Pro-poor land administration: Towards practical, coordinated, and scalable recording systems for all

Bob Hendriks, Jaap Zevenbergen, Rohan Bennett, Danilo Antonio

A R T I C L E   I N F O

Keywords:
Land tools
Land administration
Tenure security
Pro-poor
Land registration

A B S T R A C T

The global land community has increasingly recognized the need to work towards practical, coordinated integration and scalable implementation of alternative approaches to land administration, ones that better serve the interests of the majority of groups in society. The pro-poor land recordation tool (PPLRT) contains a set of design elements developed to improve protection and access to land for the poor, particularly women, youth and vulnerable groups, especially in areas with (rapidly) changing land use. Building on earlier PPLRT work, this article positions the PPLRT relative to other responsible land administration approaches (especially Fit-For-Purpose). It further develops the PPLRT design elements and system based on incorporating increased foci on institutional and political economy aspects and a more complex notion of community, stemming from four documented cases of records keeping, and expert feedback. The paper recommends refinement of all but one of the design elements, addition of a new design element, and modification of the PPLRT’s graphical depiction. Recommended strategic areas for further research are: assessing the impacts of pro-poor land recordation on achievement of the SDGs (particularly land related indicator 1.4.2) and New Urban Agenda (particularly paragraph 35); identifying the necessary conditions for improved, coordinated, and scaled PPLRT implementation in various contexts; and articulation of the circumstances for effective future alignment, conversion and integration of land data collected by local communities with those of existing land administration agencies.

1. Introduction

The global land administration community has increasingly recognized and worked towards the realization of alternative pro-poor and gender responsive approaches to land administration (Zevenbergen et al., 2016). Specifically, the work of the Global Land Tool Network (GLTN) and International Federation of Surveyors (FIG) advocates for recognition and scaling up of a continuum of land rights and the use of fit-for-purpose (FFP) approaches (Enemark et al., 2014; UN-Habitat/GLTN, 2016). In 2012, GLTN released the PPLRT in order to promote the land rights and improve access to land for the poor, especially in contexts with rapidly changing land use patterns. The PPLRT is a set of design principles for establishing and maintaining land records for a community’s poorest members (UN-Habitat/GLTN, 2012a; Zevenbergen et al., 2013). It is an approach that encourages local communities to document transfers as well as existing land rights on a (sporadic) case by case basis and to make those more transparently available (Zevenbergen et al., 2016). The underlying motivation is to achieve more inclusive, equitable and sustainable land governance results. In addition, the aim is to also decrease conflicts over land by increasing predictability and contributing to better dispute resolution. The initial PPLRT framework consisted of the following design elements (Zevenbergen et al., 2013):

- Assessment of national and community conditions;
- Build on community tenure practices;
- Introduce formalization and a land officer;
- Recordation;
- Land records, indexes and a record keeper;
- Inspection;
- Multiple sources of evidence;
- Dispute resolution;

---

* Corresponding author.
E-mail address: bobbendriks@yahoo.com (B. Hendriks).

https://doi.org/10.1016/j.landusepol.2018.09.033

Received 19 July 2018; Received in revised form 22 September 2018; Accepted 26 September 2018

0264-8377/ © 2018 Elsevier Ltd. All rights reserved.
• System ownership by state and community;
• Emphasis on continuum of land recording.

Since 2013, development work focused on articulation and refinement of design through further incorporation of institutional and political economy aspects and ‘unpacking the notion of community’ (Zevenbergen et al., 2013). This study aims to analyze and discuss the refined PPLRT design elements and system based on recent literature review and four documented cases of land records keeping. Section 2 discusses and updates the background of the PPLRT in relation to other emergent responsible land administration approaches. Section 3 provides a brief overview of the materials and methods, primarily consisting of a literature review and four selected case studies. Section 4 presents the results of the literature review, including consideration of political economy, mobilization, co-management, land records as common good, and evaluation aspects. Section 5 synthesizes lessons learnt from four documented cases of land records keeping for the design elements. Finally, section 6, concludes by presenting the refined PPLRT diagram and recommendations for further research.

2. Background

The conceptualization and design of the PPLRT started in the context of the traditional debate on ‘deeds versus titles’; referring to a dichotomy between two extremes of how to register the changes that follow a transfer of land rights in a land registry, and the resultant legal consequences. However, through the debate, a more fundamental challenge becomes apparent: either approach, in its institutional and administrative guise, has tended to fail the poor and marginalized – particularly in developing contexts where Western approaches were merely transplanted in highly inappropriate ways for securing local tenure realities. The approaches are argued to serve primarily the interests of the elite and, at best, parts of the middle-class. Coverage in acreage ranges from as little as 2 percent in some contexts, and up to 30 percent in others (Roberge, 2012; UN-Habitat/GLTN, 2012b; Antonio, 2011; see also Chauveau et al., 2007; Deininger, 2003). For the parts covered, these systems struggle to keep up with transfers, especially transfers upon inheritance (transmission by death). The land registration systems are often highly anachronistic, bureaucratic, expensive and slow – and not designed to accommodate current land issues in (fast) developing countries. They lack in participatory approaches, transparency and accountability, and equity among other issues. Fragmentation in laws and the functions of actors involved (both private practitioners, such as lawyers, surveyors, valuers, and government agencies) is the norm rather than the exception.

Proponents of pro-poor land administration, FFP land administration (Enemark et al., 2014; UN-Habitat/GLTN, 2016), and the broader concept of ‘responsible land administration’ (Zevenbergen et al., 2015a,b) – including actors in government, academia, and donor organizations – argue that another approach is needed. In this vein, specific tools focus on participatory enumeration, community mapping, participatory GIS and the Social Tenure Domain Model (STDM) (Lemmen et al., 2007; Lemmen, 2010; UN-Habitat/GLTN, 2009; Antonio, 2011; Antonio et al., 2015). It is worth noting that FFP and to some extent STDM are often part of (sub-) national initiatives that via a more systematic approach aim at capturing a whole area for the first time.

Land records, however, only live up to most of their expectations when the information is updated every time a change happens after a sale, a subdivision of the land or upon death of the land right holder. The research underpinning this work started from the idea of capturing these changes, which are usually locally known (if nothing else, at least by word-of-mouth). Even in areas where no formal land register is present, more and more transfers (usually within communities) are done in writing. Such cases were first documented from Francophone West-Africa and described as using ‘little papers’ (Lavigne Delville, 2002; Edja, 2001). Usually parties seek a witness for such transactions, and use a local leader they trust for this (e.g. community, tribal, religious, or local government leader). Using the ‘little papers’ concept as basis, it is suggested a more generalised ‘bottom-up’ and ‘locally customized’ approach could be created.

A pro-poor land recordation approach could stand alone for a time, capturing more and more of the land rights when they are transferred. It could also be used to keep the data that has been collected in a systematic, community based way (e.g. with STDM) up-to-date. It is conceivable that the data could eventually feed into a (national) FFP approach – once such a national approach reaches the location of a specific community (see Fig. 1, with an oval around the PPLRT). Conditions for effective future conversion or integration of land data collected by communities can already be generated alongside, once critical mass for sufficient counterweight has been reached. However, it should be noted that the focus of the PPLRT is in the first instance and primarily on a (sporadic) case by case capturing and documenting of transfers (that can happen haphazardly) rather than on a (systematic) area-wide approach. Meanwhile, initial mixes of sporadic and systematic approaches are already taking place.

3. Materials and methods

The process for developing the refined PPLRT involved 3 phases: i) review of recent literature on incorporation of institutional and political economy aspects and a more complex notion of community; ii) synthesizing lessons learnt from four documented cases of land records keeping; and iii) refining and tailoring design of the PPLRT for a set of specific situations.

First, an extensive desk study of recent literature was carried out. Building on the previous phase of PPLRT design three lenses were applied during the review: looking back (reviewing literature related to the original 10 design elements), moving forward (reviewing literature on institutional and political economy aspects and unlocking the notion of community based on cross-sector analysis), and evaluation issues.

