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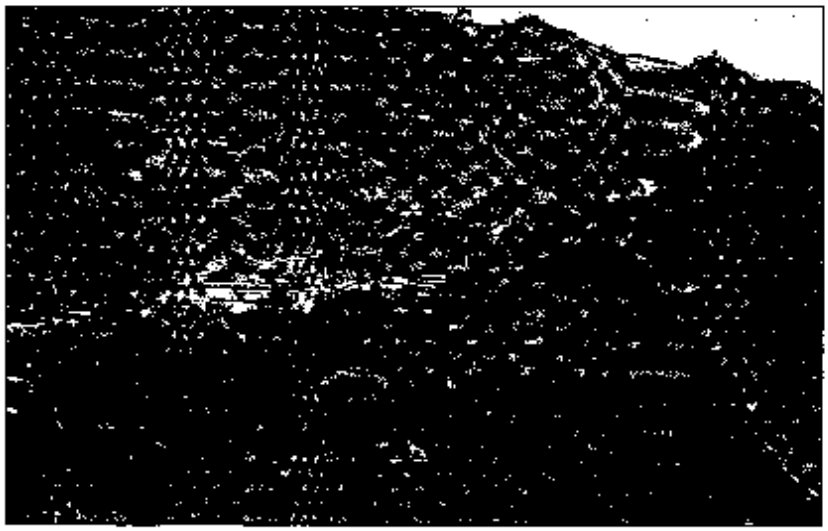
International Institute for Environment and Development

Forestry and Land Use Programme

Forestry and Land Use Series No. 14



Sustainable livelihoods in upland Vietnam: land allocation and beyond

Elaine Morrison and Olivier Dubois

1998

Forestry and Land Use series no. 14

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Issues paper

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International Institute for Environment and Development

October 1998

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Executive Summary

This paper attempts to identify some of the key issues concerning land use and livelihoods in the uplands of Vietnam, and is particularly concerned with the use of forest land.

The perceived natural wealth of Vietnam's uplands contrasts with the poverty of many of its inhabitants: about one third of the population inhabits upland areas, and the majority of those are poor and suffer food insecurity. At the same time, forest resources have become impoverished over the last fifty years, although there are signs that the escalation in forest loss in the 1980s has slowed considerably during the 1990s.

Of various attempts by the Government of Vietnam to reduce forest loss and enhance livelihoods, allocation and contracting of land to households represents the most ambitious and radical. So-called "people's forestry" began in 1994, with the transfer of *management authority for forest land - whether with forest cover or not - from the state to* the household unit. The system of allocation (of forest land without forest cover) and contracting (of forest land with protected forest cover) has been gradually adapted over the years, following experience of implementation. However, a number of problems remain, and the process of allocation of forest land has not yet been completed or achieved its objectives.

This paper identifies a number of issues related to upland development and possible areas for further research. These are broadly grouped according to two land categories:

- land without trees, where land development is primarily a farmer's decision; and
- land with trees, where the decision relates more to forest management, and thus involves other stakeholders besides farmers

Three types of issues are discussed: technical issues; economic and market issues; and institutional issues. In addition, the provision and dissemination of information within Vietnam is identified as an issue requiring support: This ranges from lack of agreement on a national forest information system to policymakers' expressed need for information on experience of upland management from elsewhere in the region.

Acknowledgements

The authors would like to thank the Swedish International Development Cooperation Agency (Sida) for funding the research and consultation work that led to production of this paper, and for funding production of the paper itself.

This paper is based on information gathered by the authors during a visit to Hanoi in June 1998. We are particularly grateful to those members of Vietnamese government bodies and international agencies with whom we met (listed in annex 1), for finding time to hold long and informative discussions with us, and for freely providing us with relevant material. We should also like to thank both our colleagues at IIED, and various contacts in Vietnam, for their helpful comments on a draft of this paper.

Elaine Morrison and Olivier Dubois
Forestry and Land Use Programme
International Institute for Environment and Development

Acronyms

ADB	Asian Development Bank
ANR	Assisted Natural Regeneration
ASB	Alternatives-to-Slash-and-Burn
ASI	Asian Social Institute (Philippines)
CAEV	Center for Agricultural Extension Volunteers
CCA	Canadian Cooperative Association
CFSA	Community Forestry Stewardship Agreement
CIFOR	Center for International Forestry Research
CSC	Certificate for Stewardship Contract
FAO	UN Food and Agriculture Organisation
FBSSE	Forest-Based Small Scale Enterprise
FF	Ford Foundation
FLA	Forest Land Allocation
FSI	Forest Science Institute
GDLA	General Department of Land Administration
GTZ	German Technical Cooperation Agency
HH	Household
ICD	International Cooperation Department
ICRAF	International Council for Research in Agroforestry
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
ISF	Integrated Social Forestry
ISG	International Support Group
KfW	German Financial Cooperation Agency
LA	Land Allocation
LTC	Land Tenure Certificate
LUP	Land Use Planning
LUTC	Land Use Technical Working Group
MARD	Ministry of Agriculture and Rural Development
MRDP	Mountain Rural Development Programme
NEZ	New Economic Zones
NIAPP	National Institute for Agricultural Planning and Projection
NTFPs	Non Timber Forest Products
PRA	Participatory Rural Appraisal
REFAS	Reform of the Forestry Administration System
SAE	State Agriculture Enterprise
SALT	Sloping Agriculture Land Technology
SFDP	Social Forestry Development Programme
SFE	State Forest Enterprise
SIDA	Swedish International Development Agency
SWC	Soil and Water Conservation
TOT	Transfer of Technology
UNDP	United Nations Development Programme
VAC	Garden-Livestock-Pond Farming System
VND	Vietnamese Currency (Dong; exchange rate 1US$ = 12,250 VND)

1 Introduction

This paper identifies some of the key issues affecting sustainable land use and livelihoods in the uplands of Vietnam[1]. It is particularly concerned with the use of forest land, around which there are a number of unresolved policy and practical issues currently being discussed by the Government of Vietnam. The paper starts with background information on recent developments in the uplands, which leads into discussion of some key issues for further study. However, we do not pretend that this is a comprehensive assessment of the issues - there are much more detailed analyses of various aspects of upland land use in some of the references listed. The aim of this paper is to give an overview of the current state of affairs in the uplands and to highlight key issues in preparation for further research, on which IIED will embark in the coming months in collaboration with Vietnamese partners.

Within Vietnam there appears to be significant demand for information on experience of upland land management elsewhere in south east Asia. This paper starts to provide some such information; the gathering of further information and its dissemination within Vietnam, will form a key part of IIED's future collaboration with Vietnamese partners.

This paper is based on information gathered by the authors during a visit to Hanoi in June 1998. It builds on earlier IIED work in Vietnam, which included collaborative research with the Forest Science Institute of Vietnam (Dr Do Dinh Sam) on the values of shifting cultivation and its alternatives, and support to a cross-sectoral policy analysis group, the Land Use Working Group.

2 The transition economy: who benefits?

In 1986 the introduction of *'Doi Moi'* (renovation programme) heralded a transition from central planning to a market economy in Vietnam. The transition process continues and in the natural resources sector particularly, the volume of new legislation, and the frequency with which laws and regulations are issued, indicate a continuing focus on managing and accelerating the transition. It is notable how many of the policies and associated institutions dealing with uplands have been developed since the early 1990s (Binh T. Nguyen, 1998). However given the rate at which new policies and initiatives are developed (a case of 'policy inflation') and the inter-dependency of such policies, skilled strategic direction of the overall management of natural resources is required. Communication and information also become key elements of the natural resource management strategy, as understanding of the sometimes radical policy changes needs to be shared between stakeholders across provincial, district and local levels.

Considered at the national level, there appear to have been benefits from the emerging market economy. The Government of Vietnam estimates that the proportion of poor households has declined from 90 per cent in 1990 to about 19 per cent in 1995; the aim being a reduction to 10 per cent by the year 2000. Recent estimates by the World Bank indicate the poverty incidence to be about 51 per cent (Bhargava, 1998). However, care needs to be taken in using these figures since it is not clear what criteria are used to define 'poor' households or 'poverty'; clearly different systems are being used.

[1] 'Uplands' are generally defined as the land above 600m. altitude, whilst the 'midlands' are between 300m. and 600m. altitude. However, some researchers say there is no clear definition of 'uplands'. A list of which communes are in the uplands does exist, although it does not appear to correspond exactly to altitude.

Whilst rapid changes and largely positive impacts are clearly evident in urban areas, some rural districts, particularly those in upland areas, have yet to experience benefits.

Income disparities have widened since the introduction of *Doi Moi*. As well as rural-urban disparities - evidenced by visibly increasing wealth in the cities whilst 90 per cent of those below the poverty line live in rural areas - there are regional disparities in income. For example 71 per cent of people in the north central region are classified as poor, but only 33 per cent in the south east (Buffett, 1997). Whilst there are reported "significant improvements" in some upland areas in terms of both rural economy and environment (Donovan *et al*, 1997), in general, poverty remains widespread across the uplands.

Inequalities in income and access to resources may also be increasing within communities under certain conditions. In Ha Tinh province, it was found that following the allocation of land (discussed below), forest land was increasingly concentrated in the hands of richer households. This reduced traditional income generating opportunities for the poor and increased disparity in access to land resources (Smith, 1997).

In 1989 Vietnam achieved national food self-sufficiency. It is now a major exporter of rice, which - together with significant exports of coffee - represents an important source of foreign exchange. The consequent ending of the policy for provincial self-sufficiency meant it was no longer necessary for all regions to maximise food production, opening the way for more diversified production and a re-thinking of how land is used.

But despite the current production of food surplus at a national level, *food insecurity* remains a major concern amongst the rural poor who have not yet benefited from economic reforms. This is especially the case in mountainous areas, with the northern mountain and Central Highland regions experiencing the largest rice deficits (Goletti and Minot, 1997; see table 1 below). In some upland rural areas "food shortages typically last up to 6 months a year" (Buffett, 1997) although others report food shortages for 3 to 4 months per year. It should be noted, however, that figures used to determine food security in rural areas are usually based on the ration of rice per capita rather than overall availability of food supplies. This might appear to exaggerate the real situation in the uplands, where farmers resort to other crops (e.g. maize, cassava, fruit) or where possible, purchase food in the market, at times of rice shortage. Nevertheless, there is a need to maintain diversified sources of food in these marginal areas. Whilst there is little outright starvation, such food shortages contribute to the malnutrition that afflicts an estimated 40 to 45 per cent of children under 5 years of age in the uplands (Malcolm Duthie, 1998. Personal communication). Thus food production is a driving force in farmer decision-making.

