

FORESTS, MARKETIZATION, LIVELIHOODS AND THE POOR IN THE LAO PDR

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ABSTRACT

The Lao PDR is making the transition from subsistence to cash, and command to market. Rural communities are being drawn ever more tightly into the embrace of the market economy and of the central state. The construction of roads, schools and health centres, the provision of credit and new crops and technologies, and the arrival of traders and the panoply of the consumer economy are all, in their different ways, remoulding rural economy and society. This paper looks at one aspect of this multi-stranded process of agrarian transformation: the role and place of forests and, in particular, non-timber forest products, in rural people's lives and livelihoods. The paper highlights the contradictory and uneven livelihood-eroding/enhancing effects of these transformations. In many upland areas of Laos livelihoods are being squeezed from 'below' by environmental degradation and from 'above' by the operation of government policies and, more generally, by evolving market relations. While market pessimists see market integration as a largely destructive process, the paper highlights the opportunities that market integration can provide through diversification and livelihood reorientation. The challenge is that these opportunities are unequally available and are likely to promote social differentiation. Some households find themselves in a position to embrace new opportunities while others are forced to continue to rely on a declining and degrading forest resource. Copyright © 2006 John Wiley & Sons, Ltd.

KEY WORDS: market integration; resource decline; NTFPs; vulnerability; Lao PDR

FOREST DEGRADATION, LIVELIHOOD DEGRADATION

This paper focuses on the role and place of the forest and, more especially, non-timber forest products (NTFPs) in rural people's livelihoods in the Lao People's Democratic Republic (Figure 1). However, the focus of the paper is not on the role of NTFPs in rural livelihoods *per se*. Rather, I am interested in exploring how market integration and, more widely, globalization (reflected in the Country's integration into the Greater Mekong Subregion) have pressured traditional systems and reworked the place of the forest in rural livelihoods. In particular I wish to elucidate the implications of this for marginal groups in rural society and show how the forest resource has, in a real sense, been wrested from the grasp of local people. The actors in this theatre of development are rural households and commercial intermediaries, and the props and scenery comprise government policies, market forces and, of course, the forests and their fauna.

The degradation of the forest resource is central to the narrative of dearth and decline that the paper will outline. But rather than providing a detailed examination of forest degradation itself, the paper will seek to build an understanding of the impact of the process on rural populations and the way in which it narrows and compromises (and therefore degrades) rural livelihoods and in particular the livelihoods of the poor. The paper conceptualizes degradation in a twofold, and circular relationship. Natural resource decline contributes to livelihood decline, and livelihood decline places additional pressures on natural resources (further explored towards the end of the paper).

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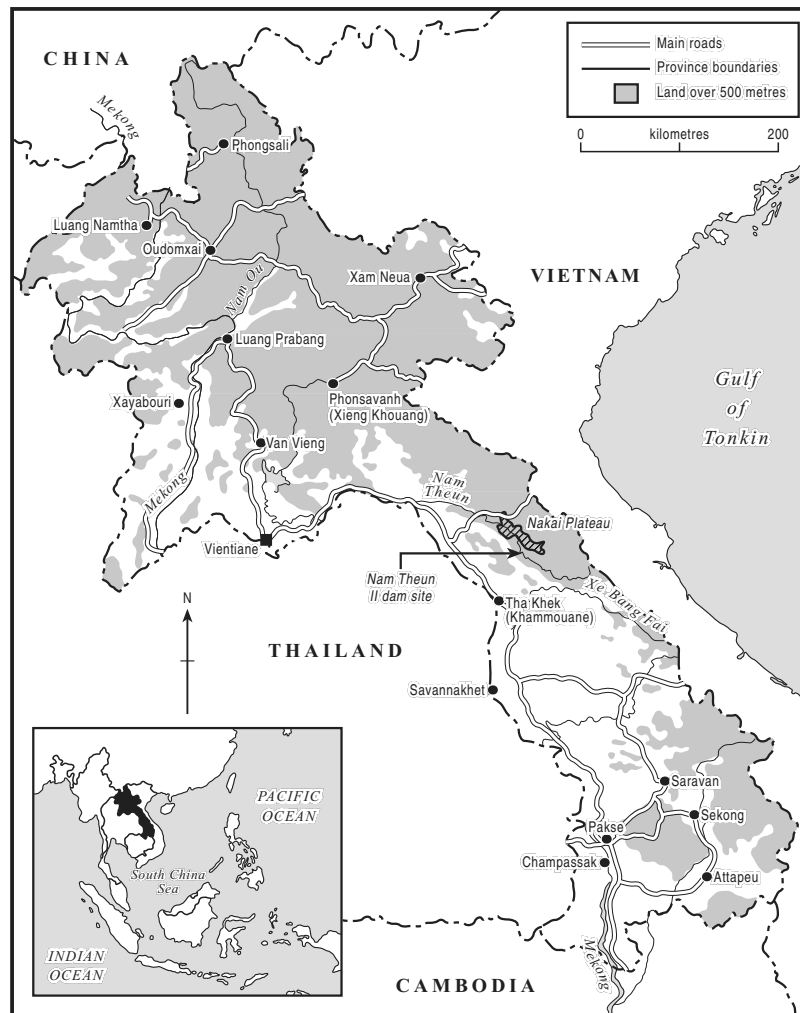


Figure 1. Lao PDR.