Works from 2010 onwards were studied: earlier works were generally considered to be dealt with in the initial design work under GLTN phase 1. Grey literature examined included relevant works from the annual World Bank conferences on land and poverty and FIG’s working week conference series. Additionally, publications and project reports...
from works undertaken by international and financing agencies (UN-Habitat, FAO, World Bank, DFID, ODI) were reviewed. Key search strings utilized included combinations of ‘land record’, ‘pro-poor’, ‘grassroots’, ‘continuum of land rights’, ‘formalization’, ‘land administration’, ‘political economy analysis’, ‘social accountability’, ‘institutionalisation’ ‘(community) mobilisation’, ‘community driven development’, ‘co-management’, ‘common pool resources (CPRs)’, and ‘commons’. A pool of 60 documents was assembled. The literature review was further updated during final preparations of the tool publication (UN-Habitat/GLTN, 2018a) and this article. The relationship between the major findings on each research string and the 10 PPLRT design elements was considered and recorded. The content was then synthesized into a discussion and set of key findings, implications, and recommendations.

Second, four documented cases related to record keeping in contexts of agricultural improvement/irrigation projects (MIS Mwea Irrigation Scheme, Mount Kenya area, Kenya), large scale land based investment projects/inclusive business models (VODP Vegetable Oil Development Project, Bugala Island, Uganda), pastoralist land administration processes (MWEDO Maasai Women Development Organisation, Arusha Region, Tanzania), and agricultural social land (ejido) rights administration (RAN National Agrarian Registry, Mexico) were selected (see Figs. 2–5). Three cases are derived from the African context, whilst the other case is derived from the Americas. Most find origins from the 2000s onwards, in terms of interventions, although the Kenyan case dates back to the 1950s and the Mexican case finds it roots in the 1920s. The cases deal with a variety of development goals including economic, social, and to a lesser extent, environmental development. The tenure systems in each context differ greatly, although each location is challenged by historical layering of formal and informal land rights. Each case experiences some interface between central legislation and government agencies, and local rules and customs. Selection was done by GLTN in cooperation with the International Fund for Agricultural Development (IFAD). Table 1 provides a summary overview of the main characteristics of the cases (Hendriks et al., 2016, 2015a,b; Zevenbergen et al., 2015a,b; Bennett et al., 2014; Barnes and Di Giano, 2014).

The case studies, each 3 to 5 days, aimed to capture experiences and
4. Results from review for PPLRT design elements

4.1. Unpacking the notion of community

4.1.1. Political economy analysis (PEA)

The review confirmed the need to apply a problem-driven and inclusive PEA in the context of the PPLRT, which incorporates both macro (sector, national, regional, global) and micro (local, project) levels (Harris, 2013; Fritz and Levy, 2014; Fritz et al., 2009; Poole, 2011). This facilitates alignment of (preferred) bottom-up and top-down approaches, as an important first step in establishing a pro-poor context. As highlighted by Palmer et al. (2009), land governance is fundamentally about power and the political economy of land and that the power structure of society is very much reflected in the rules of land tenure and the quality of governance can affect the distribution of power in society.

PEA aims to situate development interventions and outcomes within an understanding of prevailing political, economic, historical and other processes in society – specifically, the incentives, relationships, distribution, and contestation of power between different groups and individuals (Mcloughlin, 2014; Tembo, 2013). The PEA framework consists of three stages: 1) Reflection (problem identification and questions formulation); 2) Analysis and diagnosis (2.a structural diagnosis of contexts and institutions; 2.b agency diagnosis of power, incentives and behaviour); and 3) Prescription (what can be done) (Harris, 2013).
In alignment with these notions, land administration literature often stresses the relevance of assessment of national and community conditions and building upon community land tenure practices (Anaafo, 2013; Lengoiboni et al., 2010; Simbizi et al., 2014; Van Asperen and Zevenbergen, 2012). Moreover, several authors expose potential inadequacies in existing approaches relating to the limited conversion of land laws and policies sympathetic to local conditions and tenure practices. This results in limited community consultations, limited awareness of informal land right holders, and impotent enforcement tools, as demonstrated in Mozambique (Oliveira, 2013); lack of appropriate human and technical resources for customary land secretariats to fulfil their mandate, as highlighted in Ghana (Bugri, 2012); and difficulties in simultaneously supporting national and local land tenure administrative approaches. For the last issue, in Tanzania, centralized systems are suggested to be considered redundant by local communities, meaning ‘buy-in’ and sustainable linkages between governance levels are not achieved (Fairley, 2012). Others discuss challenges relating to integration between tenure systems or its total absence in regularization programmes that are administered as ‘pro-poor’ and agricultural reforms, respectively in Rwanda (Pritchard, 2013) and Amhara region, Ethiopia (Shibeshi et al., 2013).

The review shed light on how these types of PEA findings could be better incorporated into PPLRT designs. Chances of uptake can be increased through process design, formulation of ‘theory of change’, use of complementary tools and approaches (e.g. action research, outcome mapping, force field analysis, intersubjective and dialogue oriented approaches), qualified mix of international and local expertise, appropriate timing, and continuous communication before, during and after fieldwork to bridge analysis and follow-up action (Harris and Booth, 2013). Additionally, Valters (2015) suggests focusing on process, prioritising learning, and ensuring locally led analyses are important to overcome previous criticisms of the approach. Meanwhile, Booth et al. (2016) argue the approach should not be applied rigidly; rather it should act as a guiding framework to tease out salient issues within a context.

Overall, the review suggests that PEA is relevant both at community and national level. This has implications primarily for PPLRT design elements 1 and also 9, 7, 8, and 11 in terms of recognition of the need for PEA (1); PEA outcomes supporting the desire for co-management (9); using multiple sources of weighted evidence in assessment (7); and dispute resolution (8). In this regard, adding ‘and local weighting’ to element 7, and putting ‘affordable, accessible and well-informed’ in front of element 8, are suggested changes. Finally, as prelude to element 11, certain baseline information is best collected early to be able to determine the outcome of any PPLRT in the medium to long term.

4.1.2. Mobilisation

To really let documentation and land recordation have an impact on the ground, it is important that the community be aware, understands what is needed, believes in the tool, and is included in all phases, in order to bring forward the information for example after a transfer, and to rely on the information in preparing a sale. Civic driven change literature speaks of a paradigm shift and return to the organizing (unscripted) rather than mobilising (scripted) tradition (Boyte, 2008a,b). The former begins with ‘where people are’; it supports people in defining and discovering their own slowly ‘unfolding’ development process and encourages self-organisation. The latter is generally more top-down, with parameters and contents of the process largely defined by outside parties. Key factors for successful community/citizen engagement in collaborative arrangements at local level were found to be:

![Fig. 4. Maasai Women Development Organisation (MWEDO), Longido district, Arusha region, Tanzania.](image-url)
broad based participation and stakeholder buy-in; building credibility, mutual trust and acceptance between local communities and officers; maintaining a balance between a community’s willingness and readiness; and familiarity with perceived benefits and distribution (Takhadu, 2005; Mitlin, 2008; UN-Habitat/GLTN, 2010). Thereby the debates on collective action, social movements and civic driven change emphasize the necessity to synthesize structural and agency approaches to individual and collective engagement for pro-poor development in the context of international globalisation and chronic poverty (Bebbington, 2010; Van Stekelenburg and Klandermans, 2009; Biekart and Fowler, 2009).

Meanwhile, social accountability literature formulates strategies for strengthening change agents to overcome or evade obstacles of the political and economic status-quo, such as mobilizing public opinion, organizing the voices of those who would benefit from change, and shifting incentives from anti-change groups towards pro-poor change (Tembo, 2013). Citizenship literature on engagement in a globalizing world emphasizes the importance of both vertical and horizontal views of citizenship rather than isolated grassroots citizen action (Gaventa and Tandon, 2010; Tarrow, 2005). It also points out the increasing complexities of a movement’s internal inconsistencies in power and access to resources at local, national, regional and global levels due to ideological, political and institutional internalization of socially differentiated experiences of globalization by the ‘people linked to the land’ (Borras and Franco, 2009; Borras, 2010) and challenges over standardization and control of data (SDI, 2011) as well as the concerning roles of diverse interest groups – particularly land holders and renters - and their position in planning and implementing participatory enumerations at settlement level (Hooper and Ortolano, 2012; Hooper and Cadstedt, 2014).

The implications of mobilisation literature for the PPLRT are the establishment of a sub-component for design element 1 (i.e. ‘enable mobilization’) under component box ‘Establish Pro-Poor Context’. This element could include both engagement based on the organising and mobilising traditions. Additionally, it includes both engagement of the entire affected population on land use change and resource users or project participants on project implementation issues. This is vitally important to increasing possibilities to build on inclusive community tenure practices (2) and to ensure that the land officer (3) and record keeper (5) are really accepted by the community, and the traditionally weaker among them. This also directly impacts on co-management (9).

