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Key words: Land rights, land tenure, continuum, cadastral systems

SUMMARY

This paper tests a new conceptual model proposed for the land rights continuum in Whittal (2014). Fieldwork was conducted in Giyani in South Africa in 2013/14 in order to understand the land rights situation. The method of primary data collection, coding and processing was reported and critiqued in Whittal and Rikhotso (2014). Accessing valid data was aided by a deep understanding of the community and its relationship to land, trust in the researcher, and the researcher's ability to communicate effectively with the community. Internal validity was noted as a problem in that study and this was addressed with further fieldwork and verification. The status of the Permission to Occupy was not investigated in that study and is reported here. This paper extends that analysis of the Givani data to modelling of the land tenure situation using the new conceptual model as per Whittal (2014). It uses the land rights and tenure lexicon proposed in Whittal (2014) including objects, subjects, rights types and values. This is deemed essential in furthering research (Royston, 2005). The new land rights continuum model accommodates the land rights types and land values in the horizontal dimension of the model while the land tenure indicators of legitimacy, legality and complexity form the triple vertical axes. This initial testing of the model reveals that the correlation between land rights types and land value complexity remains unchallenged. The decoupling of land rights and land tenure allows the vertical axis to reflect land tenure using various indicators. As such, the land tenure situation in Givani was successfully represented using the three vertical axis indicators of legitimacy, legality and certainty. It is possible to model the complexity of the land rights situation as well as the spread of tenure. The ability of the model to reflect the flexibility in land rights types proposed by the current land reform policy is demonstrated. However, mobility of individuals is not tested as Giyani residents do not generally move locations - land tenure upgrading applies to land the residents occupied and continue to occupy.

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1. INTRODUCTION

The new continuum of land rights model proposed by Whittal (2014) challenges the dominant modernisation and evolutionary theories underscoring the former UN-Habitat (2008) and LEAP (Royston 2005 and 2012) models. Instead, it is designed to accommodate a diversity of land rights types which may co-exist (plurality) along an axis which is ordered in accordance with land value complexity. The model is also designed to accommodate duality of subjects (holders of rights), a neutral worldview as opposed to a western worldview, rejection of a "timeline" approach, flexibility in that land rights can change over time, and mobility of subjects to land with different opportunities/rights. Furthermore, the model is able to reflect three measures of land tenure security – legitimacy, legality and certainty.

This paper uses data processed and reported in Whittal and Rikhotso (2014) to test the modelling of the continuum of land rights in Giyani. The process of structured interviewing, data coding methods, population of four tables, through to final modelling as conceptualised in Whittal (2014), was subject to critique in Whittal and Rikhotso (2014) and is only summarized here.

2. METHOD

A combined approach including both natural and social systems research paradigms is important in understanding the human-land relationship, in furthering cadastral systems and land tenure research (Whittal, 2008), and in understanding and developing land tenure information systems (LTISs) (Barry and Roux, 2012). South African land and housing policy drives most pro-poor land projects in South Africa. The State is responsible for the promotion of human rights (Constitution, 1996, section 7(2)); a human rights-based approach (Franco, 2008) provides an additional backdrop to this research. A case study strategy (Yin, 2003) conducted in Giyani, is used to test conceptual theory.

The land rights and tenure lexicon promoted in Whittal (2014) is used here. The objects of tenure, include the land and its associated structures. The Rights, Restrictions and Responsibilities (RRRs) of tenure including all aspects that increase or decrease perceptions of land RRRs, including both natural and social aspects. The values of tenure including aspects such as social value in use and commodity/trading value. These are inextricably linked to use and development and so the three aspects of market value, use and development in the LMP are included as well. The values of tenure are inclusive of traditional and spiritual land value aspects. The subjects of tenure are any people, collectives or bodies capable of land ownership and may include the dead (ancestors), the living, those with future rights (live or unborn successors in title from legal persons arising from any cause) and those as yet unidentified (unborn). Tenure transactions are the relationships between subjects by which RRRs are transferred and thus speaks to land access and loss of land rights.