The drivers behind the process of degradation in upland areas of Laos, as discussed in more detail below, are a combination of government policies and market integration.

While this view of the relationship between degradation and livelihoods may resonate with Blaikie and Brookfield's (1987) notion of the 'desperate ecocide of the poor', the twin and intertwined spiral of decline is not—necessarily—a closed one, with no escape route. There are ways in which rural households in Laos have raised incomes and improved livelihoods even in the context of a deteriorating natural resource base, largely through beginning the process of de-linking their livelihoods from the forest. These avenues for accumulation are also, though, intimately linked to marketization and supporting government policies (namely, those that comprise the New Economic Mechanism). Marketization, then, can be both poverty creating and livelihood enhancing. The critical point, though, is that the opportunities are not open to all communities or to all households and individuals in all communities. Inequality of access is the norm.

As one of the world's lesser-known countries, Laos is prone to descriptive simplification. It is paraded as agricultural, poor, remote, subsistence-oriented and traditional. Available statistics, at least at an aggregate level, lend support to such a perspective: 57 per cent of GDP is generated by the agricultural sector; 84 per cent of households are engaged in farming; the incidence of poverty—using a low poverty line—is close to 40 per cent;

the majority of rural villages sell no rice whatsoever; fewer than 40 per cent of villages are accessible year-round by road; 80 per cent of rural communities have no electricity; and so on. This characterization by statistic has two main drawbacks. First, it tends to overlook—or gloss over—the degree to which Laos is a country in flux, making the transition from one ‘state’ to another. And second, it provides an impression of uniformity, thus playing down the variability, unevenness and diversity that are part-and-parcel of the country’s development.

There is one further point of clarification, and that concerns the extensive use of unpublished sources to support the case that this paper makes. Primary research by academics on Laos is limited. That said, there has been, and particularly over the last 10–15 years, a good deal of applied field research associated with development projects undertaken in the country. This is disseminated in Laos in the form of reports, mission statements, mid-term evaluations, feasibility studies, briefing papers, appraisals, baseline surveys, inventories, and more. While there are shortcomings and difficulties with using these forms of output as a basis for a research paper, this is felt to be more than counter-balanced by the access they provide to primary material on agrarian and livelihood transitions. It is this seam of information which the paper mines to make its case.

FORESTS, LIVELIHOODS AND THE POOR

Forests have tended to be regarded in Southeast Asia either as wild areas to be avoided (traditionally) or as stores of wealth to be exploited (more latterly). In Laos the importance of forests in the economy is self-evident: in 1998, wood and wood products comprised 34 per cent of total exports (World Bank, 2001, p. 10). Forests have also filled—and continue to fill—a central livelihood role for rural families. But because of the low visibility of forest exploitation this role, for many years, went either un- or under-reported. It was only in the 1980s that the importance of forests to rural livelihoods became an object of systematic study. Work on the role of NTFPs, in particular, has revealed that forests provide more than just timber. They are repositories of village food and wealth, and buffers during times of crisis. Forests in Laos provide food items such as game, fish, bamboo shoots and honey; fibres including **khem** grass and paper mulberry; condiments like cardamom as well as traditional medicines; inputs for the chemical and perfume industries like benzoin and damar resin; and bamboo poles, rattan and fuelwood. Unlike most other countries of Southeast Asia where the importance of NTFPs in livelihoods has declined markedly, forests in Laos remain an important source of food and marketable products for villagers in many parts of the country. No systematic countrywide survey has been undertaken but this basic point is emphasized in study after study. It has been estimated that the average rural Lao family consumes the equivalent of US\$280 of NTFPs per year, equal to 40 per cent of total rural family income (World Bank, 2001, p. 11).

Studies show that the majority of poor households, whether delineated according to a poverty line or measures of food security (rice sufficiency), live in upland areas and practise shifting cultivation. A participatory poverty assessment (PPA) undertaken by the ADB in 2000 across 84 rural villages, for example, revealed that 90 per cent of poor villages were dependent on **swidden** agricultural systems (ADB, 2001, p. 43). Characteristically, these villages experience rice insufficiency for six months—or longer—of the year. This, it should be emphasized, is the norm—not the exception (Table I). Villagers make up this deficit through various means: by selling their labour; the sale of livestock; the cultivation of non-rice crops, whether for consumption or sale; and through the marketing of handicrafts. However a central piece in the livelihood jigsaw is the forest resource. ‘The most common form of

Table I. Rice sufficiency in the Lao PDR, by region and ethnic group—months per year (2000)

Region/ethnicity	Mon-Khmer	Tibeto-Burman	Hmong-Mien	Lao-Tai	Total
North	6.2	7.0	8.2	11.5	7.2
East	6.3	—	7.8	6.5	6.0
Central	7.9	—	8.0	10.8	8.5
South	5.5	—	—	9.3	5.5
Total	5.9	7.0	8.1	9.0	6.8

Source: ADB, 2001, p. 45.

compensating for rice shortages among villages', the PPA states, 'was found to be the consumption and sale of forest products' (ADB, 2001, p. 48). Two-thirds of villages reported that they obtained more than three-quarters of their non-rice food from the wild. Nor is the role of the forest limited to subsistence needs. Typically, in more remote upland areas, 40 percent to 60 percent of household income is derived from the sale of NTFPs and this rises to 80 percent in some instances (UNDP, 2002, p. 77).

