3

Who Defines Land Tenure Security? *De Jure* and *De Facto* Institutions

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Introduction

Let us begin with a simple thought experiment. Consider a space explorer heading off into the uncharted edges of the galaxy.[1] That explorer and their family find a new habitable planet with water, other life, and many other resources. Not too hot, not too cold. Luckily, they do not find other signs of any imminently dangerous or sentient life with whom to negotiate, so they decided to settle there in the peace and quiet as the first and only (human) family there. That early explorer family may choose to

[1] Loosely inspired by real-life possibilities envisioned in President Trump's last *Economic Report of the President* (USA) 2021 (Executive Office of the President Council of Economic Advisers, 2021).

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settle wherever they like. They end up at a floodplain that has plentiful fish in the river, freshwater, and nice sunset views. Grasslands nearby are easy to till and convert to some small agricultural plots (they brought seeds). They use the floodplain part of the year for farming and then retreat during the rainy season to avoid floods. There are also forests across the valley that house plenty of small wildlife creatures for hunting, new herbs to discover, various fungi, and woody species to use for building and heating. They use these multiple pieces of land throughout the year as they please. Without anyone else around, this single family has no other competition, no socially imposed limits or constraints on their activities or action. They can choose to use (or not use) resources as they please, only bound by environmental and biological constraints of the landscape and the climate. There are no other people with whom to negotiate any concept of fair use and, as such, there is no need to define the concept of who has a *right* to certain resources, to engage in activities, or otherwise draw benefits from the land.[2]

Eventually, others hear of the bounty that exists on this previously unknown planet and come to settle down. At first, some settle in other parts of the planet and face limited or no social pressures. But as time passes lands become more crowded, and some others come to settle in the same area as the first family. Wildlife is plentiful, and resources are abundant. As more newcomers arrive social relationships and agreements begin to develop. A community, in fact, is built based on common understandings of how land and resources will be used and managed by community members. Sometimes these understandings emerge through discussion, negotiation, and shared principles. Sometimes they emerge through conflict. With time, however, boundaries are defined, collectively agreed-upon (even if implicitly) rules of use are devised, and a functional and socially coherent society evolves.

The foundational basis of property rights is a social agreement. Members of a society must, even if implicitly, agree on who can and cannot use particular resources and in what way, and these agreements must be backed by a recognized authority (Bromley, 1992; Meinzen-Dick & Mwangi, 2009). In the space frontier example, as unoccupied areas are settled, rights emerge as understandings and agreements among community members. This is much how John Locke formalized ideas of the

[2] This is akin to John Locke's early ideas of a "state of nature" (Locke, 1689).

emergence of property rights in the seventeenth century (Locke, 1689) (see Chap. 2). Our understanding of property relations has developed since then (see Bromley, 2004), in part this is because it is exceedingly rare, if even possible, that there is "uncharted" territory in which other members of society do not have pre-existing claim or, at the minimum, have no interest (Banner, 2009; Ellis et al., 2021). Still, the example helps illustrate that as societies grow and land pressure increases, there becomes a need for clear and transparent processes that assign and enforce rights among various parties, and spell out the rules for how rights can be accessed, transferred, terminated, or gained. Locke even argued that the *primary* function of government is to secure and protect such property institutions (Locke, 1689). In any case, granting rights over land and property is like a social contract. As a society we agree to let some people have rights to some things and in turn agree that others do not have a right to that same thing.

This chapter briefly reviews how the "governors" of that social contract can exist (and throughout history, have existed) at various levels of society or administration. They can be part of a formal system of governance or equally a more informal system of social relations or local land management. The most common way land rights and land tenure is discussed is through contracts, titles, or deeds that are formalized by the state (here: government). However, the state is not always necessary or present for having rights—so-called informal rights can exist without a higher-level state sanction. These are often referred to as "customary" arrangements, or *de facto* community-level understandings of simply "how things work."

As we will discuss, legitimacy and security of rights can be strong in both formalized and *de facto* situations. The *security* of land tenure refers to how confident a landholder is that their land rights will be upheld by and within their community (Sjaastad & Bromley, 2000) (for key terms see Chap. 1). The community must be a recognized authority, but it is not always necessary that the authority is a centralized government (Diop, 1968; Pélissier, 2008). In some cases, especially when the state is absent or weak, household-level land tenure security may be more a function of local community dynamics and informal governance mechanisms. Still, in most current contexts, land pressures from outside parties are only increasing (e.g., see Chap. 7), meaning that sustained land tenure security must likely come with state-recognized backing of land rights. Here we

review *de jure* (of the law) and *de facto* (common local practice) perspectives on where the authority over rights can be held, and their relationship to land tenure security.

