



## Editorial



## Land governance and tenure security at scale: Lessons from the field

## 1. Introduction

How rights to land are defined and governed and how tenure security is perceived both matter for many pressing development reasons. Tenure systems influence investments in climate adaptation, in housing and infrastructure, how cities evolve and expand, or options for taxing property. How land tenure and property rights are governed guides decisions about investments in agriculture, system resilience, and diversification; and affects management of property held in common and of public land. It guides land markets, intergenerational transfers of land and property, and land rights—especially for more disadvantaged groups like women, young people, pastoralists, and migrants. Land rights may be linked to identity, and culture.

Land is a scarce resource. Access to suitable land is essential for rural livelihoods, particularly where there are few nonagricultural employment opportunities. Pressure on land is rising due to factors as varied as population growth, soil degradation, expansion of large-scale farming, mining, conservation initiatives and forms of green energy. Expansion of residential areas, industrial zones, and infrastructure also cut into the land available. Among possible outcomes may be agricultural expansion into forests or less suitable areas, land fragmentation and rising costs for investment, lease prices and housing. More scarcity and higher values might ultimately lead to land speculation, more conflict over lands, exclusion, and evictions.

These developments put additional pressures on already underperforming land governance systems. Land policies, laws, and regulations; land administration and information systems; and dispute resolution mechanisms set the institutional framework for land governance. Pre-existing land governance systems may have been integrated, regularized, overlaid, or simply abolished – at least officially. But, the gap between what the law says and whether it is perceived as legitimate and actually adhered to can be enormous. Although the causes vary, the implications for citizens do not: they suffer from tenure insecurity, inequity, and disputes, while inefficiencies in land allocation and land markets affect prospects for sustainable development and stability.

The growing acknowledgment that tenure security matters for sustainable development resulted in the inclusion of two indicators on land tenure in the 2015 SDG framework.<sup>1</sup> Another example is the World Bank Annual Land and Poverty Conference, which grew from a small

workshop in 1999 to an annual event attended by over 1500 government officials, academics, development practitioners, representatives of NGOs and civil society from throughout the world. This conference has become a major venue for exchange of the latest research results and lessons learned from changes in land policy and interventions; it allows decision-makers to quickly access global good practice and direct interaction with and exchanges on cutting-edge developments<sup>2</sup>.

## 2. Special issue

This special issue of the journal *Land Use Policy* presents papers analyzing tenure rights and security and interventions to strengthen land governance, the first drafts of which were presented at the 2019 Land and Poverty conference.

## 2.1. Gender-disaggregated analysis of evolving tenure rights in informal settings

For rural areas, there is a large body of research describing and analyzing how well local tenure systems address specific local rights and needs and adapt to changes, and also how they affect equity, development, and sustainability. Much less is known about informal urban tenure systems, many of which have already been in place for several decades and are likely to shape the conditions for land governance for a long time. Using a gender lens, (Kotikula and Raza, 2020) show, for instance, the growing differentiation between first settlers, who are perceived as “owners,” and recent migrants to Dhaka in Bangladesh. Both women and men, tenants and de-facto owners, seek to strengthen their occupancy claims and the legitimacy of their rights not only within their communities but also vis-à-vis authorities and development partners, such as NGOs investing to upgrade slums. This paper demonstrates how tenure security should go beyond the rights of owners to also address the position of tenants.

## 2.2. Expanding urban land delivery while respecting rights

Urban expansion is often at the expense of pre-existing land-right holders, who tend to be evicted and seldom benefit from rising land values. Land pooling can be a way to acquire land for urban

<sup>1</sup> The most relevant sustainable development goals are 1: No poverty and goal 5: Gender equity, which both include indicators on tenure security. And rights are also relevant to other goals like 2 – zero hunger and 11 sustainable cities and communities. The Doing Business index has added an indicator on the quality of land administration

<sup>2</sup> We would like to thank all participants, especially presenters and chairs, as well as partners and sponsors for their invaluable contributions to making the conferences possible and sustain these over two decades.

development while also respecting the rights of current land holders and enabling them to benefit from rising land values even when their rights have not been formally registered. To meet the growing demand for housing, (Farrin et al., 2019) describe how Bhutan used land pooling to acquire land for housing while ensuring that the original landowners were granted rights to obtain land in the new housing scheme so that they benefitted from rising land values. Analyzing the results of this land pooling scheme, the authors found that although original landowners did benefit, the challenge now has devolved to tenants, whose rents are beginning to soar.