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3. GIYANI CASE STUDY AREA

Giyani is chosen as the case study area as it demonstrates a complex mix of local government and traditional/communal administration of land and has seen violent protests over land governance. Giyani exhibits a mix of farm lands and villages and a complex set of aspects influencing land tenure. As such, the case study area shows diversity in all three measures of land tenure: legitimacy, legality and certainty and is thus suitable to test the continuum of land rights model. In addition, the researchers have investigated boundary disputes involving municipal and traditional authority boundaries (Nxumalo, 2013, Nxumalo and Whittal, 2013) and have used the area in an investigation into cadastral surveying of property boundaries (Nxumalo, Whittal and Xaba, 2014).

A brief history of settlement, land claims and conflict over land and boundaries in Giyani is given in Whittal and Rikhotso (2014). With the inclusion of all homeland areas in South Africa after democracy in 1994, Giyani became part of the Limpopo Province in the north east of South Africa. The rural economy is based on subsistence farming and natural resources such as Mopani worms and Marula fruit are also used for food. The Giyani area exhibits dualities in governance (municipal and traditional) and in income (extreme poverty of the majority unemployed and comparative wealth of the employed minority).

Apart from land which is privately held, usually as a result of the Reconstruction and Development Programme, land in the Giyani area is State land and is under the custodianship of Traditional Authorities. Land holding is through Permission to Occupy (PTO) which is administered by the Traditional Authorities and Muyexe, in the Greater Giyani area, was selected by the government as a pilot project of the Comprehensive Rural Development Programme (CRDP), a programme which is ongoing. As one result, high resolution aerial imagery of Giyani was captured so as to upgrade spatial information for the area. It is currently in the process of transfer of land from occupiers holding Permission to Occupy (PTO) rights to ownership as part of the national land reform



Figure 1: Typical rural landscape of the case study area

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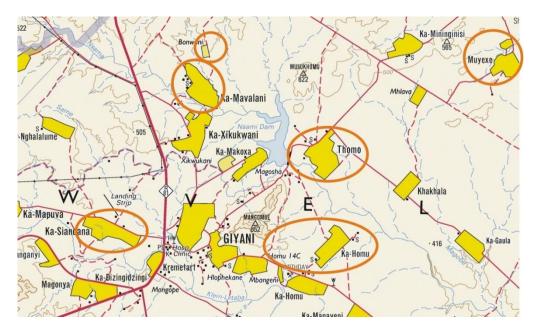


Figure 2: Giyani and its satellite towns. Areas where interviews with communal leaders and residents were conducted are circled in orange.

programme.

Data collection is reported and critiqued in Whittal and Rikhotso (2014). For completeness, the data collection strategy is summarized here. Interviews were conducted from December 2013-January 2014 using purposive sampling methods for key informants (Municipal officials and community leaders) and snow-ball sampling methods for residents of Giyani. Interviews were semi-structured with three different sets of interview questions used so as to direct questioning to Municipal officials, community leaders and for residents in six villages in Giyani. These villages are Bonwani, Mavalani, Muyexe, Hluphekani, Siyandhani and Thomo (circled in Figure 2). In each village two or three residents were interviewed as well as one or two community leaders (chiefs/headmen). In total 15 residents were interviewed and nine community leaders. Three officials of the Municipality of Great Giyani were interviewed as key informants. These were a Director of Strategic Planning, a Chief Town Planner, and a Housing Assistant. The age profile, occupations and sources of income of participants are reported in Whittal and Rikhotso (2014).

4. DATA PROCESSING AND RESULTS

Data processing is reported in Whittal and Rikhotso (2014); some repetition is necessary for continuity and in justification for the modelling to follow.

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4.1 Perceptions of land value

Figure 3 reflects that perceptions of land value for the various categories of interviewees.