Formal, State-Sponsored, *De Jure* Land Tenure

With the growth of the state and the increasing reach of capitalism (see Chap. 2), defining and adjudicating property rights over land and territory, even historically ignored remote areas, has become a common concern of national governments. When land rights and tenure over land are formalized, they are an institutionalized part of government and governance. State judicial and enforcement systems that adjudicate and uphold the rule of law also, similarly, uphold and enforce property relations.

Various types of rights can be conferred to individuals and groups which define the stream of benefits to which an entity is entitled from a parcel of land. A common way of describing types of rights is presented in Chap. 1 (see Table 1) as the right of access, withdrawal, management, alienation (the ability to sell), and due process of land (Schlager & Ostrom, 1992). Sets and subsets of these right "bundles" are often implied in common ways of talking about different types of property in terms of private, common, or public land (Robinson et al., 2018). For example, western thought traditions consider rights "well-defined" when all possible rights are held by a single entity or landholder, what is generally referred to as full ownership or private property (Cooter & Ulen, 2012). However, in some countries such as China, Ethiopia, Tanzania, and Mozambique, the state is the sole owner of the land and, as such, rights are never "well-defined" in a strict sense, since rights of alienation do not hold. What is still generally thought of as "private" land in these cases is land that is contracted from the state in long-term (leasehold) agreements, up to 70 years in the case of China (Ma et al., 2020; Wang et al., 2015). Still, when the substance (does the right exist?) and assurance (is the right upheld?) of rights (Sjaastad & Bromley, 2000) are clear to a household, leasehold agreements via long-term contracts can lead to high rates of land investment and productivity (Deininger et al., 2011; Lin, 1992), similar to expectations of freehold private property. With formalized private rights, governments typically develop parcel-based land registries, or a cadastral map, that

document who has an "interest" in the land (see Chap. 11). When geolocated cadasters do not exist, land registries may hold legal recognition of land properties in the form of titles and deeds.

In cases where some rights or duties are shared between the public and private individuals, for example, in communal and public lands, rights may be formalized or *de jure* recognized by the state in various other ways. Some common terms that imply formalized rights include laws and regulations, zoning, policies, management plans, protected areas, or private easements. Box 3.1 describes these terms and how rights can be formalized within them.

Box 3.1 Common Terms Associated with Formalized (*De Jure*) Rights

Laws and regulations: Property rights or right bundles may be defined or outlined in specific laws or regulations enacted by the governing body.

Zoning: Federal, regional, or municipal zoning regulations, especially in more developed contexts, often define uses and restrictions on land use, which amount to rights enforcements handed down by the state. Zoning is also featured in public protected area management (in, e.g., biosphere reserves) by defining access, withdrawal, and sometimes management rights restrict certain activities to specific areas.

Policies: Often rights, duties, and responsibilities can change with specific and often shorter-term policies or programs that are put in place that may be more ephemeral than codified laws or regulations. Payment for ecosystem service programs and other incentive-based policy tools are effective contracts that landholders enter into with a governing body, that imply duties or restrictions in lieu of some compensation mechanism.

Management plans: National, regional, or local agencies can develop strategies or management plans with specific goals. These sometimes have land use restrictions or duties that must be upheld in adherence with what is determined to be in the public interest.

Protected areas: Protected areas are often developed to safeguard unique landscapes, ecosystems, and biodiversity in general. Overall goals of protected areas, or the subject of what is being "protected," can range from environmental to social, cultural, or historical (e.g., UNESCO World Heritage Sites). These areas have historically represented primarily top-down strategies that limit actions, behaviors, or uses of land. Also see note about protection in Zoning above.

Private easements: Sometimes referred to as fee-simple easements, these are legally codified restrictions on a privately owned land parcel. These effectively transfer some portion of landholders' rights to the state and have become a more common form of environmental protection for some developed regions, especially the USA and parts of Europe.