Table 1: Rice surplus/ deficit in selected agroecological regions

	Northern mountains and midlands	Red River delta	Central Highlands	Mekong River delta
Population density (persons/km^2)	120	1124	53	401
Paddy production ('000 tons)	2254	4623	429	12832
Rice surplus ('000 tons)	-759	173	-247	4468

Source: Goletti and Minot, 1997; using 1996 data from the Government Statistics Office.

From 1993 to 1995, surplus production increased more than actual exports, so availability of rice within Vietnam is increasing at a national level. However it is not clear to what extent food security at the national level has translated into food security in the uplands. Simply increasing rice production is not the solution to food insecurity. Goletti and Minot (1997) discuss the implications of increased rice production in the context of Vietnam's inefficient marketing system and restrictive export policy, speculating that it could lead to a fall in prices, lower farmer incomes, slower agricultural growth and negative impacts on the rural population. On the other hand, encouraging a growth in production could lead to redistribution of the gains of such growth to meet the needs of the poor and the food insecure - though it appears that there are still restrictions on the internal rice trade. But given the disparities in income and continuing food insecurity, it seems clear that mechanisms to enable equitable distribution of resources - and realisation of comparative advantage - within Vietnam are not yet in place.

3 The uplands: abundant natural resources?

In recent decades, the uplands have been perceived as an abundant *source of natural wealth*, on which the nation could draw to support its development. In particular, upland forest resources were vital during the war and for post-war reconstruction. More recently, the Government of Vietnam has placed great strategic importance on the protection of upland watersheds for provision of national services. For example the hydro-electric power plant[2] at the Hoa Binh dam provides 45 per cent of the nation's electricity - yet only seven years after inundation of the reservoir was complete, and four years after power generation began, sedimentation has reduced its projected life from 100 years to 50 years. As a result, much focus is now put upon maintenance or regeneration of good vegetative cover in the watershed in an attempt to reduce erosion (Poffenberger *et al*, 1997). Similarly a new dam is close to completion in Son La, which is planned to provide 4MW capacity. The importance of the upland watersheds for power generation was emphasised by recent drought in Vietnam, whereby reduced water levels at Hoa Binh led to power cuts and water shortages in Hanoi.

However, goods and services provided by the uplands largely benefit the lowlands: ironically some rural communities resettled as a result of the construction of the Hoa Binh dam do not even have access to electricity. The perceived natural wealth of the uplands is in sharp contrast to the poverty of many of its inhabitants. Currently about one third of Vietnam's population (i.e. about 25 million people) inhabits upland areas, but as noted above, the majority of people in some upland areas are poor and often short of food. Average rice yields in upland areas are 1.9 tonnes per hectare, compared to a national average of 3.3 tonnes per hectare (1991 figures from Vu Long *et al*, 1996b). Population density in the uplands is, on average, about 60 inhabitants per km^2 (Warfvinge and Ngo Sy Hoai, 1998), compared to a national average of about 219 per km^2 (Vu Long *et al*, 1996a). Whilst these figures indicate that yield per person is currently relatively high in the uplands, assessment of potential production, and of sustainable carrying capacity of the uplands, is much more complex[3]. Hence any comparison of upland and lowland rice

[2] Vietnam plans to develop a potential of 5,000-7,500 MW from hydropower sources over the 1995-2010 period (Johnson, 1995).

[3] For instance, the assessment of household carrying capacity computed for an upland area in the Philippines in the early nineties used the following variables:
1: period of cultivation
2: period of fallow
3: total agricultural cycle = (1) + (2)

production needs to take into account many other variables upon which such production is dependent. In addition widespread poverty in the uplands means that the relative purchasing power of upland inhabitants is significantly less than that of lowlanders, further impeding the former's ability to secure their subsistence needs.

Upland and midland areas constitute three quarters of Vietnam's land area. It is estimated that 85 per cent of these areas are very poorly developed, with poor infrastructure, poor health care, relatively low levels of literacy and education[4], and poor information on improved technologies. About 1700 communes are located in these poorest areas. However, most of the Kinh settlers are to be found in the better developed, remaining 15 per cent of upland and midland areas (Vu Biet Linh, 1998. Personal communication).

3.1 Classification of forest asset

Vietnam's remaining forest resources are mainly found in the midlands and uplands. However, there is little consensus regarding the current status of the forest asset, the confusion starting with the classification of forest land as illustrated in the box below.

Box 1: Vietnam's forest resources: confusion of classification

Currently, land is classified by three different agencies, each of which uses a system to classify forest land.

(i) GDLA classification: the General Department for Land Administration is responsible for land classification, land cadastre and overall land use planning at the national level. According to their classification[5] land use is as follows:

	Million ha	Percentage
Agricultural land	6.9	21
Forest Land	9.3	28
Land in Special Uses	0.9	<1
Residential area	0.9	<1
Unused land	14.9	45
Total area of the country	33.0	100

GDLA estimates that, of the total unused land, 10.8 million hectares of land has potential for forestry, 3 million hectares are suitable for agriculture and 0.7 million hectares unsuitable for any economic use.

(ii) NIAPP classification: the National Institute for Agricultural Planning and Projection (NIAPP) functions as a central agency for agricultural planning and resources assessment. This

4: land use intensity (in %)= (1)/(3) x 100
5: average cultivated area needed per household (assumption)
6: total agricultural area needed per household: (5) x 100/(4)
7: forested area needed per household (assumption)
8: total area needed per household = (6) + (7)
9: household carrying-capacity per 1,000 ha = 1,000/(8)
This process shows that the carrying capacity for shifting cultivation systems must encompass the need for forest land. This increases the total need for land, but also serves conservation purposes, as it allows rotational agriculture to occur.

[4] In general, literacy levels in Vietnam - including those of many of the ethnic minorities - are significantly higher than in other countries of similar GNP per capita (US$ 250). For instance, the six more numerous ethnic groups have recently been officially reported as having literacy rates over 50 per cent, with an average of 72 per cent (Thi Que *et al*, 1996). These literacy levels, along with other factors such as infant mortality and average life expectancy, are reflected in Vietnam's relatively high ranking in UNDP's Human Development Index.

[5] It is not clear what criteria the GDLA classification is based on.

classification[6] shows more arable and forest land, but does not categorise 'unused' land:

	Million ha	Percentage
Arable land	11.3	34
Forest land	15.2	46
Nature Conservation	3.3	10
Water surfaces	1.2	4
Construction sites and urban areas	2.0	<1
Total area of the country	33.0	100

(iii) FIPI classification: the Forest Inspection and Planning Institute (FIPI) is responsible for the assessment of forestry resources and the preparation of national forest inventories and forest development plans. FIPI defines forest land as land above 25 degrees slope (although it is thought to have also developed a national forest classification system based on timber volume and crown cover). Using this definition:

	million ha	percentage area
total forest land	>19	58
of which covered with forest	9.3	
of which land without forest (commonly called 'bare land)	9.7	29

FIPI categorises all forest land, whether with or without forest cover, as follows:

- *special use forest* (covering about 10 per cent of the area: mostly protected areas such as nature reserves);
- *protection forest* (about 30 per cent of the area: on the most economically important watersheds): this is further sub-divided into 'very important/ critical', 'important/ critical' and 'not so important/ less critical' depending on type of watershed;
- *production forest* (about 60 per cent of the area)

Sources: Warfvinge, 1998; Warfvinge and Ngo Sy Hoai, 1998.

It is to be hoped that, given the merger of the Ministries of Forestry and Agriculture, a unified system of land classification will be developed, and that such a system will recognise the value of trees on many different land types. Until this occurs, the use of different systems is likely to perpetuate confusion (Asian Development Bank, 1996):

- *Different criteria used for classification*: FIPI classifies land according to its perceived potential, or intended use, whilst GDLA and NIAPP use criteria relating to existing land use. Even within one system there are complications in the interpretation of the figures: the GDLA employ both physical and economic criteria in their definition of land use[7].

- *Provision of poor information to planners:* Both the FIPI and GDLA classification systems employ a category of unused land, of which 70.72 per cent is located in hilly or mountainous areas (Nguyen Dinh Bong, 1998) and which is commonly referred to as "bare lands". Because land classification is partly based on its intended use according to government plans, this category of land, representing some 30 per cent of the total area of the country, gives the impression of wasteland that constitutes a significant potential for "regreening". However, it is now increasingly recognised that 85-95 per cent of these "bare lands" are actually used for agricultural and forestry production purposes, in the form of cropped land, fallows, grazing areas and/or secondary forest (Ockerman, 1995). This confusion is likely to cause major conflicts over land issues with the implementation of the latest plan to increase forest cover, the "Five million

[6] It is not clear what criteria the NIAPP classification is based on.
[7] The detailed breakdown of the GDLA classification (not shown here) includes physical criteria such as vegetation cover and economic criteria such as the 'unused land'.

hectare Afforestation National Programme" (see Box 4), as it is mainly based on the intention to afforest the perceived "bare lands".

- *Lack of feasibility:* In practice it is often difficult to distinguish special use from protection forest as well as the different types of watersheds. This often leads to inaccuracies, need for rechecking, cancellation of allocation contracts, etc.

- *Classification systems are not appropriate for actual land use:* Areas currently used for shifting cultivation are often shown on maps as bare land or as forest land, when they are more accurately a form of agroforestry. This leads to unclear lines of responsibility regarding shifting cultivation areas: agricultural planners claim no responsibility for such areas as they claim it is forest land.

- *Conflicting signals given to policymakers*: Depending on the classification system used, the process of allocation of forest land, which has reached some 7-8 million hectares to date, can be seen as making good progress (if using the GDLA classification) or not (if using the FIPI or NIAPP classifications). Clearly the choice of classification system can favour or be detrimental to different actors - those charged with meeting particular afforestation targets, or those responsible for implementing allocation of land, for example.