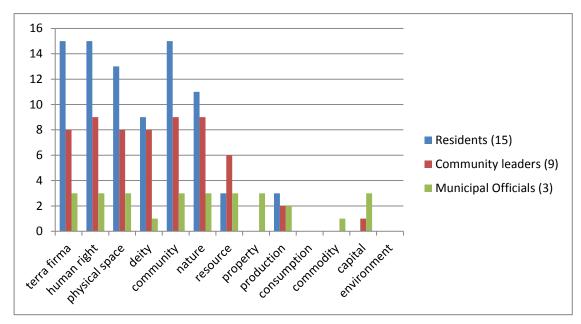
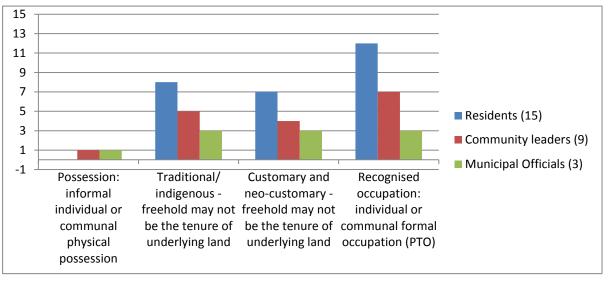
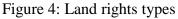


Figure 3. Land values held in Giyani

4.2 Land rights types

Just over half the residents of Giyani identify the land rights types as a combination of traditional/indigenous and customary.





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majority of residents also indicate that their occupation of the land is a form of land right. This is linked to the prevalence of PTO form of land holding and the underlying traditional land administration structures. Community leaders follow a similar pattern except that possession also features with one respondent. Municipal officials recognise the traditional/indigenous and customary land holding in their area of jurisdiction as well as the rights of occupation, and one official also identified possession as a form of land right.

4.3 Land tenure upgrading policy context

The Comprehensive Rural Development Plan (CRDP) is an overarching plan under the Rural Development Framework (RDF). It aims to guide rural development that includes the goal of land reform including improvements to tenure security (DRDLR, 2013). The CRDP envisages administration of land by Traditional Councils in customary law areas and by Communal Property Associations (CPAs) or Trusts in other areas thus institutionalizing and "democratising" the administration of land rights - this is called the Communal Land Tenure Policy (CLTP) (DRDLR, 2013). Communal land will be owned by the state with traditional leadership administering land in their local area. The roles and responsibilities of traditional authorities and municipalities remains unclear although the local structures are mandated with "fair and equitable management of land and land-based resources" (DRDLR, 2013, 16). The municipal authority role and responsibility will be for planning and by-laws that oversee land use and norms and standards of development. Now that the Spatial Planning and Land Use Management Act No 16 of 2013 (SPLUMA) is coming into force, it is intended that this will govern land use and management. Householders will pay property tax regardless of their lesser land rights (not freehold) and ownership is understood to be developments on the land excluding the land itself - this should inform compensation (in expropriation) and property taxation. Land rights will be inheritable. The State and the Rural Investment and Development Financing Facility (RIDFF) will retain the right of first refusal in any land alienation.

4.4 **Permission to Occupy (PTO)**

4.4.1 Legal status of the PTOs in general

The PTOs shown to the researchers are issued in terms of article 491 of Proclamation R188 of 1969. This Proclamation entitled Black Areas Land Regulations which granted legal access to land through quitrent and PTO certificates. Following the Native Land Act of 1913, the Development Trust and Land Act 18 of 1936 governed land access for blacks and the land was administered under the Black Administration Act 38 of 1927. This land was not governed by Provincial Ordinances.

When the Interim Constitution of the RSA was passed in 1994, the authority of the South African Development Trust was not delegated to the provinces, except for KwaZulu-Natal which had that authority since 1998 (Sibanda, 2004) and possibly areas of Limpopo (A.Claassens personal communication). The Limpopo Traditional Leadership and Institutions Act 6 of 2005 repeals the Black Administration Act 38 of 1927 to the extent that this act is assigned to the Limpopo Province. The issue of legislation governing PTOs in Giyani today remains a matter for a legal enquiry.

