



# Hidden Costs

The underside of economic transformation in the Greater Mekong Subregion

*An Oxfam Australia report by Jonathan Cornford & Nathaniel Matthews*

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Published September 2007

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Neither Australian Government funds nor tax-deductible donations have been used to fund the production of this report or the work of Oxfam Australia's advocacy unit.

We appreciate any feedback, comments or input you may have about issues and cases discussed in this report. Comments can be emailed to [jonathan@oxfam.org.au](mailto:jonathan@oxfam.org.au)

*Front Cover: Phoupieng Village, Laos.  
Photo: Jerry Galea/OxfamAUS*

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# Executive summary

This report seeks to challenge the “success story” narrative of development in the Mekong region by considering rural people’s actual experiences of economic change in the “transition” economies of Laos, Cambodia and Vietnam.

Under the Asian Development Bank’s ambitious multi-billion dollar program for regional development, the Greater Mekong Subregion (GMS) framework, fast-paced economic growth – underpinned by large-scale infrastructure development, economic integration and resource extraction – has been heavily promoted as the solution to entrenched poverty in the region.

However, the livelihoods, culture and environment of too many have been seriously compromised by economic change in the Mekong. Although the claimed mandate of development has been to help poor people and improve their livelihoods, difficulties for many, most notably the multitudinous ethnic minorities of the Mekong, have been exacerbated.

This is borne out in the literature reviewed for this report, which includes academic journal articles, research institute studies and reports by donors and non-government organisations published since 2001. In particular, the report draws on a number of key, localised, empirical studies which give detailed accounts of the circumstances, changes and implications for people living in Laos, Cambodia and the uplands of Vietnam. Specialised studies in aquatic resources, resource governance and health are also referenced which contribute important areas for consideration.

The three main sections of this report reflect the critical themes that feature consistently across the studies. The first documents the changing experience of access to natural resources – agricultural land, forests and rivers – which forms the foundation of rural livelihoods in the Mekong. Changes in ownership of and access to these resources has been one of the fundamental components of GMS economic change, and it is in this area which the poor have experienced the greatest vulnerability.

The second section examines experiences of the new economy, in particular those associated with agricultural transformation and new opportunities for commerce and trade, and considers some of the unintended consequences.

The third section explores some of the impacts of economic change on cultures and their implications for people’s experience of poverty and wellbeing. Culture is one of the least considered aspects of development and poverty alleviation yet it is central to all that defines our humanity and therefore to the meaning of a concept such as poverty.

*The key findings of this report are:*

- 1. The single greatest determinant of vulnerability in the face of economic change in the Mekong region is ethnicity.** Ethnic minorities in the Mekong are the most acutely affected by changes in the natural resource base; an inability to compete in new agriculture and new commerce; and rapid cultural change. While members of ethnic *majority* populations – the Lao in Laos, the Khmer in Cambodia and the Kinh in Vietnam – can also be affected by these changes, and many are, ethnic minority groups *are nearly always affected*.
- 2. The second greatest determinant of vulnerability in the face of economic change is the level of dependence on natural resources (especially forests and rivers).** This dependence underpins many of the forms of vulnerability discussed here, such as forms of agriculture, familiarity with trade and commerce and cultural frameworks for perceiving the world.
- 3. The ability of natural resources to continue to support poor people’s livelihoods in the Mekong is at a crisis point.** Forests and rivers are in a state of rapid ecological decline caused by human over-exploitation. Some of this has been an inevitable corollary of rapid population growth, however, a large part has resulted from the establishment of private (commercial) tenure rights over common property resources, such as through commercial logging, plantations, commercial fishing lots and hydropower dams. Moreover, such a shift in resource tenure serves to deny poor people access to resources they depend on for their livelihoods.
- 4. For many subsistence agriculturalists, and especially for many ethnic minorities, the transition to modern agriculture is extremely difficult and perilous.** There are multiple obstacles mitigating against them when attempting this transition, such as lack of suitable land; insufficient knowledge of the new techniques; unfamiliarity with managing credit and lack of access to un-exploitative credit; inexperience in commercial negotiation and lack of commercial networks; and finally the volatile nature of the new markets themselves.
- 5. The transition to modernised and commercialised forms of agriculture can serve to disempower women’s roles in agriculture.** Many traditional cultures have sophisticated divisions of labour between men and women which ensure women play an important role in livelihood decision making. By contrast, modern land certificates, availability of training and commercial negotiation tend to entrench the male with greater power as the head of the household. Agricultural wage labour tends to have significant differentiation of remuneration between men and women.
- 6. Opportunities for commercial agriculture or trading tend to be dominated by outsiders and in-migrants, while ethnic minorities tend to be relegated to the lowest rung of the new economic structure.** Familiarity with commerce, extensive social networks and good connections with government administration give the majority populations an enormous competitive advantage over minority groups. Minority groups tend to enter the market late and are dependent on external credit, technical know-how and marketing.
- 7. For many ethnic minority groups, especially shifting cultivators, the loss of traditional agriculture is in effect a loss of culture.** Much about traditional cultures, from religious rituals and festivals, to food taboos and gender relations, is based around locally-specific livelihood systems. When these no longer become viable many other dimensions of cultural identity and practice are also unsettled.
- 8. The loss of culture, or rapid change in culture, is primary to the experience of poverty in the Mekong.** Cultural upheaval often results in social dislocation, psychological trauma and increased health risks. It can create a sense of deep hopelessness and despondency among minority groups.

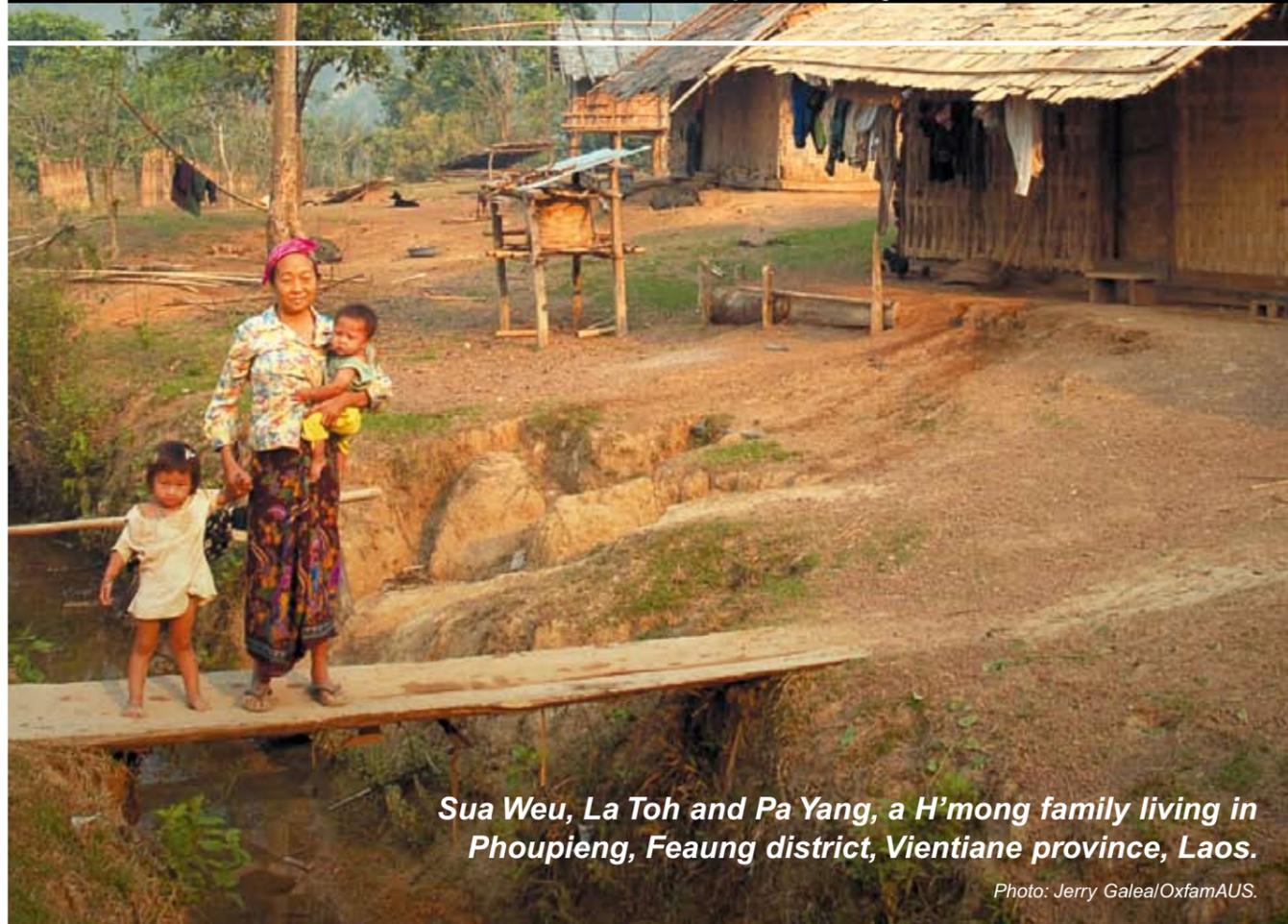
For policymakers with an interest in poverty alleviation the implications are clear. First and foremost, they need to urgently provide legal and administrative protection to the diverse forms of resource tenure used by ethnic minorities and subsistence agriculturalists across the region. The issues of agricultural productivity, population pressure and environmental degradation cannot be meaningfully understood or addressed without taking into account the radical change in ownership of and access to resources which has accompanied economic change in the Mekong.

Secondly, there needs to be a fundamental rethink of the simplistic assumptions around the effects that infrastructure, markets and growth have on poverty. Policymakers and development planners need to have a much more nuanced understanding of poor communities, the deprivations they suffer, and specific kinds of infrastructure and markets that might benefit them. Of course, such knowledge can only be based on much closer dialogue with those “poor” communities in whose name development is proceeding.