3.2 Quantification of the forest asset

In spite of these conflicting systems of classification, the figures that tend to be quoted are those produced by FIPI (for example in the planning of the new Five million hectare afforestation programme (see box 4), and in reports to UNDP for the Global Programme on Forests. Hence whether or not it is an accurate reflection of reality, a generally accepted figure for natural forest cover in Vietnam is that is has declined from 43 per cent of the land area in 1943 to 26 per cent in 1993 (Warfvinge, 1998). However, following a serious escalation in the loss of natural forest and hence total forest cover in the 1980s, official figures suggest an actual increase in overall forest cover from 1990 to 1995, with the loss of natural forest being offset mainly by an increase in plantation area but also by natural regeneration on the "bare" land. Latest estimates account for 110,000 hectares of annual forest loss against 150,000 hectares planted per year, with little information on the contribution of natural regeneration and other factors affecting forest area[8] (Bhargava, 1998). These other factors, of unknown relative significance, include the allocation of land and a reduction in the expansion of agricultural land due to national self-sufficiency precluding the need for local self-sufficiency in food production.

According to MARD (cited in Con, 1998), out of 6.5 million hectares classified for watershed management, only 3.1 million are under actual forest cover. This would suggest an average forest cover of less than 50 per cent in the mountainous areas. Poffenberger and Nguyen Huy Phon (in Poffenberger, 1998) estimate that currently most provinces in the mountainous north have between 10 and 25 per cent of the area under forest (compared to between 50 and 95 per cent estimated in 1943).

[8] However, these figures, and more generally statistics about activities in rural areas, should be considered with caution, as their reliability is often questionable due to lack of means and incentives to carry out accurate data gathering.

Forest quality has also been severely depleted. Most natural forests have been heavily exploited and produce less wood, particularly of valuable species, than they could if restocked. Only about 0.5 million hectares are classified as "rich", with more than 100m^3 of stemwood per hectare; 1.7 million hectares have "medium" stocking, whilst 2.8 million hectares are "poor" with stemwood volumes below 50m^3 per hectare. The average volume of standing stem wood is 63 m^3 per hectare, or 7.5 m^3 per capita, and the mean annual increment is of 1 m^3/ha/annum (Bhargava, 1998).

3.3 Causes of forest loss and policy response

Various claims have been made for the *causes* of forest loss, as illustrated in Box 2, although most would agree that a combination of factors, both direct and underlying, is responsible. However there appears to be little consensus (perhaps given little monitoring or research) as to the principal cause(s), or the relative contribution of each factor. Impressions of which factors are most to "blame" for forest loss have significant impacts on the formulation of policies designed to reverse forest loss. Whatever the actual causes, ultimately the perceptions of decision-makers regarding the reasons for forest loss that determine how future policy is developed.

Box 2: The causes of forest loss in Vietnam: claims and contradictions

Claims for the causes of forest loss include the following (italics added):

- "Three quarters of the detrimental deforestation practices can be attributed to the *populations that have been resettled* in [New Economic Zone] areas." Nguyen Van Thang (in Buffett, 1997).
- "Whilst war, policy changes, economic development, and the introduction of new technologies have all been linked to the steady decline of Vietnam's natural forests, *population expansion* is arguably the fundamental, underlying cause of deforestation." Poffenberger and Nguyen Huy Phon in Poffenberger (1998). However as pointed out by Boyce (1990, in Buffett, 1997) "to identify population as the root of the problem is to mistake a symptom for the cause".
- A feasibility study prepared for the Asian Development Bank starts its report with the statement: "forests in Vietnam are being depleted at a rapid rate due to *logging and shifting cultivation*" (Asian Development Bank, 1996).
- The *direct and indirect effects of the war* are also blamed for forest loss: in addition to the effects of war (bombing and chemicals), extensive logging took place in some upland regions, to generate timber revenues to support the war. Commercial timber production continued to dominate forest policy through the 1980s and the country tried to resurrect its economy after the war (Poffenberger *et al*, 1997).
- UNDP (n.d., in Buffett, 1997) estimates that of an annual loss of 200,000 hectares of forest, 50 per cent is lost to fuelwood and logging, 25 per cent to clearance for agricultural land, and 25 per cent to forest fires.
- The Forest Science Institute of Vietnam estimates that the causes of forest loss are fivefold: excessive logging, shifting cultivation, land reclamation (for example for coffee plantations), agent orange during the war (contributing to the loss of 2 million hectares of forest) and forest fires.
- Other variables such as tenurial systems, the "opening" effect of roads, access to technology such as chainsaws, the rise of cash-cropping, and government policies on taxation, subsidies, etc. are also frequently discussed (Swartzendruber, 1994).

Most official documents do emphasise the roles of population growth and destructive patterns of slash and burn, although Swartzendruber (1994) quotes the Rainforest Action Network (1992) and others who suggest that the focus on shifting cultivation may be nothing more than an effort to distract attention from the financial and political forces responsible for environmental degradation through commercial logging for export, and places the blame on government agencies who allocate access to concessions.

Significant factors contributing to forest loss appear to include agricultural expansion, logging, shifting cultivation, and the effects of the war, whilst underlying factors which

drive these activities include population growth, the spread of the market economy, and the demand for agricultural land (Swartzendruber, 1994). These factors are considered in more detail below.

- *Agricultural expansion* associated with population increase, which in turn stems from both increase in native upland population and the resettlement of Kinh people (Bhargava, 1998). This may have been a more significant factor prior to the achievement of national self-sufficiency in food, when each province was required to produce enough food for its people. However in some areas forest cover is even about as high as it was several decades ago, despite different trends in deforestation and reforestation in the intervening period, and despite a large population increase. The maintenance of forest cover appears to be due to intensified food production in the lowlands and the cessation of co-operative farming (van der Poel, 1998. Personal communication), amongst other factors such as the possible intensification of land use in the uplands. Assessment of the expansion of agricultural land, and its contribution to forest loss, is difficult due to the differing systems of classification as mentioned above; for example in many cases land classified as bare land is already used for some form of agriculture.

- *Logging* includes both commercial logging and illegal felling for meeting rural needs for firewood and timber, as well as for export. Following much higher levels of logging in the 1980s, currently logging of 600,000m^3 of timber per year is permitted in natural forests and the aim is to reduce that amount by half over the next two to three years (Warfvinge, 1998) (but see also *Restrictions on extraction from forests*, below). However, substantially higher estimated removals of logs for industrial purposes indicates significant illegal logging (Warfvinge, 1998) - exploitation possibly being enhanced by the impending "closure" of forests, as well as in response to the demand both in the domestic market and in neighbouring countries[9]. In 1993 and 1994, the Government of Vietnam reported 70,000 cases of illegal cutting and trade. Due to these illegal activities, cases of suspected tax evasion totalled US$ 6 million in 1993, almost as much as the total amount in taxes collected in the forestry sector (Sikor, 1998). Other sources have reported a fourfold higher figure than official ones for illegal exports to China in 1993 (WFP, 1994). Illegal activities are thought to involve several players, including farmers, middlemen/ transporters, State Forest Enterprises, local forestry services, and even the Army.

- *Direct and indirect effects of war*. About 4.6 million hectares of forest were exposed to spraying with defoliants during the war, of which 1.8 million hectares were completely destroyed and the remaining seriously damaged (Bhargava, 1998). In addition, forest resources provided vital raw materials during the war and to support post-war reconstruction.

- *Shifting cultivation* was long assumed to play a major role in the loss of upland forests. Changing perceptions of shifting cultivation and its impact on upland forests are summarised in Box 3.

[9] The two Chinese Provinces bordering Vietnam (Yunnan and Guangxi), with a total population of 120 million people, are expected to constitute nearly insatiable market outlets.

Box 3: Shifting cultivation in Vietnam: should it be blamed for forest loss?

Shifting cultivation, and by implication the ethnic minorities who practise it, is frequently blamed for forest loss in Vietnam's uplands. Until recently, all types of shifting cultivation were perceived to be the same, and all were perceived to be destructive. However, recent research has illustrated the great diversity of systems of land management described as shifting cultivation, and concluded that under certain conditions, some of these systems can be sustainable (e.g. Do Dinh Sam, 1994).

Just as there is tremendous ethnic diversity in the uplands, there is great variation in land use. Most of the 52 ethnic minority groups residing in Vietnam's uplands utilise a variety of shifting cultivation systems. Bostroem and Veer (n.d.) found that "the full range of situations in shifting cultivation, from forest fallow to multiple cropping, as sketched by Raintree and Warner (1986), in response to variations in populations densities ranging from less than 5 persons/ km^2 to over 150, exists in the Vietnamese highlands".

Summarising papers from a symposium on Montane Mainland South East Asia, Rerkasem *et al* (1996) found that "it was abundantly clear... that the stereotype of upland farmers as nomadic cultivators is invalid. Many ethnic minorities living in upland villages in Vietnam (and Yunnan) employ a stable, composite system of agricultural production that combines irrigated wet rice in terrace fields with shifting cultivation on sloping hillside plots. The agricultural system known as 'shifting cultivation' or 'swidden' was shown to be complex and diverse, reflecting adaptation to the varied social, economic, and environmental conditions found in upland communities. Although commonly recognised by one widely used land-clearing technique, 'slash and burn', shifting cultivation is not in fact a fixed package of technology but rather a complex mix of techniques that may be altered over time in response to changing circumstances. Thus, upland agricultural systems incorporate various aspects common to shifting cultivation.... Such systems are practised by different groups in different upland areas with varying degrees of success, both economically and environmentally."

Menzies (1995) notes that whilst field research has led to a fresh appreciation of the complexity of shifting cultivation, significant time, energy and other resources are still devoted to a search for solutions to the "problem" or "issue" of shifting cultivation. It appears that the long-held view that shifting cultivation is practised by "backward" ethnic minorities and is a "primitive" form of land use still persists to some degree (but see Box 4). The failure to acknowledge shifting cultivation as a legitimate form of land use is perpetuated by systems of assessment which categorise land where shifting cultivation is practised as either forest land or bare land (Asian Development Bank, 1996) - when it is more accurately a form of agroforestry.

However, recently Vietnamese policymakers have begun to acknowledge shifting cultivation to be a popular system of upland land use. In a letter to the Government, the former Prime Minister, Vo Van Kiet stated that shifting cultivation is now recognised as a type of land use in upland areas (Do Dinh Sam, 1998. Personal communication).