### 2.3. Policy and legal reform to enable regularization of customary land and strengthen women's rights

Overhauling land laws to enable formal regularization of customary systems rights can take time. (Chikaya-Banda and Chilonga, 2020) analyze why in Malawi it took over 20 years from land policy to parliamentary approval of the new laws. They also analyze the efforts to strengthen gender equity in the land laws. To ensure actual implementation, the Malawian Ministry of Lands, Housing and Urban Development started a systematic customary land adjudication pilot, the design of which was based on international experience, particularly from Rwanda. The authors also discuss the role of development partners. Although their support is essential for completing and piloting the land reform process, it is also a challenge for government to stay in control and ensure that the activities of development partners are coherent and can be sustained.

### 2.4. Secure tenants' tenure in customary systems

Uganda recognized customary tenure systems in the 1995 constitution and the 1998 land law, thus allowing individuals and groups to register customary lands. One of the Ugandan customary systems, "Mailo," is the main tenure type in peri-urban Kampala. The Mailo system covers landlords and tenants, whose relations are often marked by tensions over rights and disagreements about contracts and payments, which is affecting investment in agriculture. The result is tenure insecurity for tenants. (Musunguzi et al., 2020) discuss a pilot program that is testing measures to arrive at agreements benefitting both landlords and tenants.

### 2.5. The challenge of realizing registration of community rights

A range of countries in Asia and Latin America have introduced policies and laws that should enable communities to register their rights over land and natural resources. (Notess et al., 2020) show that communities trying to do so, often do not succeed. However, companies seeking to secure rights for the same land and natural resources are often successful. Communities suffer from inappropriate land registration procedures and instruments; government staff not in place or not trained properly; long and costly procedures; and institutional fragmentation where responsibility for land is spread over a large number of central and local government institutions whose work is often poorly coordinated. The few communities that managed to register their land succeeded only because external parties, such as NGOs, assisted with navigating the process and covering the costs.

### 2.6. Achieving complete cadastral coverage

Since the early 1990s, Turkey has been investing in improving its incomplete and outdated cadastral database but initially progress was slow. (Ercan, 2020) analyzed how the decision to reorganize the State land inventory agency around its core functions (ensuring accuracy of the cadastral and land administration service delivery only), while outsourcing first-time land surveys to the private sector, helped to speed up the process, lower unit costs, and achieve the goal of a complete

cadastral data base.

### 2.7. Preventing land administration systems from returning to informality

In 2012 Rwanda completed the registration of all 10.4 million parcels nation-wide, using a participatory and low-cost approach that combined insight from global good practices, rigorous piloting, and intensive process monitoring. After completion of first-time registration, the land agency was reorganized to focus on land information system sustainability, data interoperability with other government registries and expanding land governance services. Land administration services are decentralized and increasingly on-line and accessible, but fees are levied. However, (Ali et al., 2019) show that 87% of rural transactions (mainly life events like inheritance) are still informal in 2018. Reforms to prevent inaccurate land information require the reduction of transaction fees for agricultural land to affordable levels (including a waiver for the poor), which would be revenue-neutral but greatly enhance social welfare.

