



Land tenure formalization and regularization activities in low-income countries

Land insecurity is frequently viewed as an impediment to development. Insecure land tenure is thought to reduce the incentive to invest in land, thereby lowering agricultural productivity. In response, many low- and middle-income countries have attempted to increase land tenure security through certification and the strengthening of land administration systems.

Despite the importance of this topic, only one systematic review on land tenure formalization and regularization activities has been completed, which found only two articles assessing impact.

In response to this gap, 3ie conducted a rapid evidence assessment, identifying 14 impact evaluations of initiatives in low-income countries that strengthened local land administration, directly implemented data collection and formalization activities, or supported voluntary land consolidation intervention.

Within the four-year periods in which they were evaluated, these interventions had: (1) positive impacts on investment; (2) inconclusive impacts on perceptions of tenure security, participation in the credit market, and productivity; and (3) negative impacts on gender equity. These findings are notable because they challenge conventional theories on the benefits of formalizing land tenure.

Highlights

- Most of the included studies focused on land administration strengthening or formalization activities.
- Interventions had positive impacts on investment, but inconclusive impacts on other outcomes.
- Interventions often worsened gender equity outcomes by reducing informal tenure for women.
- All impact evaluations studied impacts within four years after each intervention. Further research on long-term impacts is needed.

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developing countries that are committed to good governance, economic freedoms, and investing in their own citizens to deliver large-scale grant programs to reduce poverty through economic growth. MCC is advising the government of Malawi regarding its own efforts

to formalize customary land rights and commissioned 3ie to answer the question “**What are the impacts of land tenure regularization and formalization interventions?**”



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Main findings

We screened a total of 799 articles; 14 articles on six unique interventions met all eligibility criteria. Ten articles examined the impacts of land certification and demarcation activities. Two articles examined the impacts of strengthening local land administration. Two articles examined the impacts of voluntary land consolidation. Interventions in Benin, Burkina Faso, Ethiopia, Rwanda, and Tanzania were included in the assessment.

Land certification and demarcation activities consistently increased investment in farmers' agricultural

inputs in Benin, Ethiopia, and Rwanda. In Benin, forest coverage increased. The interventions also improved tenure security in Rwanda (but not in Benin); increased rental and credit market participation in Ethiopia (but not in Benin); and increased productivity in Ethiopia (but not in Benin or Burkina Faso). The interventions had no effect on other outcomes.

Local land administration strengthening inconsistently increased *some* measures of tenure security in both Burkina Faso and

Tanzania and investment in Tanzania; however, it did not increase crop production in Burkina Faso.

Voluntary land consolidation decreased nutritional diversity in Rwanda.

Every study that examined gender equity found that these interventions widened the gender gap regarding female ownership, inheritance, and decision-making power across Benin, Ethiopia, and Rwanda. Formalization activities often failed to incorporate or recognize existing customary land rights for women.



Table 1: Effects from studies included in the rapid evidence assessment

Intervention type	Article	Country	Impact of intervention
Land certification and demarcation	Deininger (2009)	Ethiopia	Increased investment; increased rental/ credit market participation; increased productivity; decreased female ownership of land
	Ghebru (2015)		
	Hagos (2013)		
	Melesse (2015)		
	USAID (2016)		
	Gender Innovation Lab (2019)	Benin	Increased investment; increased forest coverage; no change in perceived land security; no change in rental/credit market; no change in productivity; decreased female productivity
	Goldstein (2015)		
	Goldstein (2018)		
	Wren-Lewis (2020)		
	Ali (2014)	Rwanda	Increased investment; strengthened perceived land security
Strengthening local land administration	USAID (2018)	Tanzania	Increased investment
	Zhang (2015)	Burkina Faso	No change in productivity
Voluntary land consolidation	del Prete (2018)	Rwanda	Decreased nutritional diversity
	del Prete (2019)		

Considerations for implementation, maintenance, sustainability, and evaluation

Since women's traditional land rights are often less secure than men's, they may react differently to receiving a land title certificate. Women do not consistently benefit from land formalization and regularization, as many programs have failed to recognize existing customary norms.

Unfortunately, few studies reported on implementation costs. However, the two included studies that did consider cost evidence indicated that land

formalization and regularization initiatives were relatively inexpensive. In both Ethiopia and Tanzania, farmers were willing to pay for certificates, indicating that they valued them.

If budget constraints limit the number of certificates a government can provide, practitioners should consider prioritizing those with the greatest land insecurity, as they would be most significantly impacted by this

intervention. As tenure insecurity can be understood as a continuum, those with the least secure tenure rights stand to gain more from interventions than those with moderately secure tenure rights. The impacts of certification on investment may have been higher in Ethiopia than in other countries, as its customary land systems were almost nonexistent at the time of certification, making baseline tenure particularly insecure.

Implications

For programming and policy:

This rapid evidence assessment suggests that land formalization and regularization activities may be – at best – moderately impactful within the first few years. Increased investment appears to be the most promising outcome. Most interventions' impacts on productivity, agricultural output, tenure security, or credit and rental market participation were either modest, single-digit percentage point increases or null. However, as outcomes may take years to be fully realized, it is important not to project null short-term impacts onto longer-term outcomes. Nonetheless, the immediacy of the differential impacts across genders is concerning. When designing future land formalization and regularization activities, practitioners must consider differential impacts by gender.

For impact evaluations:

Land formalization and regularization activities generally take two forms: large-scale national reforms and local action by individual implementers. In both cases, the intervention funding agencies should reach out to evaluators before activities begin in order to design the interventions for evaluability. Often, evaluations can be designed without interfering with project activities, provided that the evaluation was integrated into the design and baseline data were collected. As implementers typically cannot roll out large programs in their entirety all at once, stepped wedge designs can often be used to evaluate national policies.

Land formalization and regularization activities are expected to achieve impacts over relatively long time

scales. As such, evaluations must also occur over long periods. However, all studies examined impacts of the interventions between six months and four years after their implementation. Some outcomes may have been achieved in later years but not at the time of data collection. Future impact evaluations should examine the long-term effects of such interventions.

What is a rapid evidence assessment?

A rapid evidence assessment is a targeted systematic review. Similar to a systematic review, it uses a systematic approach to search and screen studies for inclusion. To ensure its rapidity, the search strategy may be limited to certain databases, and the scope may be narrowed to focus only on a few intervention types.

About the rapid evidence assessment

This brief is based on the MCC-funded rapid evidence assessment *Rapid evidence assessment on land tenure formalization and regularization activities in low-income countries*, by Michael Kinzer, Charlotte Lane, Ingunn Storhaug, Sridevi Prasad, and Douglas Glandon. The authors found and appraised the quality of 14 impact evaluations that evaluated land tenure formalization and regularization activities in low-income countries.

About this brief

This brief was authored by Michael Kinzer. He is solely responsible for all content, errors, and omissions. This study is made possible by the generous support of the US government through MCC. The contents are the responsibility of the International Initiative for Impact Evaluation (3ie) and do not necessarily reflect the views of MCC or the US government. This brief was designed and produced by Akarsh Gupta and Tanvi Lal.

The International Initiative for Impact Evaluation (3ie) promotes evidence-informed, equitable, inclusive and sustainable development. We support the generation and effective use of high-quality evidence to inform decision-making and improve the lives of people living in poverty in low- and middle-income countries. We provide guidance and support to produce, synthesise and quality assure evidence of what works, for whom, how, why and at what cost.


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June 2022



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