4.1.3. Co-management

Co-management was already partially discussed in the previous article (Zevenbergen et al., 2013). It is informed by commons theory and can be understood as a property rights regime in between common and state property (Ostrom, 1990; Agrawal, 2001; Berkes et al., 2001; Dietz et al., 2002). From the rich variety of definitions, co-management was interpreted as a partnership arrangement between a community of local resource users and other primary stakeholders who share responsibility and authority for resource management (MacFadyen et al., 2005; as quoted in UN-Habitat/GLTN, 2010). Evolution of the concept during the last two decades reflects a shift from initial interest in legal aspects of collaborative arrangements to process and learning and various areas that characterize complex adaptive systems (Berkes, 2007, 2009; Dietz et al., 2003; Basurto and Ostrom, 2009). Major changes took place in the notions of ‘participation’ (from user groups/two-to-tango to stakeholder approach/more-than-two), linkages (from vertical/local level between government and users to vertical and horizontal/multiple levels, networks), and process (from formal
### Table 1
Main characteristics of documented cases of land records keeping.

**Source:** Based on Hendriks et al. (2016).

<table>
<thead>
<tr>
<th>Type</th>
<th>Mwea Irrigation Scheme</th>
<th>Vegetable Oil Development Project</th>
<th>Maasai Women Development Organisation</th>
<th>National Agrarian Registry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Kenyan Irrigation project</td>
<td>Large scale land based investment project / inclusive business model</td>
<td>Pastoralist land administration process</td>
<td>Social land rights (ejido) administration</td>
</tr>
<tr>
<td><strong>Origin and phases</strong></td>
<td>1953: Start development</td>
<td>2002-2006: Phase 1</td>
<td>2000: MWEDO established</td>
<td>Country wide, Mexico</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>Total: 30,350 ac</td>
<td>Total: 9800 ha</td>
<td>2013: MWEDO, PA, INEGI</td>
<td>1993-2006: PROCEDE</td>
</tr>
<tr>
<td><strong>Main objective</strong></td>
<td>Provision of irrigation and drainage for improved livelihoods, food security, and economic growth in Kenya (2014)</td>
<td>Introduction of vegetable palm oil plantations and production to facilitate national economic and social improvement</td>
<td>Promote women's rights to benefit from individual and collective land allocations and other natural resources for improved community livelihoods</td>
<td>Systematic documentation of existing land rights and capture of land transactions</td>
</tr>
<tr>
<td><strong>Local context</strong></td>
<td>Former colonial (re)settlement scheme using captive Mau Mau as cheap labour</td>
<td>Tse-tse fly infestation (1917) and evacuation island population resulting in deme forest and large swaths of grassland</td>
<td>82% land use livestock grazing and wildlife conservation</td>
<td>Predominantly peasant society</td>
</tr>
<tr>
<td><strong>Land tenure systems</strong></td>
<td>Tenancy arrangements on land held under trust deed by government through National Irrigation Board (NIB)</td>
<td>National Land Policy 2013</td>
<td>Legal Reform (1992): Change of constitution and legislation strengthened individual land use rights to residential plot and agricultural fields; while retaining community elements such as shared use of forest, grazing, unproductive land</td>
<td>Circular 51, National Agrarian Commission (1922)</td>
</tr>
<tr>
<td><strong>Programme reach</strong></td>
<td>Scheme farmers: 7500 (recorded)</td>
<td>Official Mailo/Public: used for nucleun plant</td>
<td>Scheme farmers: 1600 (99% local; 50 internationals)</td>
<td>Village Land Act 1999 No. 5 (revised 2002)</td>
</tr>
<tr>
<td></td>
<td>Informal outgrowers: 3000</td>
<td>Private Mailo (~85%); with absent landlords and informal tenancy</td>
<td>Outgrowers: 1610 (36% women) (2 units: 310 gardens; or 5.7% recorded in STDM pilot 2013)</td>
<td>Village Land Act 2001</td>
</tr>
</tbody>
</table>

---

Note: The table provides an overview of the characteristics of the documented cases of land records keeping, including type, location, origin and phases, size, main objective, management, local context, legislation, land tenure systems, and programme reach. The cases are from various regions, including Kenya, Uganda, Tanzania, and Mexico, each with unique characteristics and outcomes related to land management and development projects.
resources and are often still in an experimental phase. However, currently it was still found unusual to view ‘land records’ as the resource, regardless of the more individual or common land (resource) tenure that they document.

Integrated practice-based approaches can be useful in this context. These aim to overcome mainstream institutionalism’s dominant focus on investigating institutional designs and outcomes by paying more attention to how community-based arrangements are actually carried out in practice. Alemany et al. (2015) take patterns, routines and conventions as basis of action, social cultural change as policy intervention, and situational validity as scientific claim. Agrawal and Ribot (2014) identify three ways for using Ostrom’s principles in concrete design of new and revised resource governance institutions, viewing them as guidelines for crafting institutions.

Taking the above notions into account, Ostrom’s eight amended principles for CPR management (Cox et al., 2010) - provide multiple lessons for the PPLRT design elements. Principle 1 directly impacts on element 5 (land records), which should cover a clearly defined geographical area as resource boundary, while in the specific case of land records it simultaneously covers clear boundaries between legitimate users and non-users. Several principles point to making sure it is felt as ‘their’ records by the community, as well as that the land officer (3) and record keeper (5) are truly representing the community. Principle 6 links to element 8 (dispute resolution). Principle 8 on nested enterprises, with both horizontal and vertical linkages, is linked to inspection (6) and co-management (9), where both local and national buy-in play a role.

To provide a comprehensive understanding of the core design requirements for the PPLRT, Table 2 presents the updated summary overview – including the necessary changes identified as part of the abovementioned review.

### 4.2. Evaluation issues

The lack of focus on evaluation in the initial PPLRT design prompted a broader analysis of the concept in land related interventions. Deininger (2005, 2012) discusses approaches for undertaking Poverty and Social Impact Analysis (PSIA) in the context of land policy reforms. These tools are necessary to support the increasing demand for evidence-based land policy-making. Doss et al. (2013) make similar calls in relation to assessment of women’s rights over land and go further to develop practical methods enabling higher granularity of analysis. Barry (2015) works towards the development of an evaluation approach relating to the continuum of land rights concept.

