The impact of land property rights interventions on investment and agricultural productivity in developing countries

The impact of land property rights interventions on investment and agricultural productivity in developing countries: a systematic review

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Objectives of the study

- To understand impacts of interventions to strengthen land property rights on agricultural and livelihood outcomes in rural areas in low and middle income countries;
- To assess whether these effects are different for men and women, and under what circumstances;
- To assess specific mechanisms that enable or limit productivity improvement (barriers and facilitators).
Systematic Reviews (or Meta-Analyses)

- Selection of studies for analysis that share certain very specific and common study design criteria, enabling a quantitative synthesis of the findings of all studies in a single analysis.

- The synthesis assesses variations between and among the included studies, for instance for strength of investment and productivity effects of tenure conversion, regional variations, etc.
Country sites of quantitative studies included in the synthesis

- Nicaragua (2), Peru (3),
- China (2), India, Vietnam (2),
- Ethiopia (6), Madagascar (2), Rwanda, Zambia
What does the quantitative evidence say?

• In Latin America and Asia cases, significant average gains to productivity after tenure recognition (ca. 50-100 percent) and strongly positive gains to investment and income following tenure recognition, typically titling.

• Weak or modest gains to productivity (ca. 0-10 percent), investment and income in Africa cases, though in most cases still positive.

• No or very weak discernable credit effects anywhere.

• Most studies failed to disaggregate effects of tenure recognition on women though two quantitative studies identified positive effects (Ethiopia, Holden et al. 2011; Rwanda, Ali et al. 2011).

• We found no quantitative evidence on the effects of statutory recognition customary tenure even though it was a primary interest of ours.
Effects on land productivity (output per ha)

- Peru 1993–2004 (Torrero & Field, 2005)
- Cambodia 1989–2004 (Markussen, 2008)
- Vietnam 1993–2006 (Van den Broeck et al., 2007)
- Ethiopia 1998–2006 (Holden et al., 2009)
- Madagascar 1961–2002 (Bellemare, 2013)*
- Malawi 2004–2006 (Chiwra, 2008)*
- Zambia 1995–2001 (Smith, 2004)*

*not included in original quantitative synthesis.

(x-axis on log scale, translated to percent change.)
Explaining the differential productivity effects in Africa, Asia, and Latin America

Three hypotheses:

• **Pre-existing institutions**: principally customary tenure institutions.

• **Wealth effect**: households’ lack of resources necessary for translating tenure rights into higher levels of productivity.

• **Complementary public investments**: land tenure reforms not coupled adequately with investments in complementary institutions, infrastructure, or other forms of “public capital.”
Conclusions

- Further research should seek to understand the reasons for such differential effects.
  - Findings from such research can identify other policies to augment tenure recognition to amplify productivity, investment, and welfare effects.

- Of course, we should also be mindful of broader welfare considerations:
  - Productivity is not the only welfare consideration.
  - Tenure security, reduction in land-related conflicts, and validation of the property rights of women and other vulnerable individuals are goals in their own right.

- Research on productivity, investment, and welfare effects of statutory recognition of customary tenure should be a priority.
Appendix
SELECTION CRITERIA

We used quantitative studies to assess impacts on intermediate and final outcomes, focusing on counterfactual studies that compare outcomes observed at the point of intervention to those in an appropriate second context.

The review synthesizes quantitative evidence only from studies characterized by all of the following:
1. (a.) Randomized experiments or (b.) quasi-experimental studies that employ strategies for causal identification with clearly delineated treated and control groups and use some method for removing biases due to non-random assignment of treatment;

2. Studies that estimate the impact of either of the two interventions (certification or conversion), with the interventions having clearly defined starting dates;

3. Studies that obtain measurements on at least one of the final or intermediate outcomes;

4. Studies that estimate impacts with outcome data measured at the individual or household level; and

5. Studies undertaken in developing countries (as defined by the World Bank) and that measure outcomes at some point between 1980 and 2012
STUDIES INCLUDED IN THE QUANTITATIVE ANALYSIS


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