

Effect of land reform and natural resource management (NRM) on feelings of trust and diversity

Land reform and NRM interventions have large effects on feelings of trust and diversity.

Geographic scope: Sub - Saharan Africa, East Asia and Pacific, Latin America & Caribbean

Effect: Large effect ($g=0.423$)

Confidence in study findings: Low (3 studies with 41 effect sizes)

Short Summary

Land reform and NRM initiatives include participatory mapping projects, payments for ecosystem services (PES), and information campaigns. Overall, these interventions have large effects on trust and diversity. Participatory mapping in Bolivia had minimal impact on trust levels, while PES programs in Indonesia fostered cooperation but did not significantly improve trust toward outsiders. In Mozambique, broad information campaigns enhanced trust in governance and civic engagement, whereas localized campaigns led to elite capture. These results indicate that NRM interventions can strengthen trust and social inclusion, but their success depends on equitable implementation, active community engagement, and safeguards against elite control.

Long summary

The intervention

NRM initiatives in this cell include participatory mapping, PES, and information campaigns. Participatory mapping in Bolivia engaged indigenous communities in delineating land boundaries to reduce disputes and enhance cooperation. PES programs in Indonesia incentivized environmental conservation while reinforcing social capital through shared responsibilities and benefit-sharing mechanisms. Information campaigns in Mozambique aimed to improve transparency in natural resource governance, empower citizens, and build trust between local communities and the state.

How the intervention is expected to work

These interventions aim to foster trust and diversity by encouraging cooperation, reducing resource conflicts, and strengthening community ties. Participatory mapping clarifies land ownership, empowering marginalized groups and promoting collective management. PES programs encourage conservation through mutual benefit-sharing, mediating tensions between participants and non-participants. Information campaigns enhance political engagement and trust in governance by providing transparent processes and promoting collective action.

The evidence base

This cell includes three quantitative studies evaluating interventions in Bolivia, Indonesia, and Mozambique. There is also one qualitative paper included which is set in Kenya [i.e., Klaus (2020)].

Evidence findings

Findings indicate mixed outcomes for land reform and NRM interventions in building trust and social diversity. Participatory mapping in Bolivia did not significantly influence trust or conflict

resolution, possibly due to limited community engagement and short-term implementation. PES programs in Indonesia strengthened social capital and informal benefit-sharing, yet trust toward outsiders remained low. In Mozambique, broad information campaigns successfully increased trust and civic participation, whereas restricting information to local leaders resulted in elite capture and undermined social cohesion..

Included studies

Armand (2019) examine a large-scale information and deliberation campaign focused on the management of natural resources in Cabo Delgado, Mozambique, particularly following the discovery of natural gas in the region. The campaign was sponsored by a coalition of international, national, and local institutions, including governmental and non-governmental organizations. The intervention aimed to increase awareness and knowledge about natural resources among local leaders and citizens through three types of campaigns: information to leaders only, information to both leaders and citizens, and information plus deliberation. The study employed a randomized controlled trial design, involving 50 communities for Treatment 1, 51 for Treatment 2, 50 for Treatment 3, and 55 for the control group. The sampling included baseline and endline surveys at household, local leader, and community levels, as well as structured community activities (SCAs) and lab-in-the-field experiments. The measurements were designed to capture outcomes related to information/awareness, elite capture, rent-seeking, and citizen mobilization, trust, and accountability. When information was targeted at the general population, there were increases in citizen mobilization, trust, voice, and demand for political accountability. The study was rated as low confidence due to the lack of reported attrition. The document mentions that post-treatment attrition was handled through substitutions in the same household when possible. However, there is no detailed reporting on the overall attrition rates or how they might have affected the study's outcomes.

McGrath (2018) examines the role of social capital in mitigating tensions and jealousy between participants and nonparticipants in a Payments for Ecosystem Services (PES) program in the Cidanau Watershed, West Java, Indonesia. Using surveys and focus group discussions, the study finds that while jealousy and tensions arose due to perceived inequities in program participation, high levels of social capital between community members helped alleviate these conflicts. Social networks, trust, and traditions of collective action enabled PES participants to share information and resources with nonparticipants, thereby maintaining social cohesion. The study concludes that strong pre-existing social capital is crucial for minimizing negative social impacts and ensuring the success of PES programs. The study is rated as low confidence due to low or no description of evaluation questions.

Reyes-García et al. (2012) investigates the impact of participatory mapping on conflicts involving Tsimane' indigenous communities in the Bolivian Amazon. Using a randomized evaluation across 32 villages (17 treatment and 15 control), the researchers assessed whether participatory mapping influenced conflicts with external actors (e.g., loggers, traders) and internal conflicts among Tsimane' villages. Pre- and post-intervention surveys measured reported conflicts and attitudes toward outsiders. The findings reveal no statistically significant effect of participatory mapping on conflicts with external actors or between Tsimane' villages. The study concludes that conflicts are not an inherent outcome of participatory mapping but are influenced by broader socio-political and economic contexts. The results highlight that participatory mapping alone may not be sufficient to alter conflict dynamics without addressing deeper structural issues and ensuring active community engagement. The study is rated medium confidence due to partial description of the evaluation questions.

Confidence Assessment

Overall low: The overall rating is low due to limited number of studies.

Other outcomes in the study:

Violence and atrocity prevention / Nature and scale of violence or atrocities

Community and state governance / civic participation

Community and state governance / government performance

Social cohesion / willingness to participate or help