It is also important to note that forests are not just larders of emergency provisions; they are used to meet day-to-day needs, providing almost three-quarters of meat consumed by villagers and seven-tenths of the vegetables (ADB, 2001, p. 51). A community study undertaken in three villages in Salavan Province in the south of the country between January and April 1998 revealed that of all food items consumed, 79 (54 percent) were foraged, 51 cultivated and 16 were purchased. The study's author summarizes the situation by stating that the 'role of foraging in household food security is fundamental in the rural Lao PDR' (Denes, 1998, p. 3).

The forest fulfils, then, the role of a buffer not just during years of crop failure—though, to be sure, at these times the forest becomes an even more important resource—but in normal years too. Moreover, it fills this function for most, often all, villagers. The forest, in these terms, is not just a resource for the very poorest at times of hardship, but for the great rump of upland communities and populations throughout the year. What happens to the forest in terms of its productivity for humans (an anthropomorphic take on biodiversity) is therefore critical to understanding rural livelihoods.

FORESTS, LIVELIHOODS AND CHANGE

In contextualizing the forest–livelihood relationship in upland Laos in such a manner, however, this paper is in danger of overlooking the ways in which the relationship is coming under pressure. Perhaps the most significant theme to be highlighted in socio-economic studies carried out in Laos since the mid-1990s has been the recognition that modest levels of economic growth have been accompanied by a worrying increase in inequality. Kakwani goes so far as to state that economic growth in the Lao PDR has been 'pro-rich', 'even though some of the benefits are trickling down to the poor' (Kakwani, 2001) and, together with Chamberlain and Panh Phomsombath notes that 'inequality in Lao PDR has deteriorated sharply over time' (Chamberlain *et al.*, n.d.). This is manifested at the regional, inter-village and intra-village levels. At a national level, the bottom quintile of the population saw its share of total consumption fall from 9.3 percent to 7.8 percent between 1992/93 and 1997/98, while the share of the top quintile rose from 38.4 percent to 44.4 percent.

As well as widening inequalities, people and households are being squeezed by a variety of processes and policies: by the government's Land-Forest Allocation Programme (LFAP) that has extracted people from their upland homes (see below); by population growth in the context of declining land availability; by resource decline associated with the over-cropping of marginal sloping lands; by the pressures of marketization; and by the failure of alternative livelihood opportunities to expand sufficiently rapidly to compensate for the decline in traditional activities. This image of Lao rural households encountering what appears to be a Malthusian squeeze on their livelihoods may be surprising given Laos' usual characterization as a country of land and natural resource abundance, and requires some further explanation.

Some scholars (e.g. Chamberlain and Panh Phomsombath, 2002; Raintree, 2003) have argued that the uplands of Laos, even today, face no population-induced production crisis. There is sufficient land available to support present populations without any general adverse effects on the environment or on the forest resource. Moreover, there has also been the suggestion that rotational **swidden** systems remain sustainable and are the most productive means available of achieving food security and meeting livelihood needs (Chamberlain and Panh Phomsombath, 2002, p. 9; see also MSIFSP, 1995). For these scholars, the Country's Malthusian squeeze is best interpreted as 'policy-induced'.

Forest policy in Laos is driven by the stated objectives of eliminating shifting cultivation and stabilizing agriculture. Thus, the population–resource squeeze is not being driven by simple population growth (the orthodox view) but by policies and, more specifically, by the LFAP and the Focal Site Strategy. The Focal Site Strategy, which was introduced in 1994, has led to the establishment of so-styled 'integrated rural development clusters' in

the most deprived areas of the country. The aim is to create 'growth zones' or 'development poles' that become 'centres of change and learning' where the transition from subsistence to market is enhanced (Lao PDR, 2000a). Villagers are being drawn down from the hills, sometimes involuntarily, and settled in areas where land is scarce and where the best land has already been claimed. In such a geographical context it is no wonder that declining rotation cycles is leading to falling yields and a crisis of subsistence. Laos' Malthusian crisis is, following this line of thinking, therefore policy-induced and 'artificial' (Raintree, 2003, p. 4). A report commissioned by the ILO states that 'it may . . . be assumed that those who are diagnosed as extremely poor or starving have been victims of man-made social or environmental upheaval, not infrequently in the name of rural development' (ILO, 2000, p. 9). This interpretation highlights a latent disjuncture between two key thrusts of government policy, namely eliminating shifting cultivation and improving rural livelihoods (see, for example, UNDP, 2002; Chamberlain and Panh Phomsombath, 2002; MSIFSP, 1995). The UNDP, in the light of the tensions created by the implementation of the LFAP, has called for a 'livelihood-friendly' development policy in Laos (UNDP, 2002, p. 93). This can be seen as a people-centred counterpoint to the international banks' emphasis on 'pro-poor' policies.

The difficulty of ascertaining what the 'official' position is on the role of the forests in livelihoods is that not only do government documents often contradict one another, but policy is continually on the move. It would seem, however, that the adverse effects of the LFAP on livelihoods have now been broadly accepted. For Vandergeest the programme has led to 'massive displacement' (2003, p. 49) and many other scholars and organizations have similarly identified the LFAP as selectively destructive of livelihoods (for example UNDP, 2002; Rigg, 2005; Goudineau, 1997).