At a level more specific to land administration, Haldrup and Stubkjær (2013) highlight how scarcity of indicators in the domain of cadastral and land registration impedes country and cross-country analysis. They call for more context specific indicators and imply the need for finely graded evaluation approaches in particular countries or regions. Barry and Roux (2012) are in agreement: they propose a framework for categorizing and assessing the validity of land tenure information systems theories’ usual assumption that land titling results in stimulated economic activity, which may not be valid in all circumstances. This may be due to attribution challenges in respect of other developments, such as increased connection to ‘modernization’ (e.g. mobile phones, migrant workers), increased pressure on land (e.g. outside large-scale land based investment, conservation projects, discovery of minerals, urbanization), or other interventions like subsidies for terracing, tree planting or fertilizers. Further on the practical perspective, Bandeira et al.’s (2010) proposed method for evaluating land administration systems aims at supporting the identification of opportunities for better facilitating access to land for low-income citizens. Shibeshi et al. (2013) use an approach similar to Steudler et al. (2004) to evaluate the recordation program in Amhara, Ethiopia: policy,
<table>
<thead>
<tr>
<th>No</th>
<th>Requirement</th>
<th>Definition</th>
<th>Short description</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Citizen/grassroots affordability</td>
<td>Affordable to the poorest in the state (i.e. an income of around $1.90/day; in the order of $1 per parcel).</td>
<td>The system should be affordable for all of a country’s citizens, particularly also for the poor.</td>
<td>Amhara, Ethiopia (c.f. Deininger et al., 2008)</td>
</tr>
<tr>
<td>2</td>
<td>State affordability</td>
<td>Affordable to the state in terms of start-up and ongoing sustainability.</td>
<td>The system should be affordable for the majority of citizens, making it realistic for governments to scale up their support for it.</td>
<td>UNRCA (United Nations Economic Commission for Africa) (1998)</td>
</tr>
<tr>
<td>3</td>
<td>Complex layered tenures</td>
<td>Enable community definition and recordation of existing tenures in use.</td>
<td>The system has to deal with complex, layered rights. Next to formal tenure rights, it needs to take care of customary and informal tenure forms, as well as secondary rights.</td>
<td>Arko-Adjei (2011); Fourie (1994)</td>
</tr>
<tr>
<td>4</td>
<td>Preventative justice</td>
<td>Recordation of ‘anticipatory’ rights. Facilitation of preventative justice is the underlying driver, not recordation itself.</td>
<td>The system has to deliver preventive justice by having land records that contain objective information that clarifies the rights and contractual relations, and limits the need to go to court.</td>
<td>Uganda (Deininger et al., 2006; Antonio, 2013); DRC (Sylla, 2012); Trinidad and Tobago (Griffith-Charles, 2011).</td>
</tr>
<tr>
<td>5</td>
<td>Optional sporadic vs systematic implementation</td>
<td>Recordation processes should be implementable in a sporadic fashion across the state.</td>
<td>It will not be possible to cover the whole country in a few years and areas of high priority will have to be chosen for a more systematic approach, whereas elsewhere a sporadic start can be made on a voluntary basis.</td>
<td>Namibia (UN-Habitat/GLTN, 2010)</td>
</tr>
<tr>
<td>6</td>
<td>Flexible spatial index map</td>
<td>The most fit for purpose should be utilized when developing an index map.</td>
<td>A spatial index map should be introduced early on to identify on the ground the land described in the document. A simple geometrical index can be created. Maps or aerial images may already be available.</td>
<td>STDM (Lemmen, 2010); Amhara, Ethiopia (Shibeshi et al., 2013); Ghana (Larbi, 2013)</td>
</tr>
<tr>
<td>7</td>
<td>Transparent, inclusive and equitable</td>
<td>All records should be freely available and all people should have equal access to recordation.</td>
<td>The land recordation system should be close to the ground to improve record correctness and overall acceptance, also to ensure ease of access and improve land management, land tax and planning.</td>
<td>Alberts et al. (1996)</td>
</tr>
<tr>
<td>8</td>
<td>Political economy analysis</td>
<td>The political economy analysis should be applied in a problem driven way, inclusive and covering both macro and micro levels.</td>
<td>The PEA framework consists of three main stages: reflection (problem identification and questions formulation); analysis and diagnosis (structural diagnosis of contexts and institutions; agency diagnosis of power, incentives and behaviour); prescription (what can be done).</td>
<td>Anaafio (2013); Lengoboni et al. (2010); Simbiri et al. (2014); Rwanda (Burangwa, 2013; Pritchard, 2013); St. Vincents and Grenadines (Brown, 2013); Kenya (Garcia, 2015; Archambault, 2014); Tanzania (Fairky, 2012) Malawi (Chisingsa, 2011); Uganda (Bomuhangi et al., 2011); Ethiopia (Shibeshi et al., 2013)</td>
</tr>
<tr>
<td>9</td>
<td>Mobilization</td>
<td>In a true bottom-up development, the unscripted organizing approach might be more appropriate, but when outside support is being given, it can also be made more scripted.</td>
<td>To really let documentation and recordation have an impact on the ground, it is important that the community be aware, understands what is needed, believes in the tool, and is included in all phases.</td>
<td>UN-Habitat/GLTN, 2018a; Tanzania (Sikar, 2014); Hooper and Ortolano, 2012; Hooper and Cadstedt, 2014; Kenya (Rigon, 2017); Borras and Franso (2009, 2010); Borras (2010)</td>
</tr>
<tr>
<td>10</td>
<td>Co-management</td>
<td>Local community and leaders play a joint role with local land office in delivering the land recordation function.</td>
<td>The system should build on co-management of pro-poor land records, including identifying witnesses, creating evidence, building the currency and legitimacy of land records. Strong checks and balances are needed to protect vulnerable groups.</td>
<td>MacFadyen et al. (2005); Transparency International (2009); Berkes (2007, 2009); Uruguay, Brasil (Trimble and Berkes, 2015; Trimble, 2014)</td>
</tr>
<tr>
<td>11</td>
<td>Common pool resource management</td>
<td>Land records seen as common pool resource.</td>
<td>Initial local practices towards joint recognition of available land records, such as appreciating utility of an index map or keeping shadow registries, may serve as first steps towards considering and managing land records as a common pool resource.</td>
<td>Uganda, Kenya, Tanzania (Hendriks et al., 2016); Mexico (Barnes and Di Giano, 2011); New Commons (Hess, 2008)</td>
</tr>
</tbody>
</table>
management, and operational aspects of the system are examined. The approach does not necessarily enable measurement of less tangible concepts such as land tenure. In this regard, Simbizi et al. (2014) attempt to provide a more holistic framework: one that measures multiple aspects of a land administration system and the stakeholders who interact with it.

From the broader perspective of land governance, a range of generalized assessment frameworks and guidelines emerged over the study period, including the World Bank’s Land Governance Assessment Framework (Deininger et al., 2011) and FAO’s Voluntary Guidelines on Tenure (FAO, 2012). Research and practical implementation on suitable land indicators is being increasingly undertaken and focuses on local perceptions of land tenure security and monitoring of land related goals within the SDGs. Other research includes contributions to empowerment (Zevenbergen et al., 2015b) Obviously, this depends on the level of inclusiveness of land governance in the area, both at local and national level (Archer, 2016; Rigon, 2017). The Guidelines on Impact Evaluation of Land Tenure and Governance Interventions aim to inform design and foster collection of better, more reliable data on what works.

The findings confirm rephrasing design element 1 ‘apply inclusive macro and micro PEA’ and incorporating it as element 1-a. Furthermore, as prelude to element 2, the stability, transparency and level of equity within community leadership need to be looked into in detail. Moreover, issues of sustainability of funding need to be incorporated in the level of sophistication of the design.

5. Results from PPLRT case studies

5.1. Apply macro and micro political economy analysis

All cases confirm the need to apply an inclusive micro and macro PEA in a locally customized and practice oriented way. Like any institutional intervention, and certainly ones related to land, success and impact are very context specific, and highly influenced by (and potentially influencing) the political-economic status quo of an area and/or community.

VODP and MIS illustrate the need to move beyond pre-dominantly conventional macro-level and sector-oriented economic analyses to project-design centred on contributions to increased GDP. Agency and inter-sectoral aspects, especially those related to local level, including land tenure and land use change (and environmental sustainability), need to be incorporated in project preparation, design and team composition, rather than treated as external risks dealt with through mitigation measures. At VODP, this could have highlighted the importance of inclusive formulation of land-use change scenarios, systematic enumerations during project start-up, and a twin-track approach of local level cooperating agreements between landlords and tenants, and national level land policy changes. Thus, it could have possibly also avoided heated international and local civil society protests over ‘land-grabbing’ for the nucleus plant.

MWEDO shows implicit application of the three main PEA stages, though illustrates the need for further integrating vertical links and strategic engagement at macro-level for grassroots initiatives, in increasingly nationally coordinated contexts (GOT, 2017), towards overcoming implementation challenges such as slow progress in implementation of VLUPs which are a prerequisite for CCRO issuance. Major PEA components are: i) bottom-up formulation by women groups of overall aim and vision and establishment of MWEDO and Pastoralist Women Forum; ii) ‘community mapping’ by grassroots women to further analyse and understand obstacles to their access to land, to position themselves and lead their effort as individuals and groups, and to identify people who can enable reaching and convincing key leaders to participate in ‘local-to-local dialogues’ at village to district level; iii) formulation of strategies (including partnering with local government; applying male role model approach; allowing participation of both women and men) to gain interest, willingness and political buy-in from local government, traditional leaders, men/husbands, and women, and to reduce elite capture from political leaders (UN-Habitat/GLTN, 2018a; Sikar, 2014).

RAN illustrates how a national instigated process that followed a land oriented approach has gradually evolved from a revolutionary to a compromise situation, retaining several social property ideas, increasing the individual character of land use rights, and allowing an opt-out procedure towards full-fledged private property.

Mobilization in all cases was found to be influenced by the drivers for change, and tends to be easier when local land use change is imminent, than when land tenure change is (politically) suggested or socially long overdue. However, at the same time, the increased pressure on the land in the former case complicates dialogue and negotiation of mutually agreeable solutions.

