



Tropentag, September 15-17, 2021, hybrid conference

“Towards shifting paradigms in agriculture
for a healthy and sustainable future”

Games for Triggering Collective Changes in Natural Resource Management: Four Cases from India

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Abstract

As resource users interact and impose externalities onto each other, institutions are needed to coordinate resource use, create trust, and provide incentives for sustainable management. Coordinated collective action can play a key role in enabling communities to manage natural resources more sustainably. But, when such collective action is not present, what can be done to foster it?

There is growing awareness that the governance of natural resources has to be adapted to the specific context. Interventions are often implemented at small scale, and the potential to scale up facilitation intensive approaches is limited. Moreover, sustainable resource management frequently fails to emerge or breaks down after the project ends.

To date, researchers have typically used behavioural games to study cooperation patterns of communities. Recently, games have been adapted as learning and stakeholder engagement tools to improve management of the commons, strengthen self-regulation of resource use, and enhance constructive interactions among resource users. Combining games with other interventions and tools and facilitated discussions has been proposed as a promising approach to improve collective action institutions through experiential learning — a classic approach in education.

This paper reviews existing literature and synthesizes lessons learned from a series of studies testing the use of behavioural games for institutional capacity development in India. We conclude that, while games alone will not be the solution to all natural resource management challenges games can provide a structured and therefore replicable approach for influencing behaviour. They can also improve system understanding, raise awareness, influence norms, facilitate dialogue, train for crisis response, and increase legitimacy of decisions.

Keywords: Behavioural change, facilitation tools, forest, india, sustainable natural resource management, water