In addition, the Poverty-Focused Agricultural Development Plan of the Ministry of Agriculture and Forestry explicitly recognizes that forests play 'an important role in supporting rural livelihoods systems, with an estimated 40–60 per cent of rural households sourcing food for consumption from the forests' (Lao PDR, 2003, p. 6). The plan continues: 'A significant number of poor rural Lao households continue to be dependent on non-timber forest products (NTFP) for food, shelter, medicine, and supplementary off-farm income . . . in this context, programs related to NTFPs have a high priority' (Lao PDR, 2003, p. 21). The question is to what extent this recognition will filter through to the sharp end of development interventions at the local level, and how latent contradictions in policies will be reconciled. The Forestry Law (1996), for instance, is unclear in terms of villagers' rights. Article 30 states that groups with long-standing use of the forests for the collection of firewood, NTFPs, hunting and fishing have the right to continue to use the forest in such a manner. The same article also states, however, that these activities 'shall avoid causing damage to the . . . forest'. As most traditional forest-based livelihood activities involve a degree of 'damage', 'there is much scope in how this law is to be interpreted and what activities will be sanctioned' (IUCN, 1998, p. 24).

Partially driven by government policies, which have locally fuelled and accentuated the rural resource squeeze, the forest is declining both in areal extent and in terms of diversity and productivity. Large mammals have disappeared entirely in many areas. The time taken to collect a given amount of NTFPs has also risen as scarcity has increased. A study in the village of Ban Nong Hin in the southern province of Champassak noted a collapse in the availability of wildlife over a ten-year period and an eight-to tenfold increase in the labour required to yield an equivalent quantity of fish and rattan (UNDP, 2002, p. 82). Much the same narrative of exploitation and decline is recounted in Denes' study of three villages in Salavan (Table II), in the Muang Sing Integrated Food Security Programme's baseline survey in the northern province of Luang Namtha (MSIFSP, 1995, pp. 29–30), and in surveys conducted on the central Nakai Plateau (see below).

For poor villages, the decline in the forest resource has significantly increased vulnerability. In the village of Sisangvone in Vientiane province's Kasi district not a single household is rice secure and the large majority, 40 out of 46 households, produce rice sufficient for only six months' (or less) consumption (FAO, 2002, p. 68). Yet one of the few ways in which the families of Sisangvone can make up their rice deficit and meet their growing need for cash is through the collection and sale of NTFPs. In these terms and for this village, the decline in the productivity of the forest due to over-exploitation of NTFPs has been catastrophic in livelihood terms.

There would seem, sometimes, to be a cascade effect as over-exploitation or under-production in one realm spills into another. Declining **swidden** rotations, perhaps propelled by government policy, cause households to

Table II. Foraging in Salavan: A timeline of resource exploitation and decline

Date	Resource conditions	Resource use
1900s–1960s	Adundant	A period of natural abundance; wild animals, fish and foraged plants widely and easily available. ‘One could fill one’s basket in a few hours with enough food for several days’. A generosity of spirit prevailed as villagers shared their produce with all.
1960s–late 1970s	Abundant but access restricted	War and insecurity limited foraging activities to areas near the villages. This was a period of hardship and dearth.
Late 1970s–mid 1980s	Population increase and new technologies drive exploitation	Peace returns. Rapid population growth, new hunting and gathering technologies (flashlights, guns), and the intensification of wood harvesting all increase pressure on the forest resource. A logging road is cut into the forest accelerating harvesting and promoting the local trade in timber.
Mid-1980s–present	Market-driven exploitation. Many products are now scarce and the forest is degraded.	Introduction of the NEM. Market forces intensify. Middlemen and non-Lao (from Thailand) come to the area and local people begin to sell NTFPs—such as frogs and mushrooms—in bulk. Villagers set up stalls along Route 13 to sell NTFPs.

Source: adapted from Denes, 1998, pp. 18–20.

increasingly rely on the forest. As the forest becomes over-exploited so attention turns to river resources. And as the river resource is over-harvested so villagers look elsewhere to meet their needs, perhaps in some form of *ex situ* income-generating activity. This is the development narrative recounted in a survey of 24 villages undertaken between February and March 2001 along the Xe Bang Fai River in the central Lao province of Khammouane (Shoemaker, *et al.*, 2001). Having partially exhausted, or at least degraded, the natural resources locally, people have no choice but to explore alternative, non-local opportunities. In the case of the villages on the Xe Bang Fai, this has led to a growing reliance on non-farm work (for example in sawmills) and on labour migration to Thailand (Shoemaker *et al.*, 2001, pp. 50–52). For some villages in this survey, wage labouring in Thailand has become the major source of village income. The trend can be explained in terms of growing population, declining resources, intensifying commercialism, and increasing materialism and consumerism. But while such non-farm, extra-local opportunities may provide a way out of the livelihood impasse faced by villages such as those along the Xe Bang Fai this is no reason to be sanguine about the possibilities open to other communities or about their likely effects. To begin with, for many villages such opportunities are simply not available. And, second, there are significant implications for the unity and coherence of rural society, and particularly for more vulnerable minority groups.

