LAND AND DEVELOPMENT:
A Research Agenda for Land and Resource Governance at USAID

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Acknowledgments: Special thanks to the following for lending the authors their considerable expertise, experience, and wisdom: Karol Boudreaux, John Bruce, Diana Fletschner, Mark Freudenberger, Steve Lawry, Gregory Meyers, Michael Roth, Lauren Persha, and Jolyne Sanjak.

EXECUTIVE SUMMARY

This Research Agenda positions land and resource governance (LRG) within USAID’s goal of promoting the journey to self-reliance and provides the foundation for USAID and others to undertake a carefully considered, systematic approach to reducing key knowledge gaps in the LRG sector. This is the first attempt in almost two decades to synthesize USAID’s experience with LRG programs and the state of the evidence into a single document, which will guide USAID’s learning priorities on LRG in the coming years. In revisiting these issues, this Research Agenda relies upon others’ efforts to synthesize, systematize, and render accessible the enormous amount of accumulated evidence on the relationship between LRG and key USAID development objectives.

For more than 50 years USAID has been a significant donor in the LRG sector. The Agency’s LRG programs historically focused on the development nexus with agricultural outcomes, although these programs now cover a wide-range of sectors. Over the years, the Agency has also committed resources to learning and adaptive programming, most notably with establishment of the Land Tenure Center at the University of Wisconsin. For the first three decades of USAID’s existence, the Center provided the Agency with extensive programmatic and technical expertise. Much of what we understand today about LRG programs is a result of USAID-funded research by the Center. Unfortunately, due to multiple factors, including an 86 percent decline in evaluations across the Agency, as of 2003 USAID produced only one counterfactual study on the development impact of its significant LRG programs.

In the first decade of this millennium, LRG research and evaluations experienced a revival. Over the last 15 years, USAID produced a large and diverse volume of research and evaluations on LRG, with more than 150 research products, including eight impact evaluations and eight performance evaluations. USAID has thus been instrumental in improving the evidence base and advancing evidence-based programming.

A thorough analysis of high-quality systematic reviews, meta-analyses, and other studies, has identified the following key findings on the state of the evidence:

- Insecure land tenure is widespread in the developing world, a condition that has far-reaching social, environmental, and economic consequences. Addressing tenure insecurity is necessary but is often not enough to guarantee positive development outcomes.
- Ample evidence links improvements in LRG with better economic growth.
- Formalizing land rights will not lead to improved access to formal credit, unless other conditions are also met. Yet, innovative financial models may prove viable, especially in Africa.
- Strengthening land rights can lead to substantial increases in on-farm investment, however more rigorous evidence is needed on how land rights are linked to productivity, food security, and income.
- Carefully constructed LRG policies – such as strengthening the rights of Indigenous Peoples and customary communities – in conjunction with other policy levers to protect forests, can reduce deforestation and help mitigate climate change, while also improving incomes and contributing to economic growth.
- Strengthening women’s land rights has a significant positive impact on women’s empowerment. However, research on this important topic remains thin, and the evidence base must be strengthened. Notably, more rigorous evidence is needed on the link between strengthening women’s land rights and poverty alleviation.
- Land is a significant driver of conflict, particularly in Africa. The twin forces of climate change and population growth will likely exacerbate land conflict in the near future. However, rigorous research on the extent to which LRG can decrease the likelihood and recurrence of conflict is scarce.
The review also provided insights into the methodological gaps in existing LRG research. Specifically:

- Surprisingly little rigorous research, including impact evaluations and longitudinal studies, compared to other development fields. In particular, a lack of rigorous research on the intersection of LRG and food security, conflict, fisheries, and urbanization. As a result, systematic reviews can examine only a narrow subset of LRG linkages.
- A lack of longitudinal studies on long-term LRG impact, especially in Africa, less so in Latin America and Asia.
- Too few studies investigate more than one link of the causal chain, and in particular too few studies examine links between LRG and multiple consecutive links in the causal chain. A realist synthesis approach may help fill this important gap in our understanding of the relationships between intervention, context, mechanism, and outcome.
- Too few studies employ mixed methods approaches that use qualitative and quantitative data collection and analysis.
- Studies too often measure tenure security at the household level, obfuscating potentially critical differences in how secure different members of the household feel, especially women and girls.
- Studies too often treat beneficiaries as a homogenous category, failing to account for differences between women and men, the old and the young, and the poor and the wealthy, among others.
- Few, if any, rigorous studies have examined the effects of statutory recognition of customary tenure.
- Too many studies use ‘title’ as shorthand for tenure security, failing to appreciate differences between perception and documentation. However, this is changing as the Sustainable Development Goal 1 indicator on land distinguishes between perception and documentation.
- Studies focus disproportionately on measuring the impact of titling programs, to the exclusion of measuring the impact of programs that combine multiple LRG interventions, such as titling and community governance, land administration, legal reform, conflict resolution, and social-behavioral change.

Our review of the evidence, coupled with insights from multiple LRG experts, provide the basis of the following research priorities organized by thematic and sectoral area, which are expanded upon in Section VI.

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<td><strong>Theme I: Cross-cutting Research Topics</strong></td>
<td><strong>Customary tenure and the continuum of rights.</strong> Further research should examine the emerging class of formalized customary rights and its impact on key sectoral outcomes, looking specifically at the features of this new hybrid system, the insecurity that each system (formal, customary, formalized customary) is best at addressing, and whether some formalized customary rights regimes have been more successful than others in reducing threats and obtaining positive development outcomes.</td>
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<td><strong>Links between titling, documentation, and tenure security.</strong> Although titling and other formal and informal mapping and documentation programs generally lead to improved tenure security, why is this not the case in some contexts? Are there other documents (for example, contracts) that make holders feel more secure than do titles? If titling does not increase security, then what does? Although the literature calls attention to the importance of context (Deininger and Feder 2009), more rigorous research is needed.</td>
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**LRG and what else? Digging into ‘necessary but not sufficient.’**
A better understanding of which complementary conditions are most important, and how to leverage LRG programs with complementary programs, would be valuable for policy and programming. As the Higgins et al. systematic review finds, there is not enough rigorous evidence on the impacts of LRG programs when combined with non-LRG programs.

**Theme 2:**
**Economic Growth**

**Unpacking the link between LRG and economic growth.** Studies show a strong link between LRG and economic growth, particularly on a macroeconomic level. However, further research is needed to examine how this link works.

**Economic growth for whom, and what additional enabling conditions are required?** LRG is correlated with robust macroeconomic growth, however it is not clear how this link plays out on a micro level, and in particular whether LRG-related economic growth occurs on the backs of certain vulnerable groups.

**Theme 3:**
**Women’s Empowerment**

**More rigorous, longitudinal research, especially on intra-household bargaining power and decision-making.** Given the critical importance of women’s empowerment to development writ large, and given the promising links between LRG and women’s empowerment surfaced by the few rigorous studies we do have, this entire sector deserves a large investment in rigorous, longitudinal research.

**Testing the link between women’s LRG and poverty alleviation.** While it may seem reasonable to assume that strengthening women’s land rights can reduce poverty, no studies demonstrate this specific link.

**Developing more accurate and nuanced methods for assessing the impacts of LRG programs on women.** In order to capture these nuances, the land sector should prioritize studies with high sample sizes and counterfactuals, studies that account for the heterogeneity of women (rather than treating them all as a single category), and studies that survey women specifically, instead of conducting research at the household level.

**Formalization of women’s land rights and spousal death or divorce.** Research should explore what exactly is driving women’s insecurity in certain contexts, and which LRG programs protect women in the event of spousal death or divorce.

**Social norms and women’s land rights.** Changing social norms is as necessary to promoting women’s empowerment as is statutory tenure reform (Prindex 2019). More research is needed to understand how changing social norms can be best accomplished.
**Theme 4:** Sustainable Landscapes and Biodiversity

**Which LRG programs are most cost-effective in mitigating climate change and how to address economic trade-offs?** While the link between certain LRG programs (e.g. protection of indigenous land rights), soil conservation, combatting deforestation, and mitigating climate change is well established, there is significantly less research on the cost-effectiveness of specific types of LRG programs. Not much research looks at the costs of implementing these programs, including the opportunity costs and economic trade-offs to program participants who may forego the economic gains associated with landscape conversion in favor of reduced externalities and broader public gains.