Despite this apparent change in thinking at the highest levels of Government, MARD maintains the Department for Resettlement and Development of New Economic Zones (formerly the Department for Fixed Cultivation and Sedentarisation) which, as part of its mandate, continues to promote fixed cultivation under a policy formulated in 1968. It appears that there is a persistent belief in the superiority of intensive fixed cultivation - although the Department for Resettlement and Development of New Economic Zones does acknowledge the diversity of land uses described by shifting cultivation (Ma Chung Tho, 1998. Personal communication).

Whilst some continue to blame mainly shifting cultivation for deforestation, and others are less condemning, recent research suggest that shifting cultivation may lead to less forest loss than is generally assumed. For example Do Dinh Sam (1994) found that about 30 per cent of deforestation in the north west region could be attributed to shifting cultivation, substantially less that what is sometimes assumed (in this case the Ministry of Forestry estimated that 50 per cent of forest loss was due to shifting cultivation [Vietnam News, June 1998])[10].

Do Dinh Sam (1994) also found that, prior to recent migration, the forest cover in the Central Highlands was about 60 per cent, despite shifting cultivation having been practised there for centuries (but presumably at low population densities).

[10] Sam calculated these figures by assessing the increase in area under shifting cultivation as a percentage of area of forest lost. Further details are given in Sam (1994).

In summary, shifting cultivation (or more properly, the degradation of some systems of shifting cultivation) probably is to "blame" for forest loss to some extent, as various pressures on those practising it force them to adopt less sustainable land use practices - unless sufficient time and appropriate conditions enable them to adapt (Bass and Morrison, 1994). However, the status of shifting cultivation in upland environments has been obscured by somewhat negative perceptions of those who practise it. Recent statements by policymakers acknowledging shifting cultivation as a legitimate form of land use are welcome, and now need to be backed by research on where, and under what conditions, it can be an appropriate basis for improvement of upland land management.

The Government of Vietnam aims to reduce forest losses and increase forest cover by several means:

- *Restriction on extraction from forests*: There is already a logging ban in the natural forest in 18 provinces and, as noted above, there are increasing restrictions on logging in all natural forests. Apparently the government now plans to close all natural forest for exploitation by the year 2000 for 15 years (Sikor and Apel, 1998). The average wood volume is less than 40 m^3/ha in most provinces and will take about 10 years to be rehabilitated (Nguyen Van Dang, 1998). Largely as a result of such restrictions on logging, volumes of timber extracted for industrial purposes dropped by about 40 per cent from 1990 to 1995. The Government of Vietnam intends to ban logging in natural forests completely, but is unable to do so until plantations have matured - even then, the limited species composition does not reflect the diversity and economic value of native timbers.

  However, these restrictions leave the Vietnamese with a key challenge: to meet the increasing demand for wood products, be it in the form of roundwood or fuelwood. The annual rate of wood consumption is assumed to grow by 1.05 per cent for logs and 5 per cent in the case of sawnwood (Bhargava, 1998), reaching an overall rate of 9.3 million m^3 by the year 2005 and 15.5 million m^3 by 2010 (Con, 1998). Against this increasing demand, the exploitable volume is currently estimated at 1.3 million m^3 per year. In other words there is a huge gap between demand and supply of roundwood, and the figures are of a similar order of magnitude for fuelwood. Even given this gap in domestic supply, added to the significant regional market, both of which encourage widespread illegal logging, the Government is imposing increasing restrictions on logging as a means to preserve remaining forest, whilst focusing on plantations as a source of supply.

- A significant *plantation programme*: the Vietnamese Government has been implementing a huge plantation programme since 1976. The total area planted amounted to 1,050,000 hectares in 1995, and the current rate of planting is about 150,000 ha annually. The estimated cost of plantation establishment is 3 million Dong/ha (Van Dang, 1998). However, performance of plantations is usually poor, with low survival rates and a mean annual increment of less than 3 m^3/ha/annum, which compares very poorly with the minimum standard yield of 15 to 20 m^3/ha/annum (Bhargava, 1998). Plantations are generally much poorer than the natural forest they have replaced (Sikor and Apel, 1998).

- *Natural regeneration*: several observers advocate the use of natural regeneration - assisted or not - as opposed to a common view among Vietnamese decision makers that forest must be planted. There is indeed a great potential for natural regeneration in some areas like Song Da Province. This would guarantee supply of better quality

timber (although of different species), in comparison to the limited range of fast growing trees used in plantations. Native timber species also command a much higher price than exotic fast-growing species[11]. Natural regeneration is also significantly cheaper than plantations[12]. The key reason for the resistance manifested by Vietnamese foresters is a financial one: plantations and forest protection involve an 8 per cent management fee for projects supported by programme 327/556, which is a major source of funding for local forestry services and ailing State Forest Enterprises (SFEs) that increasingly face shortages of raw material to log.

- *Controls on shifting cultivation*: despite significant changes in attitudes towards shifting cultivation as a legitimate form of land use, efforts to implement the policy to encourage fixed cultivation and sedentarisation continue through the Department for Resettlement and Development of New Economic Zones. Out of 1500 communes, 500 follow the Department's programme for alternative agricultural systems, but 1000 communes continue with shifting cultivation (Trinh Ba Bao, 1998. Personal communication). Continuing frustration in efforts to sedentarise farmers is forcing national policymakers to confront the need to accommodate local agricultural strategies, and their individual market, capital and technological requirements, rather than to entirely reject shifting cultivation systems (Swartzendruber, 1994).

- *Allocation of land to households*: this is intended to have the dual effect of reducing agricultural expansion through delineation and allocation of agricultural land (which has been completed for lowland agricultural land) and increasing forest cover through increased planting and protection of allocated forest land. Land allocation is being implemented with the objective that "all land has a user". The provisions for such decentralisation of responsibility for land management to farmer level are described in section 4.

The latest initiative to increase forest cover is *the Five Million hectare afforestation programme*. This includes policies to allocate forest land to farmers and aims to afforest much of the so-called bare land. This objectives and approach of this initiative are outlined in Box 4; problems in its implementation are discussed later in this paper (for *example see section 7*).

Box 4: The Five Million Hectares Afforestation National Programme, 1998-2010

MARD has recently been asked by the Government to prepare a national programme aimed at the reforestation of 5 million hectares between 1998 and 2010, thereby increasing national forest cover from 28 per cent to 43 per cent. This major programme encompasses 2 million hectares of protection and special use forest (of which 1 million hectares will be new plantations and 1 million hectares, natural regeneration and supplementary planting) and 3 million hectares of production forest (comprising 2 million hectares of industrial plantation and 1 million hectares of industrial and fruit crops). (Do Dinh Sam, 1998. Personal communication).

The programme has three objectives (MARD, 1998):

- to increase the forest coverage on protection land for both environmental protection and goods

[11] A WFP study on wood markets (1994) mentions tenfold differences in prices between indigenous species (e.g. rosewood and ironwoods) and exotic species such as Eucalyptus, Acacia and Mangletia.

[12] Bhargava (1998) cites a study carried out in 1987 in Côte d'Ivoire, which compared the relative costs natural forest management - which includes assisted natural regeneration - and plantation. For every cubic meter produced, the figure amounted to US$ 5.6 for the former and US$ 7.4 for the latter, thus equivalent to a 25 per cent cost reduction in case of natural forest management.

production purposes;

- to create a source of raw material for forest industries, in order to meet domestic demand and high-value export products;
- to assist in the creation of jobs for local people, in particular in upland areas, thereby contributing to the national programme of hunger eradication and poverty reduction.

The Programme intends to achieve these objectives using a three-pronged approach (Warfvinge and Ngo Sy Hoai, 1998):

- Rely on rural population as the driving force to re-create the forest asset;
- Use land allocation programmes to secure active farmer participation;
- Create incentive packages encouraging production units to invest in forestry (forest production combined with conversion of forest products).

The total budget for this programme amounts to 31 billion Dong[13], of which 13 billion will come from government budget and 18 billion from loans (MARD, 1998).

Source: Warfvinge and Hoai, 1998 and MARD, 1998

3.4 Human resources in the uplands

In the 1960s and 1970s particularly, the New Economic Zone policy led to the *resettlement* of up to 4.8 million Kinh Vietnamese from the lowlands into midland and upland areas (as mentioned earlier in section 3, most of these Kinh settlers are thought to have moved to the better developed midland and upland areas). This policy was developed to provide the labour force to exploit upland natural resources (mostly through State Forest Enterprises - SFEs) in areas that were still perceived as "under-utilised" and to encourage "national integration" and bring the ethnic minorities, traditional inhabitants of the uplands, into mainstream society[14].

Box 5: Perceptions of upland inhabitants

Public perceptions of inhabitants of the uplands amongst the Kinh (majority lowlanders) often tend to describe them as "backward" and "ignorant", attitudes which are difficult for many Western researchers to deal with. The difference in attitudes can be partly explained by differences in cultural, political and philosophical traditions, as described by Rambo (in Rambo *et al*, 1995):

"Many Western scholars but few Vietnamese belong to a scientific tradition that is built on the philosophy of cultural relativism, the view that there is no privileged position from which to judge the merit of different cultures. It is thus inappropriate to judge the practices of one culture to be inferior to that of another. Most Vietnamese, on the other hand, reflect a different tradition, that of progressive cultural evolution as incorporated in Marxist thought. From this perspective, cultures can be evaluated as being "backward" or "progressive" according to the extent to which they conform to certain assumptions about relations between the means of production, the social relations of production, and the ideological superstructure. .... we should recognise the existence of these different assumptions, but we will be unrealistic if we expect to fully resolve them."

One outcome of the prevailing attitude in Vietnam is that the indigenous knowledge of upland farmers is rarely acknowledged and respected. This is discussed further in Box 14.

[13] Using the current exchange rate of US$1=12,250 Dong, this figures amounts to some US$2.5 million (around US$0.5 per hectare).

[14] Similar attempts to integrate upland inhabitants into mainstream society have been made in Thailand and, to some extent, in Lao PDR (Bass and Morrison, 1994).

