Negotiation-support toolkit for learning landscapes

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46 | RUPES role-play game (RPG)

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The Rewarding Upland Poor for Environmental Services (RUPES) project developed a role-play game (RPG) that simulated the options for land-use changes for villages in a tropical forest margin. The game resembles the decision-making process gone through by villagers interacting with external agents. The agents offer opportunities for further logging and conversion of forests to monoculture tree plantations or incentives to protect environmental services. The game shows the complexity of negotiations under time pressure, with limited information about what the 'rules of the game' imply. Primarily meant as a learning tool for those playing, observing and analyzing the game, the results can also be compared between the results achieved in multiple replications of the game.

Introduction

Financial incentives can both support and undermine social norms compatible with enhancement of environmental services. External co-investments—for example, through incentives from mechanisms for reducing deforestation and forest degradation (REDD)—need to synergize with local efforts by understanding their dynamics and the conditions for free, prior, informed consent. The RPG can help assess the perceptions and behaviours of local dynamics, which feeds into planning institutionalized rewards' schemes. Such schemes deploy incentives to conserve or enhance environmental services in the landscape but are in competion with mainstream economic development that degrades natural capital. The RPG helps to highlight the issues.

Objectives

The RPG aims at providing a schematized but recognizable representation of the decisions that villagers can make about land use, with consequences for food security and income. It is a learning process for those who play, observe and analyze. It also allows data capture for comparison between situations.

Steps

1. Study the initial game design as reported in Villamor and van Noordwijk (2011) and make adjustments that fit the local conditions of land use and change agents.
2. Prepare land-use game boards that represent each village. In application to date, game boards consisted of a village, rice fields (rain-fed rice), monoculture rubber plantations, rubber agroforests and forests.
3. Prepare role descriptions for the external agents that reflect the performance standards they have to work against (number of contracts they need to secure).

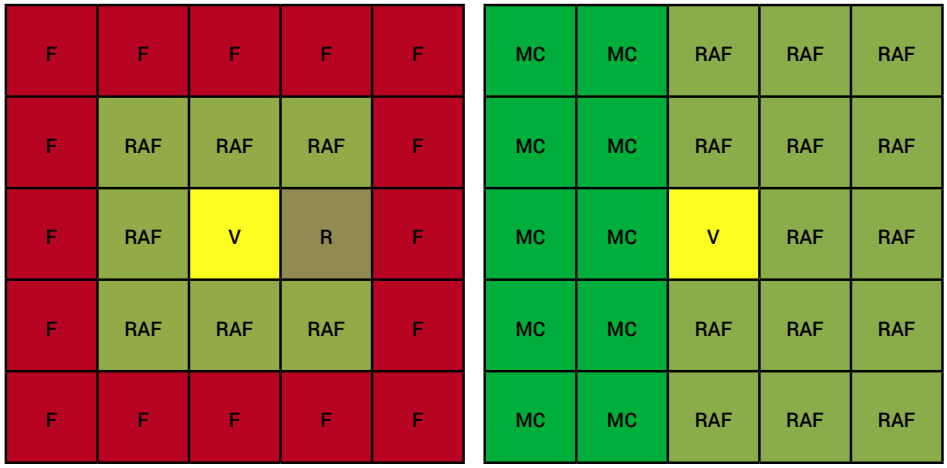

Figure 46.1. Example of gameboards

Note: The stickers with different colours represent different land uses: V = village, R = ricefield, MC = monoculture tree crops, RAF = rubber agroforest, F = forest