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4.4.2 Land rights and PTOs in Giyani

The Upgrading of Land Tenure Rights Act 112 of 1991 (ULTRA) describes the holder of the "PTO" as a "putative holder" which means they hold rights as if they are the owner but these rights are not registered (Ghostdigest, 2005). Under the ULTRA, the PTO issued under R188 of 1969 is recognised as a form of tenure under schedule 2: Occupational Rights. These land tenure rights are upgraded to ownership (freehold) once the land is surveyed and it forms part of a township register. Rural settlements as declared as such by the Minister have more relaxed rules. The Less Formal Township Establishment Act, Act No. 113 of 1991 can be used in rural areas. Conversion to freehold is not automatic and a Certificate of Ownership as specified in the Deeds Registries Act 47 of 1937 needs to be submitted to the Registrar of Deeds. Upgrading to freehold is undertaken by the Registrar without passing on charges on to the land holder. In the case study area, the Township of Shiviti Block 7 (Diagram Number 5672/2006) indicates stands in a surveyed township. Holders of these erven will most likely hold title deeds or their PTOs will be in the process of being replaced with title deeds (Municipal Official: personal communication). Upgrading the use right is also possible through a notarial deed of usus or use servitude in favour of a person. As such, the right falls away when the person is deceased (DRDLR, 2013, 31). Inheritance of such rights does not appear to be possible.

4.4.3 Nature of PTOs in Giyani

In Giyani, the PTOs issued since 1994 are understood to be valid as instruments of legal land access when the correct procedures are followed. They are issued by the Tribal/Community Authority and sanctioned by provincial and local government structures. PTOs are still widely used and recognised as instruments of tenure in rural areas. PTOs require the payment of rent and are not intended to be transferable or inheritable. Documents of receipt for "Rural Rent" are also provided as evidence of tenure. Once the Spatial Planning and Land Use Management Act No 16 of 2013 (SPLUMA) is fully operational, it is understood by Municipal officials that the PTO system will fall away. However, this requires verification and is questioned by the authors.

PTO documents viewed are dated 2005, 2006 and 2013 (issued by the Shiviti Traditional Authority). They are headed with the name of the Province, Local Government and Housing and various personal details and land references. The "residential site" number is the number given on the boundary marker tags (see figure 7). A table follows – this is supposed to indicate the livestock on the land but is left blank. In most cases the Traditional Authority's stamp is underscored with the Giyani postal address and Limpopo Province. In one case (2013 PTO) the Stamp is issued by the Dept of Cooperative Governance, Human Settlements and Traditional Affairs, Shiviti Traditional Council, address in Giyani and underscored by "Mopani District Support Centre". Land on residential sites has been issued by the Tribal/Community Authority in (dates of documents viewed is 1998), signed by the "Regional Officer: Giyani" and approved by the "Chief Agricultural Officer".

4.5 Subjects of land tenure

In Giyani, individual holding of land tenure is recognised as the primary form although social/collective tenure through membership of the community is also acknowledged. Generally,

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holders of PTOs identify the individual as the rights holder while those without a PTO identify the social collective as the subject of land rights.

Applications for government social housing subsidy have been processed in the area and a beneficiary list was available. Listed on the applications are the applicant and dependents. These are often the only means of proof of tenure if the applicant or owner dies or there is a breakdown in the family relationship and social instruments of tenure. These applications are signed by the Headman as Commissioner of Oaths. The Headman's stamp is underscored with the Giyani postal address and Limpopo Province.

4.6 Tenure transactions

The residents of Giyani have come to hold rights in land through a number of ways. Many community members (seven out of 15) purchased their land, while six inherited their land. One resident obtained land through a gift and anther through land allocation processes (the chief/headman). Six of the nine community leaders interviewed inherited their land while one purchased his and another two were gifted to them (Figure 5).

Purchase and inheritance of PTOs is not legal. However, one community leader and seven residents purchased the land and cite a PTO as the underlying evidence. Six community leaders and six residents cite inheritance as the means of land access and most have PTOs or weaker forms of evidence. It is clear that transacting in land through the PTO is not prevented nor facilitated by law. The PTOs which were inherited need to be interrogated further as to whether these were actually legitimate reallocation of the land from the former holder to a new PTO holder. Although this is not legal inheritance it may be perceived as inheritance by the new landholder.