Whilst government-sponsored movement of people has since been de-emphasised, migration is currently widespread. Large numbers of people are reported to have migrated from the northernmost provinces to more fertile areas in the Central Highlands and the Mekong delta in the south east: estimates of those who have migrated in recent years range from 400,000 (Bui Quang Toan, 1998. Personal communication) to about 212,000 households, equivalent to more than one million people (Viet Nam News, 10 June 1998). Many of those who relocate to the Central Highlands, which until recently had relatively high forest cover, do so to practise shifting cultivation.

Such resettlement, both official and unofficial, added to significant growth of the upland population, has drastically altered the population density in some areas and hence the subsistence demands being made on the land. For example, population in Dac Lac province has risen from 170,000 in 1975 to 1.6 million now: food has to be transported from the Mekong delta for sale (using income from coffee). Hence the dynamism of upland land use continues - through changing factors affecting the uplands as well as through movement of its inhabitants.

3.5 *Institutions for upland development*

3.5.1 *State institutions*

The People's Council has been vested with decision-making power over the management and use of the land, forests and other natural resources in their localities. The People's Committees are the State administrative bodies at local level (province, district and commune levels) and, as executive offices of the People's Council, they control the implementation of the Constitution, the laws and the written decisions of the State agencies at higher levels. The People's Committees at each level of local government enjoy a high degree of autonomy and executive powers and oversee the work of the local branches of the line ministries which are generally hierarchically linked to the respective People's Committee and not to the higher levels of their ministry (Christ and Kloss, 1998). Essentially the People's Council and Committees form a parallel institutional structure to that of the line ministries but with power to oversee and control the activities of those ministries.

Until the early 1990s, the Ministry of Forestry supervised forest operations and provided technical expertise. It carried out five main national programmes to support forestry operations: the Forest Protection Programme, the Fixed Cultivation and Sedentarisation Programme, the National Afforestation Programme, the Forest Management and Forest Industries Programme, and the Human Resources Development Programme, including research and extension (Sikor in Poffenberger, 1998).

In 1995-6, the Ministry of Agriculture and Rural Development (MARD) was created, a result of the merging of the Ministries of Forestry, Agriculture, Food Industries and Water Resources. It has overall responsibility for natural resources. Within and separately from MARD there are numerous government departments whose mandate is wholly or partially concerned with natural resource management and poverty alleviation in the uplands. Within MARD these include the Department of Agricultural and Rural Development Policy, the Forest Science Institute of Vietnam, the Forest Protection Department, the Department for Resettlement and Development of New Economic Zones, the Land Cadastral

Department, and the Department for Agriculture and Forestry Extension, the Forest Inventory and Planning Institute.

Another key arm of state responsibility for forestry is exercised through the State Forest Enterprises (SFEs), which are currently undergoing a difficult transition (see Box 6).

Box 6: State Forest Enterprises: changing roles

Since independence in the north in 1954, and liberation of the south in 1976, hundreds of publicly operated state forest enterprises (SFEs) operated logging and milling operations in upland and midland watersheds (Poffenberger, 1998) (they are fairly evenly distributed between upland and midland areas: Vu Long, 1998. Personal communication). For a long time, SFEs were staffed by recruits from the lowlands, few of whom knew the local situation well. Such recruitment ceased in the early 1990s (Vu Long *et al*, 1996b). Recently, the tendency has been for SFEs to enter into contracts with local farmers through Decree No 02/CP - see Box 10, section 4.2. Currently there are about 415 SFEs, who were, until recently, the official managers of 4.7 million hectares of forest land (including 2.8 million hectares of natural forest). As forest resources became depleted or inaccessible, reforestation became an attractive alternative and many enterprises became forest plantation units - but with their traditional source of income removed, were dependent on state funds.

Decision 90/TTG, taken by the Prime Minister in 1994, essentially recognised the partial failure of SFEs as viable units. SFEs were to be reorganised: those that were profitable or potentially profitable, or occupied an "important position for the economy of the people" would remain and be expected to survive in the market system, whilst unprofitable enterprises were subject to revision and possible closure. Thus SFEs were asked to survive in a market economy, or dissolve. However, government support to the SFEs was substantially increased through Programme 327/ 556, following Decision 327 in 1992 and Decision 556 in 1995. Most of the forestry-oriented projects within Programme 327 were assigned to SFEs, which were duly paid for administering the projects. (In fact Programme 327 has been the major source of income for many SFEs since 1992). This may be seen as artificially supporting (or at least postponing dissolution of) ailing enterprises, even after the earlier decision to potentially dissolve those found to be unprofitable. At the same time the SFEs found themselves in the contradictory position of needing to be profitable - yet subject to increasing restrictions on logging and dwindling forest resources - and also being asked to help protect forest resources.

In January 1997, Circular 01/BKH/ZN from the Ministry of Planning and Investment was issued, specifying that state-owned enterprises should fit into one of three categories:

- commercially successful enterprises (to be converted into share companies)
- management boards - for example those responsible for protection land and nature reserves - to be state-funded and non-profit making
- public service enterprises - to be largely economic and self-financing, but with up to 30 per cent of operating costs state-funded for "public services".

The draft implementation plan for the Five million hectare afforestation programme (dated 1998) proposes that:

- about 40 per cent of SFEs become public business units and also be responsible for extension to local people (these are independent of the state and would more accurately be termed private business)
- about 30 per cent of SFEs become watershed forest management boards, responsible for managing and organising afforestation activities under Programme 327
- whilst 105 SFEs are maintained as state business units, carrying out harvesting in the long term.

Despite these stipulations and changing roles, SFEs continue to play an important role in management of forest land, since forest land can only be contracted to households if the SFE relinquishes its claim on the land. *About three quarters of the forest land allocated to the end of 1996 was retained by SFEs* (Vu Long, 1998. Personal communication).

In line with the move towards responsibility at the household level, SFEs are being required to take on a social or extension role (see section 4 on allocation), further diluting their ability to maximise profit. However there is potential for the SFEs to provide valuable service and support functions to households. In

addition some SFEs have successfully diversified into non-forestry activities such as coffee production and brick-making. But if SFEs cannot adequately develop their new support roles, or diversify successfully, the *raison d'être* and future sustainability of the enterprise system is thrown into question.

Source: Warfvinge and Hoai, 1998; Christ and Kloss, 1998; Warfvinge, 1998

MARD is reflected at provincial level through a Department of Agriculture and Rural Development. At the district level, the corresponding "divisions" are quite small and are often combined with other technical units (Warfvinge and Ngo Sy Hoai, 1998). The provincial and district Forest Protection Service, functioning under the People's Committee at those levels, is responsible for contracting households to manage forest land (Poffenberger and Nguyen Huy Phon, in Poffenberger 1998). Other state bodies are used for channelling funds (for example the Farmer's Union administers some of the funds available under Programme 327). As the drastic change from state forestry to household forestry continues, the development of new institutional arrangements to support the new forms of forest management is needed. Currently, the level of support given to households depends to some extent on whether, and how, provincial level officers interpret the policy. In some cases it appears that forest officers, not wanting to be held accountable, wait for a new policy to clarify their role; in other cases, forest officers take the initiative to adapt the current policy to their local needs. In either case, poor remuneration of provincial government officers increases the likelihood of corruption (see also section 4.3.1). In 1997, protests in Thai Binh province against alleged embezzlement by local officials reached international news and led to calls for greater accountability of public money - and to prison sentences for some of the protesting farmers.

The responsibilities of some of the other institutions dealing with upland areas are summarised in Box 7.

Box 7: Responsibilities of selected institutions dealing with upland development

- General Department of Land Administration (GDLA) is responsible for land administration, land classification and overall land use planning at the national level. At provincial level it is reflected in Departments of Land Administration.
- Forest Inventory and Planning Institute (FIPI) is responsible for the assessment of forestry resources and the preparation of national forest inventories and forest development plans. It is concerned with land under forests and other land suitable for forestry.
- National Institute for Agricultural Planning and Projection (NIAPP) functions as a central agency for agricultural planning and resources assessment.
- Forest Science Institute of Vietnam is the national institute for forestry research.
- Land Cadastral Department, established recently under MARD, extends from central offices to district level. Its main function to implement the land allocation programme.
- Committee for Ethnic Minorities and Mountainous Areas (CEMMA): created in 1992 and upgraded to ministerial status in 1993. It has with subcommittees at provincial and district level, and is now dealing with the sedentarisation programme (Sikor, in Poffenberger, 1998)
- The Department of Fixed Cultivation and Sedentarisation: established in 1968 with the objective of resettling the upland ethnic minorities in areas where they could be brought under the formal governance systems of the state (Poffenberger and Nguyen Huy Phon in Poffenberger 1998). It appears to continue to implement the 1968 sedentarisation policy, although CEMMA also takes responsibility for this.
- The Mountainous Ethnic Pro. Development Corporation (MEPRODECO) is in charge of implementing pilot projects in 'Centres of development' areas (described in section 3.6).

Despite the creation of MARD there remains apparent overlap of institutional responsibilities and lack of close co-ordination within this plethora of agencies: for example both CEMMA and the Department of Fixed Cultivation and Sedentarisation take

responsibility for implementing the sedentarisation policy[15]. In addition, Christy (1998) notes that "the state forest administration comprises two departments, in addition to the forest enterprises, which are not explicitly co-ordinated except through the policy unit of the Ministry and the assignment of forestry matters to one of the Deputy Ministers. Both the Department of Forest Protection and the Department of Forest Management have powers to direct the activities of forest users and there is no formal mechanism for co-ordination. Real conflict is probably avoided by the fact that only the Department of Forest Protection has a field presence below the provincial level." Differences in institutional capacity probably also determine which agency's actions take precedence. Such conflicts and lack of clarity regarding institutional responsibilities can lead to diffusion of the impacts of policies.

There also appears to be a lack of inter-sectoral linkages with other agencies involved in the management of the uplands. Little or no effort has been made for harmonisation of extra-sectoral policies (such as policies on mining or agriculture), which have significant impacts on policies affecting forests and upland resources (Bhargava, 1998).

There has been a tendency to seek temporary solutions to institutional weaknesses through reorganisation, as against restructuring of forestry institutions to meet the new challenges in forestry (Bhargava, 1998). Persistent problems include lack of investment, and limited capacity to innovate (particularly in terms of encouraging innovation at the local level), as well as poor co-ordination between different levels of the forest administration.

