



# Negotiation-support toolkit for learning landscapes

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## 2 | Participatory analysis of poverty, livelihoods and environment dynamics (PAPoLD)

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The Participatory Analysis of Poverty, Livelihoods and Environment Dynamics method (PAPoLD) provides insights in the local ranking and classification of wealth versus poverty, the indicators that can be used as proxies and the challenges at the bottom of the local pyramid to move out of poverty.

### ■ Introduction

Poverty, livelihoods' strategies and the environment are linked in numerous ways. Some of these links are distinctly spatial: they can be measured using household surveys and remote-sensing technologies and be mapped using geographic information systems. Other links are more context-specific and, therefore, more difficult to observe. PAPoLD was developed to capture specific issues of local importance. The method is dynamic and comparable (Hoang et al 2007a) and a refinement of the Stages of Progress method developed by Dr Krishna of Duke University in the USA<sup>1</sup>. The method was modified to become PAPoLD by the World Agroforestry Centre in Viet Nam in 2007, in collaboration with the Ministry of Labour, Invalids and Social Affairs and the Viet Nam Institute of Economics, to better address the links between poverty and the environment. By integrating PAPoLD with a sustainable livelihoods approach, the links between poverty and the environment can be understood in a more comprehensive way.

### ■ Objectives and steps

**Table 2.1.** PAPoLD objectives and associated questions and tasks

Step	Objective	Specific questions/tasks
1	To understand stakeholders, including local people's, viewpoints on poverty and the environment	1. What is poverty, what are the causes of poverty and who are the poor? 2. How do people perceive their environment and what are their environmental concerns?

<sup>1</sup> Dr Krishna and colleagues have produced a training manual for the method, as well as a number of journal articles summarizing the results (see <http://www.pubpol.duke.edu/krishna/>). The website includes a training manual and results from case studies in India, Kenya, Uganda and Peru.

Step	Objective	Specific questions/tasks
2	To understand the Stages of Progress and livelihoods' activities in the area	<ol style="list-style-type: none"> <li>1. What are the local livelihoods' assets and what is the capital that people use to pursue their livelihoods?</li> <li>2. What are the natural and environment-related livelihoods' assets and the dynamics/changes associated with those assets?</li> <li>3. What are the communal livelihoods' activities?</li> <li>4. Life changes (escape from poverty, falling back into poverty etc) in relation to key livelihoods' activities.</li> <li>5. Rank the importance of the community's livelihood activities.</li> </ol>
3	To identify the impact of natural resources and of the environment on livelihoods' activities and strategies and vice versa	<ol style="list-style-type: none"> <li>1. How do people use natural resources to support their livelihoods?</li> <li>2. How do livelihoods' activities affect the environment? (use Rapid Market Appraisal to analyse the value chain).</li> </ol>
4	To identify shocks, risks and vulnerabilities relating to the environment and natural resources	What are the sources of natural and environment-related shocks and what risks do they pose to livelihoods?
5	To understand institutional and policy-related issues	To what extent are livelihoods' activities influenced by policies and institutional arrangements related to the management of natural resources?

## ■ PAPoLD case study: land-use strategies and the impacts of market and resource access on poor tea growers in Hoang Nong, Viet Nam

The commune of Hoang Nong in the Dai Tu district of Thai Nguyen province in Viet Nam belongs to the buffer zone of the Tam Dao National Park (Figure 2.1). The population of the study village consisted of six ethnic groups. Most of the households relied mainly on agricultural activities for their incomes, including paddy farming, rearing cattle and tea cultivation. Among these activities, cattle rearing gave farmers the highest economic return. Local farmers, especially the poorer households, also earned a living from forestry-related activities, such as hunting and wildlife trading.

PAPoLD was used together with other participatory rural appraisal tools to study the land-use strategies used by upland rural households for dealing with changes in commercialization processes (Hoang et al 2007b). Two villages were selected for the study as representative of two of the most dominant ethnic groups in the area: the Kinh in Doan Thang; and the Dao group in Dinh Cuong. Selected groups from the two villages (representing about 30% of the total households in each village) were asked to define local notions of poverty, identify 'stages of progress' that households in the villages might go through as they obtained more and more investment funds and characterize each household in the village according to its current and past stage in the stages of progress. Focus groups were also asked to describe their livelihoods' strategies. Two focus groups of tea growers were selected per village using representative criteria relating to wealth, age, and gender.