The categories in Box 3.1 constitute a simple descriptive (and far from an exhaustive) list. They are also not mutually exclusive of one another, as noted by the *Zoning* and *Protected area* categories, and can sometimes constitute overlapping or strategies that could be characterized in various ways. Similarly, laws, regulations, zoning, and policies are all somewhat overlapping, fuzzy, and sometimes synonymous categories. This list simply represents common terms that describe situations in which the state plays a key role in the formalization of land rights.

Additionally, it is important to recognize that formalization of land rights by the state does not equate to land tenure security for landholders (also discussed in Chap. 11). Too often security is equated with private land and formalized title, but simply creating rules or allocating rights through some of these formal mechanisms does not guarantee security of rights for an individual (van Gelder, 2010). Security requires that the proper institutions are in place to ensure that conflicts and claims can be adjudicated fairly and requires the landholder perceive those institutions are trustworthy and reliable. Governance needs to be clear and transparent, and the process by which individuals make a claim on their rights needs to be accessible.

A number of factors can limit the strength and efficacy of institutions and governance systems. For example, weak state governments may be understaffed or otherwise lack the capacity to monitor or enforce rights especially in more remote regions. This can create institutional imbroglio, where there may be a formal right on paper but little ability for a landholder to exercise that right in reality. For instance, in many countries in Sub-Saharan Africa, the decentralized local governance and elected officials in more rural communes do not have the necessary human and economic resources capabilities to properly manage and control individuals' tenure rights, at least in the way envisioned by the central government. In cases where formal governance is lacking, local governance fills in, which can be prone to be overly influenced by the locally powerful or allow for discrimination (Higgins et al., 2018). This "elite capture" manifests particularly in places where the land has high value and is attractive for domestic and international agri-business and extractives investors (Wolford et al., 2013). Therefore, when governance resources are limited, much of the monitoring and enforcement capabilities tend to be concentrated in population hubs and economic centers—the state may have a

more limited capacity to develop its interest in more remote or far off areas (Bromley, 2008). As the old Chinese proverb says, "The mountains are high, and the emperor is far away."

Local, Self-Governed, and *De Facto* Land Tenure

The opening to this chapter described the imagined emergence of a local and self-governed property system. Of course, historically, local-level governance has been ubiquitous. Farming communities, Indigenous groups, nomadic pastoralists, and others have developed governing systems that worked for their communities. The growth of the nation-state has given rise to larger needs to formalize governance and rules, in ways that were not typically necessary beyond regionally agreed-upon systems. In many places where the state has not (yet) claimed an interest, customary land rights are the norm (see Chap. 4, which explores indigenous and customary tenure). This is especially true in Sub-Saharan Africa, where it is estimated around 78% of the land is under customary or "neocustomary"[3] control (Alden Wily, 2018). In these cases, the role of higher levels of governance and administration can be unclear, poorly enforced, or purposefully disengaged (via "devolution" of management or within autonomous regions, for instance). This leaves land tenure and land governance decisions to local communities.

Just as in the discussion above regarding statutory or formalized rights, *de facto*, or informal land tenure arrangements, can also span any combination of right bundles. What *de facto* cases have in common is that the local community (in some form), rather than a centralized government, is the source and arbiter of rights. These rights can be *socially* upheld and are often discussed in several ways. Some common ways *de facto* regimes are described include customary or traditional tenure, communal management, norms, and *de facto* management regimes. Box 3.2 describes these in more detail.

[3] Neocustomary tenure refers to cases where the state has attempted to recognize customary lands but generally allow for autonomous governance within that land (see Chimhowu, 2019).

Box 3.2 Common Terms Associated with Informal (*De Facto*) Rights

Customary or traditional tenure: Community-specified rights can be unique, highly locally specific, and often represent long-negotiated differences and nuances that defined the rights and duties for individuals versus the greater community. These are often referred to as "customary" tenure arrangements, generally representing a wide range of conditions that summarize heterogeneity in conditions rather than any kind of commonality between cases in this categorization.

Communal management: Similar to customary rights, reference to communal management systems is vague and lacks specificity needed to understand who holds which kinds of rights. Still, this term is often used to discuss a system where some kind of collective governance over land or resources is practiced, and generally with rules that are agreed upon and enforced by a community.

Norms: When individuals or members of society behave according to some kind or rule or practiced behavior that becomes normalized by the group, these are often referred to as norms. These behaviors maybe are internalized as part of "culture" or simply as "the way things are done" (e.g., inheritance norms that can vary widely across communities), but these can constitute sometimes unspoken rules about how land management and property relations are governed.