Finally, and linked to the previous point, space needs to be created in the hard-headed world of economic policy and development programs to take seriously the value and role of culture in human wellbeing. Great care needs to be taken in considering the varied ways developments may affect the diverse and vulnerable ethnic minorities who form such an important part of the region’s human wealth.



## Introduction – Growth and poverty in the GMS



*Sua Weu, La Toh and Pa Yang, a H'mong family living in Phoupieng, Feaung district, Vientiane province, Laos.*

*Photo: Jerry Galeal/OxfamAUS.*

### A poverty success story?

Since 1992, the countries along the Mekong River – Vietnam, Cambodia, Laos, Thailand, Burma and China – have been subject to a bold vision of economic transformation. Under the auspices of the Asian Development Bank (ADB), these six countries were brought together with the purpose of creating a single, borderless, regional economy, known as the Greater Mekong Subregion (GMS)<sup>1</sup>. Since then, the GMS program has played a defining role in the way that development has proceeded among the six Mekong countries, especially in Laos and Cambodia. The term Greater Mekong Subregion, or simply GMS, has now entered the lexicon as a commonly used geographic reference for mainland Southeast Asia. The six Mekong governments have claimed ownership of the GMS framework at the highest level and collectively exerted substantial political will to realise many of the program's flagship projects.

The primary goal of the GMS program, as stated at the GMS Summit Meeting in 2002, is nothing less than to "lift people from poverty and promote sustainable development for all." The catchcry of the program, the means by which poverty will be abolished and prosperity spread, is "closer regional economic cooperation and integration." "Cooperation" and "integration" are motherhood terms that everybody supports but they tell us little about the forms of development which the ADB has promoted. (ADB 2007a, p.3)

Although the GMS program has a range of thematic areas – including concerns such as environment and human resources – it has first and foremost been a program for financing economic infrastructure, primarily transport, energy and telecommunications. The fundamental purpose has been to stimulate the private sector; indeed the role of the private sector has been central to both the GMS program's means of delivering development as well as to its ultimate end. Accompanying this, the GMS program has promoted a range of policy measures aimed at privatising a wide range of goods and services in Mekong countries, and substantially liberalising the investment environment.

There is no doubt that the GMS program has resulted in dynamic economic performance among Mekong countries. Between 1994 and 2004 GDP across the region grew at an average of 6 per cent per year, despite the economic crisis of 1997/8. In 2005 and 2006 GMS economies were growing at more than 8 per cent per year (ADB 2007b, p. 4). The ease of travelling, communicating and doing business across the Mekong region has also undoubtedly improved dramatically over this time. International investment is now streaming into the formerly isolated economies of Laos, Cambodia and Vietnam. Trade, especially intra-regional trade, is booming. All of this is clearly evident in the cities and urban centres of all Mekong countries.

But how has this economic transformation been experienced by the region's rural communities, which still represent well over 75 per cent of the population in most Mekong countries? In particular, what has been the experience of those who are poorer and more vulnerable?

The ADB makes a clear and bold claim about what has been happening to poverty in the GMS:

Since 1992, when the GMS Program started, poverty incidence in the GMS countries has declined significantly. Between 1990 and 2003, the proportion of people living on less than \$1 a day fell from 46% to 33.8% in Cambodia, 33% to 13.4% in the People's Republic of China, 52.7% to 28.8% in the Lao People's Democratic Republic, 10.1% to less than 1% in Thailand, and 50.7% to 9.7% in Vietnam (ADB 2007, p. viii).

The ADB attributes this decline in poverty directly to economic growth of the GMS countries and draws a link between this growth, poverty reduction and effect of the GMS program:

The GMS Program has contributed to this significant achievement, although it has not been possible to quantify the precise impact of the Program due to methodological difficulties and insufficient data (ibid).

In public communication about GMS development, these data are presented as clear and simple justifications for the forms of development promoted by the ADB. But does this data really tell us anything substantial about poverty?

<sup>1</sup>For a detailed description of the programs, structures and processes of the GMS see *The Activist's Guide to the GMS* by Oxfam Australia, forthcoming in February 2008.

## The problem with income measures of poverty

The ADB's claim about poverty reduction in the Mekong depends on an assumed link between the number of people "living on less than \$1 a day" and the number of people living in poverty. The further assumption is that as people's incomes rise above \$1 a day their quality of life improves. The problem is that this does not necessarily bear much relation to people's actual experience of quality of life. *In fact, it is quite possible for people to experience rising incomes and declining standards of living.*

For example, in the Sekong province of southern Laos the average yearly income in 2003 was only US \$120 – well below the \$1 a day mark. However, a study by the World Conservation Union has shown that the value of goods that households in Sekong sourced from forests – if they had to be bought at the market – was equivalent to US \$525 per household per year (IUCN 2003, p. 4). This shows that forest resources make a significantly more important contribution to food security and health than monetary income yet they do not even register on the "\$1 a day" poverty radar.

More importantly, this shows that if people lose access to forests in Sekong (as is happening), then even if they experience a doubling or trebling of income (thereby lifting them above the \$1 a day measure and supposedly "out of poverty") they will have still experienced a *decline in their standard of living*.

Actually, if we pay attention to the data presented by the ADB, all they really tell us is that the monetary economy has become more prevalent in Mekong countries in the last decade and a half. Given that the essence of the GMS program has been to spread and deepen the operation of the market (ie. monetary) economy, this is hardly surprising.

Clearly the fundamental problem in using monetary measures (also referred to as income measures) for poverty in the "transition" economies of Laos, Cambodia, Burma and regions of Vietnam and China is a *large portion of the goods and services that make a positive contribution to the quality of life of many are sourced outside of the monetary economy.*

The ADB knows this because it is a point that has been made in many studies and reports that it has funded (see especially ADB 2001). Nevertheless, the bank continues to default to income measures of poverty in any important publication which justifies its program of development in the Mekong. This is clearly evident in its primary publication describing the GMS program, the *Greater Mekong Subregion: Beyond Borders* (2006). This publication relates most of its claims about poverty in the Mekong to one table which shows data for GDP per capita, incidences of people living on less than \$1 per day, the Gini coefficient (a measure of income distribution) and national poverty lines (ADB 2006, p.3)<sup>2</sup>.

Of these, national poverty lines come closest to attempting to relate poverty to people's actual needs, usually based on estimates of the basic caloric requirements to sustain health (and sometimes other non-food requirements). However, even these are flawed. Firstly, the methods of calculation are quite different between Mekong countries and cannot be used for accurate comparisons between countries. As Kaosa-ard (2003, p. 88) points out, different survey methods and assumptions can have a huge effect on the percentage of people defined as poor. Secondly, national poverty lines in the Mekong still essentially measure the *income* considered necessary to meet a certain level of food intake, not the actual food intake. Thirdly, as demonstrated in one of the studies cited in this report, there are cases where caloric intake in certain groups is increasing above the poverty line threshold, yet overall dietary nutrition is decreasing resulting in a decline in health (Krahn 2004, pp. 6–8). Lastly (and perhaps most obviously), measuring food intake is an incredibly narrow descriptor of human wellbeing. As one of the ADB's own studies shows, poverty in the Mekong is rarely accompanied by acute hunger but has to be understood in terms of the range of complex needs that make up people's lives and identity (ADB 2001, p. 33).

The ADB data referred to above does tell us that profound economic change is happening in the Mekong region, but it does not tell us much about the actual experience of poverty and wellbeing. There are data – such as child mortality, the prevalence of underweight children and access to clean drinking water – that tell us important aspects of quality of life are improving at the general population level in the Mekong. However, even these are aggregated data sets, and they still tell us little about how people are experiencing their place in the world. Furthermore, they tell us particularly little of the experience of the poorest and most vulnerable.



*Fishing in a rice paddy in the Triang district, Cambodia.*

*Photo: David Sproule/OxfamAUS.*

## People's experiences of development

This report does not set out to make a claim about poverty trends in the Mekong region. Rather, its primary focus is to relate some of what is already known about the *actual experience* of economic change for vulnerable groups in the Mekong. Neither does it attempt to give region-wide coverage, but rather draws on localised and specific case studies that build a picture of the multiple dimensions of people's lives. That is, its concern is with real people in real places. Likewise, the studies drawn on in this report do not purport to describe the whole process of change. However, they do indicate that there are some consistent themes which apply widely across the Mekong region.

It must not be assumed that, because we are focusing on the underside of economic change, we are advocating for the absolute protection and enshrinement of "traditional culture" or to exclude minority groups from the monetary economy. This would be futile and damaging. No culture is static. What is under question is the *nature of the particular changes* which have been forced on rural communities in the Mekong, often supposedly for their own good, without due regard for the impact of those changes or the hopes and aspirations of those communities.

It needs to be remembered that the process of radical economic transformation underway in the Mekong is not some inevitable, abstract phenomenon. Much of what has taken place is the result of specific policies, plans and programs of Mekong governments, development banks and donors, most notably under the framework of the ADB's GMS program. The character of change has been shaped by the preferencing of certain kinds of infrastructure, certain sorts of tenure arrangements, certain sorts of industries, certain kinds of technology, and ultimately, certain ways of living.

<sup>2</sup> There is brief reference made to non-income aspects of poverty, such as access to social services, but no attempt to either elucidate these or describe what the experience has been in the Mekong. Reference is also made to Millennium Development Goal indicators, however, the data for these are buried in annexes at the back in an almost unusable format.



## 1. Access to natural resources

*A woman with her buffalo in Koh Phdao village, Sambo province, Cambodia.*

*Photo: Jerry Galea/OxfamAUS.*

One of the most important determinants of vulnerability in the Mekong region is the health of its natural resources – agricultural land, forests and rivers – and the level of access rural communities have to them. This is affirmed throughout the literature on Laos and Cambodia, and for the upland ethnic minorities in Vietnam. Yet the status of the natural resource base is perhaps one of the most neglected aspects in the official view of poverty and poverty alleviation in Mekong countries.