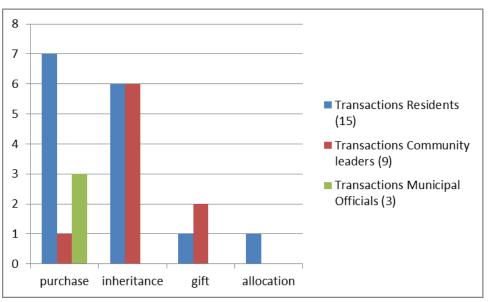


Figure 5: Transactions, or how land rights are accessed

In terms of the perceptions of the right to inherit these lands, all residents and community leaders

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confirmed that inheritance of was acceptable, but none had a written will. Whittal and Rikhotso (2014) details the perceptions regarding inheritance, women's access to land, whether land can be bought and sold, and whether a lawyer would be consulted in these transactions or whether traditional authorities are preferred. There was evidence of a very low level of confidence in the customary land administration, possibly due to the land reform programme and titling of land parcels. Since many parcels may be in the process of conversion to freehold title as part of the land reform programme, holders may perceive that they already hold the promised freehold rights.

4.7 Measures of Land Tenure on the Vertical Axis

4.7.1 Measures of Legality

The land tenure types and instruments (largely the PTOs) as well as the well-established system of positive and negative (anti-eviction) land law in South Africa convey the land holders in Giyani with a high level of legality. The current land reform programme and recognition of PTOs adds further legality to the forms of land holding in Giyani. This is furthered by the community's history of land occupation in this area - their forced removal during the apartheid years and subsequent resettlement.

4.7.2 Measures of Legitimacy

A number of interview questions are related to legitimacy: rights evidence, boundary evidence, date of boundary monumentation, whether the land use controls are functioning well and whether the land is well-managed. The predominance of documentary evidence and monumentation of all property boundaries (Whittal and Rikhotso, 2014) indicates a high degree of legitimacy.

4.7.3 Measures of Certainty

Only community leaders and Municipal officials were asked about land use controls and all stated that they were functioning well, but there was less clear evidence regarding bribery and there is still evidence of land disputes (Whittal and Rikhotso, 2014). Duality of leadership in Giyani between the customary authorities and the Municipal leadership has been a source of conflict and persists today (Nxumalo and Whittal, 2013, Whittal and Rikhotso, 2014). Trust in the customary leadership is low (Whittal and Rikhotso, 2014).

5. MODELLING

5.1 **Perceptions of land value**

Land value complexity informs the position of a land rights type along the horizontal axis in the model of Whittal (2014). The order in which these land values are "stacked" is far less relevant than the number of aspects of land value held by the respondents. The proposition is that the more values in land that are held, the more complex the meaning of land to people. Since there is only a small range of land rights types in the case study of Giyani, testing the correlation of land value complexity with land rights types cannot be undertaken using this dataset. However, it is possible to show the range of values that the various groups of interviewees (community leaders, residents and municipal officials) held regarding their land (Figure 6). Each respondent was free to choose any or all of the values they attribute to their land. The residents held the fewest number of land value

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types, the community leaders perceive land as power, while the Municipal officials are conscious of the land value in trade.

The range of land values as shown in Figure 3 and the reflection of these in the land value model of Whittal (2014) (Figure 6) proved to be more intuitive than mechanistic and relied on an understanding of the perceptions of value held by the subjects as well as knowledge of the land rights types associated with the land objects. The modelling of land values held by the respondents corroborates the proposition in so far as the land rights types in Giyani are centre and left of centre on the horizontal scale and the identified land values exclude those to the right of the model in line

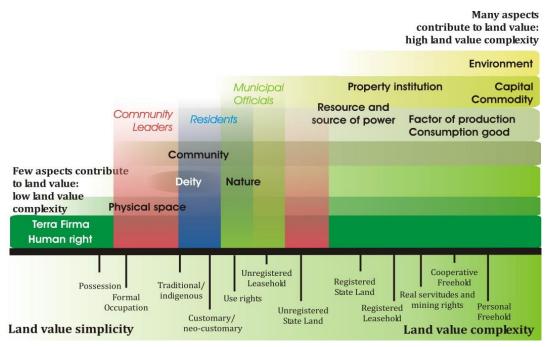


Figure 6. Land value complexity and land rights types in Giyani with the three respondent types

with land rights types not held in Giyani.

5.2 The land rights continuum

In developing the land rights continuum model for Giyani, a number of steps were followed. A deep understanding of aspects of legitimacy, legality and certainty was required. The case study research method and the participant observer status of the primary data collector provided this depth of appreciation. Initially, the data was coded and graphs prepared as per Whittal and Rikhotso (2014) and summarised above. Additional rich description along with the quantitative data proved essential. Figure 7 shows the resulting continuum of land rights model for Giyani. Its elements are motivated and discussed below, but the reader is advised that this relies on an understanding of the model design from Whittal (2014).