THE LOGIC OF INTEGRATION: MARKETIZATION, FORESTS AND THE POOR

Market integration has been one of the guiding principles of Laos’ development strategy since it embraced the New Economic Mechanism (NEM) in 1986 and embarked on the journey to reform. The logic of the enterprise, so far as the government and most development agencies are concerned, is founded on the assumption that it is the isolation of a large part of the population from the market and the state that perpetuates poverty in the country. In the great majority of development reports, the possibility that road construction might have negative effects and consequences receives barely a mention or, at best, only fleeting consideration. Yet work on social differentiation and, more particularly, on trajectories of change in the pattern of exploitation of NTFPs reveals that infrastructure-driven marketization can actually erode well-being for some poor, vulnerable villages and households. This can be seen when one considers what happens to NTFPs when the market comes to the forest.

We can delineate three main market-induced pressures on the non-timber forest resource. First, the intensification of the collection of forest products by villagers for sale; second, the infiltration of non-local people into the local market in NTFPs; and, third, the arrival of non-Lao actors on the resource stage.

In 1996 CARE undertook a study of 12 villages on the Nakai Plateau and described communities who were dependent on shifting cultivation allied with some livestock production, hunting, fishing and the collection of NTFPs. Even in the mid-1990s, however, the latter three activities—hunting, fishing and the collection of NTFPs—had made the transition from subsistence to commercial activities for many villagers. ‘Enough’ was becoming greater as values changed and ‘people begin to try every means to obtain cash to purchase more clothing, medicine, household goods, etc.’ (CARE, 1996, p. 5). The 1996 study forecast a gradual decline and likely collapse of traditional livelihood systems. Soil erosion was marked, **swidden** rotations had declined from 10+ years to 3–4 years or less, flooding had become more severe, many larger animals had been hunted out in the area, and the collection of NTFPs was becoming more and more time intensive. Chamberlain *et al.* (1996) note that villagers who in the mid-1980s had to travel only 1–2 km from their homes in the search for forest products, ten years later had to walk 20 km. Moreover, while the catalyst for this may have been the allure of the market and money, it was non-local groups—in this instance Vietnamese traders from across the border to the east—who propelled the rate of extraction to levels that were non-sustainable, even in the short-term and which ultimately worsened poverty even as additional income was generated.

The developmental lessons of the Nakai Plateau, and other areas of the country, are not hard to discern: roads, and the market integration that roads encourage, do bring wealth, but who controls that wealth, how it is apportioned between households, villages and groups, and what the implications of new livelihood practices are for established ways of making a living are critical components in building an understanding of livelihood change.

An anthropological study (DUDCP, 2001) of three villages (Ban Makfeueng, Ban Navang and Ban Theung) on the Nakai Plateau undertaken in November 2000 describes a livelihood context where market integration had channelled outsiders, and outside interests, into a formerly remote area, accelerating environmental decline and undermining local livelihoods. While increased commercialization of extraction of NTFPs initially boosted production and incomes for some, the long-term effects were deleterious to local livelihoods, and especially for more marginal households. A laterite logging road was cut in 1995 to transport timber out of the area, but has not been used for such a purpose since 1997–1998. For the three villages studied, the road had not become a conduit to access markets and wealth for the simple reason that no one in the village owned a truck or even a motorbike. Instead the logging road became a means by which Lao and Vietnamese traders could penetrate the area to buy valuable woods like **mai ka nyoung** (*Dalbergia cochinchinensis* or Thai/Siamese rosewood) and NTFPs including protected and endangered species such as turtles, tigers, bears and golden cats. The wealth that this extraction of forest riches generated largely accrued to outsiders and, in the main, left villagers with a yet more degraded natural resource and very little to show for it. In this instance we can speculate that the logging road, rather than bringing development to the poor, brought exploitation to the self-sufficient.

The broad experience of the Nakai Plateau resonates with studies undertaken in other parts of the country and particularly in borderland areas where trans-boundary environmental pressures are most pronounced. Improved accessibility between the Chinese border and the Nam Ou valley in Luang Prabang province has led to a very significant increase in the trade in valuable NTFPs, fuelled by consumer demand in China, so much so that there are worries about the sustainability of such a high level of resource extraction (ADB, 2000, p. 8). In her study in Salavan in the south, Denes (1998, p. 11) expresses concern that the marketization of NTFPs will have adverse effects on food security. Not only does it channel valuable foods out of the local area but over-exploitation without any efforts to replant, manage or conserve the resource will mean a deterioration, over the medium-term, in the productivity of the system. In the province of Oudomxai there are fears, reflected elsewhere, that the temptation to cash in the wealth of the forest for short-term gain may be ‘irresistible’ for households leading meagre lives, tempted by the apparent riches offered by the market and cajoled and encouraged by middlemen from beyond the local area (Lao PDR, 2000b, p. 45). Once again, though, the bulk of the benefits accrue to outsiders while the costs, in terms of environmental decline, resource degradation and livelihood erosion, are borne by the villagers.

The case of the village of Sisangvone noted above (FAO, 2002) clearly shows how market integration can bring communities to a development 'precipice' or 'break'. The village, without question, is poor. Average annual household incomes are under US\$200 (1.8 million kip). There is no electricity, no health post, and there are no latrines. There are only three hectares of lowland rice fields for a total population of 189, and nine out of ten households produce sufficient rice to meet their needs for less than half the year. The villagers depend on the forest both to make up the subsistence shortfall and to generate cash. Traders from Kasi—on the main road between Vientiane and Luang Prabang—come to the village to buy and sell and 46 per cent of off-farm income is derived from the sale of NTFPs. Yet it is recognized that the pattern and intensity of exploitation is taking the village down an environmental and livelihood *cul-de-sac*.