In a true bottom-up development, the unscripted organizing approach might be more appropriate. This approach is represented at MWEDO, where the Village Land Act 1999 (VLA) provided a favourable context for grassroots women participation in land management at village level. MWEDO illustrates effective ways of how to work systematically to define and promote women’s participation in these processes, such us through: i) training on the VLA and land administration processes for women’s groups and local government officials; ii) training on leadership skills for women’s groups; iii) conducting systematic awareness-raising campaigns and activities on women’s land rights and communities’ rights targeting local leaders as well as women, which includes women’s rights to representation in local, regional and national decision-making bodies (councils, assemblies) to promote their land and other rights.

In situations where outside support is being given, the approach can also be made more scripted. VODP and MIS illustrate the need for the scripted mobilizing approach to encompass at least two levels. First, engagement of the entire affected population and other stakeholders to consult and involve them in decision-making and build mutual consensus on considerable land-use change, rather than merely engaging local people on land acquisition as was the case for the nucleus plant at VODP. Secondly, awareness raising and engagement of resource users or project participants on project implementation issues, such as participation in farming and potential need for systematic enumeration. RAN illustrates a strongly inclusive and participatory scripted approach, which even for conversion of a small piece of land prescribes a two-third majority and three-quarters membership presence in assembly meetings. This is thus almost only possible for people that can mobilize the community. The way the assembly minutes are used and signed by many also mobilizes people to be engaged.

The findings indicate the need to incorporate ‘Enable mobilization’ as separate sub-element 1-b and part of component box ‘Establishing a pro-poor context’. This immediately puts mobilization at the level of co-management of the land recordation initiative (9) and directly impacts on inclusiveness (2), local recognition (3) and considered tenure forms and rights (4).
5.3. Build on inclusive community tenure practices

The pro-poor land recordation system aims to take existing local approaches into consideration.

All cases illustrate the prominence of employing and building on informal tenures through the use of ‘halfway-documents’. This consisted of entry into databases and documentation upon payment of O& M fees for allocation of water supply at MIS, storage and regular updating of non-official land records including area calculations, basic land size calculations to determine seedlings, and STDM data at KOPGT office/VODP, keeping of stamped and signed copies of application letters, minutes of meetings and receipts at MWEDO, and establishment and running of shadow registries by communities and/or NGOs as temporary measure as long as formal systems have not been fully established yet at RAN respectively MWEDO.

The cases also illustrate various avenues to ensure and strengthen inclusiveness of community tenure practices. At MWEDO, grassroots women engage local leaders and authorities in ‘local-to-local dialogues’ to reach a deeper and common understanding on issues of access to and control over land for Maasai women within their pastoralist society, and on how they can support Maasai women in their efforts to secure land. MWEDO leaders also engage community women in political processes. At MIS and VODP formation of a representative decision-making committee at the outset of the participatory design and management of land tenure recordation processes sprout engagement and commitment of all key stakeholders. At RAN, the multi-stakeholder approach of PROCEDE and FANAR consisted of three specific assembly meetings with federal agencies (first three and later two agencies) and the ejido community itself, in addition to all pre-work to set issues and disputes within the community. The increased issuance of more individual land tenure documents is likely to now have taken some of the communal land thrust out, one or two decades later.

The findings indicate the need to emphasize the added adjective ‘inclusive’ to design element 2, separate it from element 1-b, and move it into component box ‘Pro-poor land recordation system functions’. The level of inclusiveness of community tenure practices needs to be identified during PEA (1-a).

5.4. Introduce acceptable local recognition and para-land professionals

Acceptance and local recognition of pro-poor land recordation of existing rights and transactions does not happen automatically.

Awareness creation was facilitated and financed to a high degree by the government at RAN, to a medium degree by NGOs in cooperation with (district) government at MWEDO, and to a lesser degree and at later project stages by the PMU in collaboration with GLTN at MIS and VODP.

All cases illustrate that standardized forms can ease introduction and assist people to remember certain elements and transact more efficiently, allow for slow introduction of equitable policies, facilitate later recording, processing and re-use, and accommodate diversity and overlap in tenure arrangements and family relations while bringing clarity if and when possible. At MWEDO and RAN the national government designed standard formats and certificates as stipulated by law. Although delay in supply of certificates by district government due to involved costs make that copies of application letters, minutes of meetings, and receipts have been serving as main sources of evidence at MWEDO. At VODP and MIS standardized database registration procedures were developed through the PMU, partly in collaboration with GLTN.

All cases further show that support through filling out standard forms by neutral persons with more appropriate knowledge than the average community member further strengthens acceptable local recognition. At RAN a government legal advisor offers legal services for free. At MWEDO community para-legals, trained by MWEDO and district government, provide free assistance. At VODP and MIS recently trained local administrative officers provide support to digitized registration in comprehensive farmer registers of the LIMS.

Finally, in all cases, a wider range of para-land professionals facilitate local recognition at various stages of implementation, including para-legal officers, barefoot land officers, local record keepers, and local land surveyors with both sufficient qualifications and local knowledge.

The findings on design element 3 suggest replacing ‘formalization’ (which is usually linked to full acceptance in law) with ‘local recognition’ as well as replacing ‘land officer’ by ‘land professionals’ and adding ‘para’ to express the full range of involved para-professionals and highlight the unlikeliness of full professional training.

5.5. Affordable and consistent recordation of all tenure forms

At the core of the pro-poor system is the recognition by all stakeholders and subsequent recordation of all existing tenures and rights in an affordable and consistent way.

The recognition of complex layered rights hints towards two categories of land interests. The first category represents the main landholder, be it formal or locally accepted, who considers him- or herself to ‘own’ the land and is considered the legitimate landholder (at least at community level, and sometimes by outside entities, including government). The second category are derivative rights that are acquired via informal subleases or subdivisions, or even remain ‘off the books’, through innovative approaches.

MIS and VODP demonstrate the need for timely recordation of co-existing formal and informal tenure systems within changing contexts to avoid disputes and costs of court cases. At MIS, continuation of colonial practices under post-independence national law existed alongside increased informal practices of subleasing and additional on-farm activities (e.g. keeping livestock). At VODP, official mailo, private mailo (~85%), and kibanja tenure co-exist with multiple layers of complex rights that pre-dated the project, such as informal tenancy agreements, squatter arrangements, licenses, smaller interests over specific resources (e.g. fisheries, wood for charcoal), and customary uses (e.g. described as spirits in specific rocks or trees). The projects acted as catalysts for converging the differing institutional ‘recognitions’; however, processes for enabling this have only recently been established. New interests in land were created, of which the impacts on existing interests were not systematically recorded. This illustrates that next to establishing fast-track pro-poor land holding recognition, there is also need to fast-track processes for transfer, resettlement, and inheritance.

MWEDO demonstrates the potential risks of ongoing co-existence of institutions under principally conducive laws, as secondary use rights are currently not legally required to be listed on individual and group CCROs, while Village Land Use Plans can as such include designated specific areas but are increasingly perceived as offering insufficient protection. NGOs increasingly prefer group CCROs, because these can be less easily converted into general land by government for purposes of national interest, including preparation for commercial development. In addition, group CCROs seem less vulnerable to trade and sales. Some also promote listing of secondary use rights on both group and individual CCROs, including seasonal rights such as post-harvest grazing.

RAN demonstrates that the recording of individual land use rights as well as shares in the communal parts, via PROCEDE, was an efficient process. However, official transfers are restricted, and conversion to private land is very slow, creating a whole new layer of informal land access for children and/or outsiders (i.e. intergenerational transfer and peri-urbanisation sales) that is not officially captured by RAN. With the
average age of many members becoming quite high, and many younger people moving out of agriculture, informal arrangements are quite normal.

Despite (partial) formal/legal recognition of the right of inheritance for women, underlying cultural and legal gender biases remain persistent. At MIS, the land use rights of three quarters of actively farming women (18–70 years), mostly using inherited subdivided plots, were found vested in the male household head. VODP did not have in place formal processes for systematically identifying and supporting ‘minority rights’ (e.g. widows, orphans, and environment). MWEDO shows that despite the hard-won legislation (LA and VLA 1999) that guarantees women’s rights to own land, or to not have their husbands sell the house without obtaining their consent, women continue to fall into a legal void as a result of customary law. Ratification of the new constitution may override customary practices and provide more power to women in terms of leadership participation and property and inheritance rights (Thompson, 2014; Isinika and Kikwa, 2015). RAN shows that most original members were men and, although a surviving spouse should be the first choice to inherit when the member dies, often the oldest son inherits the membership (including land use rights).