The economic transformation of the GMS over the last fifteen years has fundamentally been based on a revolution in the way that natural resources have been used and managed. Simply put, there has been a change from widespread, localised use and control over resources, to widespread competition for resources between local users and external commercial interests. Through an array of processes – commercial forestry, commercial fisheries, tree plantations, large-scale cash cropping, mining and hydropower development – the land, rivers and forests of the Mekong are being transformed from common property resources to sources of private capital within the new market economy.

The implications of this transition for rural communities, especially for ethnic minorities, are dire. As the literature cited below indicates, there is widespread reporting of the diminishing viability of rural livelihoods. That is, while Mekong countries experience consistent economic growth, the *real economic base* of rural communities, as opposed to that which appears in GDP accounting, is shrinking.

### 1.1 Agricultural land

The most critical resource for agrarian families is agricultural land. As populations increase, the finite availability of cultivable land inevitably comes under pressure, and this is already the case in Vietnam and Cambodia. However, there is also considerable evidence that the experience of landlessness and land alienation in these countries is closely linked to the increasing commercialisation of land as a tradable market commodity.

#### *Cambodia*

Oxfam Great Britain (2004) reports that although approximately 85 per cent of the rural poor in Cambodia depend primarily on agricultural land for their livelihood, land is concentrated in the hands of a few and there is an increasing number of landless people, land grabbing and land disputes. Lack of access to land has remained an obstacle to poverty alleviation. Cambodia's population is growing rapidly but the total land area under cultivation has remained the same, and land available to the rural poor has actually decreased due to commercialisation. In 2004, of 18.1 million hectares of territory, about 5.5 million hectares were under economic concession.

The Oxfam-supported landlessness assessment of 2004 confirmed that more than 1 million rural Cambodians were without agricultural land and were too poor to buy agricultural land. The largest category of landless families were those who had moved to a new village, implying that many Cambodians were increasingly resorting to travelling around the country in search of a decent livelihood. The experience of landlessness was closely linked to its tradability; a high proportion of those who were landless had sold land to pay off debts – 60 per cent had sold land just to pay healthcare costs. It was predicted that landlessness would rise steeply in 2005 and 2006 due to the marriage of a large sector of the population in their twenties needing their own land to cultivate (Oxfam 2004).

Sophal and Acharya (2002), in their survey of nine Cambodian villages in a range of geographic contexts, showed that landlessness was growing among the poor, with an increasing concentration of land in the hands of a few. In the surveyed villages, the landless and the near landless (with plots under 0.5 ha) totalled 45 per cent of all households. Conversely, 10 per cent of households owned 40 per cent of the land. Landlessness was estimated to be increasing at 2 per cent each year (p. 2). Not surprisingly, they found that households that did not own land were "much worse off, in both assets and income than households who do" (p. 25).



**A Vietnamese rice field.**

*Photo: Brendan Allen/OxfamAUS.*

In the villages surveyed by Sophal and Acharya, the principal cause of landlessness was the rising population; however, the role of the land market was also found to have played an important part. Significantly, Sophal and Acharya found a clear correlation between villages with a high incidence of landlessness and high land values or high commercial usage of land (p. 26). Speculative land purchases by non-local investors were observed to play a part, especially for high value land close to roads (p. 27).

In an in-depth study of two Tampuan villages in Ratanakiri province, McAndrew (2001) observed a more aggressive form of this dynamic. In both villages land encroachment and pressure to sell land became a major problem with the growth of the nearby markets. As the market began to grow, Khmer buyers came to one village (Kamang) and offered large sums (up to US \$400) for cultivated land which they wanted to use for cash crops to sell at the district market. Land adjacent to roads was more attractive to investors. In Kamang village, villagers decided that land was communal and not for sale by individuals, however, in one case, two soldiers were given plots by the military commander (p. 12).

The other village (Kahoal) did not experience the success of the first in avoiding village land sales. In this village, before the growth of the district market, government workers were given permission by the government to cultivate land adjacent to the national road without any consultation with the villagers.

As the market grew the government workers sold their parcels of land to Khmer buyers who were anxious to plant cash crops to supply the growing demand. The market's continued growth caused more in-migration by Khmer traders and further pressure was placed on the residents of Kahoal village to sell their land. Officials reportedly told them that if they did not sell their land it would be confiscated. In Kahoal 35 of 67 households had sold land rights. In addition, the rights to a 100-hectare tract of communal land in the village were sold (pp. 16–17).

Sophal and Acharya found two villages where the extent of landlessness did not seem to significantly affect village livelihoods. These villages had a heavy reliance on common property resources, especially fishing (2002, p. 26). As landlessness increases in Cambodia, rural poor turn to natural resources such as forest gathering and fisheries for survival. This has increased pressure on the forests and the fishery which has also been heavily privatised and exploited.

### **Vietnam**

In Vietnam, a strong land market (although “technically illegal”) emerged after new land laws in 1988. Since then there has been a general trend of increasing concentration of land into the hands of wealthier households, with land being sold by poorer households. This trend has been linked to the commercialisation of agriculture and the increasing social differentiation accompanying it (Henin 2002, p. 6).

This phenomenon was observed by a Stockholm Environment Institute study in Cu M'Gar district of Dak Lak province which underwent rapid widespread conversion to coffee cropping as world coffee prices rose during the 1990s. This process was accompanied by heavy in-migration of non-indigenous groups seeking to benefit from the opportunity. As coffee prices rose, so did competition for good land and, inevitably, land prices. Poorer farmers, especially indigenous Ede groups with less commercial experience, were tempted to sell land in the hope that cash incomes could improve their livelihood. The traditional livelihood of the indigenous groups was already under strain through the loss of forests (to logging and coffee) and grazing land (to coffee). On the other hand, Kinh (Vietnam's ethnic majority) migrants tended to buy land and put it to more profitable use. Ironically, the crash of coffee prices in 2002 also contributed to increasing concentration of land ownership, as poorer (often indigenous) farmers with heavy investments in coffee were then forced to sell land to pay debts and buy food (Lindskog et. al. 2005, pp. 25–29, 58–59).

Thus the transfer of land and concentration of land ownership during this period had a strong ethnic dimension. The report notes that newly landless farmers not only suffered from loss of income and food insecurity, but also the strong psychological stigma attached to landlessness and day labouring (p. 59). Interestingly, the study in Cu M'Gar district found that villages of the Dao ethnic group, who refused to sell land to in-migrants, had a lower proportion of “poor” families and a relatively high proportion of “better off” families (p. 25).

### **Laos**

In Laos, the introduction of a system of tradable titles (through the “land-forest allocation process”) has been much more recent and there does not yet seem to be the same issues of landlessness as found in Cambodia. However, there have been emergent signs of vulnerability to land loss among some ethnic groups. For example, the ADB's participatory poverty assessment found that with the introduction of titles, which are easily bought and sold among groups with little concept of land ownership, land was being sold for high-priced consumer items such as TVs and motorcycles (ADB 2001, p. 36).

A much greater issue in Laos has been the impact on the productivity of cultivation in the transition from traditional forms of tenure to a modernised system of land use planning and titles. Such a modern system is premised on the operations of sedentary agriculture,

however, the majority of Lao ethnic minority groups, who make up roughly 50 per cent of the population, depend in some part on shifting cultivation, otherwise known as swidden agriculture. Shifting cultivation is a broad term that describes a number of complex systems of cropping based on rotating fields of cleared forest land (a swidden). A swidden may be cultivated for up to three years; the productivity of the soil then depends on the soil being left to lie fallow for between five and 12 years before it is returned to in the cycle.

Because swidden fields take place in cleared forest areas, shifting agriculture has frequently been blamed for the high rate of deforestation.<sup>3</sup> Also, in the eyes of the lowland Lao, shifting agriculture is considered to be a backward and low-yielding form of cultivation. As a result, since 1997 the Government of Laos, supported by numerous donors, has pursued a program of land-forest allocation which includes the goals of eliminating shifting cultivation and promoting commercial agricultural production. It has done this by delineating and severely restricting areas of forest land available for cultivation and by issuing certificates (and later titles) for land under “permanent” cultivation.

The ADB's participatory poverty assessment visited 84 villages from every province of Laos, comprising more than 50 ethnic groups. Of these villages, 90 per cent depended on swidden agriculture as their primary means of livelihood (ADB 2001, p. 43). The assessment found that the imposition of land-forest allocation was the single greatest cause of poverty in these areas. Its impact was to lock upland groups into ecologically unsustainable forms of shifting agriculture, where adequate sites for “permanent” paddy cultivation were not available, essentially precipitating a crisis in upland agriculture. It stated that the program:

led to shortened fallow cycles and directly or indirectly to soil degeneration, lack of biodiversity through habitat loss of varied fallow forest types, over-hunting of wildlife, especially predators, excess gathering of forest products leading to epidemics of crop pests and ultimately exponential decreases of rice yields (pp. 34–35).

The result has been impoverishment of swidden families through decreased rice yields and increased deterioration and degeneration of wildlife and forest resources by families attempting to compensate for rice shortages, including in some cases total elimination of a few wildlife species in the area (p.47).

The study also found that lowlanders were able to manipulate the allocation process to gain title to upland areas which traditionally belonged to upland communities (p. 46).

<sup>3</sup> The debate around shifting agriculture is complex. Given the correct conditions, many of the forms of shifting agriculture practised in Laos (particularly those of the Mon-Khmer) are ecologically sophisticated and productive forms of cultivation. However, there are significant pressures which affect the viability and environmental sustainability of shifting cultivation. Population growth, commercial logging, encroachment of lowland agriculture and government policy towards shifting cultivation are all factors that can limit access to cultivatable forest areas.