**Unpacking the links between private tenure, forest protection policies, and deforestation.** What types of forest protection policies can reduce deforestation and increase reforestation on private lands? Why, and in what contexts, does improved tenure security on private lands contribute to reduced deforestation and increased reforestation? If improved private tenure security increases deforestation and reduces reforestation, why? Are there cases of sufficient forest protection policies without private tenure security that resulted in positive forest outcomes? Given the importance of secure private tenure for investment, productivity, markets, incomes, and economic growth, this line of research could investigate how to effectively manage trade-offs between economic growth and deforestation and the role of secure private tenure.

**Integrating indigenous knowledge into the design of LRG programs.** A key unanswered question is how to effectively incorporate local and indigenous communities, especially traditional land management practices, into the design of LRG programs. A related unanswered question is whether a community's level of trust, social cohesion, and collective action can be augmented or resuscitated in situations where it has been depleted?

**More studies that incorporate spatial analysis and more spatially explicit econometric studies, particularly in Africa and Asia.** Despite a proliferation of mapping databases like LandMark, and the increased availability of geospatial imagery at various temporal and spatial resolutions, there are relatively few spatially explicit econometric studies in Africa and Asia on the link between tenure security, community forestry, sustainable landscapes, and biodiversity outcomes.

**What is the link between LRG, sustainable intensification practices (SIP), and reducing environmental damage?** A farmer’s decision to intensify crop production inside their existing footprint, instead of expanding into forests and other landscapes, can reduce the environmental damage that comes with landscape conversion. However, while some scholars hypothesize that LRG programs will prompt farmers to pursue SIP (instead of expansion), there is little research to prove this.
**Theme 5: Food Security and Resilience**

*Long term impacts of LRG on food security.* More rigorous evidence is needed on whether LRG leads to long-term food security impacts. Research may include longitudinal studies that follow up on USAID or other donors’ impact evaluations, as well as remote sensing research to measure land use and land cover trends and understand impact over a longer time period.

*Taking another look at credit.* Research should dive into the full spectrum of mechanisms by which land rights can and do facilitate informal or innovative credit access, the conditions that are needed for various mechanisms to be viable, the extent to which customary land rights can be used to access credit, and what can be done by policymakers to strengthen and promote these mechanisms.

*Taking another look at productivity and income.* A review of two recent LRG meta-analyses revealed that while the average exposure period for all studies was more than 10 years, for food security studies it was only six years. Given the critical importance of productivity and income within the food security causal chain, it is worth investing in longitudinal studies that can answer the question of whether LRG translates into productivity and income gains or not.

*Farmland tenure models in Africa.* Landholding in Africa’s agricultural sector used to be dichotomous: producers were either smallholders or large-scale commercial operators. Now that is shifting, with the rise of medium-scale farms (Jayne et al. 2019). Additional research is needed on the advantages and disadvantages of these alternative land tenure models.

**Theme 6: Conflict, prevention, and stabilization**

*Improved cross-national data on the causes of land conflict, particularly when it comes to non-State actors.* Further research should dig into the motivations behind land conflict, as well as into the reasons why land insecurity may contribute to conflicts that are not themselves land-related.

*Is LRG an effective way to prevent conflict?* We know communities and individuals fight over land, but is improving LRG an effective means of preventing these conflicts? If so, what types of LRG programs are most effective at preventing or mitigating conflict? Is titling, for example, more effective than strengthening local dispute resolution mechanisms? And are there certain types of conflict that different LRG programs are better able (or not) to prevent or mitigate?

*The link between climate change, migration, and conflict.* More rigorous research is needed on the potential for LRG programs to mitigate climate-related displacement and the ensuing governance challenges.

*The relationship between improved LRG and large-scale land-based investment.* Does improving the land tenure of the local communities, including through formalizing customary tenure, help head off adverse land-based investments by the private sector? Might the very act of tenure recognition render a piece of land more attractive to outside interests, because it provides clarity as to the interest in the land? Further research should examine this link to understand how LRG programs in desirable areas should be structured, and thus prevent unintended consequences.