### 2.8. Developing property tax systems where land records are incomplete and analog

Recurrent property tax is a predictable source of government revenue and often one of the most progressive forms of taxation. Urban municipalities in India managed to overcome the obstacle of incomplete and paper-based land records by drawing on now easily available satellite imagery and digitized administrative data, while leveraging artificial intelligence (also for mass valuation). (Awasthi et al., 2020) show how this approach enabled municipalities to expand the taxpayer database and facilitate valuation. Municipalities' introduction of mobile payment facilitated compliance. They further grew the tax base by investing in systematic, low-cost, and fast collection of data on plot boundaries, property characteristics, and self-reported rights, a development that is enhancing tenure security.

## 3. Looking ahead

Globally, experts' estimate that the percentage of formally registered land is still low. Lack of registered rights, as such, is not increasing tenure insecurity if local systems are functional and trusted and the level of disputes is low. Moreover, even when land is registered, perceptions of tenure insecurity may be high if land administration system are weak and not trusted, and the documentation held by landowners as evidence of rights is not legally valid, incomplete, erroneous, or outdated.

Registration of rights and moving to formalization of tenure relations have proved to become necessary once gains from specialization and economies of scale are large enough, which tends to be associated with growing population density, greater economic diversification and expanding land markets. But, there are both benefits and costs of regularization and keeping land data updated, for both government and individual land holders. Policy makers must decide when to invest in first-time registration, if they can sustain the land information system thus established, whether to aim for nationwide coverage or focus on certain areas first.

Establishing and sustaining institutions for land administration and information is not costless. It will be rational only if net benefits exceed the associated cost. It needs continuing attention to operating costs and effective approaches to engaging communities and the private sector, with the government focusing on its core roles of quality control, ensuring reliability and respect for the rule of law. Land information systems have to be integrated in government IT systems and interoperable with other registries. Sustainable systems require full government buy-in with commitment enshrined in regulations, administrative procedures and budgetary processes that will ensure maintenance, interoperability, and expansion without external support.

A sufficiently large share of land holders must see the cost-benefit

balance of registration flip enough that they become motivated to engage, keep accurate records and report all changes to prevent reversion to (semi) informality. Landholders are not a homogenous group. Where those with ownership rights may see benefits, other family members, tenants and those with user rights may be more skeptical and could lose access to their social safety net. Intra-household and intra-family differentiation of rights must be considered too.

The distribution of spillovers is another key policy that must be taken into account. Rents will be created as land moves (or becomes eligible to move) to more valuable uses. The tricky part is to make sure that the new rents are broadly shared by society and by those who have made past investments, in order to prevent unleashing destructive rent-seeking schemes and speculation, with rents falling mainly to the well-positioned. That is why diverse possibilities for rent capture must be considered in the design, as this can bias the outcomes either way, toward too little/too slow formalization, or too much/too fast.

New IT technologies that are increasingly doing more, while costing less, offer many opportunities to address some of these concerns. Connectivity, new software applications and developments around data access and management greatly reduce the costs of first-time registration and enable collection of a wide range of data on diverse local tenure rights, including user rights, and uploading, classifying, and validating various forms of evidence of rights held by the land holders. They have come within reach even of countries with less-well-developed IT infrastructure and enable local participation, recording of all rights, and fit-for-purpose approaches.

These developments are now allowing countries to transcend the limitations of their IT infrastructure and make use of rapid and low-cost technologies to collect information on evidence of rights, using participatory and cost-effective ways that were unimaginable even a decade ago. Ensuring equity of rights, like joint ownership, and recording the full bundle of rights is possible, enabling recording of all user rights, common property, and improving the tenure security of all family members. Using these technologies effectively will not only improve the cost-benefit of first-time registration and the feasibility of scaling, but also facilitate the verification, maintenance and updating of records; speeding up of digitizing paper-based systems; and significantly improve data quality, integrity, and protection.