De facto *management regimes*: Land is sometimes managed without law or an overarching governance system. In such cases "*de facto* management" indicates that however land is being managed by local actors *is* its management system. Again, this can capture a huge range of local conditions.

Local and indigenous management systems have sometimes evolved over generations, responding to social and environmental stresses. Recent efforts to formalize some traditional and customary management systems aim to keep traditional, customary, or otherwise indigenous knowledge or norms intact while formally recognizing these informal institutions in the eyes of the state (Knight, 2010). Still, the adoption of customary institutions can have equity implications that do not align with modern sustainable development objectives, for example, when local rules reinforce overly local power imbalances or social, ethnic, or gender-based inequalities.

Importantly, individuals and households in informal land tenure arrangements can feel either secure *or* insecure that their *de facto* rights

will be upheld by the community. Theories on the emergence of property rights as a social system note that private and individual rights are responses to competition and pressure for land and resources. Rights specify "how persons may be benefited or harmed and, therefore, who must pay whom to modify the actions taken by persons" (Demsetz, 1967: 347). But rules are costly to enforce, so it only makes sense to increase the strength of rights and protection of rights when a community feels the benefits conferred by the right are worth the cost of monitoring, enforcement, and adjudicating fair processes (Ostrom, 2002; Robinson et al., 2013).

Recent efforts show that in many cases perception of tenure security is often high, even without formalization of rights. For example, the Prindex project recently began collecting annual nationally representative data from several countries on the perception of rights. A recent report showed that while 83% of those with formal land documents felt secure in their rights, still 63% felt secure even *without* any formal documentation (Prindex, 2020). Thus, as discussed above, formalization is neither necessary nor sufficient to guarantee land tenure security (see Chap. 11 for further discussion). Local competition, gender, migration and population change, external land pressures from outside interests, and civil conflict can all affect the security of land rights (Ghebru & Lambrecht, 2017; Robinson et al., 2018; Stickler et al., 2017). Land tenure security in these informal and *de facto* situations often depends on how clear, transparent, and legitimate rights are within a community.

Informal Rights, Formalization, and Sustainability

Sources of insecurity exist for both formalized and informal land tenure arrangements. In some cases, the core source of tenure insecurity can be thought of as a lack of congruence between *de jure* and *de facto* rights. This "tenure gap" can be a source of conflict, confusion, and dispute that alone can manifest (Robinson et al., 2018). Closing the gap between these two is important and has been a core effort of many land tenure interventions in the past several decades (Tseng et al., 2021). This requires

ensuring customary lands are recognized at the state level, and also that local rights are just and appropriate at the community level. Other challenges come when there are overlapping or conflictual claims, which can often be brought on by development pressures. Regional land disputes can be difficult to resolve, and indeed are the resource at the core of violence and war (see Chap. 8), as well as overlapping claims between local communities and the state, for example, indigenous lands versus protected areas (Holland et al., 2014). Still, addressing these may not be easy—managing and resolving land disputes can quickly become an exercise in conflict resolution and possibly involve generations of disagreements.

The formalization of rights is sometimes a precursor to development, and in other cases is a messy and conflict-ridden consequence of development (Fenske, 2011; Ho, 2015). Regardless, if the process of defining and determining rights begins when dispute or conflict is active, those rights are bound to be contested and fought over (see Chap. 8). Formal recognition of customary land rights is ideally proactive and happens prior to any imminent "need" for those rights to be clarified. Land pressures are only expected to increase across the Global South (see Chap. 7), making open and transparent legal recognition of rights all the more needed.

Understanding the nuances of how customary and formal systems align (or do not) is challenging but critical for recognizing and elevating customary lands to legitimate legal status (Knight, 2010). Even when formalization of customary and traditional lands has been attempted, the initial weak legal status of these traditional lands (especially ones that have not been put into "productive use") can leave them vulnerable to claim or co-opt by outside parties (Alden Wily, 2011). Still, it is encouraging that recognition of forests as owned or designated for Indigenous People and local communities grew steadily from 2002 to 2017 (RRI, 2018).