However there is some flexibility within the existing somewhat confusing institutional *structure, as noted by Warfvinge et al (1998). "Since the introduction of a market economy* began in earnest in Vietnam by 1989, the Government has issued a string of decisions, regulations, and guidelines for units in the forestry sector, affecting both state units, private units, co-operative units, and individuals. In what to the outside observer seems to be a typically Vietnamese manner, much is left open in the decisions. In this way, both the technical ministries and local level authorities are given a degree of freedom in interpreting the decisions."

Hence there is considerable allowance for local adaptation of central regulations by local government agencies - but to date, this flexibility seems to be mainly in the hands of civil servants and, as noted above, the *capacity* to innovate may still be lacking. This decentralisation of decision-making does not appear to involve other stakeholders such as farmers. To minimise the chances of poor decisions or abuse of power by local officials, there may be a need for some improvement of institutional capacities at the local level, including the development of locally-derived checks-and-balance mechanisms, and a fairer balance of stakeholders' roles.

At the central level, institutional capacities are temporarily weakened by the demands of donor projects (described in Box 8) - although in the long term such capacities should be enhanced as project staff return to their government posts with broader experience.

[15] It appears that funding from Decree 556 (unlike Decree 327) is limited to watershed areas and hence covers initiatives addressing shifting cultivation areas in watersheds; these are administered by CEMMA. See section 4.2.

Box 8: Influx and influence of foreign involvement

Since the late 1980s, the integration of Vietnam's economy into world markets has entailed an increasing inflow of significant foreign loans and some direct foreign investment into the forestry sector. At present there are a number of major bi- and multilaterally funded projects allied to MARD (e.g. the GTZ Social Forestry Development Project, Asian Development Bank forest sector project, SIDA-funded Mountain Rural Development Programme). However, Warfvinge (1998) notes that while such projects have constituted a strong force for change and development, they have also absorbed a major share of the skilled labour force with professional qualifications and management capacity. Provided such staff return to their government responsibilities (with added experience) the management capacity will not be reduced long-term - although there is also concern that most of the management-level staff in MARD are approaching retirement age. Hopefully some of the donor-funded projects focusing on institutional capacity-building will address the need for creating a pool of future managers.

3.5.2 *Extension services*

Since 1993, a network for extension in agriculture and forestry has been established under the authority of the provincial Department of Agriculture and Rural Development (an "Extension Centre") and the corresponding district units (an "Extension Station"). The basic administrative structure is now in place at provincial and district levels, although at commune, village and hamlet level, the system varies greatly in size and quality and structures are often *ad hoc* (district stations, for example, typically have only five staff) (Warfvinge and Ngo Sy Hoai, 1998; Christoplos, 1997). The extension system built up since 1993 has essentially taken over the duties related to extension shed by the Forest Inspectorate and the SFEs (Warfvinge *et al*, 1998).

Forestry extension, in its current form, is new to the Vietnamese forestry sector, and little is known about how to develop this activity under the present conditions (FAO, 1994). Yet it is required to support a vastly increased number of clients, given the dissolution of co-operatives and the allocation of land to individual farmers. Traditionally, forestry extension was top-down with an emphasis on planting and protection, but giving little attention to the role of forest products in the household economy (Ockerman, 1995). There have been various innovative efforts aimed at stimulating demand for technological support from all levels - *many funded by donors and NGOs - and these are resulting in new forms of* village governance (Christoplos, 1997). Whilst many are aware of the need for a change in attitudes and diversification of strategies, the development of the "new" extension system will take time. In addition to a more complex "demand" agenda, the extension system is required to support the Government's "supply" agenda, through strategic supply of inputs and capital to retain the Government's leading role in directing technological change.

Many (international) projects assume that they will lead to development of "civil society" which will in turn pressure the state to provide services i.e. a stronger demand on the extension services. However, FAO (1994) questions such assumptions, given that "local government, households and traditional institutions in Vietnam are so closely intertwined that the simple dichotomy between state and civil society is insufficient for understanding the context of extension".

Hallam and Janowski (1998) found that a major area of work for many foreign NGOs working in the natural resources sector in Vietnam is the introduction of participatory methodologies in the establishment and operation of the extension services. The

importance of this role was acknowledged by many Vietnamese working in government ministries and universities.

3.5.3 *Civil society and NGOs*

The role of civil society/ NGOs is not strong in Vietnam - virtually all local structures (even informal ones) are intermingled with local governmental authorities. Village management groups, for example, are usually led by village authorities; truly independent civil institutions are largely illegal. There is rarely a clear separation between state and civil society (Christoplos, 1997a).

Most of the NGOs present in Vietnam are foreign NGOs which have arrived within the last 10 to 15 years; the growing interest in Vietnam has meant that more foreign NGOs are becoming established all the time. However there is a certain level of suspicion of NGOs on the part of the government, and foreign NGOs are quite tightly controlled (Hallam and Janowski, 1997).

There are also local organisations known as associations or institutes which class themselves as NGOs, but which have close links with government in that their staff are usually former government employees at universities or ministries, and who tend to follow government policy. There are also organisations like the Women's Union and Youth Groups which are organised through the government network and should perhaps be seen as branches of government (Hallam and Janowski, 1997).

3.5.4 *Private sector*

In Vietnam the term "private sector" is not really used in the area of natural resources management although there are elements of a private sector, however with varying degrees of state involvement. For example, the rice market is largely managed by middlemen who buy from farmers, and who have the freedom to set their own prices, but have contracts with the government. Numerous small businesses have flourished in recent years. In the timber market, the emerging private sector consists of joint ventures and small sawmills, both of which display a high level of activity. These joint ventures also overcome an important constraint affecting state enterprises: that of shortage of foreign exchange. Current assets are contributed by the foreign partner (WFP, 1994).

Christy (1998) notes that the "major obstacles to private involvement in forestry are created by the land and forest legislation. While concerned about the legitimate need to protect land and forest resources and ensure their proper use, both laws create sweeping grounds for revoking the rights that they grant. Simply narrowing these provisions, using greater precision in defining the worst offences, would go a long way toward reassuring foresters while protecting social interests" - and might also encourage private sector investment.

3.6 *Markets*

Despite its ongoing transition to a market economy, Vietnam's internal market system is not yet well developed in upland areas. Even the internal rice market is based on poor conveyance of information: a recent study found that farmers are not aware of prices beyond a 200 km radius. The rice market is partly operated by "private" middlemen, who

are contracted by the government but still have some flexibility in the prices they pay the producers (Jyoti Rajkundlia, 1998. Personal communication).

Most areas have access to the market but lack resources to develop market products, to process those products where applicable, and are subject to poor access and transport facilities. It is thought that lack of market information, poor services, unfavourable prices and lack of sufficient land to make production of market commodities worthwhile, may contribute to the slow rate of diversification of farm products observed in remote areas (Ockerman, 1995). In addition the transition to a more diversified market economy has not been encouraged by the tendency for government "campaigns" to focus on one crop, creating a significant marketing risk for farmers.

For forest products, many trade barriers remain - according to various regulations the farmer may have to go through 10 to 12 steps to cut and sell a tree. Timber marketing is still handled by the government, largely through SFEs. Despite the acute shortage of raw material, acknowledged by all sectors of the wood industry, producer prices have remained low, especially in comparison to consumer prices. This discrepancy shows that prices are not determined in an open market system, and a large part of the consumer price goes to taxes, fees and state-middlemen (WFP, 1994).

Farmers have more freedom to trade non-timber forest products directly. In Vietnam such products are of importance in terms of employment, food, fodder and income to local people, and for both internal and export trade. Industrial utilisation of a number of abundant non-timber forest products has evolved to produce, for example, essential oils, turpentine, shellac and medicinal plants (the latter finding an important export market in China). Export of these products reached US$ 40 million in the five years from 1986 to 1990 (Bhargava, 1998).

However, two recent studies on marketing of produce from fruit trees (Lane and Dahlberg, cited in WFP, 1994) indicate that increasing fruit production in northern Vietnam is probably premature and fraught with risks - although the potential for increased fruit production is often cited as one route to improved livelihoods in the uplands. This is likely to do with the perishable nature of such products and the risk of significant losses in the current absence of local processing operations and market outlets.

Country-wide constraints on marketing may be exacerbated by local controls. Given the decentralised administration of Vietnam, in which provincial and local People's Committees have administrative and enforcement responsibilities under most legislation, there is some flexibility and inconsistency in the application of laws. The rural population is discouraged from marketing produce by the local permit requirements and locally-imposed charges - hence the excessive number of steps required in marketing timber, as described above.

To date, government initiatives to improve the market system include the relaxing of controls and restrictions on inter-province transport; a policy (but insufficient funds and weak implementation) to improve infrastructure; and the establishment of "centres of development" in the more remote parts of mountainous areas[16]. These centres are to have government-sponsored roads (between communes but not to villages), market facilities,

[16] Centres of development are to be in the more remote areas where Kinh have tended not to settle (see section 3.4).

services and extension. There are plans for 500 such centres to be developed between 1996 and 2005; so far 100 are under development. The implementation budget averages US$ 500,000 per centre, with more than 50 per cent allocated to infrastructure (Vu Biet Linh, 1998. Personal communication).

Whilst some in the government openly acknowledge that the market is heavily distorted and want to remove the many controls, they are also cautious about liberalising the market to the extent that over-exploitation of resources takes place. How can the market be liberalised yet resources adequately protected?

4 The transition to 'people's forestry'

Policy responses to forest loss, summarised in section 3, focus mainly on physical targets related to forest area and use. Apart from a broad objective in the Five Million Hectare Afforestation National Programme, there appears to be little acknowledgement of the links between environmental degradation and rural livelihoods. The possible exception to this is the land allocation policy, which relates management of the forest and agricultural land asset directly to local people and, in theory at least, to their subsistence needs. The process of allocation and contracting of forest land is sometimes given the colloquial description of "people's forestry". In this section we summarise the transition from state-run forestry to household responsibility for forest land, through the development of 'people's forestry'.

In this, and the following sections, we identify some issues for further research: these are signified by the arrow symbol (⇨).