Both citizen and state affordability remain an issue in the African cases, whereas Mexico has given strong financial support to the registration project and keeps a base budget to supply base services for free. Citizen affordability, in all cases, exceeded the criterion of USD 1 per parcel. MIS illustrates that, within inclusive business contexts with strong influencing of market prices through brokerage, three quarters of tenants perceive sufficient tenure security through system registration upon payment of annual O&M fees for serviced plots at USD 35; only a quarter of tenants acquired the formal records of License of Occupancy together with Tenant Identification Card upon extra payment at USD 10. VODP shows that within inclusive business contexts with sufficient demand the perceived need to secure investments and ability to pay for surveying and mapping services by district land surveyors increases for early commenced smallholders once becoming land holders with steady income through returning profits and increasing values of their plantations. MWEDO points out the option of non-mandatory and flexible land registration fees (~USD 4.60) and yearly land rent fees (~USD 9.20) under CCRO regulations, which can be set by individual villages and depend on size and use of the specific land. CCRO issuance requires additional fees (~USD 6.50) due to use of legally required official ‘crested papers’ and ancillary forms. RAN demonstrates that legal advice services (PA Agrarian Lawyers) and land administration services (RAN) are free of charge for local land right holders (especially ejiditarios). Local travel might be needed, although mobile service units are also reported to reach out to communities. State affordability involves the issue of short term minimization of direct costs of land recordation versus longer term avoidance of indirect costs related to resolving disputes and conflicts. VODP and MIS show minimal approaches in which land tenure issues of smallholders until recently (through enumerations and mapping; formalization of subleasing agreements, etc.) were subsequently postponed due to lack of priority, budgetary reasons, and sensitivity of land ownership issues. MWEDO illustrates sporadic approaches characterized by relatively low-technological start-off, gradual introduction of more advanced tools, with registration proceeding on a ‘spot’ adjudication basis supported by (partial) external project based financing. RAN, under PROCIDE, illustrates comprehensive approaches for recordation of nearly all ejido land with – at the time - innovative technologies, and through strong political support. Next to the ample (and still continuing) project costs, the base funding for maintenance and updating remains small. Drops in national budget, which land tenure issues of smallholders until recently (through enumeration, and surveys) were subsequently postponed due to lack of priority, budgetary reasons, and sensitivity of land ownership issues.

The findings call for refinement of design element 4 by adding ‘all tenure forms’ and ‘affordable’ and ‘consistent’. In many cases, recordation of all tenures and rights may go beyond current legal-administrative requirements and could serve as good practice for replication and future inclusion in law.

5.6. Land records, indexes and a record keeper for a specified area and specified users and non-users

The next step is the recordation of information in the land recordation system.

Although set within varying institutional set-ups, all cases show the importance of locally grounded land records in close proximity to communities and reflecting the situation on the ground. VODP and MIS illustrate the need of timely and planned transition from merely central (and formal) to complementary local (and informal) initiative-specific capturing, storage and processing of land records in close proximity to the community. Until recently, these schemes merely gathered production and water supply related data by blocks/sections, units, and individual plots. Since late 2013 respectively 2016, STDM pilots and follow-up enumerations were executed, in collaboration with GLTN, to overcome ambiguities in land holdership and continued emergence of contentious land disputes despite repeated ad-hoc attempts through sensitization and public meetings for improved transparency, inclusiveness and dispute resolution. In addition, Land Information Management Centers (LIMs) and Databases were established in 2017 respectively 2016. For smallholders the centers act as de-facto land administration office, or land clinic. The informal land records and (garden) certificates held are likely to be more up-to-date and reflect better the true situation on-ground, due to co-management of LIMs, regular face-to-face interactions, and mobile phone communication between staff and smallholder farmers. This particularly shows the critical role of senior project staff, their personalities, decision-making approaches and management methods rather than policy or regulations in this respect, regardless of whether they are formally trained in land administration.

MWEDO reveals a variety of reasons for slow processes of establishment and equipment of legally required village registries and actual issuance of customary certificates at local level, including limitations in knowledge and resources, but especially lack of priority and hidden political-economic interests at higher levels. This compels community support organizations to the temporarily parallel running of locally customized shadow registries.

RAN reveals that in situations whereby record keeping at local level (within ejidos) is not a priority and left to official organs (RAN and PA), with operating regional offices and mobile service teams visiting the communities, practical implementation of several elements of the underlying tenure system may lead to inequity issues. Self-governance has been long established and continuous and each person officially considered as ejido-member or accepted land user received land use rights documents. During the fieldwork, both at agencies and in ejidos, most talked positively about the processes and outcomes. However, rights of ejiditarios, poseisionarios and others differ and create inequality within communities. Ejido members traditionally were all male, and gender sensitivity is not widely accepted. The equitable idea of the land reform leading to ejidos is also slowly dissipating with rules such as only one child can follow as full member. This has recreated a group of people that is potentially (and legally) landless when they remain in the ejido. The accepted category of poseisionarios is a half backed way to deal with this. Informal leasing out is also happening, especially with the aging of primary farming members. Although the daily management committee is elected every 3 years and a second observatory (‘vigilante’) committee exists at the same time, internal power play can be found in some cases.

Spatial index maps again were not an explicit goal in the investment related cases, but in all cases flexible approaches were trialed and partly applied. At MIS formal tenancy documents do not provide detailed spatial information, but specify holding numbers. Section and unit maps provide a detailed overview of all sections and holdings. These maps provided a good basis for determining geo-reference points and
digitization into STDM through production of overlays on top of Google Earth images as part of pilot and follow-up participatory enumeration and geo-spatial mapping projects (using hand-held GPS). This included recording and certifying 540 acres outgrower-blocks in Ndekia III in 2016, additional outgrower-blocks in Ndekia I, II, and IV in 2017, and mapping of link and branch canals to track the irrigation water conveyance infrastructure supplying water to these blocks.

At VODP the importance of a spatial index map was either not recognized by key project stakeholders, or taken as a secondary consideration at best, during project start-up. No authoritative map of outgrower plantations was generated. However, area calculations were made for specific outgrower farms by VODP staff and basic survey teams from each block during early stages. These measurements enabled basic land size calculations in order to determine seedling numbers. From 2010 onwards, the utility of an index map has been recognized by both KOPGT and outgrowers: land administration and management activities could be supported. For this reason pilot and follow-up projects in participatory enumerations and geo-spatial mapping in STDM of 310 oil palm gardens (5.7% of outgrower farms) in late 2013 respectively additional 1500 gardens on Bugala, Bunyama, and Bubembe Islands in 2017 were undertaken. The pilot showed that a general boundary approach using trees and roads as delineators could shorten the time period for surveying with between 50–67 percent (a 40ha parcel was completed within 1 day compared to 2–3 days).

At MWEDO, CCROs issued by village councils contain a simple and low-cost hand-sketched map of the single parcel which specifies the participatory collected data on acreage, nodes, community witnessed proof of plot boundaries, and - since 2016 - also increasingly GPS measured coordinates of nodes. The information listed on CCROs can thus be linked directly to the parcels on the ground and provides sufficient tenure security. This data could be easily digitized in GIS and stored in databases at district (and/or village) level.

RAN demonstrates that pre-1992 every ejido’s outside boundary was set in the Official Gazette. Internal land use was only provided for verbally or in assembly minutes. PROCEDE and now FANAR covered all areas with good maps – applying innovative tools - of individual parcels for houses and agricultural plots. Communal land was also surveyed and shares certified. Every ejido that joined got a high quality spatial index map. INIEGI used very advanced technology for the mid-1990s, and RAN has been keeping up with technological developments. Still, indirect data collection methods are reported as not being liked by the farmers. Unclear is whether this relates to the level of participation or the technology applied.

The findings confirm the importance of flexible and locally grounded recordation practices and hint at adding ‘for a specified area and specified users and non-users’ to design element 5.

5.7. Joint inspection of the land records

Joint inspection can build and strengthen buy-in and trust from both community and state in the pro-poor land recordation system.

All African cases show initial steps towards more structural integration of (joint) inspection practices, while Mexico exemplifies incorporation into systemic and standardized learning cycles.