TRAJECTORIES OF RURAL CHANGE: LIVELIHOODS AND THE FOREST

This paper has presented a largely depressing story of the interplay between market integration, forest exploitation, and livelihoods in Laos. To summarize: while the role of forests in rural livelihoods remains important, and is often central in upland areas, the progressive integration of rural peoples into the economic mainstream is leading to over-exploitation and a gradual degradation in the richness and productivity of the forest resource. For those groups and individuals who are unable to take advantage of the new opportunities that market integration is offering, this process of natural resource decline is leading to a parallel process of livelihood decline.

The lessons of other countries in the region, and beyond, are similar and would seem to lend wider credence to this interpretation of the processes underway. In upland Vietnam, for example, 'poverty, population growth, environmental degradation, social marginalization, and economic dependency are now interacting to create a downward spiral that is currently reaching crisis proportions, both socially and environmentally' (Jamieson *et al.*, 1988, p. 2; see also De Koninck, 1999, 2000; Hardy and Turner, 2000). This spiral of decline in upland Vietnam is closely linked to the way in which the market and the state have intruded into formerly 'autonomous' (but not isolated) communities. Sikor and Dao (2002) also note the importance of national policy reforms in influencing local-level land-use change in their study of ten Black Thai villages in upland northern Vietnam, although they are less pessimistic in their assessment of the effects on livelihoods despite marked ecological decline and the 'pulling' of household production into the uplands. Work on ethnic minorities in peripheral areas of Yunnan (China) and Thailand has also shown how modernization and integration can lead to a profound process of 'disorientation' and a loss of livelihood sustainability (Jamaree Chiengthong, 2003, p. 167).

Some analysts have identified possibilities for the restructuring of forest extraction/cultivation in Laos so that NTFPs remain a key component in rural livelihoods. Foppes and Sounthone Ketphanh, for example, write that the 'Lao PDR has a remarkable opportunity to build a strong NTFP sub-sector as a basis for sustainable economic development in the Southeast Asian region' (2000, p. 15). The view of this paper, and the lessons from other countries in the region, is that the best outcome in the medium term is that NTFPs will become a niche livelihood activity undertaken by the few, rather than the many.

It would be easy to leave the analysis here and to argue that market integration and the wider process of transition in Laos—and elsewhere in the uplands of Southeast Asia—is poverty-creating and environment-degrading and, in general, destructive of rural livelihoods. What is occurring in many upland areas of Laos is a twofold livelihood squeeze, from 'below' and from 'above'. From below driven by the declining productivity of the environment, whether cropland or forest; and from above by government policies. There is also a third explanatory factor, as explained in the previous section: the operation of the market. As Sikor and Tuong Vi write, 'commodity markets have become key forces transforming the uplands not only in Vietnam but also throughout Southeast Asia' (2005, p. 406). It is in the light of these patterns of development interactions in upland areas that the ADB's (2001) PPA concluded that poverty in the Lao PDR is 'new poverty' in the sense that it is not endemic but produced—and then reproduced—by the very process of development. This view of the operation of development in upland Laos, and its effects on people and the environment, accords with the broad outlook of the 'market pessimists'.

It fails, however, to tell the full story in at least two respects. First, it tends to exaggerate the nature and productivity of 'traditional' systems. And second, it ignores the opportunities that market integration can provide. There is a case, as the paper has outlined, for seeing modernization, marketization and integration as *both* livelihood eroding and livelihood enhancing. Much of the latter is linked to the possibilities for diversification and livelihood reorientation. The difficulty—and the challenge—is that in Laos, Vietnam, China and elsewhere, the opportunities that market integration offers are unequally distributed, as are the costs, which often contribute to an accentuation of the disparities and inequalities that already exist in rural society (see Hy Van Luong and Unger, 1998, on China).

Sikor and Tuong Vi's (2005) study of a village in Son La province in north-western Vietnam clearly shows that notwithstanding the equalizing effects of collective rice land allocation (a hangover from the earlier period of socialist/collective production), differences in access to capital and non-collective lands is beginning to lead to the emergence of enduring differences between households in terms of their wealth/income status. However, they also note that local institutions, local social relations and traditions, local cultural norms, and local political structures will imprint themselves on the patterns of differentiation that emerge. They therefore challenge accounts that naturalize change. This warning is well taken: the generalized trajectory that emerges from this paper is not meant to overwrite or overlook the degree to which relations, processes and structures are constituted as much locally as extra-locally. Moreover, this is not just a difference that is manifested at the inter-village level; there are also striking intra-village variations too. As Molle *et al.* have written: 'When surveying villagers one cannot avoid being struck by the diversity in determination, energy, interest and entrepreneurship that the different individuals put into their activities and decisions. . . . the relevance of the human factor is given little acknowledgement in the literature, which tends to see economic activities as predetermined by the resources on hand, by the constraints of the environments and by (lopsided) social or market relationships' (Molle *et al.*, 2002, p. 23).

'Subsistence affluence' is an attractive and beguiling rhetorical device, but traditional upland production systems did not, in the main, produce a comfortable surplus. Rotational **swidden** systems were, it seems, characteristically in deficit rather than surplus and the forest became the means by which upland households could supplement diets and make up this deficit. Food security was not achieved through subsistence land-based production alone, but through a complex layering of activities among which the exploitation of the forest resource played a central role. A baseline survey of 38 Akha and Hmong villages in Muang Sing District in the northern province of Luang Nam Tha states that '... the **swidden** system seldom promises a rice surplus, and the people who practice such a system are equally dependent on the forest and their livestock to ensure their overall subsistence. . . . The ultimate resource, particularly for the traditional Akha communities, remains the forest . . . ' (MSIFSP, 1995, pp. 27 and 29).