Moving forward, aligning *de jure* rights—the statutory and legal codes and policies that define and provide backing for rights—and *de facto* understandings of who holds which rights, and how tenure security plays out on the ground is necessary for equitable and transparent governance of land and for landholders to feel secure in making sustainable investments in land and property. In many cases, communities can leverage

rights "on the books" or in the legal code. Ensuring communities know their legal rights, and have ways to monitor and enforce those rights, is also fundamental to ensuring congruence between *de jure* and *de facto* realities. In the context of our space explorer, small, isolated communities can develop *de facto* arrangements to help bring order to land and property relations within their own landscape. As populations grow and various (outside) entities develop interests in scarce land resources, governance mechanisms must develop coherent ways of allocating land to address growing populations and emerging economic activities. A state helps formalize governance, back right holdings, and adjudicate disputes. In some cases, the core role of the state may be to provide formal recognition of *de facto* right contexts.

Throughout the remainder of this book, some chapters discuss situations and attempts to formalize rights, while others grapple with understanding strategies to recognize customary or *de facto* contexts. A recognition of how "on paper" rights and "on the ground" rights can differ, as well as strategies and mechanisms for how we might align these, is one key to developing sustainable and equitable land management into the future.

References

Alden Wily, L. (2011). 'The law is to blame'. Taking a hard look at the vulnerable status of customary land rights in Africa. *Development and Change, 42*(3), 733–757. https://doi.org/10.1111/j.1467-7660.2011.01712.x

Alden Wily, L. (2018). Collective land ownership in the 21st century: Overview of global trends. *Land, 7*(2), 26. https://doi.org/10.3390/land7020068

Banner, S. (2009). *How the Indians lost their land: Law and power on the frontier*. Harvard University Press.

Bromley, D. W. (1992). *Making the commons work: Theory, practice, and policy*. ICS Press.

Bromley, D. W. (2004). Property rights: Locke, Kant, Peirce and the logic of volitional pragmatism. In H. M. Jacobs (Ed.), *Private property in the 21st century: The future of an American ideal* (pp. 19–30). Edward Elgar Publishing.

Bromley, D. W. (2008). Resource degradation in the African commons: Accounting for institutional decay. *Environment and Development Economics, 13*(05), 539–563.

Chimhowu, A. (2019). The 'new' African customary land tenure. Characteristic, features and policy implications of a new paradigm. *Land Use Policy, 81*(July 2018), 897–903. https://doi.org/10.1016/j.landusepol.2018.04.014

Cooter, R., & Ulen, T. (2012). Law and economics, 6th edition. In *6th edition*. Addison-Wesley.

Deininger, K., Ali, D. A., & Alemu, T. (2011). Impacts of land certification on tenure security, investment, and land market participation: Evidence from Ethiopia. *Land Economics, 87*(2), 312–334. http://le.uwpress.org/content/87/2/312.abstract

Demsetz, H. (1967). Toward a theory of property rights. *The American Economic Review, 57*(2), 347–359.

Diop, A. B. (1968). La Tenure Foncière En Milieu Rural Wolof (Sénégal): Historique et Actualité. *Notes Africaines: Bulletin d'information et de Correspondance de l'Institut Français d'Afrique Noire, 118*, 48–52.

Ellis, E. C., Gauthier, N., Goldewijk, K. K., Bird, R. B., Boivin, N., Díaz, S., Fuller, D. Q., et al. (2021). People have shaped Most of terrestrial nature for at least 12,000 years. *Proceedings of the National Academy of Sciences, 118*(17), e2023483118. https://doi.org/10.1073/pnas.2023483118

Executive Office of the President Council of Economic Advisers. (2021). Exploring new Frontiers in space policy and property rights. In *Economic report of the president (USA)* (pp. 225–249). U.S. Government Publishing Office.

Fenske, J. (2011). Land tenure and investment incentives: Evidence from West Africa. *Journal of Development Economics, 95*(2), 137–156. https://doi.org/10.1016/j.jdeveco.2010.05.001

Gelder, J.-L. v. (2010). What tenure security? The case for a tripartite view. *Land Use Policy, 27*(2), 449–456. https://doi.org/10.1016/j.landusepol.2009.06.008

Ghebru, H., & Lambrecht, I. (2017). Drivers of perceived land tenure (in)security: Empirical evidence from Ghana. *Land Use Policy, 66*(April), 293–303. https://doi.org/10.1016/j.landusepol.2017.04.042

Higgins, D., Balint, T., Liversage, H., & Winters, P. (2018). Investigating the impacts of increased rural land tenure security: A systematic review of the evidence. *Journal of Rural Studies, 61*(June), 34–62. https://doi.org/10.1016/j.jrurstud.2018.05.001