## 1.2 Rivers and forests

Rural livelihoods in Cambodia and Laos, and to a lesser extent in the uplands of Vietnam, cannot be understood without comprehending the importance of the commons of rivers and forests to household consumption. Although perceived as a region of rice paddies, the productivity of rice agriculture across the Mekong basin is actually only “marginally adequate to severely inadequate due to seasonal shortages” (James 2001, p. 756). Rural households depend on the biodiversity and ecological productivity of the natural environment for their wellbeing.

The Mekong river basin is a unique area of biodiversity supporting up to 1,200 species of fish fauna, making it the most diverse river basin in Asia (Baird & Flaherty 2005, p. 440). The importance of biodiversity for rural people can be identified by the number of riparian species consumed. In Laos and Cambodia combined, almost 300 species of fish, aquatic plant, crustaceans, amphibians, reptiles and insects are consumed. It is estimated that about 100g of animal resources per person per day are consumed as well as a number of aquatic plants (James 2001, p. 756). Similarly, in Laos and Cambodia there are more than 400 non-timber flora and fauna products that are extracted from the forest for both household consumption and sale; these are the only sources of livelihood for many people when main crops such as rice experience a bad season (Acker 2003, p. 3).

### Cambodia

In Cambodia, the harvesting of natural resources (particularly fisheries and forests) is central to the livelihoods of rural people generally, and especially ethnic minorities. Drawing attention to the importance of household fisheries, Frank Van Acker asks, “Is Cambodia a nation of fishermen that – incidentally – grow rice, or of rice producers that also catch fish?” (Acker, 2003, p. 3) He relates that at least 4 million people in Cambodia depend on inland fishing for their livelihoods as the primary or secondary source of income and employment and that virtually all Cambodians benefit directly in some way from inland fisheries (p.3).

The importance of common property to poor rural communities cannot be underestimated for they depend on common property resources for their survival and supplementary income. Sophal and Acharya’s (2002) village survey in Cambodia showed that beyond personal use, forestry and fisheries were an important source of monetary income. Of the villages surveyed, only 29 per cent of village income came from agricultural sources, while in some villages up to 22 per cent of income came from forestry and fisheries (p. 53). The table below shows the percentage of households earning income from different types of common property resources (referred to in the table as CPR) in the surveyed villages.

*Percentage of Households Earning Income from Different Types of CPR.*

	Fishing	Hunting	Gathering vegetables	Other
<b>Tonle Sap Plain</b>				
Andong Trach	85	2	34	12
Krasaing	65	8	48	17
Khsach Chiros	93	0	6	3
<b>Mekong Plain</b>				
Prek Kmeng	90	0	12	44
Babaong	37	0	1	5
<b>Plateau</b>				
Kanhchor	30	1	4	54
Dang Kdar	70	22	22	81
Trapeang Prey	3	0	0	18
<b>Coastal</b>				
Kompong Thnaot	69	0	0	3

*The ‘Other’ category includes income from trees and by-products from forests, insects from fields, and aquatic edibles such as oysters. In Dang Kdar, 81 percent of the village households generate income from these resources. In Kanhchor, another village located near a forest, 54 percent of households generate income from this category, mainly through collection of leaves (Sloeuk Traing). In Prek Kmeng, 44 percent of the households generate cash income from collecting aquatic edibles. Source: Sophal and Acharya 2002, pp.58*

The village surveys also indicated that common property resources were on the decline. Villages reported that the availability of almost all aquatic resources (fish, crabs, crickets, frogs and vegetables) had declined since the previous year. Decline in fisheries was the most consistently reported area of decline (66 per cent of respondents) (p. 59).

The reported rate of decline of forest resources was much higher. The table below shows that there was a widespread experience in the decline of all the forest resources surveyed, with around 90 per cent of respondents reporting declines in wild animals and resins in the previous year.

Sophal and Acharya found that the rapid population increase in surveyed villages was placing significant strain on the availability of forest and fishery resources. Moreover, with an increase in population, they predicted that landlessness would continue to rise, placing further strain on resources that were already shrinking. This increased strain would affect the livelihoods of both the new and old generation. Unfortunately, they concluded that mainly poor people would be affected as they were the most dependent on the fisheries and forests for survival (p. 12).

However, Acker (2003) contends that while population issues are certainly a factor behind resource decline in Cambodia, a more serious structural cause lies in the changing property rights over once common ecological resources. In particular, he finds that the operation of commercial private property regimes over common property fishery and forestry resources in Cambodia has played the major part in Cambodia’s “downward spiral of natural resource degradation”. He states that pressures on these important sources of livelihood have increased dramatically, particularly from pressure on marginal land and overexploitation of flooded forest; destructive fishing methods including the introduction of gill nets in upland lakes; and increased clear-felling for market timber and agricultural land in forests (p.5). At times, this system has led to a “total harvest” mentality among private operators, in which any concerns about sustaining the resource for future use, or the rights of other stakeholders who depend on it, have been abandoned to extract a maximum immediate return on investment (pp. 17–18).

*Responses to Trends in the Availability of Forest and Related Resources Compared to One Year Previously (percentage distribution of households)*

	Firewood		Timber		Bamboo		Wild Animals		Resins		Materials for Mats	
	Same	Less	Same	Less	Same	Less	Same	Less	Same	Less	Same	Less
<b>Tonle Sap Plain</b>												
Andong Trach	14	54	6	91	9	77	.	100	.	.	.	.
Krasaing	85	11	100	.	.	.	33	67	.	100	100	.
Khsach Chiros	16	78	.	100	50	50	.	100	.	50	30	61
<b>Mekong Plain</b>												
Prek Kmeng	19	79	100	.	.	100	.	.	.	.	25	75
Babaong	2	98	.	.	33	33	.	.	.	.	100	.
<b>Plateau</b>												
Kanhchor	46	53	2	98	.	100	.	50	.	.	.	100
Dang Kdar	57	43	5	95	25	75	.	100	3	97	29	57
Trapeang Prey	20	76	.	100	.	.	.	.	.	50	.	.
<b>Coastal</b>												
Kompong Thnaot	37	54	40	60	.	.	.	.	.	.	.	.
<b>All Villages</b>												
	31	64	16	83	13	72	3	92	2	89	23	69

Source: Sophal and Acharya 2002, pp.60.

Oxfam Great Britain (2004) reports that Cambodia's forests are disappearing at an alarming rate with serious impact on the environment and livelihood of local communities. Forest assessment figures by the Food and Agriculture Organisation in 2001 showed that forest cover dropped to 9,335,000 ha from 11,284,200 ha in 1993. Reliable accurate data is not available on the extent of forest cover left but there is great concern that large portions of the forests have been degraded and are no longer suitable for sustainable forest management. The major causes of forest cover degradation and deforestation have been the activities of logging companies and land concession holders.

McAndrew found that commercial logging was having a major impact on access to natural resources in Ratanakiri province. One Taiwanese logging company was found repeatedly to have logged outside its license area and misrepresented the number of trees harvested, yet was still granted renewal of its annual license. Another logging company was granted a 350,000 hectare concession for an area inhabited by 10,000 indigenous people without any government environmental consultation (McAndrew 2001, pp. 5–6).

Also in Ratanakiri, the impact of development on natural resource-dependent communities is starkly illustrated by the effects of building hydropower dams on the Se San River in northeastern Cambodia. More than 90 indigenous communities comprising some 50,000 people have been negatively affected by severe flooding and a changed river environment as a direct consequence of the construction of the Yali Falls Dam located 80km upstream in Vietnam. There were no assessments of the dam's potential impacts on people and the environment (Hirsch and Wyatt, 2004 p. 54).

In 2004, Hirsch and Wyatt reported that since the construction of the dam there had been widespread flooding caused by erratic flow releases from the dam, resulting in 39 reported drownings (Hirsch and Wyatt, 2004 p. 56). Villagers who lived along the river had lost crops, dry season river bank gardens, livestock, nets and boats which caused many to move inland thereby increasing the strain on forest resources. The water quality was also impacted by the dam bringing a rise of associated ailments such as itchininess, bumps and eye irritation after bathing in the river, and stomach problems after drinking river water. This has since been linked to blooms of blue-green algae in the dam reservoir (Probe International 2007). Fish catches also reportedly declined drastically, with a disproportionate impact on the catch of larger fish. The decline in fish was thought to be partly associated with the increased river bank erosion that killed bottom-growing algae, an important food source for many species (Hirsch and Wyatt 2004 p. 58).

These same communities – nearly all non-Khmer minorities – were simultaneously experiencing the pressures of encroachment on land and forests by outside interests described by McAndrew above. Villages reported that their already marginal livelihoods were now untenable, that they could not compete against the new Khmer in-migrants in the market place, and that they felt despondent about the future for their children (Cornford 2004).

## Laos

In Laos, forests also play a critical role in rural livelihoods, especially for those living in upland areas. In its participatory poverty assessment for Laos, the Asian Development Bank (ADB, 2001) found that in many poor villages, virtually all the flesh in villagers' diets came from wild sources. Forests also play an essential role as the source of handicraft materials such as rattan and damma resin, and of herbal medicines, fuel wood and housing materials. The value of these resources to the household economy is much greater than is often realised. A study by the World Conservation Union (IUCN 2003, p. 4) of the collection of non-timber forest products in the southern province of Sekong, where average yearly income is only US \$120, showed that if given a monetary value, forest harvesting was equivalent to an income of US \$525 per household.

A study of livelihoods in the Xe Bang Fai Basin in central Laos (Shoemaker, Baird & Baird 2001) found that wild capture fisheries "were clearly one of the most important resources for people living in the Xe Bang Fai Basin" and the primary source of dietary protein (p. 26). More than that, it found that the importance of fisheries to livelihoods was increasing. This was partly attributed to the increasing scarcity of forest meat and partly to people's desire to raise income for new consumer goods.

Most significantly, fishing and the collection of aquatic animals is of greater importance to poor households than to those which are better off. A study in southern Laos' Attapeu province found that while all households participated in fisheries, men and women from "better-off" households attached low importance to fishing and even lower importance to collecting aquatic animals in their list of priority activities.