4.1 Goals of land use planning and land allocation

Forestry in Vietnam is undergoing a period of great change, from control of all forest by the state towards "people's forestry", with forest land increasingly managed by local people. This transfer of management authority is being pushed for the "bare" land without forest cover as well as forested land. In essence, the Government indicates its belief that farmers are the best protectors of forests and users of land. This is partly based on the allocation of agricultural land in the lowland areas, which is now complete, has led to substantially increased yields and is generally considered to be broadly successful. However, variables affecting forest land, mostly in the uplands and midlands, are clearly quite different to those in lowland delta areas, and much adaptation of the provisions intended to enable "people's forestry" is still necessary.

Management authority is being transferred through allocation of land and provision of contracts to protect forest. The declared purpose of land use planning and land allocation in Vietnam is to improve the management and protection of the land resources through a sense of ownership and responsibility (Christ and Kloss, 1998). It is implied that this leads to various positive impacts as shown in Box 9:

Box 9: Implied objectives and potential impacts of land use planning and land allocation

On the farmer's side:
- improved land use practices
- mobilisation of available resources (capital and labour)
- the willingness to protect sensitive areas
- higher productivity of productive areas
- improved income opportunities

And on the State's side:
- protection of the national land resources for long-term usage
- sustainable land use with improved land productivity
- improved living conditions in mountainous areas
- reduced government involvement in land management
- concentration of government activities on legal and regulatory framework, land administration, protection and extension services.

Source: Christ and Kloss, 1998.

Provision of this "sense of ownership and responsibility" was somewhat diluted by early attempts to introduce land use planning and land allocation: initially the government specified how allocated land should be used, thus allocation could be seen as another vehicle to control the use of land - there was little dialogue with the actual users of the land. In addition, allocation requires that recipients of allocated land are sedentary, and continue to use the land as specified.

However, the systems of land use planning and land allocation have evolved and been adapted following numerous experiments and assessments. Some of the lessons learnt, and the ways in which the systems have been improved, are summarised later in this section.

4.2 Provisions for land allocation and responsibility contracting

There are basically two systems for devolving responsibility for management of forest land:
- direct allocation of forest land (much of which is "bare" land) to households: the land tenure certificates (LTCs) issued are commonly known as "red books". (There are several other types of certificate, white, yellow and green, signifying various interim stages in allocation, but only red books allow the land to be used as collateral for bank loans). The LTCs are generally issued for a 50 year period.
- contracting of responsibility for management and protection of land under forest cover from state forest enterprises to collectives and households, on a (renewable) yearly basis.

The Department of Forest Protection is responsible for forest land allocation, while the GDLA is in charge of agricultural land allocation. Further details on the provisions of decrees concerning forest land allocation are given in the box below.

Box 10: Provisions for land allocation

Provisions for forest land allocation are succinctly summarised by Christ and Kloss (1998), and reproduced here:

"Decree 02/CP, issued in January 1994, provides detailed guidance for the allocation of forest land and forests in accordance with the Forest Protection and Development Act (1991) and the Land Law (1993). It stipulates that the state allocates forest land to organisations, households and individuals for stable and long-term use according to specific conditions for each category of forest. Forest land is defined as any land with (a) natural forest on it (b) forest planted on it, or (c) land without forest on it planned for afforestation, forest nurseries and protective vegetation cover. Forest land is allocated and contracted on the basis of land use plans and applications for land by the local population. While forest land users basically have the same rights and obligations as other land users, the decree stipulates some important exceptions: special-use forests are not allocated but are contracted for protection and plantation of forests only. Users cannot therefore obtain a land use (tenure) certificate. The same applies to protection forests in very critical and critical watershed areas, while protection forests in less critical areas and production forests can be allocated to users who receive a land use certificate.

"Decree 02/CP specifies in detail the requirements for application for forest land allocation and for issuance of land tenure certificates. Responsibility for issuance of certificates lies with the local Department of Land Management, whilst the responsible body for forest management is required to cooperate in implementing the necessary formalities.

"The contracting of forests for protection, regeneration and plantation is further regulated by Decision 202/TTG of the Prime Minister, dated May 1994 and in Decree 01/CP by the Government, dated January 1995 with regard to land over which a state business holds a land use certificate. These regulations give state organisations the right to contract the land for which they hold a land use certificate to households and other organisations for protection, regeneration and planting. The holders of the contract are entitled to receive payments[17] but do not receive full land use rights. Decree 01 further prohibits the contract holder from building permanent structures on the land and from transferring the contract to another user in case he cannot fulfil the obligations set in the contract. The contract holder thus has very limited user rights in comparison to the rights granted to users of bare hills and agricultural lands. (However if farmers plant trees, they receive free inputs and a substantial cash payment for their contribution, but their share in the final product remains unclear [Sikor and Apel, 1998]).

"In practice, most natural forests are assigned with protection contracts."

Decree 02/CP and Regulation 202/TTG are both financially supported by Programme 327/556, which has an annual budget worth some US$ 60 million. There is no such support for activities undertaken according to Decree 01/CP.

Source: Christ and Kloss, 1998

As noted in Box 10, forest land is allocated on the basis of land use plans and applications for land by the local population. Decree 02/CP states that for households and individuals, "there must be a document outlining the proposed management and use of the land". Land use planning is therefore an activity that must precede land allocation, although for the purposes of commenting on implementation of the process, the two are generally considered together (LUP/LA). The land use planning methodology is evolving, building on experience of a number of projects. For example the FAO/MARD methodology involves land use planning at three levels: commune, village and household, with planning detail increasing from commune to household level. The Social Forestry Development Project in Song Da has been actively involved in participatory land use planning, at the village level.

[17] about 4 US$/ha, equivalent to 16-20 kg of rice (Sam *et al*, 1997).

Tables 2 and 3 summarise some key provisions of this legislation for allocation of forest land; the following points arise:

- Table 2 shows the key intermediary role played by State Forest Enterprises (SFEs) in many of the arrangements that involve households in production, but mostly in protection activities in forest land. This change in role is somewhat in contradiction to their original mandate to exploit the forests. They are now being required to protect, and support others who protect, the forests. More details on their current status is provided in Box 5.

- *Table 3 shows that allocation of land, be it for production or forest protection purposes*, does not prevent the farmer from growing agricultural crops, except where natural forest exists. Therefore, the farmer's choice between food production and other land uses will mainly depend on the availability of land and incentives, including food security and income generation.

Table 2: Key policy statements in relation to forest cover

Policy statements	Land without trees/fallow land	Land with trees		
		Scattered trees	Plantations	Natural forest
** Decree No 02/CP (01/94)* Allocation for long-term forestry purposes - LTCs (management agreements/and tenure certificates) - Government funds available under Programmes 327(1992) and 556 (1995)	orgs, indivs, HHs	orgs, indivs, HHs	orgs, indivs, HHs SFEs	SFEs
** Decree No 01/CP (01/95)* Allocation to State Forest Enterprises (SFEs) for forestry (+ agriculture + aquaculture) - SFEs intermediaries between State and households (HHs) - No funds available from the State			indivs, HHs	indivs, HHs
** Regulation No 202/TTG (05/94)* Contracts for protection, regeneration, afforestation of forest land for SFEs and organisations (orgs) that can contract individuals (indivs) or households (HHs) - Requires LTCs for SFEs and orgs (via 02/CP)	SFEs, orgs — indivs, HHs		SFEs, orgs — indivs, HHs	SFEs, orgs — indivs, HHs

Note: HHs: households
indivs: individuals
orgs: organisations
SFEs: State Forest Enterprises

Table 3: Some key policy provisions regarding agricultural use of land allocated to households

Policy Statements	Provisions
Decree 02/CP	* Protection Forests: - If without forest ⇒ for reforestation , assisted natural regeneration and protection; *economic production for forestry & agriculture possible* if the watershed is not critical; - Article 7/4: small patches unallocated to households to be managed by villages. But contradiction with Article 3/3, which says that decision re: unallocated land is to be taken by local government authorities. * Special use forest: - Not allocated to households if it is strictly protected; - Can be allocated to households for protection and reforestation in case of environmental restoration; - *If there are already annual crops on the land, it will simply be reallocated for agricultural use.* * Production forest: - In case of forested land, contract with households is possible via SFEs (01/CP); - In case of unforested land, allocation to households is directly made via the management board; - *The combination of agriculture, forestry and aquaculture is possible on degraded land and bare hills.* * Households have to pay taxes - recently abandoned at central level, but still happening at Provincial and District levels * There is no provision regarding payment for LTC by households. However, some provincial/district provisions consider payment
Regulation 202/TTG	* Land to be allocated to households via organisations and SFEs * Households can harvest NTFPs and choose the duration of the contract * Households can be paid in cash or in kind (e.g. wood, food) for their work * *Households can interplant trees and crops as long as it does not affect the main trees and soil fertility* * State channels funds to households via SFEs * SFEs must provide technical assistance
Decree 327	* In addition to the allocated land, *households can receive land for food and cash crops plus 5,000 m^2 (5 ha) for a homegarden plus some land for grazing* * *SFEs/SAEs must help the farmer in the case of cash crops* * 40 per cent of the Programme budget goes to interest-free loans for farmers * There are financial incentives for the government staff that works in the uplands

Decree 02/CP and Regulation 202/TTG are both financially supported by Programme 327/556[18], which has an annual budget worth some US$ 60 million. There is no such support for activities undertaken according to Decree 01/CP.

Box 11: Programme 327 and Programme 556

Programme 327 was launched in 1992 and concerned the use of bare land, denuded hills, forests, alluvial soils and water bodies. Activities planned included afforestation, protection, enrichment and regeneration of forests. The budget was to be used as follows:

- about 60 per cent for infrastructure, scientific and technical facilities, public welfare, afforestation of protection forest and special-use forest land, national seed strands, and temporary support to new settlers;
- the remaining 40 per cent for loans without interest to individual households.

In 1995, Programme 327 was replaced by Programme 556 and renamed "National Programme to Create and Protect Watershed Protection and Special Use Forests", thereby denoting the henceforth greater emphasis placed on the watershed protection function of forest management. This emphasis has also translated into changes in allocation of programme funds:

- 74 per cent of available funds are to be used for direct lending to households, of which 60 per cent is available for contracts for protection, restoration, regeneration, tending, and planting of protection and special use forests. Only about 12 per cent is planned for interest-free loans to households for the planting of commercial crops and fruit trees, home gardens and large livestock raising.
- 12 per cent of the budget is planned for infrastructure and social welfare.
- Management fees amount to 8 per cent of the budget including 0.8 per cent for the central level, 1.2 per cent for steering institutions at provincial and district level, and not less than 6 per cent for project management bodies.

