

Effect of land reform and natural resource management (NRM) on willingness to participate or help

Land reform and natural resource management (NRM) interventions have large effects on willingness to participate or help.

Geographic region: East Asia and Pacific, Sub-Saharan Africa

Effect: Large effect ($g=0.487$)

Confidence in study findings: Low (2 studies with 2 effect sizes)

Short Summary

Land reform and natural resource management (NRM) interventions, such as Payments for Ecosystem Services (PES) in Indonesia and community-based watershed restoration projects in the Democratic Republic of the Congo (DRC), showed large effects on willingness to participate or help. The PES program incentivized farmers to maintain forest cover, leading to higher rates of community contributions and cooperation. Similarly, the DRC program, which combined Village Savings and Loans Associations (VSLAs) with restoration activities, increased household donations to local organizations, strengthening collective action and community engagement. Overall, these interventions significantly enhanced willingness to participate and support community initiatives, although confidence in the findings remains low due to the limited number of studies.

Long summary

The intervention

Land reform and NRM initiatives encompass programs like PES and community-based watershed restoration. PES schemes create conservation incentives through financial rewards tied to environmental performance, fostering shared responsibility and community engagement. In the DRC, VSLAs were used alongside restoration activities to promote savings, local leadership, and collective action. Both approaches aim to build social and economic resilience through inclusive community structures and participatory management.

How the intervention is expected to work

These interventions foster cooperation, trust, and participation by clarifying land ownership, promoting equitable resource sharing, and incentivizing collective conservation efforts. PES mechanisms encourage mutual benefit-sharing, reducing social tension and strengthening local networks. Participatory land mapping and transparent management processes empower marginalized groups and build trust in local governance, thereby enhancing social cohesion and willingness to help others.

The evidence base

This cell includes three studies: 1 qualitative study and 2 impact evaluations. The impact evaluation studies are set in Indonesia and Democratic Republic of Congo. The qualitative study by Krampe (2018) is set in East Timor.

Evidence findings:

The findings suggest generally positive large effects of land reform and NRM interventions on willingness to participate or help. In Indonesia, 94% of PES participants reported contributing to village causes compared to 84% of nonparticipants, indicating higher civic engagement. In the DRC, the difference-in-differences analysis found a statistically significant increase in household donations to local religious institutions within treatment areas, highlighting stronger community solidarity and cooperation fostered by these interventions.

Included studies

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 low due to little description of the evaluation questions.

Sabin (2019) evaluates the impact of a community-based watershed restoration initiative in Eastern Congo, assessing its environmental, economic, and social outcomes. Using a mixed-methods approach, including difference-in-differences (DID) analysis, participatory workshops, and remote sensing data, the study compares two watersheds—one receiving the intervention and the other serving as a control. The intervention involved establishing Village Savings and Loans Associations (VSLAs), promoting sustainable farming practices, and strengthening community leadership networks to encourage environmental restoration. The treatment watershed showed greater community cohesion and cooperation, with a decrease in local disputes. Community members reported improved relationships among different social groups, indicating enhanced peace and reconciliation. The study is rated medium due to partial description of the evaluation questions.

Confidence Assessment

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

Other outcomes in the study:

Social cohesion / feelings of trust and acceptance of diversity

Human security / economic security

Human security / education security

Human security / food security and nutrition & health security

Human security / environmental security