In contrast, men and women from "worse-off" families considered both these activities to be priorities, with greater importance attached to collecting aquatic animals (Friend et.al. 2004, p. 20).

It is generally recognised that the fisheries of the Mekong Basin have declined over recent decades (Bush 2005, p. 7). Baird and Flaherty conclude that increases in population, modern fishing equipment, expanding markets and new



*Keo, a fisherman from Laviphangdeang village, Lamam district, Laos.*

*Photo: Jerry Galeal/OxfamAUS.*

development projects ranging from small irrigation initiatives to large hydroelectric dams have all combined to impact negatively on fish populations. James (2006, p. 756) found that intensive rice cultivation also leads to decreased aquatic biodiversity which inevitably impacts fish stocks.

The official data on the status of fisheries stock are very weak, however, surveys of fishing communities are bringing widespread and consistent reports of decline (Flaherty & Baird 2005, p. 441). A survey in southern Laos found that villagers experienced a decimation of their fish catch between 1989 and 1999; whereas previously they had been able to catch up to 5kg of fish in an hour, by 1999 they caught only 0.5kg within an hour – a tenth of their previous catch (cited in Raintree & Soydara 2001, p. 16). Friend et. al. found that the view that fisheries stocks are in decline was commonly voiced in Attapeu province. A number of explanations were provided for this, such as growing pressure due to population growth, more widespread use of modern gear, increased market penetration and growing demand for aquatic resources, and environmental degradation (Friend et.al. 2004, p. 23).

Likewise, the availability of forest resources seems to be under system-wide strain in Laos. The ADB's participatory poverty assessment noted that in many of its survey areas the availability of once plentiful plants and animals was decreasing rapidly (ADB 2001, p. 57). Other surveys in southern Laos have reported that villagers are having to travel for up to two days to hunt wildlife that was once obtainable adjacent to the village. These same villagers have also experienced a decline in the quantity of rattan harvested from the forest, from 300 stems for a day's labour in 1989 to 20–30 stems in 1999 (cited in Raintree & Soydara 2001, p. 16).

## Vietnam

In Vietnam, upland ethnic minorities are also feeling new pressures on the forest resources on which they have long been reliant. A study by the Stockholm Environment Institute in Lak district of Dak Lak province found that M'nong people's dependency on the forest for dry crop cultivation, fishing, hunting and collecting non-timber forest products (such as rattan, bamboo and resin) had ensured that use of forest resources was well managed and sustainable. However, this balance was being upset by the emergence of commercial logging activities (both state and individual), trade in wildlife and in-migration of other ethnic groups who cleared the forest for new forms of agriculture. These activities led to a rapid loss of forest cover across the province; between 1983 and 2001, 30 per cent of Dak Lak's forests disappeared.

As a result, the M'nong reported increasing difficulty in finding non-timber forest products and that hunting and fishing were also becoming less productive (Lindskog et.al. 2005, pp. 39–40).

In Cu M'Gar district, the driving force behind the loss of forest was the expansion of coffee crops in the 1990s. By 1995 the district had lost all of its remaining forest cover and this has had multiple implications. The indigenous Ede communities were hit hardest as forest gathering and hunting had been a central pillar of their livelihood system and they were unable to compete with in-migrants in growing the new commercial crops. All residents were affected by the exacerbation of droughts due to the effect that deforestation and coffee plantations had on water tables and ground water. In some areas the water levels in rivers and reservoirs fell between 2 and 10 metres below average levels. Farmers also believed that the loss of forest had resulted in more frequent flooding, causing losses to rice crops (Lindskog et al. 2005, pp. 15–26).



## 2. New Economies



*A village market in Laos.*

*Photo: Brendan Allen/OxfamAUS.*

Over the last decade and a half, Laos, Cambodia and Vietnam have been undergoing a transformation that can best be summarised as a geographic expansion and a social deepening of the role of the market economy. This is precisely what policymakers have endeavoured to achieve and it has undoubtedly been the driving force behind high rates of economic growth. With the new economy have come new market opportunities, new forms of agriculture and higher rates of economic productivity.

It has been assumed that such changes are invariably positive, that in and of themselves they represent a change in the conditions of poverty. However, for many of the region's ethnic minorities this is not how economic change has been experienced. Rather they have experienced loss of rights, loss of control over their livelihoods, disempowerment, and relegation to the bottom of an increasingly stratifying social pyramid.

### 2.1 New agriculture

In the standard scheme of development, the shift away from traditional forms of agriculture to more productive cultivation and cash crops is generally assumed to yield positive quality of life benefits. However, in the experience of many ethnic minority groups in the Mekong, the transition is not that straightforward. There has already been substantial discussion above of the effect that agricultural commercialisation has had on land concentration and encroachment on forest resources, and the impact that this has had on minority groups. However, for those groups trying to make a transition from traditional practices, the shift to conventional modern rice cultivation and to other forms of cash cropping has often resulted in negative impacts on quality of life. This is due to some predictable factors such as the inability to compete commercially or the loss of secure tenure to agricultural land. But there have also been less foreseeable effects such as changing relations between men and women or the impact that changing dietary make-up has on health and wellbeing. What has become clear is that the unraveling of traditional agriculture is in effect the unraveling of culture, and the consequences of this change go wide and deep.

### Laos

There has already been discussion above about the crisis facing swidden agriculture in Laos due to the changing land tenure system. Much of the impetus behind this policy change has been to encourage, or even force, minority groups into sedentarised agriculture, especially wet rice (paddy) cultivation, but also into growing new commercial crops. For many groups, such a transition is fraught with pitfalls.

The ADB's participatory poverty assessment found that uprooted swiddeners living in paddy-based systems face significant "physical and psychological" problems. Central to the physical constraints was that, contrary to dominant assumptions, there was a severe lack of land suitable for paddy cultivation. The report consistently documented newly sedentarised minority groups struggling with poor soils and inadequate access to water (ADB 2001, pp. 34–39, p. 46). Another major constraint was the increasing incidence of rice pests found to be prevalent across the country. The study linked this phenomenon to the over-hunting of forest predators (such as big cats) for wildlife trade and the decline of forest habitat (pp.57–58).

Among the "psychological" factors, the greatest obstacle faced by upland groups converting to sedentarised agriculture was simply the lack of the right sort of technical knowledge. Such groups found themselves in a position where their highly sophisticated understanding of the agro-ecological processes involved in rotational agriculture had been rendered redundant, and where they had little access to sources of technical information needed for the new system. The sense of frustration was captured in a quote by one villager:

We don't understand how to cultivate paddy fields. We tried to plough with the buffalo but the buffalo died [from overwork]. Then the water didn't come as promised by the district officials (quoted in ADB 2001, p. 39).

Beyond this, many groups expressed a strong dislike for the process of paddy farming as compared to the much more variegated life of forest-based livelihoods. Some groups even preferred to hire out their labour than become paddy cultivators themselves (p. 35). Associated with this was a reluctance to take on the risks associated with the credit needed for much lowland agricultural practice (p. 39).

Boyce Magali (2003, pp. 8–10) observed similar problems faced by hill tribes in Long district of Luang Nam Tha province, who had been resettled to the lowlands and forced to stop upland cultivation (including poppy cultivation). Once again, this meant a transition from a diverse, multi-pillared livelihood system to dependence on growing rice.

Magali particularly stressed the devastating impact of rice pests and rice disease on villagers who were being forced to depend more and more on rice as they were discouraged from shifting cultivation by the government. Magali found that pest problems were causing families to sell livestock (their primary form of “insurance”) or to borrow rice. Often pests returned year after year with the cycle of borrowing leading to an entrenched cycle of poverty (pp. 48–9).

In a separate study in Long district (and the neighbouring Sing district), Lyttleton et. al. noted that problems with new agricultural diseases in the lowlands extended to the livestock of resettled Akha groups, a problem that attacked their primary source of wealth. This study also observed that the Akha were struggling to find sufficient land suitable for paddy rice cultivation as they were pressured to stop opium cultivation and swidden agriculture. This had forced many who were resettled to lowland areas to look for wage labour instead (Lyttleton et al. 2004, pp 30–32).

The conversion from shifting cultivation to sedentarised rice paddy farming has resulted in some unexpected negative consequences. In her study of upland dietary change, Jutta Krahn (2004) found that while development efforts had led to an increase in rice production and consumption by upland communities, it had led to an overall decrease in the quality of nutrition. The Katu of Thateng district, for example, traditionally saved rice only for guests and special occasions, and instead relied on a wide variety of forest and swidden produce, especially tubers rich in carbohydrates. However, the government defines food security as having a predetermined amount of rice, and through a combination of development programs and depletion of forest resources, the Katu have been forced into increasing their rice cultivation and dependency.

Krahn found that while this transition resulted in an increased caloric intake (a key definition of rising out of poverty) among the Katu, the quality of their dietary nutrition actually declined due to the loss of protein and vitamins which they previously obtained in abundance through forest flora and fauna. Rice in itself does not provide the necessary nutrients for a balanced diet and must be supplemented with vegetables, meat and fish. Even though the Katu were classed as food insecure (based on rice intake) they were actually able to obtain a sufficient amount of nutrients from the forest products and cassava (p.8). The shift to a diet dominated by rice was predictably accompanied by a decline in the health status of the Katu, compared to when they were able to practice their traditional livelihood (pp. 6–7). Krahn contends that if rice is used as the only way to judge food security then malnutrition will continue to be prevalent in the upland areas (pp.10–11).

## Vietnam

In Vietnam there is substantial research to show that pro-market and privatisation reforms in the agriculture sector have led to an increasing differentiation between lowland and highland areas and an increasing social differentiation within communities (Henin 2002, pp. 4–5). This is demonstrated by the findings of the Stockholm Environment Institute study in Dak Lak province.

