

Community Empowerment and Sustainability of a Common Forest: the Case of Cherán, Mexico

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Extended Abstract

Many vulnerable groups around the globe live in rural areas and play an important role in the management of natural resources since their livelihoods depend on it. Nowadays many countries are going through a process of decentralization in which governments transfer power to local governments or community groups to manage the natural resources [5]. There is a vast literature on the effects of decentralization on forest resources [6]; however, little is known about the consequences of local community's self-empowerment on the management of forest. This study aims to explore the interaction between decentralization, community empowerment and forest sustainability.

During the decade of 2000, the indigenous community of Cherán, Michoacán, Mexico lost roughly 9,000 hectares of forest (37% of its total territory) to illegal loggers, mostly outsiders linked to criminal organizations [7]. Given the lack of response by state authorities, in 2011 the community armed itself, and mobilized against the intruders and recovered control over their territory by force. Then, they did a legal process against the federal government that ended in the establishment of a traditional self-governance structure that gives the community considerable autonomy and control over their decisions [8]. This case presents an opportunity to study community empowerment, decentralization and its relation to forest management and sustainability.

In this paper we investigate three research questions: 1) What kind of power did the community gain in relation to natural resources management? 2) How have the institutions for sustainable management of common pool resources (CPRs) evolved after 2011? and 3) How has forest land-cover changed from 2005 to date? To answer the first two research questions, we conducted a qualitative case study consisting of 25 interviews, 3 focus groups and participant observation during Summer of 2016. We found that the community in fact gained judicial, executive and legislative power to manage their natural resources and such empowerment resulted in improved fulfilment of Ostrom's principles [9] for sustainable management of CPRs. The resource and user boundaries are more clearly defined after 2011. Appropriation and provision rules; graduated sanctions and mechanisms for monitoring were updated by the user group. However, the community struggled with recognition of their rights to organize and with the nesting of their institutions with higher levels of government. To answer the third research question, we used change detection techniques on classified and reflectance-calibrated images from Landsat 7 during the dry season between 2005 and 2016. Forested area reached the lowest point in 2012 but has been steadily recovering ever since.

This study provides empirical evidence of the benefits of self-empowered communities to develop robust institutions for the sustainable management of CPR's and positively impact the condition of commonly own forests. The findings contribute to closing a gap in the literature on self-empowerment and sustainability.

References

- [1] D. B. Bray, L. Merino-pérez, P. Negreros-castillo, G. Segura-warnholtz, J. M. Torres-rojo, and H. F. M. Vester, "Mexico's Community-Managed Forests as a Global Model for Sustainable Landscapes," *Conserv. Biol.*, vol. 17, no. 3, pp. 672-677, 2003.

- [2] C. J. A. Bradshaw, X. Giam, and N. S. Sodhi, "Evaluating the relative environmental impact of countries," *PLoS One*, vol. 5, no. 5, 2010.
- [3] K. W. Deininger and B. Minten, "Poverty, Policies, and Deforestation: The Case of Mexico," *Econ. Dev. Cult. Change*, vol. 47, no. 2, pp. 313-344, 1999.
- [4] D. Narayan, "Empowerment," *J. Ambul. Care Manage.*, vol. 30, pp. 120-125, 2007.
- [5] J.-P. Faguet, "Decentralization and Governance," *World Dev.*, vol. 53, pp. 2-13, 2014.
- [6] G. D. Wright, K. P. Andersson, C. C. Gibson, and T. P. Evans, "Decentralization can help reduce deforestation when user groups engage with local government," *Proc. Natl. Acad. Sci.*, p. 201610650, 2016.
- [7] M. L. España-Boquera and O. Campo-Jiménez, "Proceso de deforestación en el municipio de Cherán, Michoacán, México (2006-2012)," *Madera y Bosques*, vol. 22, no. 1, pp. 141-143, 2016.
- [8] M. del C. Ventura Patiño, "Proceso de autonomía en Cherán. Movilizar el derecho," vol. 19, no. 55, pp. 157-176, 2012.
- [9] E. Ostrom, "Governing the commons: The evolution of institutions for collective action," *Land Economics*, vol. 68, no. 3. p. 354, 1990.