Ho, P. (2015). Myths of tenure security and titling: Endogenous, institutional change in China's development. *Land Use Policy, 47*(January 2013), 352–364. https://doi.org/10.1016/j.landusepol.2015.04.008

Holland, M. B., de Koning, F., Morales, M., Naughton-Treves, L., Robinson, B. E., & Suárez, L. (2014). Complex tenure and deforestation: Implications for conservation incentives in the Ecuadorian Amazon. *World Development, 55*(March), 21–36. https://doi.org/10.1016/j.worlddev.2013.01.012

Knight, Rachel. (2010). Statutory Recognition of Customary Land Rights in Africa: An Investigation into Best Practices for Lawmaking and Implementation. 105. FAO Legislative Study. Rome, Italy.

Lin, J. Y. (1992). Rural reforms and agricultural growth in China. *The American Economic Review, 82*(1), 34–51. http://www.jstor.org/stable/10.2307/2117601

Locke, J. (1689). Two treatises of government. *The Anthropology of Citizenship: A Reader, 2013*, 43–46.

Ma, X., Heerink, N., Ierland, E. v., Lang, H., & Shi, X. (2020). Decisions by Chinese households regarding renting in arable land—The impact of tenure security perceptions and trust. *China Economic Review, 60*(6), 101328. https://doi.org/10.1016/j.chieco.2019.101328

Meinzen-Dick, R., & Mwangi, E. (2009). Cutting the web of interests: Pitfalls of formalizing property rights. *Land Use Policy, 26*(1), 36–43. https://doi.org/10.1016/j.landusepol.2007.06.003

Ostrom, E. (2002). *The Drama of the commons*. National Academies Press.

Pélissier, Paul. (2008). *Les Paysans Du Senegal; Les Civilisations Agraires Du Cayor a La Casamance. Revue Tiers Monde (Vol. 8)*. Dakar-Paris.

Prindex. (2020). Security and formalization. In *Land and property rights in sub-Saharan Africa*. Prindex. https://www.prindex.net/reports/six-infographics-land-and-property-rights-sub-saharan-africa/

Robinson, B. E., Provencher, B., & Lewis, D. J. (2013). Managing wild resources: Institutional choice and the recovery of resource rent in Southwest China. *World Development, 48*(August), 120–132. https://doi.org/10.1016/j.worlddev.2013.04.004

Robinson, B. E., Masuda, Y. J., Kelly, A., Holland, M. B., Bedford, C., Childress, M., Fletschner, D., et al. (2018). Incorporating land tenure security into conservation. *Conservation Letters, 11*(2), e12383. https://doi.org/10.1111/conl.12383

RRI. (2018). At a Crossroads: Consequential Trends in Recognition of Community-Based Forest Tenure, no. September: 60.

Schlager, E., & Ostrom, E. (1992). Property-rights regimes and natural resources: A conceptual analysis. *Land Economics, 68*(3), 249–262. https://doi.org/10.2307/3146375

Sjaastad, E., & Bromley, D. W. (2000). The prejudices of property rights: On individualism, specificity, and security in property regimes. *Development Policy Review, 18*(4), 365–389.

Stickler, M. M., Huntington, H., Haflett, A., Petrova, S., & Bouvier, I. (2017). Does de facto Forest tenure affect Forest condition? Community perceptions from Zambia. *Forest Policy and Economics, 85*(1), 32–45. https://doi.org/10.1016/j.forpol.2017.08.014

Tseng, T.-w. J., Robinson, B. E., Bellemare, M. F., Yishay, A. B., Blackman, A., Boucher, T., Childress, M., et al. (2021). Influence of land tenure interventions on human well-being and environmental outcomes. *Nature Sustainability, 4*(3), 242–251. https://doi.org/10.1038/s41893-020-00648-5

Wang, H., Riedinger, J., & Jin, S. (2015). Land documents, tenure security and land rental development: Panel evidence from China. *China Economic Review, 36*, 220–235. https://doi.org/10.1016/j.chieco.2015.09.005

Wolford, W., Borras, S. M., Hall, R., Scoones, I., & White, B. (2013). Governing global land deals: The role of the state in the rush for land. *Development and Change, 44*(2), 189–210. https://doi.org/10.1111/dech.12017