VODP and MIS show the need for increased engagement of national and local government land offices beyond land identification and acquisition. At VODP, the Ministry of Lands, Housing and Urban Development was only involved in the Land Acquisition Task Force for the nuclear plant, while the District Agricultural Office - responsible for land management - coordinated land acquisitions, transactions, and court cases with willing sellers/vendors on the ground. At MIS, the Ministry of Land keeps records of the overall gazetted scheme, while since devolution CLOs increasingly aim to register individual land holdings in the main scheme. Both at VODP and MIS the recent increased sharing on recordation practices with government may contribute to improved interoperability, regular mutual inspections, and reduced competition between STDM records kept in the projects’ LIMSs and official records at district/county, zonal and national government land offices.

MWEDO shows how gradually built joint inspection practices can contribute to improved perceived tenure security through overcoming limitations in access, transparency, inclusiveness and equity. Inspection of land records is a responsibility assigned to the DLO; oversight by national government is limited. It is executed as part of general monitoring; additional ad-hoc visits are undertaken whenever time and finances allow. Basic training and capacity development of village chairmen and executive officers, supported by MWEDO, focused on the VLA and CCRO issuance, during initial stages. Additional training on paper-based record keeping and maintenance was provided early 2017. Due to the limited numbers of CCROs issued so far, systematic identification of weaknesses in land recordation practices has not taken place yet or only on project related basis. However, village offices have been increasingly equipped with metal filing cabinets and/or locks for secure storage of certificates, copies of title documents, and other paper-based land records. Additionally, the DLO keeps duplicates of Village Certificates and issued CCROs, while MWEDO keeps copies in its ‘shadow registry’ until formal systems will be fully established.

RAN, shows a twin-track approach of special agencies with mobile teams for social property support to and control of land use rights recording by ejido communities and their members. Oversight by the federal government has been consistently incorporated. Pre 1992 this was done by the Agrarian Secretariat and included RAN record keeping, be it that this mainly concerned keeping copies of base documents, updating membership lists, and assembly minutes. After PROCEDE, the meaning of membership lists and assembly minutes became less prominent, now that every ejido member has (at least) three documents that give more tenure security to specific pieces of land. RAN keeps a duplicate of all these documents, as well as the original data collection information from PROCEDE.

The findings call for refinement of design element 6 by adding the adjective ‘joint’. This feeds into co-management and system ownership by community and state (9). Inspection is differentiated from evaluation (11) and deals with the integrity of land records as such.

5.8. Multiple sources of evidence and local weighting

The pro-poor system contains information on land that is accessed through various channels and with a variety of evidence.

All cases show the collection and storage of contradicting evidences for local weighting and use at later stages either as part of the projects’ LIMS or as part of a shadow registry run by community support organisations. Local weighting of contradicting evidences so far has been largely through formal court cases and has not yet influenced formal land recordation practices and systems. VODP and MIS show the incorporation of multiple sources of evidence in STDM records of LIMS, which includes collaborative verification of collected data. Local weighting was scheduled for later stages. MWEDO illustrates the strategy of parallel collection and storage of all available evidences related to parcels in the shadow registry, while formal recordation of CCROs through village councils does not include contradicting evidences. This practice has proven useful in several cases, especially for highly contentious contexts. The recording of any type of paper brought in facilitates thorough analysis and local weighting at later stages, as successful resolution of an illiterate woman’s court case against partial grabbing of her parcel near the highway after 2 years illustrates. RAN illustrates a consecutive approach of first doing all pre-work of settling issues and disputes within the community (see design element 2) and thus as much as possible dealing instantly with contradicting evidences. This is followed by normal adjudication work in the field with land use right holders present.
The findings indicate the relevance of adding 'local weighting' to design element 7. The recordation of contradicting evidences principally eases dispute resolution (8). More empirical research on processes of local weighting is recommended for improved transparency, also in relation to the provision of preventive justice.

5.9. Affordable, accessible and well-informed dispute resolution

Alternative dispute resolution mechanisms that are locally grounded may offer avenues to ensure dispute resolution practices for all in the community that are culturally sensitive, affordable, relatively short in duration, in close proximity, and promote amicable rather than irreparable future relationships between disputing parties.

Delivery of preventive justice has not been an explicit goal in any of the cases. MIS and VODP are examples of large scale projects whereby lack of stated preventive justice goals, next to their primary economic and social development objectives, results in frequent and contentious land disputes and conflicts. However, the recently taken up preventative practices can substantially avoid and reduce land disputes, conflicts and resulting court cases. This concerns the confirmation of informal sub-lease agreements between licensee/landlord and lessee/tenant in the register, especially if complemented by a fairly elected and co-managed Scheme Advisory Committee/Land Tribunal respectively land clinics for final and binding resolution. MIS and VODP also show that similar projects can gain considerably from some form of systematic enumeration prior to other project activities.

The cases display various ways to build on existing alternative dispute resolution mechanisms, within a hierarchy starting with elders, local chiefs, (sub-) clan leaders to finally culminate to the High Court. At RAN a legal advisor is present at important ejido assembly meetings, such as for co-signing of protocol. The legal advisor provides free assistance in documenting decisions on land use rights, including on intended heir, formal transfers, and start of privatization procedure. At VODP and MIS the project management unit, in collaboration with farmers’ associations, plays an enabling role in engaging alternative dispute resolution and establishing additional binding mechanisms. At MWEDO community paralegals, including some traditional leaders, have been trained on basic legal issues and advocacy methods for supporting and referring women facing land and property related issues. Thereby the initial community watchdog approach to guard against women’s rights abuses was soon extended to provision of land related legal expertise (UN-Habitat/GLTN, 2018a).

The findings hint at adding the qualifying terms of ‘affordable, accessible and well-informed’ to design element 8. Pro-poor land recordation as such ideally results in decrease of land disputes in the medium and longer term.

5.10. System ownership and co-management by state and community – as a public good

For land records to contribute to better land governance for the poor, it will be essential that the land recordation system is owned by both local community and state through a co-management arrangement.

Co-management of land records in all cases is played out with a strong role for official agencies, be it often their regional or even local representation. Really local, bottom-up records that the government sector started to support were not evident in the four cases, which was partly due to the selection procedure of cases. At VODP and MIS, recently formed representative multi-stakeholder decision-making committees to guide collaborative enumeration and geo-spatial mapping processes and key issues could further co-management (UN-Habitat/GLTN, 2018a). At MIS this resulted in LIMS database management by the Mwea Irrigation Users Association, co-hosted by MIS and NIB. MWEDO shows ad-hoc forms of co-management practices such as workshops, drafting guidelines for practical implementation of laws, joint mapping exercises, and accountability processes based on shadow registry data. At RAN, the ejido-system clearly reflects a co-management approach of land use rights documents, whereby the Ejido Assembly is in charge, with social property support and oversight from the federal Agrarian Attorney’s Office. More equal forms of co-management may be accomplished by emphasizing and/or claiming a problem-driven and inclusive PEA and enabling strategies for (un)scripted mobilization.

Land records are not really seen as CPRs themselves in any of the cases. At VODP and MIS, however, collaborative participatory enumerations and geo-spatial mapping make that gathered land records are increasingly trusted and to a higher or lesser degree initially treated as CPRs. At MWEDO and RAN, shadow registries show characteristics of land records as CPRs. However, the gradual individualization through issuance of individual land certificates to each person, combined with an official land office (RAN), has reduced the ejido’s role as record keeper and makes that land records can no longer be seen as CPRs.

The findings call for adding ‘co-management’ and ‘as a public good’ to design element 9. This expresses more explicitly the collaborative arrangement respectively the use of land records (rather than land) as new commons.

5.11. Emphasis on continuum of land recording

The continuum of land rights is a metaphor for understanding and administering the rich complexity of land and tenure rights on the ground.

All cases display good practices of forms of land recordation and their institutionalization for implementing the continuum of land rights at scale. The cases confirm context relatedness of a wide and complex spectrum of appropriate and legitimate tenure arrangements that exist. However, the findings also show biases towards individualization of land tenure rather than considering the full range of appropriate pro-poor and gender sensitive land tenure systems. MWEDO shows that in situations of national formal hybrid land tenure systems, the option of ‘tenurial shells’ through collective self-governance (see also García, 2015) has not been considered neither claimed in the pastoralist context (see also Fairley, 2012). The continuing deliberations over most appropriate and legitimate ways of securing tenure through VLUPs, group or individual CCROs, partially result from this. VODP and MIS show similar limitations from the land acquisition phase, although VODP shows differentiation in land allocation strategies between blocks, while initial project design included a settlement component for smallholders (Mukasa, 2014). RAN shows that individualization through increased issuance of land certificates to each person makes people operate more individually at times, depending on the pressure on land in the area, despite legal provision of approval by the ejido assembly majority. At the same time, it needs to be considered that, for women and youth, individualization often also offers opportunities of access to resources (Archambault, 2014; Archambault et al., 2015), although these often result in lower levels of overall development of communities.