However, while the opportunities to accelerate land registration are real, technology alone is not the answer. Without local capacity to choose appropriate technologies, and without informed oversight to ensure security of data and protection of privacy, technology can foster exclusion and oppression rather than inclusion and empowerment. Political economy often determines whether new opportunities are, or should, be seized. Experience shows that when large investments in technology are not preceded by regulatory and institutional change, the impact will be low because such interventions usually do little to benefit the general population. Seizing these opportunities will require regulatory adjustments first related to standards, data ownership, privacy, and security. Government agencies that want to effectively tap into this new wealth of options while avoiding capture by special interests will need to adopt the *right* regulations, workflows, and performance standards, and ensure broad public awareness of the implications of all choices.

That is why alternatives to reducing sources of tenure insecurity beyond investing in new demarcation and registration operations have to be considered first—they may be more efficient and effective and cost considerably less. There is a lot of scope for improving regulations, streamline procedures and instruments within existing legislation—to improve accessibility, and enhance cost-effectiveness of regularization and recording transactions. To the extent that institutional and regulatory land-related reforms will be approved and can be implemented without obstruction from those benefiting from the status quo, they offer scope for relatively quick improvement of economic, social, and environmental outcomes once the barriers to large-scale, systematic regularization are taken away.

Looking ahead, how land governance improves is likely to depend on

how well it can leverage the digital economy<sup>3</sup> while establishing an appropriate regulatory framework and addressing the political economy challenges. New technologies allow more flexible registration and full coverage, while capturing several layers of rights and restrictions that may overlap, which enables a near-costless transition between tenure systems to resemble a ‘continuum of rights’ and achieve scale. They offer a unique opportunity for countries to catch up with regularization and new registration, record user and rental rights; and apply good practice and insights at scale, to achieve comprehensively secure land rights for all.

Piloting, monitoring, and adjusting approaches, and sharing these experiences on how to integrate new possibilities for strengthening tenure security, achieve more effective land management and improve land governance, is and will remain vital.

As the papers in this Special Issue show, multiple paths are being identified and tested – inspired by exchanges with other experts and other countries. As some are more successful than others, it is crucial that such experiences and lessons learned continue to be shared through, e.g., publications like this one; regular exchanges like the Annual Land and Poverty Conference; and leveraging regional networks, online platforms, and portals. But only when the people preparing, implementing, and evaluating land reforms take the time to learn from those experiences can replication of incomplete or even counterproductive measures be prevented. For now, as guest editors we hope you will enjoy reading the papers that follow and be inspired.

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<sup>3</sup> The ‘digital economy’ refers to developments like cheap computing power and cloud computing; expanded connectivity of mobile phones also in rural areas; open-source software; availability of geospatial data on buildings and land cover data at high levels of spatial or temporal resolution via remote sensing and drones; growing use of machine learning and other forms of Artificial Intelligence (AI) to process and analyze land-related data. Availability of satellite imagery at increasingly high resolution and frequency is helping to link tenure to land use and monitor changes or compliance with regulations. Linking cadastral information with freely available satellite imagery at relatively high levels of temporal and spatial resolution provides opportunities to monitor land use in near real time. Machine learning approaches to identify building footprints can now be applied at low cost and high speed at the country level. The resulting data can improve quality and realism of land use plans and, by allowing low-cost enforcement (e.g. in terms of acting against violations such as deforestation or unauthorized building) increase the potential relevance of land use plans and reduce the level of discretion (and corruption) in enforcing such plans. This may have far-reaching implications for decentralized management of public land, monitoring land assigned to investors, and environmental sustainability.

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Thea Hilhorst<sup>a,\*</sup>, Jaap Zevenbergen<sup>b</sup>, Klaus Deininger<sup>a</sup>  
<sup>a</sup> World Bank, Washington, DC, USA  
<sup>b</sup> University of Twente, Enschede, The Netherlands

\* Corresponding author.

E-mail addresses: [thilhorst@worldbank.org](mailto:thilhorst@worldbank.org) (T. Hilhorst), [j.a.zevenbergen@utwente.nl](mailto:j.a.zevenbergen@utwente.nl) (J. Zevenbergen), [kdeininger@worldbank.org](mailto:kdeininger@worldbank.org) (K. Deininger).