In Cu M'Gar district, it was found that new cash cropping opportunities were dominated by the Kinh (Vietnam's ethnic majority) from the start. Success in these ventures required experience with the new crops, new technical knowledge and good market information, and much of this was dependent on education, fluency in the Vietnamese language, and the right sort of social networks. When poorer minority group farmers were attracted or forced to convert to coffee growing, they did so with a lower base of technical knowledge or the investment capability for the requisite fertilizers and irrigation. Many households entered into large sums of debt in the informal credit market (with interest rates of up to 65 per cent) to try to supply the necessary inputs to coffee crops. Nevertheless, high coffee prices in the late 1990s encouraged widespread over-dependence on coffee, even among poorer farmers. When world coffee prices collapsed in 2001 and 2002 not one borrower was able to repay his or her loan. While all income groups were affected by the price falls, the poorer farmers lacked the buffer of accumulated capital, and many were forced to cut down the tree crops (Lidskog et. al. 2005, pp. 26–29).

In the Lak district of Dak Lak the pressure to convert to more modern and commercialised forms of agriculture has been unwelcome. The district authorities have felt that the local ethnic minorities, who make up 65 per cent of the population, do not produce enough rice, and have been trying to convince them to grow a second rice crop each year. The local M'ngong have been reluctant to take this up as the feel they do not need a tradable surplus. They also feel that increasing dependence on wet rice makes them more vulnerable to floods and droughts which have been occurring more frequently (Lidskog et al. 2005, p. 39).

The push for two crops per year has other consequences for farmers. Two crops require extensive fertilizer use and intensive forms of irrigation. This has resulted in spiraling debt among large numbers of M'ngong who have made the transition to a second crop. They are often forced to sell their rice cheaply before it is grown to pay for fertilizer necessary to sustain the two crops. At harvest time, M'ngong farmers are paying back nearly double the original loan value to the Kinh traders who sell the fertilizer.

Community members stated that they are not comfortable with the techniques necessary for producing two crops, such as using draught animals, and that they do not like to be in debt for buying fertilizers. For many communities the old system of one rice crop supplemented by forest gathering is more attractive (Lidskog et al. 2005, p. 39).

There is evidence to suggest that the commercialisation of agriculture in Vietnam has led to a disempowerment of the role of women in agriculture. Henin (2002) has found that the growth of the agricultural labour market and subsequent wage labour has seen men specialising in more profitable labour than women. Women are often confined to low paying jobs such as weeding and harvesting while higher paying jobs like masonry and pesticide spraying are reserved for men. Furthermore, as men are traditionally the head of the household, they control access to credit and investment capital (pp. 6–10). Lidskog et. al. (2005) suggest that this trend may be particularly felt in minority groups with matrilineal systems. For example, women in the M'ngong community have traditionally held strong influence in decisions over agriculture. Furthermore, inheritance of land is through the female line.

With the shift to modern cash cropping with its new forms of technical knowledge and dependence on credit, there is evidence that shows M'ngong women are now often ignored or left out of important decisions to do with cropping and land use. In particular, local authorities, working from Kinh patriarchal practices, deal with men when formalising land ownership, or when providing training on new cropping (p. 40).

A study into pesticide use in Vietnam has brought to light another unexpected impact of the transition to intensive rice farming. Through blood testing of 190 farmers, Dasguptaa et. al. found that as many as 35 per cent had acute pesticide poisoning resulting in skin disease, headaches, high blood pressure and fatigue; 88 per cent reported at least one symptom of poisoning (Dasguptaa et al. 2007, p. 128). Investigating the causes of this alarming incidence of poisoning, the study found that despite the obvious dangers of pesticide use to both humans and the environment, farmers were given no education as to potential health risks and proper application procedures – many farmers mistook their symptoms for other illnesses. It was estimated that 2,500kg of banned pesticides were in use in Vietnam, that 97 per cent of farmers used pesticides more than instructions recommend and that 95 per cent of farmers disposed of left-over pesticides in canals or ditches. Farmers also didn't take necessary safety precautions with only 61 per cent using masks and as little as 1.4 per cent using shoes (p. 123).

## Cambodia

Similar to the findings of Lidskog et. al. in Vietnam, McAndrew found that in the two Tampuan study villages in Ratanakiri, while there was often a clear division of labour, men and women were involved equally in the activities of swidden agriculture, forest gathering and livestock raising. However, recent innovations in agriculture such as the introduction of commercial crops and paddy rice cultivation were foreshadowing a shift in men and women's roles, with men poised to take a greater degree of control over the production process (McAndrew 2001, pp. 27–28).

Men had more knowledge than women about high-value cash crops and tended to decide what type of cash crops they would plant. This resulted mainly from their stronger participation in extension training and broader contacts with middlemen. Similarly, men performed the critical labour in paddy rice cultivation and consigned women to secondary tasks. Shifts to high-value cash crops and paddy rice cultivation thus threatened to lessen women's decision-making power in agriculture and their control over the yields of the crop. And while both men and women engaged in wage work, men had more opportunities to do so because of their greater mobility, their knowledge of Khmer, and their involvement in public affairs. More opportunities to earn wages provided them with more opportunities to control the wages earned (McAndrew 2001, p.28).



**Logging near Donxa village,  
Thateng district, Laos.**

*Photo: Jerry Galea/OxfamAUS.*

## 2.2 New Markets

There has been much press given to the growth of new markets and new market opportunities in the Mekong region.

However, comparatively little attention has been given to the composition of those markets. Often there is a general assumption that new markets and industries in an area translate into widely disbursed benefits for that area.

Yet the nature of economic self-interest in markets means that new markets are rarely left open to the poor free from aggressive competition. And those best placed to dominate a market are those who already have a competitive foothold through capital, connections and know-how.

### *Cambodia*

McAndrew's study in Ratanakiri province shows a startling level of domination of new market opportunities by Khmer in-migrants. In the mid-1990s the opening up of the Cambodian economy prompted a large influx of Khmer in-migrants into Ratanakiri province in the hope of exploiting new commercial opportunities. This generated significant growth of the market at the provincial centre, Banlung, which grew from 302 to 535 stores in the four years between 1996 and 2000. However, in 2000 only 13 per cent of store owners originated from Ratanakiri, while only one store owner out of 535 came from one of the province's many indigenous groups (McAndrew 2001, pp. 5–7).

The growth of the Banlung market also stimulated nearby district markets, however, these also showed the same tendencies for domination by Khmer in-migrants. Of the two district markets surveyed, 90 per cent of traders were Khmer while less than 10 per cent originated from Ratanakiri. Of the 94 stores in the two markets surveyed, only one was owned by an indigenous trader (McAndrew 2001, pp. 10–11, p. 14).

Tampuan villagers from the two survey villages of Kahoal and Kamang had little involvement in the surrounding markets other than to buy consumer goods. They remained participants in swidden agriculture and were increasingly employed as cheap wage labour by the Khmer traders who dominated the market.

Between the two villages only seven households bought or sold goods and only 16 households made and sold goods (rice wine and winnows), while 42 were engaged in wage labour (McAndrew 2001, p. 27). However, McAndrew found that increasing contact with the market economy, especially pressure for land acquisition, was affecting traditional village leadership structures. In particular, the authority of the elders in both villages was giving way to the emergence of younger Khmer-literate leaders who were more able to understand the new trends and pressures (McAndrew 2001, p. 23).

### *Laos*

In Laos, the ADB's participatory poverty assessment found that ethnic minorities across all regions identified their commercial mismatch against lowlanders as a major factor contributing to their poverty (ADB 2001, p. 35). This inability to compete in new market opportunities is demonstrated in Lyttleton et al.'s detailed examination of the growth of new markets along route 17B near the Chinese border.

The development of route 17B as a transport route for goods travelling between Thailand and China stimulated opportunities for the development of tradable crops along the transport corridor. However, as a conduit for Chinese trade, it has been the Chinese that have dominated the new commercial opportunities.

Chinese funded and managed market gardens which grow capsicums, and investments in cash crops such as sugar, rubber and watermelon, have eclipsed the attempts of local Akha groups to grow cash crops such as coffee and cardamom as an alternative to opium production. For example, in 2003, exports of sugar cane and watermelon from the area were worth 1,120 million kip and 1,280 million kip respectively. By comparison, exports of cardamom were worth only 105 million kip (Lyttleton et al. 2004, pp. 6–10, p. 22, p. 113).

With the expansion of sugar and rubber crops, more Chinese have entered the area. Chinese often supply the necessary raw materials for the crop to Lao Akha growers and then Chinese Akha middlemen sell the crop to the Chinese from the highland growers. Although there were contracts in place to protect the highlanders, in practice this afforded them little protection from being under-paid or receiving no money at all:

During the initial years of sugar cultivation, many problems between Akha growers and Chinese buyers have emerged that highlight the fraught transition from more typically subsistent lifestyles into those oriented to sedentary cash-crop production. The Akha complain that they don't always receive the money they are due, arguing the weights of sold sugarcane are reduced in the accounting and recompense; that they seldom receive payment on time or sometimes not at all; that Akha middlemen take large cuts and pay the growers markedly less than they are due and so forth, with little ability to seek legal redress in each instance ... [I]t is worth noting that economic relations established during recent years of Chinese investment are not straightforward nor necessarily equitable. A key point is that there are few resources at the Akha's disposal to prepare them to avoid these problems in advance or to resolve these disputes in their favour after they have taken place (Lyttleton et al. 2004, pp. 41–42).

In the case of watermelons, it was usually Chinese companies that crossed the border with Chinese specialists, up to 20 to 30 at a time, to plant the crop. The labourers that were hired were usually women due to their "apparent subservience and superior diligence" (Lyttleton et al. 2004, p. 44). The domination of Chinese growers was partly due to the delicate nature of the crop and the fact that the Chinese would not pay for watermelons unless they met quota requirements. Due to these difficult requirements the local Akha usually rented their land to the Chinese, receiving only a small proportion of the profit (Lyttleton et al. 2004, pp. 43–44).