**Figure 2.1.** Map of Thai Nguyen, Viet Nam

## Summary of findings

- 1 Links between poverty and policy: the Hoang Nong study showed that land-use changes over time were related to land and cooperative reforms. This was particularly the case in the early 1990s, when the establishment of the Tam Dao National Park, together with land privatization, left little land for young families to build on and to cultivate. This was the main cause of poverty among younger households.
- 2 Poverty indicators: the most common indicators of poverty were housing, land areas, labour, income, selling price of tea, the need to repay loans and buy furniture (Table 2.2).
- 3 Self-rated poverty level: most of the villagers rated themselves as being in stage 1 of progress (Table 2.2). This was defined as lacking land, suffering from bad health and unemployed. The farmers who described themselves as being in the medium stages of progress (stages 3 to 7) seemed to have more diverse crop and animal patterns, which gave them higher security and sometimes enough money to expand their farms or to invest. The better-off households (described as being in stage 5 and above) either had a large amount of land to begin with or had managed their investments well and were able to buy additional land.
- 4 Poverty changes over time for each household: changes in wealth over time showed that better access to land, credit and labour were the main factors that helped local farmers make their way out of poverty (Table 2.3).
- 5 Strategies for getting out of poverty: owning tea plantations, being able to afford fertilisers, waged employment, smaller families, reduced expenditure and collecting and consuming wild foods were the main strategies that were listed for getting out of poverty.



**Table 2.2.** Stages of progress and their definitions for the village of Doan Thang, Viet Nam

Stage number	Indicator
<b>Wealthy</b>	
10	Expanding business; able to use the brand name of Hoang Nong
9	Applying technology; investment; marketing; learning about the product market
8	Owning advanced multimedia (radio and television)
7	Accruing savings; taking care of health
<b>From average to wealthy</b>	
6	Buying a motorbike
5	Building house; improving and upgrading kitchen and house furniture; owning a bathroom
<b>Poverty line</b>	
4	Buying cows and buffalo
3	Buying fertilizers and basic machines
2	Buying additional land
1	Having little land and/or poor land; having many dependants; do not have basic houses; often sick

**Table 2.3.** Examples of changes in household poverty over time in Doan Thang village, Viet Nam

Exam- ples	1982– 1986	1991– 1992	1994	1997	2001	2005	2007	Reasons for changes
		Land allocation and 'red book' (land title) issued		Selling young labour to the south	Electricity becomes available	The German Organisation for International Cooperation project starts and a 'safe tea' cooperative is established		
<b>A</b>				1	→		3	Children grow up, health improves, hard working (14 hours/day)
<b>B</b>				4	→		3	Old parents, able to pay for small children to go to school
<b>C</b>				4	→		3	Old parents, able to pay for small children to go to school
<b>D</b>						2	→	3 Purchase more land for tea, children get bigger
<b>E</b>					2	→	3	Children get bigger
<b>F</b>				2	→		3	Parents are less sick
<b>G</b>				1	→ 2	→	4	Business service, selling equipment for tea, and drying and processing tea
<b>H</b>	2	→			3	→	4	Working with tea, children grow up, more labour
<b>I</b>	3	→ 4	→				4	More labour, creativity, pension

**Note:** Refers to stages of poverty identified in Table 2.2

The PAPoLD method helped researchers to understand the livelihoods' strategies that people use to get out of poverty and the positive or negative impacts that these strategies have on the environment. The poverty lines, the wealth line and the poverty indicators show that there are ways to improve livelihoods in the area, primarily by promoting livestock production and by cultivating 'environmentally safe' tea.

## ■ Further reading

Hoang MH, Pham TT, Swallow B, Nguyen TLH, Thai PT, Nguyen VH, Dao NN. 2007a. *Understanding the voice of the poor: participatory poverty analysis with environment focus*. Hanoi: United Nations Development Programme; Ministry of Natural Resources and Environment of Viet Nam.

Hoang MH, Nguyen LH, Pham TT, Mai HY, Be QN. 2007b. *Comparative analysis of market and resource access of the poor in upland zones of the Greater Mekong Region (MMSEA project)*. Viet Nam case study. Hanoi: World Agroforestry Centre Viet Nam.



The landscape scale is a meeting point for bottom–up local initiatives to secure and improve livelihoods from agriculture, agroforestry and forest management, and top–down concerns and incentives related to planetary boundaries to human resource use.

Sustainable development goals require a substantial change of direction from the past when economic growth was usually accompanied by environmental degradation, with the increase of atmospheric greenhouse gasses as a symptom, but also as an issue that needs to be managed as such.

In landscapes around the world, active learning takes place with experiments that involve changes in technology, farming systems, value chains, livelihoods' strategies and institutions. An overarching hypothesis that is being tested is:

Investment in institutionalising rewards for the environmental services that are provided by multifunctional landscapes with trees is a cost-effective and fair way to reduce vulnerability of rural livelihoods to climate change and to avoid larger costs of specific 'adaptation' while enhancing carbon stocks in the landscape.

Such changes can't come overnight. A complex process of negotiations among stakeholders is usually needed. The divergence of knowledge and claims to knowledge is a major hurdle in the negotiation process.

The collection of tools—methods, approaches and computer models—presented here was shaped by over a decade of involvement in supporting such negotiations in landscapes where a lot is at stake. The tools are meant to support further learning and effectively sharing experience towards smarter landscape management.