The findings confirm the importance of ‘Emphasis on continuum of land recording’ for pro-poor policy frameworks and re-emphasize the need to consider the full range of appropriate and legitimate tenure arrangements (1; 4). Particularly in pilot and scaling-up projects which provide the ‘living laboratories’ for future legal-administrative innovations. While legal-administrative and mapping sides of land records can evolve at different speeds, they should not be completely out of sync.

5.12. Evaluation of economic, social and environmental outcomes, including contributions to empowerment

The broad notion of improvements for the poor has been slightly unpacked by making these more tangible via evaluation of its outcomes...
in all three elements of sustainability. In all cases, comprehensive outcome evaluation of pro-poor land recordation has not been undertaken yet, while theories of change tend to be specifically related to donor financing. Nevertheless, some overall observations can be made based on fieldwork and secondary literature.

Social outcomes can be reflected in improved perceived tenure security, reduction of disputes and conflicts between landowners, landholders and tenants, and social empowerment. Overall transparency, inclusivity and equity were covered to a large extend; with progress made on access to land for women, but issues remaining for youth. Perceived tenure security slightly improved in all cases expressed by increased investments in properties. Reduction of disputes and conflicts at the individual level through prevention and arbitration has been a major reason for documentation of land rights at VODP and MIS, while RAN (ejidos) and to a lesser degree MWEDO (group CCROs) are examples of creation of ‘tenurial shells’ at collective level which protects communities (or groups within) from outside land invasions and allows them to evolve internally without the associated pressures (Barnes and Di Giano, 2014). Social empowerment potentially occurs at various and interrelated fronts, for example at MWEDO: structural (property ownership), relational (marital power), and individual (comfort speaking; household decision-making) (Grabe, 2015; Goldman et al., 2016). Gained power within marital relationships contributes to the likelihood of becoming engaged in political participation and decision-making.

Economic outcomes can be reflected in more efficient resource use and improved productivity, improved access to credit, and contributions to economic empowerment. More efficient resource use for improved productivity is seen at MIS by using generated data for developing cropping plans to support efficient irrigation water management and use by both management and farmers, while practices of considerable subleasing may pose challenges to its pro-poor nature. Access to credit has generally not improved through certification so far. This may be partly due to land not being a simple economic commodity that can be foreclosed upon if credit is not repaid, but having cultural, political, ecological and other functions as well (Barnes and Di Giano, 2014). Nevertheless, MIS and VODP show use of land recordation proof as secure form of collateral through incidental trustful personal relations respectively establishment of farmers’ credit society in 2013. Access to credit has generally not improved through certification so far. This may be partly due to land not being a simple economic commodity that can be foreclosed upon if credit is not repaid, but having cultural, political, ecological and other functions as well (Barnes and Di Giano, 2014). Nevertheless, MIS and VODP show use of land recordation proof as secure form of collateral through incidental trustful personal relations respectively establishment of farmers’ credit society in 2013. Economic empowerment through better positioning for productive land use towards improved livelihoods is shown in all cases, especially through group CCROs at MWEDO. Finally, contributions to revenue collection and land value capture may also be medium-term spin-off benefits at VODP and MIS.

Environmental outcomes can be reflected in applied spatial and other environmental mitigation and adaptation strategies. All cases show that systematic integration of sustainability issues during PEA and mobilization could contribute considerably to ensuring environmental sustainability. For example, strategies to prevent or minimize soil degradation and water pollution related to growing oil palms from negatively influencing fishermen’s livelihoods at VODP, and deliberately planned strategies for sustainable water supply and distribution at MIS.

The findings confirm timeliness of adding design element 11. Thereby it is important to also take into consideration potential contradictions at local and national scales, in line with the PEA (1).

6. Conclusions and recommendations

This article built on initial publications on the PPLRT as a bottom-up and locally-customized approach to document transfers and capture existing rights on a (sporadic) case by case basis and more transparent for all to see, as compared to the recent more (sub-) national interventions aiming at area-wide approaches of FFP and STDM supporting (systematic) first time registration. It discussed the further development of PPLRT design elements and system based on review of recent literature related to ‘unpacking the notion of community’ and evaluation, documentation of four cases of records keeping, and feedback during the EGM in 2016. Fig. 6 shows the resulting refined PPLRT diagram.

The PPLRT design system diagram requires modification of the exact lay-out to more adequately express mutuality and reversibility of relations between the component boxes. Attention is called to the direct relationship between component box ‘Establish pro-poor context’ and component boxes ‘Pro-poor land policy framework’ and ‘Pro-poor information records’; relationships that can even be seen as bi-directional. This would also mean that all three component boxes should be on the lower side of the diagram to give input to component box ‘Pro-poor land recordation system functions’ that is at the functions level (and –unchanged– leading to component box ‘Improvements for the poor’). However, changing the diagram exactly along those lines would lead to the disadvantage of taking it further away from the original figure for (conventional) land administration (Williamson et al., 2010). Therefore, the final diagram compromises between the two positions: i.e. the component boxes are moved halfway down, but with bi-directional links added.

Although the model is intended as a generalized view of a pro-poor land recordation system, one should remember that the local settings will necessarily mean tailoring and extension of the specific principles. During the expert group meeting it was recommended to continue with case studies in (peri-) urban areas, as well as add Asian and more Latin American cases. The recommended addition of (peri-) urban cases was taken up through the network study based on existing case materials on three sub-Saharan African countries (Van Aperen et al., 2017). The suggested revised GLTN publication, now covering both (updated) design and implementation, is forthcoming (UN-Habitat/GLTN, 2018a). It incorporates a detailed good practice chapter on concrete implementation of pro-poor land recordation based on the MWEDO process.

Several strategic areas for further research can be recommended. Firstly, research on the impacts of pro-poor land recordation and its contributions to the SDGs’ overall aim to leave no one behind, especially land indicator 1.4.2. This should include research on the contributions to empowerment and influence in processes of land use planning and to medium and longer term benefits of land certification at household, community and national levels. A more continental spread of cases is advisable; adding Asian cases and having more Latin-American ones. Perhaps lessons from other bottom-up originated documented cases may also lead to still further refinements.

Secondly, research on the conditions for improved, coordinated, and scaled PPLRT implementation. Several NGOs, including GLTN partners, are active in documenting what some called ‘anticipatory rights’, and is called ‘half-way documents’ here. That concept needs to be further detailed and linked to the work on the ‘continuum of land rights’. Empirical research on processes of local weighting of evidence needs to add further contributions on the outputs of the VGGT. Scaled implementation also requires building on initial explorative studies towards standard approaches for determining per-parcel costs or cost-effectiveness of land documentation (Persha et al., 2017; Achilla, 2017; Deininger et al., 2008). It is important to include both individually and collective held parcels in the analysis.

Thirdly, in the medium term, cross-tool research on conditions for effective future conversion or integration of land data collected by local communities with data from land administration agencies, although critical mass for sufficient counterweight should first be generated.
Fig. 6. The refined design elements and system of the pro-poor land recordation tool.

The PPLRT design elements require refinements of ten elements. This concerns reformulation and split into two components of element 1, modification of terms within elements 2–9, and addition of element 11. Element 10 is being kept unchanged.

Source: Reworked from Williamson et al. (2010); Zevenbergen and Augustinus, 2011; Zevenbergen et al., 2013

Acknowledgements

This paper would not have been possible without the support of the Dutch, Swedish and Norwegian governments to GLTN, UN-Habitat, and ITC, University of Twente. This paper also benefited from the contributions of the participants during the GLTN/ITC organized EGM in March 2016.

References

and livelihood insecurity in rural Rwanda. Land Use Policy 30 (1), 186-196.


Zevenbergen, J., De Vries, W., Bennett, R.M. (Eds.), 2015. Advances in Responsible Land Administration. CRC Press, Taylor & Francis Group, pp. 305.