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5.2.1 Identifying the land rights types along the horizontal axis

Although there is a range of land rights types in Giyani, these overlap. In other words, there is a many-to-one relationship between the land rights type and the land object. For instance, all land is owned by the State and is administered by the traditional authority and the local municipality. There is an overlay of land rights of occupation and use. In the case of Giyani, a land object can be owned by the State and also have formal occupation, PTO, and use rights over the same land and held by different subjects.

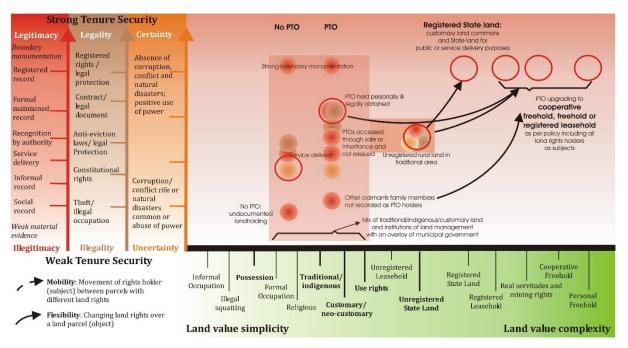


Figure 7 Continuum of land rights in Giyani

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land rights of formal occupation, traditional/indigenous/customary, use rights and unregistered State land can all refer to the same land object in Giyani, but the land rights are held by different subjects. The land rights types of formal occupation, traditional/indigenous, customary/neo-customary and use land rights cannot be disaggregated in Giyani as aspects of all of these elements are present in most land parcels.

Three groupings of existing land rights are found in Giyani represented by two columns of red brown and orange spots and one cluster of spots to their right. The first column links to the "Formal Occupation" land right along the horizontal axis in Figure 7. This refers to land which is held by the occupiers without any PTO in existence, but they are recognised as rights holders through the formal social organisation of the traditional institution. The next column along represents the presence of a PTO on the land. However, even with a PTO, there are multiple land tenure constructs since the legality of PTOs varies and there are normally other rights holders (subjects) who are not the PTO holder (usually the household head). The cluster of spots reflects to the unregistered

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underlying land ownership held by the State. It is noted that this land right pertains to the same land object as the previously described land holdings. The underlying orange shading indicates that this land right underpins all land holding to the left in the area of Giyani. There is also unregistered state land in the case study area which is not occupied but is used for community purposes. To the far right, the arrows and hollow circles indicate flexibility of land rights type and are discussed later.

5.2.2 Land tenure indicators and the vertical axis triplet

The three land tenure indicators of legitimacy, legality and certainty form the vertical axis triplet and are differentiated by different colours. Graded colours from pale at the bottom to saturated colour at the top indicate land tenure strength increasing vertically. In order to represent these elements for each land rights type, spots of same colour are used in the body of the graph. There is no attempt to restrict the indicators to one per type of land right. For instance, there are four indicators of legitimacy in line with traditional/indigenous/ customary/use land rights (Figure 7). The top red spot indicator shows that there is strong boundary monumentation whether the land is held through a PTO or not indicating strong legitimacy of landholding. A lower red spot indicates land held by PTO as a formal record. A service delivery and social record red spot complete the legitimacy indicators. Similarly, legality and certainty were interpreted with indicators in brown and orange spots respectively.

It was possible to include all aspects identified in the case study analysis of Giyani, except for tenure transfer mechanisms. It was also possible to reflect the interests of those who have a claim on the land but who are not reflected in documentary evidence. In the case of a legal/current PTO, reflecting only one household member, other household members may only have claim to the land through a social record or social institutions. This is shown in the lowest red legitimacy indicator. In both the non-PTO and PTO land there is very strong evidence of monumentation (fences, corner posts, beacons) which increases the legitimacy and hence the land tenure of all possession and use rights holders (and concomitantly reduces the land tenure of the State as underlying owner).