Just as subsistence affluence has often been assumed rather than interrogated, so market integration has been caricatured as poverty-creating. However, it is clear that market integration delivers real benefits just as it also brings costs and challenges. The livelihood tensions that market integration engenders are sometimes implicitly recognized. For example, an FAO preparation report in succeeding paragraphs argues that the villages studied were 'less poor because of their relatively greater emphasis on marketable cash crops' AND that relocation to the roadside (propelling market integration) was creating 'a process of impoverishment, exemplified by [the communities'] loss of food self-sufficiency' (FAO, 1997, p. 16). Both these processes can—and do—occur in tandem: a wealth-creating process driven by the opening up of new market opportunities (both *in situ* and *ex situ*); and a poverty-creating process driven by the erosion of traditional activities. In the same vein, a 1996 baseline survey of 342 rural villages and 15 421 households in four districts in Luang Prabang province identified that communities with access to markets (less remote communities) were *both* less poor and more food insecure (EU, 1997, pp. iv and 20).

There is, certainly, a persuasive argument that market integration—and the effects of government policy—have been livelihood eroding. But the self-same policies and processes of market integration also provide the means by which rural households can access greater income and higher standards of living. At the most obvious level, accessibility means that villagers can access the services of the state, from health to education. Less obviously, market integration means that (some) villagers can diversify their activities and sources of income, raising their

real standard of living, and beginning the process of reducing their reliance on a declining and degrading forest resource. This, in turn, will permit the Lao government to pursue its twin goals of eliminating shifting cultivation (and thereby, in the government's view, protecting the forest resource) while also improving the livelihoods of rural people. The challenge—and the difficulty—is that while villages may experience both the livelihood-enhancing and livelihood-eroding effects of market integration, at the household level this is unlikely to be so balanced. Some households will find themselves in a position to embrace new opportunities; but others will be forced to continue to rely on a declining and degrading forest resource.

Support for a middle way in terms of interpreting the links between market integration, rural livelihoods and the forest resource comes from other countries in the Southeast Asian region which, at a simplistic level, have proceeded further in their agrarian transitions. For these countries—such as Thailand (Rigg and Sakunee Nattapoolwat, 2001; Molle and Thippawal Srijantr, 2003), Malaysia, Indonesia (Bremen and Wiradi, 2002), and the Philippines (Hayami and Kikuchi, 2000; Eder, 1999)—not only has the role of the forest in rural livelihoods declined but so too has the role of agrarian pursuits more generally. Deagrarianization—the progressive de-linking of rural people from agrarian pursuits—has reworked not just the links between rural people and the forest, but rural people and agrarian resources more generally.

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REFERENCES

- ADB 2000. Poverty reduction and environmental management in remote Greater Mekong Subregion watersheds, phase II: Draft final report (Volume 1). Asian Development Bank: Manila (unpublished).
- ADB 2001. *Participatory Poverty Assessment: Lao People's Democratic Republic*. Asian Development Bank: Manila (December).
- Blaikie P, Brookfield H (eds). 1987. *Land Degradation and Society*. Methuen: London.
- Bremen J, Wiradi G. 2002. *Good Times and Bad Times in Rural Java: Case Study of Socio-economic Dynamics in Two Villages Towards the End of the Twentieth Century*. KITLV Press: Leiden.
- CARE 1996. Nam Theun 2: socio-economic and cultural survey, executive summary. Care International: Vientiane, Laos (November) (unpublished).
- Chamberlain JR, Phan Phomsombath. 2002. Poverty alleviation for all: potentials and options for peoples in the uplands. SIDA: Vientiane (September) (unpublished).
- Chamberlain JR, Kakwani N, Phan Phomsombath. n.d. Poverty in the Lao PDR: participatory and statistical analyses. State Planning Committee, Lao PDR and Asian Development Bank, Vientiane (unpublished).
- Chamberlain JR, Alton C, Latsamay Silavong. 1996. Socio-economic and cultural survey: Nam Theun 2 Project area (Part II), CARE International (July) (unpublished).
- De Koninck R. 1999. *Deforestation in Viet Nam*. International Development Research Center: Ottawa.
- De Koninck R. 2000. The theory and practice of frontier development: Vietnam's contribution. *Asia Pacific Viewpoint* **41**: 7–21.
- Denes A. 1998. Exploring the links between foraging and household food security: a gender-based study of foraging activities in Salavan province. Australian Embassy: Vientiane (April) (unpublished).
- DUDCP 2001. Anthropologist report (report author Culas C). District Upland Development and Conservation Project, Khammouane (February) (unpublished).
- Eder JE. 1999. *A Generation Later: Household Strategies and Economic Change in the Rural Philippines*. University of Hawaii Press: Honolulu, HI.
- EU 1997. Micro-projects Luang Phabang, Phase II: district level baseline report. Commission of the European Communities, Vientiane (February) (unpublished).
- FAO 1997. Shifting cultivation stabilization project: interim preparation report. Report No. 97/097 ADB-LAO, Food and Agriculture Organization of the United Nations, Rome (December) (unpublished).
- FAO 2002. Initial participatory rural appraisal and socio-economic baseline survey in the four provinces of Luang Namtha, Oudomxay, Vientiane and Bolikhamxay. Draft final report. Special Programme for Food Security and South-South Cooperation, Food and Agriculture Organization of the UN, Vientiane (January) (unpublished).
- Foppes J, Sounthone Ketphanh. 2000. Forest extraction or cultivation? Local solutions from Lao PDR. Paper presented at the workshop on the evolution and sustainability of 'intermediate systems' of forest management, FOREASIA, 28th June–1st July, Lofton, Norway. Downloadable from www.etfrn.org/etfrn/workshop/biodiversity/documents/foppes1.pdf. [Accessed 26 October 2005].

