

New technologies and changing livelihoods: How are household and community traditions affected in upland Laos?

Petra Moser, Douglas White, Michael Hauser

Research objective

To (1) determine the likely effects of new technologies and practices on household and community traditions, and (2) identify development policies that foster equitable outcomes.

Context and challenge

In Lao PDR, shifting cultivation is still a dominant land use. With increasing population pressures, resulting shorter fallow periods render the traditional land use system unsustainable. Policy to merge villages provides health and education services but causes localized pressures on natural resources. Thus alternative practices need to be developed and supported to enable the growing population to achieve sustainable livelihoods.

New opportunities, many of which arise from development efforts, may alter long-standing social and cultural traditions. Promoted livelihood activities include paddy rice, livestock, cassava, job's tear, galangal, fruit gardens and domestication of non-timber forest products (NTFPs).

This research examines the effect of realizing such new livelihood strategies on:

- the roles of men and women within households, and
- traditional interactions between households and their community.

Conceptual Framework

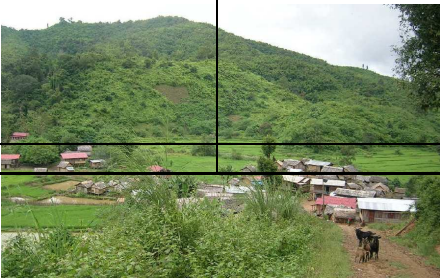
Step 1 is to document current technologies practices. Household and community traditions often differ according to livelihood activity. Within households, specific gender roles are common. For example, women often tend smaller animals while men are responsible for larger animals. Similarly, the roles of individual households and the community differ per livelihood activity. Whereas upland rice production is often a communal activity, livestock production is typically a private household activity.

Step 2 is to document the process of realizing a livelihood activity. Household and community traditions can differ with respect to specific decision stages. The three principal stages are:

- opportunity assessment,
- implementation (i.e. labour) and performance assessment, and
- the distribution of benefits (food and money).

Analysis determines gender roles and levels of community cohesion. For example, an assessment and associated decision may include both male and female household members, but the implementation activities may require more inputs (e.g. labour) from men or women. Benefits (e.g. cash) arising from livelihood strategies may be shared equally or unequally.

Table 1. Conceptual framework: Household and community traditions per stage of realizing livelihood activity

Livelihood/Enterprise Stage and Associated Decision	Tradition	
	Household	Community
	Male ← "Equal" → Female	Household ↔ Communal
I. Opportunity assessment		
II. Implementation and performance assessment a. Preparation b. Planting c. Weeding/Care d. Harvest e. Post-harvest f. Sales/Marketing		
III. Benefits distribution		

Research hypotheses

- H_1 : The introduction of new livelihood strategies maintains household traditions.
 H_2 : The introduction of new livelihood strategies has no impact on community traditions.
 H_3 : Livelihood transitions are independent of household wealth.
 H_4 : Livelihood transitions are independent of natural resource endowments and market access.

Methods

Qualitative and quantitative data were collected to test the research hypotheses in 3 villages of Houn, Xay, and La districts of Oudomxay, Laos. Participatory scoring methods (a 7-point scale) were used to estimate villager perceptions of household and community traditions pertaining to new and traditional livelihood strategies.



Preliminary Results

Traditional shifting cultivation has gender differences according to labour task. Women do most of the weeding. A transition to paddy rice or home gardens also has gendered labour tasks. For example, digging boundaries and soil preparation is more a male activity, while planting and harvesting is shared by both. Decision processes seem to be mostly dominated by men. Exceptions include the collection of NTFPs and the decision to raise some small animals, which involves women. Women are often able to decide about the benefits of the NTFPs and spend the earnings. Although women manage and keep agricultural earnings, men usually typically make the spending decisions.

Development efforts affect interactions between household and the community. New livelihood strategies, like paddy rice, still require labour exchanges within the community, as well as other strategies like cassava, job's tear, etc. Due to the diversification of the agricultural crops, labour exchange will likely continue. Since the Lao government is not able to provide paddy rice area for all farmers, supports if given to diversify crop production. To reach the government's goal to reduce shifting cultivation by 2010, substitutes for the traditional upland rice are needed. Although some farmers will try to become involved in trading activities, interactions between households and village community will likely persist, due to the important social function.

When selling products, all family members can benefit, especially children, who need purchased school supplies. Access to education, which is mostly guaranteed in the new villages, provides a better situation for women who only speak a local dialect. Trading activities of women, which currently is more a male activity, may increase by learning Lao language.

Implications

Step 3 of the research effort examines how development projects introduce new technologies and practices. To ensure women and less-wealthy households benefit, a number of considerations can be made:

- Analyze, ex-ante, gender and community roles in domesticating NTFPs.
- Promote chicken and pig production instead of larger animals.
- Ensure representation of women at meetings and trainings.
- Conduct meetings in local dialect, select extensionist with multiple language skills.

Analysis of the quantitative results will be completed in 2007. This research is associated with a research-for-development initiative on Collaborative Livelihood Assessment and Opportunity-identification Support (C Laos) within a 3-year project entitled: *Spatial trade-off analyses for site-sensitive development interventions in upland systems of Southeast Asia*. The project will continue linking with agriculture researchers and extensionists and development projects to refine the methodology and validate results in other village contexts.