It is noted that the new continuum of land rights model, with its land tenure axis triplet, is sensitive to many aspects of land tenure. As such, it can reflect strong aspects of land tenure for all land rights types. This includes those to land rights types with low levels of land value complexity which are found on the left of the model. This was impossible to reflect with prior land rights continuum models (Whittal, 2014) as the land rights type was coupled with land tenure security.

The second stage of the modelling was the addition of clear red circles to estimate level of land tenure for each land right type as per the data in Giyani. When the indicators are aggregated, this leads to loss of information and seems ill-advised. If the underlying indicators of tenure are removed in the process of modelling, the lack of tenure of marginalised groups will be lost and potentially forgotten. For policy formulation and intervention, loss of information can be counterproductive. The use of clear red circles avoids the loss of underlying information as to the real land tenure situation on the ground, which is messy and unclear and needs to remain reflected as such.

5.2.3 Mobility and Flexibility

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Mobility could not be tested in Giyani since residents do not generally move locations – land tenure upgrading applies to land they continue to occupy

Flexibility

Flexibility refers to the change of land rights associated with a land object – there is some indication of flexibility prior to land reform as land use rights change between possession, possession sanctioned by customary institution and more formalized use rights through PTOs. The reversion to a possession or formal occupation when a PTO is transferred extra-legally is also an indication of *de facto* flexibility, or change of land rights. Similarly, on marriage/separation/divorce, birth and death, a variety of forms of land rights over the land object can come into being and also cease to be.

Land reform

The flexibility arrows on the model indicate the land tenure upgrading envisaged by post-Apartheid land policy in South Africa. This policy is in flux as the former White Paper on land reform promoted freehold while the Green Paper promotes State ownership and leasehold for individuals and households. In the land reform and upgrading process, policy indicates that State land will be registered and divided into public property and roads as well as communal land to be used by an identified community or exclusively by the state (DRDLR, 2013). The solid arrow indicates the unidirectional land rights flexibility of State land from unregistered to registered land holding, some of which will remain State-owned for use by the State or by communities. Unregistered State land will also be part of the process of land reform and upgrading of PTOs into co-operative freehold, freehold or registered leasehold to households or individuals. It is noted that family members who are not the primary PTO holder are included in this upgrading process (lowest arrow).

6. CONCLUSIONS

This paper tests the modelling of new land continuum of land rights model developed by Whittal (2014) using data from Giyani. The processing of that data is reflected in Whittal and Rikhotso (2014). It demonstrates that the correlation between land value and land rights types remains unchallenged although the particular contribution of this aspect of the modelling is only that it frees up the land tenure indicators to form the vertical axes. The land rights types need to be verified with research in the Deeds and Surveyor-General's Offices, in practice, and particularly in relation to the status of the PTOs in law.

Modelling using the new continuum of land rights relies on both qualitative and quantitative data and a rich/deep understanding of the land rights and tenure situation on the ground. Background knowledge of the law and applicable policy as well as an appreciation of the community understanding of land rights and tenure is essential. The particular strength in the data collection strategy was that the second author is a resident of the area. From the data collection to the modelling it is essential to understand the meaning behind the terms used. The tables contained in the appendix to Whittal (2014) categorising objects, subjects, rights types and values are essential in this understanding and in promoting a common lexicon in this domain of research.

In conclusion, the authors are satisfied with the testing of the new continuum of land rights model in

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representing the land tenure situation in Giyani using three vertical axis indicators of legitimacy, legality and certainty. It is possible to model the complexity of the situation as well as the spread of tenure and the flexibility proposed by the current land reform policy. The decoupling of the land rights types from land tenure security, as well as the sensitivity introduced by the land tenure axis triplet, allows the model to reflect strong aspects of land tenure for all land rights types.

However, it is clear that the land rights continuum is not a simple representation such as its predecessors. Its complexity is both a strength and a weakness. It is suitable for research in land tenure and land rights and should be considered as a tool for understanding and reflection on land tenure and land rights prior to policy formulation or in critique of policy and practice. But it is too complex to be used in most grassroots training, advocacy and consulting environments. It is necessary for this model to be tested in a variety of other conditions in order to develop it further and to gain traction as a useful land tenure and land rights tool.

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