingwill R and Barry M 2023 *in litt*. Cloudy title in South Africa: critical assessment of Occurrence, Problems and Prevention, Accepted by South African Journal of Geomatics.
- Kotler, P and K. L. Keller (2012). *Marketing Management*, 14<sup>th</sup> edition. Upper Saddle River: Prentice Hall.
- Li, TM 2007. *Will to Improve: Governmentality, Development and the Practice of Politics*. Duke University Press.

- Manona, S 2021. Director Phuhlisani NPC. Personal Communication with R. Kingwill 10 August 2022.
- Masiko-Kambala, P 2021. Western Cape Department of Human Settlements, Director Policy and Research. Personal Communication, Email to R. Kingwill April 20 April 2021
- Miller, J M 1985, *Information Systems Planning - Principles and Practice*, South African Journal of Library Information Science, 53(4) 183-190.
- Shipton, P. 2009. *Mortgaging the Ancestors. Ideologies of Attachment in Africa*, New Haven: Yale University Press
- Robey, J and Meltzer I (for 71point4). 2020. 'What of you bought a new home and you don't have the papers to prove it'. Cities Alliance 9 March 2020. 2020.  
<https://www.citiesalliance.org/newsroom/news/urban-news/what-if-you-bought-new-home-%E2%80%94-you-don%E2%80%99t-have-papers-prove-it>
- Rust K 2018. Investment & Economic Empowerment Opportunities in South Africa's Affordable Housing Sector, Centre for Affordable Housing Finance in Africa, 16 October 2018. <http://housingfinanceafrica.org/documents/investment-economic-empowerment-opportunities-in-south-africas-affordable-housing-sector/>
- 71point4 2019. <https://www.71point4.com/tsc-case-study-4-informal-cash-sales-in-khayelitsha-the-problem-and-what-can-be-done-about-it/>
- 71point4 2022a. TSC Case Study 6 'Regularising an informal cash sale after 12 years' <https://www.71point4.com/tsc-case-study-6-regularising-an-informal-cash-sale-after-12-years/>
- 71point4 2022b. Seven case studies. <https://www.71point4.com/?s=case+studies>

## **BIOGRAPHICAL NOTES**

Michael Barry is an emeritus professor at the University of Calgary, where he held the Chair in Land Tenure and Cadastral Systems. He worked in private practice as a land, engineering and offshore engineering surveyor in South Africa, Iraq, Indonesia, Botswana and Zambia. He worked in local government in the City of Cape Town for 5 years, as an academic at the University of Cape Town for 11 years, and the University of Calgary for 20 years. He has consulted and done research in land tenure, land administration and GIS in South Africa, Canada, Botswana, Kenya, Ghana, Lesotho, Malawi, Nigeria, the Philippines, Somaliland, Swaziland and Zimbabwe. He is a Professional Land Surveyor in South Africa, a Canada Land Surveyor and a Professional Engineer in the province of Alberta, Canada.

Rosalie Kingwill is an independent research consultant combining applied, policy and academic research in land governance, land rights and land administration, on which she has published widely. She is concerned with the expansion of the land-legal property framework to embrace off-register rights in contexts of legal pluralism. She has worked in the land sector for forty years, the first three decades of which were in the Eastern Cape, South Africa. She now resides in Cape Town and is concerned with non-binary forms of land administration that straddle rural and urban tenures. She has undertaken much field research among landowners, rural and urban land rights holders, farm dwellers and farm workers backed up by documentary and archival research for a variety tenure-related projects, including land rights enquiries and restitution claims.

## **CONTACTS**

Dr Michael Barry  
University of Calgary  
CANADA

Web site: <https://www.researchgate.net/profile/Michael-Barry-9/research>

Dr Rosalie Kingwill  
LGR-RK sole proprietor  
Vredehoek, Cape Town  
SOUTH AFRICA]

Web site: <https://www.researchgate.net/profile/Rosalie-Kingwill/research>