- Goudineau Y. 1997. *Resettlement and Social Characteristics of New Villages: Basic Needs for Resettled Communities in the Lao PDR*. UNDP: Vientiane.
- Hardy A, Turner S. 2000. Migration, markets and social change in the highlands of Vietnam. *Asia Pacific Viewpoint* **41**: 1–6.
- Hayami Y, Kikuchi M. 2000. *A Rice Village Saga: Three Decades of Green Revolution in the Philippines*. Macmillan: Basingstoke.
- Hy Van Luong, Unger J. 1998. Wealth, power, and poverty in the transition to market economies: the process of socio-economic differentiation in rural China and northern Vietnam. *The China Journal* **40**: 61–93.
- ILO 2000. Policy study on ethnic minority issues in rural development (Project to Promote ILO Policy on Indigenous and Tribal Peoples). International Labour Office: Geneva (February) (unpublished).
- IUCN 1998. *Social Action Plan for the Nakai-Nam Theun Conservation Area*. IUCN: Vientiane (May) (unpublished).
- Jamaree Chiengthong. 2003. The politics of ethnicity, indigenous culture and knowledge in Thailand, Vietnam and Lao PDR. In *Social Challenges for the Mekong Region*, Mingsarn Kaosa-ard, Dore J (eds). Social Research Institute, Chiang Mai University: Chiang Mai; 147–172.
- Jamieson NL, Le Trong Cuc, Rambo AT. 1998. *The Development Crisis in Vietnam's Mountains*. East-West Center Special Reports No. 6 (November), East-West Center. Honolulu, HI.
- Kakwani N. 2001. Statistical analysis of poverty in the Lao PDR (Appendix 1). In *Participatory Poverty Assessment: Lao People's Democratic Republic*. Asian Development Bank: Manila (December); 87–97.
- Lao PDR 2000a. Fighting poverty through human resource development, rural development and people's participation. Government Report to the Seventh Round Table Meeting, Vientiane (21–23 November) (unpublished).
- Lao PDR 2000b. Oudomxay province: Environmental inventory. Prepared by the Ministry of Communication, Post and Construction and the IUCN with assistance from the Swedish International Development Cooperation Agency: Vientiane (March) (unpublished).
- Lao PDR 2003. Poverty-focused agricultural development plan. Final draft. Ministry of Agriculture and Forestry: Vientiane (January) (unpublished).
- Molle F, Thippawal Srijantr (eds). 2003. *Thailand's Rice Bowl: Perspectives on Agrarian Change in the Chao Phraya Delta*. White Lotus: Bangkok.
- Molle F, Thippawal Srijantr, Latham L. 2002. Balances and imbalances in village economy: Access to irrigation water and farming systems in the Chao Phraya Delta. *Paper Presented at the 8th International Conference on Thai Studies, Nakhon Phanom, Thailand, 9th–12th January*.
- MSIFSP 1995. Socio-economic baseline survey, April–May 1995. Muang Sing Integrated Food Security Programme, Lao-German Cooperation Project, Muang Sing, Luang Namtha (unpublished).
- Raintree JB. 2003. Social perspectives on food security in the uplands of Northern Laos. Socio-economics Unit, National Agriculture and Forestry Research Institute (NAFRI): Vientiane (February) (unpublished).
- Rigg J. 2005. *Living with Transition in Laos: Market Integration in Southeast Asia*. RoutledgeCurzon: London.
- Rigg J, Sakunee Nattapoolwat. 2001. Embracing the global in Thailand: activism and pragmatism in an era of de-agrarianisation. *World Development* **29**: 945–960.
- Shoemaker B, Baird IG, Baird M. 2001. The people and their river: a survey of river-based livelihoods in the Xe Bang Fai River basin in Central Lao PDR. Vientiane (November) (unpublished).
- Sikor T, Dao MT. 2002. Agricultural policy and land use changes in a Black Thai commune of Northern Vietnam, 1952–1997. *Mountain Research and Development* **22**: 248–255.
- Sikor T, Tuong Vi PT. 2005. The dynamics of commoditization in a Vietnamese uplands village, 1980–2000. *Journal of Agrarian Change* **5**: 405–428.
- UNDP 2002. *National Human Development Report Lao PDR 2001: Advancing Rural Development*. United Nations Development Programme: Vientiane.
- Vandergest P. 2003. Land to some tillers: development-induced displacement in Laos. *International Social Science Journal* **175**: 47–56.
- World Bank 2001. Lao PDR: production forestry policy—status and issues for dialogue. Volume 1, main report, Vientiane (June) (unpublished).