*Effective mechanisms for post-conflict property restitution.* LRG is critically important to post-conflict recovery because property is often the most
valuable asset of those displaced by conflict. And yet, while the existence of restitution programs is important, other factors must be in place for these programs to work quickly and equitably, and for them to be considered legitimate. What are these other factors, and how can governments who may be in the early stages of rebuilding acquire the capacity to effectively restitute land? Would involving local leaders and community members foster trust and help to develop local-level institutions that are better able to ensure that returnees have secure property rights?

**Theme 7:** Research on Emerging LRG topics

**Ground truthing new land rights approaches.** New people-centered approaches (community mapping, crowdsourcing) place communities at the center of processes to map and document their property rights. Not only that—new research suggests that digital trails (smartphone location data, social media posts, and online purchase histories, among others) can provide rich data to supplement traditional evidence of land and property claims. Can this locally derived data be trusted by various stakeholders as a basis for making decisions regarding land and resources?

**Are new technologies delivering on their promise?** New technologies promise to make it faster, easier, and cheaper to map and record land rights at scale. Are these promises bearing out? What are the contextual factors that make or break the adoption of these technologies? Are these technologies leading to unintended consequences, both positive and negative?

**LRG and managed coastal retreat.** Rising oceans threaten to inundate vulnerable coastal areas and low-lying islands. In cases where adaptation is not feasible, there will have to be a strategy for relocating people, either by incentivizing them to move voluntarily or through a planned, proactive relocation. Research is required to prepare national LRG systems to accommodate large-scale displacement and property loss.

**The impact of urbanization on land rights.** Recent research by the European Commission shows that 84 percent of the world’s population lives in urban areas. Urbanization rates in Africa and Asia are at 80 percent and 90 percent, respectively (Dijkstra et al. 2018). What are the impacts of this mass urbanization on tenure security in urban settings (to which people are flocking), rural settings (which people are leaving and sometimes returning to access land) and peri-urban areas (which are expanding as cities swell)? What are the implications of this massive shift, for USAID LRG programming?

**Urban MAST.** USAID’s MAST project developed a new approach that uses smartphones to map land parcels and compile information needed for first-time land registration. Following pilots in rural areas of Tanzania and in a peri-urban commune in Burkina Faso, MAST has proven to be an effective, low-cost, and participatory system for formalizing rights and creating land information systems. The MAST approach holds promise for urban areas as well, but adapting it to an urban context entails a number of complications. For example, urban settings require greater accuracy due to higher population density. Research could thus pilot and test different options for adapting MAST to urban environments.

**Private sector perceptions, policies, and practices related to land tenure risk.** Little information exists about investors’ attitudes and practices towards LRG. A recent study found that less than 10 percent of companies have
This begs the question: to what extent do investors prioritize land tenure risk amongst other Environmental, Social, and Governance (ESG) factors? To what extent do they feel equipped to address land tenure risk, or do they instead make a decision to either write off the risk or not proceed with investments? Do investors in certain regions, or in certain sectors, prioritize land tenure risk differently? How many investors are making normative commitments related to land tenure risk (what are those commitments, and in which fora are they made?), and how well do those commitments align with actual practice?

**Sustainability of land administration systems.** Building on DFID’s recent Land at Scale report, which analyzes lessons learned from DFID’s land regularization programs, research should examine why some first-time registration programs have taken hold and others have not, and which lessons we can draw for future programming, including the sustainability and cost-effectiveness of impacts (Deininger and Feder 2009).

**How must legal frameworks adapt to take advantage of new land technologies?** Research could examine how national legal frameworks must adapt to new technologies and other innovations, while providing examples of best practices.

**Better understanding of the artisanal and small-scale mining sector.** Under what conditions can efforts to formalize and regulate the mining sector have a positive impact on a country’s journey to self-reliance? And how should formalization efforts engage with customary tenure systems? Finally, is formalized tenure better able to resist encroachments on the ASM sector by transnational criminal organizations and other actors external to ASM communities?