### 3. Culture and Vulnerability



Nor Por village, Feang district, Vientiane province, Laos.

Photo: Jerry Galea/OxfamAUS.

The ADB's participatory poverty assessment for Laos makes some strong statements about culture and poverty: "From the outset of the PPA ... it was evident that poverty in the Lao PDR is inextricably related to culture and ethnicity, and that its locus is with the highlanders." It goes on to state that, "Poverty in the Lao PDR ... cannot be studied without reference to culture" (ADB 2001, p. xiii).

Much the same can be said about the relationship between culture and vulnerability in the face of economic change. It has already been noted that the crises and transformations of traditional agriculture is in itself an unraveling of culture. However, the ramifications of such economic change go well beyond the economic sphere.

### 3.1 Relocation

The starkest examples of the experience of cultural upheaval and its associated trauma can be seen in the relocation by upland minority groups in Laos to the lowlands. Such relocation can take place due to diminished viability of upland livelihoods or due to government coercion in an effort to stop swidden agriculture and opium cultivation. Relocation is also seen as the best means for helping upland minorities to access new markets, obtain a modern education and access modern healthcare.

A study by Action Contre la Faim (ACF) into resettlement in Long district of Luang Namtha province found that villages were resettled if they did not fit criteria which included having at least 30 or more families, a communication link to facilitate trade and alternative forms of agriculture to swidden practices. Under these criteria about 50 per cent of villages in the district, or 6,000 people, would be resettled under the government's plan (Romagny 2002, pp. 2-4).

The ACF study provides an insight into how villagers perceived resettlement. Many villages in the upland areas of the Long district had large areas of rich natural resources and although they were remote none were observed to be in a state of abject poverty. A great number of villagers who were slated for relocation did not want to leave their villages (Romagny 2002, pp. 3-4).

The ACF study found that when villagers were resettled they were subject to a complete cultural upheaval, food shortages, degradation of living standards and a loss of assets. Besides radically undermining livelihoods, resettlement represented an extreme cultural change which brought with it associated health problems, contributing to increased mortality (Romagny 2002, pp. 5-6). As well as vulnerability to increased incidences of illness due to malaria, respiratory diseases and diarrhoea, resettled villagers also reported higher incidences of psychological disorders and "social breakdowns" (Romagny 2002, p. 5).

Resettled populations examined by ACF showed a much higher mortality rate than either lowland or non-resettled upland village populations. Indeed, mortality rates rose to 20 per cent for the first year in resettled villages and then translated into a startling 70 per cent increase in mortality for the first five years of resettled villages. This mortality rate could be linked to stress caused by cultural upheaval, loss of capital, land conflicts and unsanitary conditions which caused disease (Romagny 2002, p. 9).

Rattanaovong has also stressed the enormous cultural transition involved in relocation. He has noted that many Akha have been living in their present location for generations. Over time traditional culture and customs have developed and the villages have learned to adapt to a specific area while extracting their livelihoods from the resource base. When villagers were forced to resettle to the lowlands they were thrown into an entirely new world in which most of their coping strategies did not work and they found it difficult to grasp the limited opportunities available (Rattanaovong 2005, pp. 27–28). This is supported by the ADB's participatory poverty assessment which found that when cultural systems experience serious disruption or become no longer viable, the accompanying loss of indigenous knowledge, loss of morale, and loss of strategies for survival, could easily result in a decline into poverty (ADB 2001, p. 32). Magali (2003, p. 47) has further pointed out that much of this stress is borne disproportionately by women who are the caretakers of the family.

Ironically, Lyttleton found that Akha villagers, who are often resettled due to opium cultivation, have experienced large increases in methamphetamine use in recent years. The rise in methamphetamine use is a partly a consequence of increased psychological stress:

Amphetamine use results to a large extent from the pressure many people feel to keep up the increasingly hectic pace of modern life, to cope with a world in which nothing seems predictable but change – constantly accelerating change (Grinspoon & Hedblom 1975, p. 288, cited in Lyttleton 2004, p. 909).

### 3.2 Sexuality and HIV

Lyttleton et. al.'s study of social change along route 17B in northern Laos reveals that drawing traditional groups into the market economy creates complex consequences which extend to the sexual practices of both men and women, therefore bringing heightened vulnerability to HIV infection.

The upgrade and development of route 17B has brought many cultural changes to the Lao towns that it passes through. Once quiet towns which saw little to no traffic now experience an average of 30 or more large trucks a day. Chinese investors, traders and labourers who have flooded into the area have also started to permeate the area, and there have been increasing visits of foreigners to Akha and Kui villages that were once considered remote.

With these visits by foreign Chinese and government officials the Akha and Kui women have been exposed to new sexual partners. The Akha have a culture of offering massages and sometimes sexual services to visitors from other ethnic minorities, while Kui sometimes offer these services in exchange for labour. The sexual services are usually controlled by men in the village who determine who the women will sleep with, but these services have previously never involved monetary compensation. However, as more outsiders visit the village they have started to liaise with the local women, some of whom have begun seeking payment for sexual favours. Also in a break with custom, young Akha women who sold trinkets in town clubs and bars have also begun to sell sex to traders and tourists. Lyttleton et. al. note that:

Money for provided services is now a logical accompaniment for any number of labour relationships the Akha enter into. It is becoming a key value that attaches to the assessment of the worth of everyday pursuits. If it makes money, it is worthwhile and 'modern'. Following the arrival of watermelons, commodified sexuality has now also entered the list of negotiable income-earning relationships in which the Akha can engage (Lyttleton et al. 2004, pp. 85–87).

With an increasing proliferation of commercial sex venues in the towns, the sexual habits of Akha men are also changing. Where once their sexual interaction was restricted in geographical range, they now cross into networks of highly mobile populations of commercial sex workers and truck drivers. Lyttleton et. al. point out that in a context where education about HIV is rudimentary and condoms are seldom used by men, these changes in sexual practice present a scenario in which the vulnerability of local populations to HIV infection is significantly increased (Lyttleton et al. 2004, pp. 85–87).



Photo: Jerry Galea/OxfamAUS.



## Conclusion

This report has sought to act as a corrective to the “success story” narrative of GMS development.

From the literature reviewed we can see that the livelihoods, culture, environment, food, and gender relations of too many have been seriously compromised by economic change. Although the claimed mandate of development has been to help poor people and improve their livelihoods, difficulties for many, most notably the multitudinous ethnic minorities of the Mekong, have been exacerbated.

Clearly, the single greatest determinant of vulnerability in the face of economic change in the Mekong region is ethnicity. Ethnic minorities in the Mekong are the most acutely affected by changes in the natural resource base; an inability to compete in new agriculture and new commerce; and rapid cultural change. While members of ethnic majority populations – the Lao in Laos, the Khmer in Cambodia and the Kinh in Vietnam – can also be affected by these changes, and many are, ethnic minority groups are nearly always affected.

The second greatest determinant of vulnerability in the face of economic change is the level of dependence on the natural resource base (especially forests and rivers). This dependence underpins many of the forms of vulnerability discussed here, such as forms of agriculture, familiarity with trade and commerce, and cultural frameworks for perceiving the world. The health, use and control of natural resources have also been subjected to the most profound change as a result of the GMS economic transformation.

Disturbingly, the ability of the natural resource base to continue to support the livelihoods of the poor in the Mekong is at a crisis point. Forests and rivers are in a state of rapid ecological decline caused by human over-exploitation. Some of this has been an inevitable corollary of rapid population growth, however, a large part has resulted from the establishment of private (commercial) tenure rights over common property resources, such as through commercial logging, plantations, commercial fishing lots and hydropower dams. Moreover, such a shift in resource tenure serves to deny poor communities access to resources they depend on for their livelihoods.

For many subsistence agriculturalists, and especially for many ethnic minorities, the transition to modern (and especially to commercialised) agriculture is extremely difficult and perilous. There are multiple obstacles mitigating against them when attempting this transition, such as lack of suitable land; insufficient knowledge of the new techniques; unfamiliarity with managing credit and lack of access to un-exploitative credit; inexperience in commercial negotiation and lack of commercial networks; and finally the volatile nature of the new markets themselves.

The transition to modernised and commercialised forms of agriculture can also serve to disempower women’s roles in agriculture and agricultural decision making. Many traditional cultures, especially matrilineal groups, have sophisticated divisions of labour between men and women which ensure women play an important role in livelihood decision making. By contrast, modern land certificates, availability of training and commercial negotiation tend to entrench the male with greater power as the head of the household. Agricultural wage labour tends to have significant differentiation of remuneration between men and women.

Moreover, new opportunities for commercial agriculture or trading tend to be dominated by outsiders and in-migrants, while ethnic minorities tend to be relegated to the lowest rung of the new economic structure. Familiarity with commerce, extensive social networks and good connections with government administration give the majority populations an enormous competitive advantage over minority groups. Minority groups tend to enter the market late, and are dependent on external credit, technical know-how and marketing.