1. Assign a game master who will be in charge of the game and one or more assistants who interact with the agents with special roles and/or help villagers with the bookkeeping part of the game. Lack of clarity of the rules of negotiation is an essential part of the game and this learning process must take its due course. Observer roles can be added.
2. Bring participants (25–30) to a setting that is conducive to free exchange and give a short account of the purpose, learning opportunities and game procedure. Invite volunteers to leave the room and be instructed on their terms of reference and receive their initial supply of money (tokens). Meanwhile, the other participants are divided into multiple villages (4–6 participants per village board, multiple villages in the space).
3. Based on negotiations with other agents, income from either maintaining or changing the land use is accounted for in annual time steps. Negotiations with the external agent are constrained by the time step (15 minutes, 5–10 minutes per year to update the targets and keep the records for the year; total length of the game is announced to be 10 years but the game may stop after seven or eight years). At the end of each simulated year, external agents leave the room (may require gentle persuasion...) and the villagers as well as agents take stock of their performance so far.
4. Once the basic routine has been settled, the game master can announce ad hoc changes such as a forest fire, population growth or a sudden change in commodity prices. If external agents do not meet their performance goal they get a warning and may subsequently be taken out of the game owing to bankruptcy.
5. Once the game is ended, villagers and external agents are asked to reflect on their roles, explaining why they did what they did, while the game master offers simple observations to further probe what took place. When this stage of learning is reaching saturation, the assumption that this was purely fictitious is brought to the group, allowing participants to express which aspects may actually have some similarity with real life. From the factual land-use representation this can be taken towards the inter-agent dynamics (lack of clarity, trust, misunderstanding, cheating), and the lack of clarity of the 'rules of the game'.

Further description is provided in Villamor and van Noordwijk (2011).

Figure 46.2. Different ways of playing the game: sitting on the floor in a community house or at tables in a school

Case study: RPG: testing for gender differences in response to options to change land uses

The role-play game was used by Villamor et al (2013) to explore the role of gender as a factor in decision making about alternative land-use options and in responses to new investment opportunities in a forest margin landscape in Jambi, Sumatra, Indonesia.

The RPG was used to assess participants' responses in a simulated social setting of women-only and men-only groups.

When women from either upland or lowland villages played the RPG, external investors proposing logging or conversion of forests to oil palm were approached very positively and the resulting land-use change was more dynamic and extensive than in the equivalent men-only groups. Consequently, women outperformed men in achieving income targets. In lowland areas, gender was strongly associated with land-use change while in the uplands the level of conservation awareness played a more crucial role in the maintenance of rubber agroforests. Based on the data, and contrary to expectations and gender stereotypes, it is expected that the greater involvement of women in landscape-level decision making will increase emissions from deforestation and forest degradation in the area, posing further challenges to efforts to reduce such emissions.

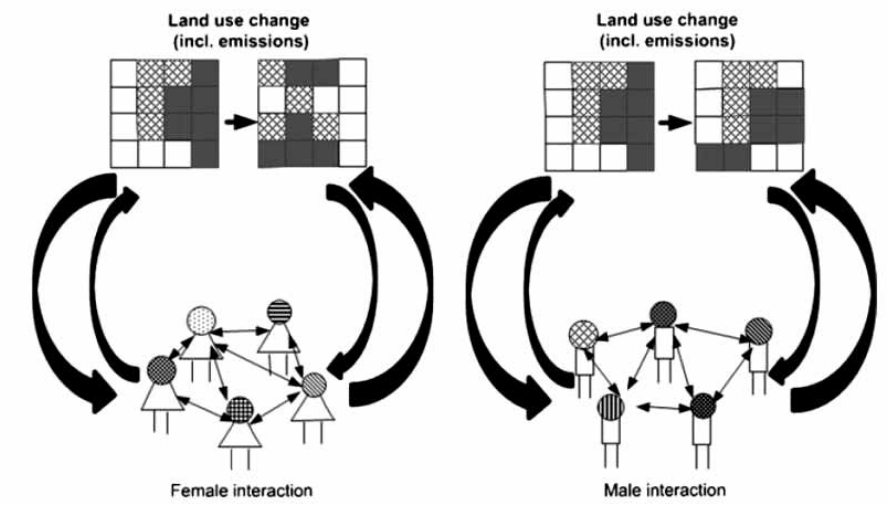

Figure 46.3. Schematic diagram of the use of an RPG to explore the different responses of men and women to proposed changes in their landscape

Source: Villamor et al 2013

■ Key references

Villamor GB, van Noordwijk M. 2011. Social role-play games vs individual perceptions of conservation and PES agreements for maintaining rubber agroforests in Jambi (Sumatra), Indonesia. *Ecology and Society* 16(3):27.

Villamor GB, Desrianti F, Akiefnawati R, Amaruzaman S, van Noordwijk M. 2013. Gender influences decisions to change land-use practices in the tropical forest margins of Jambi, Indonesia. *Mitigation and Adaptation Strategies for Global Change* 2013:1–23.