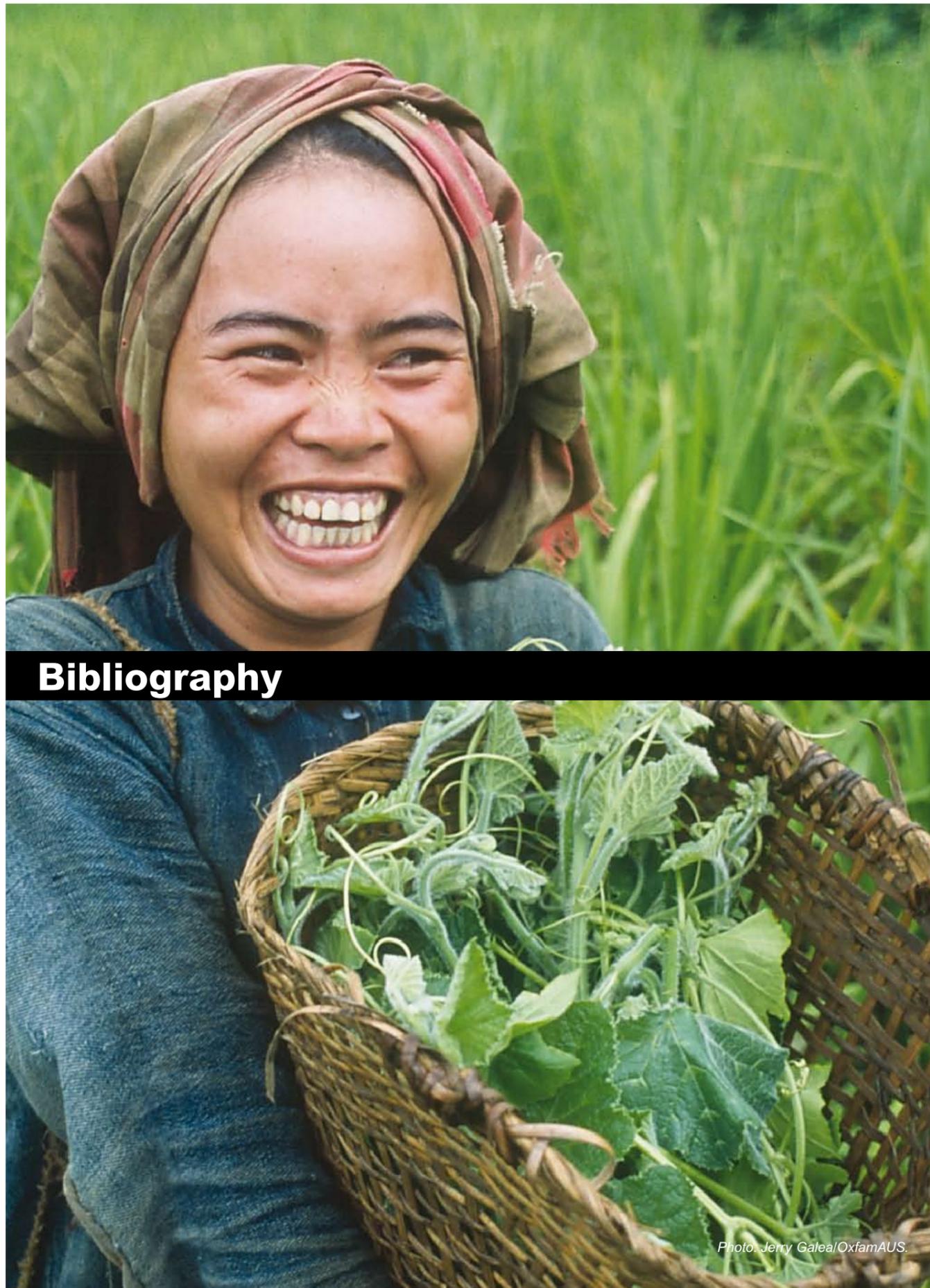
For many ethnic minority groups, especially shifting cultivators, the loss of traditional agriculture is in effect a loss of culture. Much about traditional cultures, from religious rituals and festivals, to food taboos and gender relations, is based around locally-specific livelihood systems. When these no longer become viable many other dimensions of cultural identity and practice are also unsettled. The loss of culture, or rapid change in culture, is in itself primary to the experience of poverty in the Mekong. Cultural upheaval often results in social dislocation, psychological trauma and general health vulnerability. It can create a sense of deep hopelessness and despondency among minority groups.

For policymakers with an interest in poverty alleviation the implications are clear. First and foremost, they need to urgently provide legal and administrative protection to the diverse forms of resource tenure used by ethnic minorities and subsistence agriculturalists across the region. The issues of agricultural productivity, population pressure and environmental degradation cannot be meaningfully understood or addressed without taking into account the radical usurpation of resources which has accompanied economic change in the Mekong.

Secondly, there needs to be a fundamental rethink of the simplistic assumptions around the effect that infrastructure, markets and growth have on poverty. Policymakers and development planners need to have a much more nuanced understanding of the poor, the deprivations they suffer, and of the specific kinds of infrastructure and markets that might benefit them. Of course, such knowledge can only be based on much closer dialogue with those “poor” communities in whose name development is proceeding.

Finally, and linked to the previous point, space needs to be created in the hard-headed world of economic policy and development programs, to take seriously the value and role of culture in human wellbeing. Great care needs to be taken in considering the diverse ways in which developments may affect the diverse and vulnerable ethnic minorities who form such an important part of the region’s human wealth.

The choices that have been made, and are being made, are not the only set of choices available. Understanding how vulnerable groups are affected by social and economic change is only the first step in designing development programs which actually improve the wellbeing of those experiencing deprivation of one form or another. There is much that has been learnt about forms of change which are less destructive and which do not write-off the vulnerable as collateral damage, and which can make significant inroads into improving the quality of life of those who live the hardest.



## Bibliography

Photo: Jerry Galea/OxfamAUS

Acker, Frank Van 2003. "Cambodia's commons : Changing governance, shifting entitlements ?", Centre for Asean Studies, Discussion paper No 42, October 2003, p. 1-53

ADB 2001. *Participatory Poverty Assessment: Lao PDR*, Vientiane.

ADB 2007a. Mid-Term Review Of The Greater Mekong Subregion Strategic Framework 2002–2012, Manila, June 2007.

ADB 2007b. *Regional Cooperation Strategy and Program Update, August 2006, The Greater Mekong Subregion — Beyond Borders (2007–2009)*, Manila.

Bush, S. 2005. *Fish decline in the Sekong/Se San/Sre Pok River Basin: An introduction to its causes and remedies*, Oxfam Australia.

Cornford 2004. Field Notes from a trip to Se San Communities in Ratanakiri, Cambodia, Oxfam Australia, August 2004.

Dasgupta S., Meisnera C., Wheelera D., Xuyenb K., Lam N, T. 2007. "Pesticide poisoning of farm workers—implications of blood test results from Vietnam", *International Journal of Hygiene and Environmental Health*, Volume 210, 2007, pp. 121-132

Flaherty M. S., and Baird I. G. 2005. "Mekong River Fish Conservation Zones in Southern Laos: Assessing Effectiveness Using Local Ecological Knowledge", *Environmental Management*, Volume 36, Number 3, September 2005, pp. 439-454

Friend, R., Meusch, E., Funge-Smith, S. and Yhoun-Aree, J. 2004. "Wetlands and aquatic food sources in the Lao PDR: A Case Study from Attapeu Province", *Juth Pakai*, No.5, pp.17-25.

Henin B. 2002. "Agrarian Change in Vietnam's Northern Upland Region", *Journal of Contemporary Asia*, Volume 32, Number 1, , pp. 3-28.

Hirsch P. and Wyatt A. 2004 "Negotiating local livelihoods: Scales of conflict in the Se San River Basin", *Asia Pacific Viewpoint*, Volume 45, Number 1, April 2004 pp51–68.

IUCN 2003. "Sekong Province, Lao PDR: economic returns from conserving natural forests", *Case Studies in Wetland Valuation* #8, October 2003.

James D.G 2006. "The impact of aquatic biodiversity on the nutrition of rice farming households in the Mekong Basin: Consumption and composition of aquatic resources", *Journal of Food Composition and Analysis*, Volume 19, 2006, pp. 756–757

Kaosa-ard M. 2003. "Poverty and globalisation", in *Social Challenges for the Mekong River*, Dore, J. (eds), White Lotus, Bangkok, 2003, pp 405-440

Krahn J. 2003. "Cooking Up: Dietary change in Lao upland kitchens" *Juth Pakai*, Issue 1, December 2003, pp. 4-14

Lindskog, E., Dow, K., Nilsson Axberg, G., Miller, F., Hancock, A. 2005. *When Rapid Changes in Environmental, Social and Economic Conditions Converge: Challenges to Sustainable Livelihoods in Dak Lak, Vietnam*, Stockholm Environment Institute.

Lyttleton C. 2004. "Relative Pleasures: Drugs, Development and Modern Dependencies in Asia's Golden Triangle", *Development and Change*, Volume 35, Number 5, November 2004 , pp. 909-935

Lyttleton C., Cohen P., Rattanavong H., Thongkhamhane B., and Sisaengrat S. 2004. "Watermelons, bars and trucks: dangerous intersections in Northwest Lao PDR: An ethnographic study of social change and health vulnerability along the road through Muang Sing and Muang Long", Institute for Cultural Research of Laos and Macquarie University, 2004, pp. 1-110

Magali B. 2003. "Food security assessment and implementation of a surveillance system", Action Contre La Faim, October 2003, pp. 1-88

McAndrew J.P. 2001. "Indigenous Adaptation to a Rapidly Changing Economy: The experience of Two Tampuan Villages in Northeast Cambodia" CIDSE, Cambodia, 2001, pp. 1-49

Oxfam Great Britain 2004. Evaluation Report: Cambodia Livelihood Study Project, Phnom Penh, May 2004.

Probe International 2007. Mekong Utility Watch, 4 July 2007, www.probeinternational.org

Raintree, J. and Soybara, V. 2001. *Human Ecology and Rural Livelihoods in Lao PDR*, Vientiane.

Rattanavong, H. 2005. "Poverty reduction in Mountainous Areas: Points to Consider", *Juth Pakai - UN Development Research Awards Edition*, pp. 23-30

Romagny, L. 2002. "Resettlement: An alternative for upland development?", Action Contre La Faim, Paper presented at the workshop "Poverty reduction and Shifting Cultivation Stabilization in the Up-lands of Lao PDR: Technologies, approaches and methods for improving upland livelihoods". Luangprabang, January 2002, pp. 1-16

Shoemaker, B., Baird, I. and 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.

Sophal C. and Acharya S. 2002. "Facing the Challenge of Rural Livelihoods: A Perspective from Nine Villages in Cambodia", Cambodia Development Resource Institute, Working Paper 25, pp. 1-134.

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