The evolution towards a stronger focus watershed protection between programmes 327 and 556 has had some practical implications on land allocation:

- less support to the productive functions of land, i.e. on land without trees and to farming practices. Moreover, only farmers using land in watersheds are to be assisted;
- more funds made available for SFEs, given the greater importance of contracts under Regulation No 202/TTG, and the provision of management fees.

4.3 Issues arising from land use planning and land allocation

By the end of 1996, about 6 million hectares of forest land had been allocated: about 4.5 million hectares to SFEs, 0.5 million hectares to collective bodies, and 1 million hectares to 334,000 households. Hence most of the forest land allocated so far has been for protection. *Allocation to households represents about 5 per cent of total forest land and concerns less than 2 per cent of all households living in and around forests* (Vu Long *et al*, 1996b; Christ and Kloss, 1998). However, information collected from our discussions and recent literature indicates that only *20 to 30 per cent of the area allocated to households has been developed according to land use plans*. There are some calls for more land to be allocated to households such that all the land around villages is allocated to people, with SFEs retaining smaller areas of land (Doan Diem, 1998. Personal communication).

[18] Background information on the official provisions of Programmes 327 and 556 draw mainly on MARD (1996).

Allocation of forest land is therefore not yet complete. The proportion of forest land allocated ranges from 30 per cent in some provinces to more than 80 per cent in others. The number of households receiving land ranges from 1.2 per cent in one province to 85 per cent elsewhere. Allocation has mainly happened in areas of easy access (Nguyen Duc Trieu, 1998). The process has been especially slow on unused areas: only 1.595 million hectares, representing about 13 percent of unused land nation-wide, has been allocated so far, and the proportion is similar for unused land in mountainous areas (Nguyen Dinh Bong, 1998). In particular, this means that the traditional food producing areas in the uplands (often through shifting cultivation) are generally not yet allocated. This is partly due to the difficulty in classifying shifting cultivation land under current systems, but the allocation process is also severely hampered by "complicated terrain, weak infrastructure, communication problems, weak institutions with poorly trained staff, a lack of suitable maps as well as lack of funds" (Christ and Kloss, 1998).

Based on an average rate of 464,000 ha/year (Nguyen Dinh Bong, 1998), the allocation of *the remaining 10.5 or so million hectares of unused land might take some 20 years. Even* assuming that the new methodology being developed would double the pace of allocation (i.e. achieving 1 million hectares/year), this would still leave Vietnam with a ten year task to allocate all unused land.

There are a number of issues arising from the land allocation (LA) process and the land use planning (LUP) that accompanies it: these are summarised in the sections below[19].

4.3.1 Issues related to implementation capacity

It is already acknowledged that the government is unable to implement its own policies: for example the cadastral department is unable to fulfil all its duties concerning allocation, and in an attempt to alleviate this, new guidelines are now being prepared for allocation based on participatory planning. A number of issues relating to the capacity to implement land use planning and land allocation are summarised below.

- Land use planning and land allocation needs to be considered as a *continuing, long-term process*, rather than a one-off exercise. Once the initial allocation has been completed, land use changes will take place as a result of investments, policy change, market influences, etc., and land ownership will change due to the possibility to exchange, transfer and inherit land use rights. Hence adaptation will be needed as the users and use of the land changes: this requires commitment to good performance by those in charge of its implementation.

- Current land use classification based on the purpose stipulated by the government administration *fails to recognise present land use* and particularly traditional land use systems (such as upland agricultural systems, shifting cultivation, agroforestry), and classifies large parts of the uplands as forest land - hence potential conflict is created through failure to consider the claims and interests of all stakeholders. The process needs to be flexible enough to adapt to the diversity of local conditions and land uses.

[19] Further discussion of the strengths and weaknesses of the land use planning/ land allocation process is given in Christ and Kloss (1998).

- Land use planning has traditionally followed a *top-down approach*, based on national targets and priorities, and on intended land use, rather than on locally-designed needs, the characteristics of the land and on local production and implementation capacity.

- The priority currently given to *policy-driven national programmes* such as the 5 million hectare afforestation programme (which, however, incorporates the land allocation process) (see Box 4) means there is a risk that most of the available programme preparation and implementation capacity is absorbed by them, leaving little room for attention to land user practices that do not fall under such mainstream programmes (Christ and Kloss, 1998). In addition, the government is being called upon to incorporate improvements and recommendations to these programmes.

- There is a *lack of clear criteria* for classification of different types of forest during land use planning (e.g. protection versus production forest, critical versus less critical protection area).

- Cultivation across the boundaries of villages is common in some areas, yet allocation does not take account of the fact that families can own/use land in other villages - this can lead to conflicts; but may be avoided if LUP were to take place at commune level rather than at village level. *Failure to recognise traditional boundaries* and claims on areas of land during the land allocation process can actually decrease security for farmers; although the process is intended to increase secure tenure.

- *Land use planning* should precede allocation, in a negotiated process involving villagers in the decisions over future land development (in particular areas for protection[20] and production), and aim to resolve conflicts over land before allocation. Land use planning should be considered as a process of orientation or guidance at commune level. There appears to be little national co-ordination regarding land suitability identification and priority setting.

- At present, district cadastral units are *poorly equipped and trained* yet are expected to allocate large areas of land quickly; measurements are likely to be inaccurate and may well need repeating in a few years. Complementary measures of simplifying the land use planning and land allocation process, and (technical) capacity strengthening, should enhance local implementation.

- Given that there are, at present, different government departments working in parallel on similar issues (such as classification of land), there is much potential to streamline the process and make economies at the same time. Currently, *lack of co-ordination between agencies* - particularly those responsible for agriculture and forest land allocation - results in insufficient information exchange and duplication of effort.

- There are many factors which can lead to *opportunities for local corruption* and hence lack of efficient and accurate implementation at the local level. For example:
  - *the lack of accuracy of cadastral registers justifies the need for limits of allocated plots* to be regularly checked by government staff. Inaccuracies can lead to the retrieval of

[20] As discussed, further in this paper, flexibility in LUP/LA would be further enhanced if the capability of other types of vegetation than forest (e.g. pastures, agroforests, some agricultural patterns) in protecting land from erosion would be acknowledged.

land tenure certificates, unless payment is made to conceal the inaccuracies and retain the certificate;
- provincial and district authorities can issue their own regulations, which may contradict central government ones[21]. In particular, there are numerous locally-derived controls and taxes, which can be evaded against bribery;
- a major underlying cause for corruption lies probably in the inadequate pay of forest officers.

4.3.2 Issues specific to land without forest cover

- *User rights and benefits need to be clarified*: the user has the right to develop the land for forestry and agriculture - and is likely to make the meeting of subsistence needs priority, followed by an assessment of the potential market for any cash crops grown; however:

- *Support for land development is minimal*: there are few or no funds available to support development of the land[22], and the extension service, still under development (see section 3.5.2) tends not to reach the less accessible places. However, to date it appears that households do not feel a need to clear new land outside the allocated plots as they have been allocated more land than was formerly cultivated. This situation is likely to change following declining yields and demographic change (Sikor and Apel, 1998).

- *Few incentives for farmers*: given the lack of support and unclear rights and benefits, there are few incentives for farmers to apply for allocated land on land without trees - this is illustrated by the very low percentage (less than 2 per cent) of households in the uplands who have received allocated land.

- *Cost of allocated land to the household varies:* According to the regulations, farmers don't pay anything for allocated land, although some provincial authorities impose costs. However some informants asserted that farmers do (or used to) pay for the red book, a rate of about 20,000 dong per household; some farmers considered this payment worthwhile given that the red book can then be used as collateral for bank loans. Currently there are no national taxes on allocated forest land, although taxes are sometimes payable due to regulations issued at provincial and district levels; in addition 4 per cent tax is payable on produce (see section 3.6 on local and provincial taxes).

- *Cost of allocation process needs to be reduced:* The cost of the process of forest land allocation, from preparation until issuance of certificate, is estimated at 20,000 dong/ha (Christ and Kloss, 1998). An estimated 3 to 5 hectares per labour day can be allocated. There are insufficient state funds to provide all farmers with a red book. However, adaptation of the land allocation process (such as the "Tu Ne" method, which uses greater farmer participation) have been found to be cheaper (at 12,000 dong/ha) and are now being applied more widely (Vu Van Me, 1998. Personal communication)[23].

[21] Examples include: payment for land tenure certificates, locally-derived taxes on land, local government rules concerning what to plant or how to use land, etc.
[22] Although officially there are 1.7 million dong/hectare for development of bare land (Vu Van Me, 1998. Personal communication).
[23] However other estimates put the government investment in land use planning and land allocation at 7,000 dong/ha (Doan Diem, 1998. Personal communication).

4.3.3 Issues specific to land with forest cover

- *User rights and benefits need to be clarified*: protection contracts provide the user with few rights over the forest being protected and restrict his/her traditional rights: for example it is not clear whether he or she is entitled to a share in the value of the forest products. Hence there is little incentive for the user to increase the productivity of the forest (however a policy on the sharing of benefits is currently being developed (Doan Diem and Vu Van Me, 1998. Personal communication). In the case of tree plantations established under Programme 327, it appears that whilst the farmer "owns" the land, the state claims up to 60 per cent of the returns from the trees (Christ and Kloss, 1998), creating a potential conflict of interest. Article 556 further states that all indigenous forest trees remain the property of the state, as does one third of all 'supplementary trees' (for example fruit trees and non-indigenous species). The remaining two thirds, which belong to the contracted farmer, must be extracted following approved extraction procedures (MARD, 1996). These rules are generally unclear to local government officials and households (Sikor and Apel, 1998).

- *Households' lack capacity to fulfil their responsibilities*: whilst having few or uncertain rights and benefits, households are contracted to protect the forest, although with few means at their disposal to do so (for example households have no power to deter illegal loggers).

- *Households remain dependent on SFEs*: households are heavily dependent on SFEs for contracting of responsibility and follow-up support and extension - and hence, in the absence of alternative extension support on the viability and continuance of the SFEs themselves. Some funds are available to SFEs under Programme 327/556 but it is not clear to what extent the benefit is passed on to households.

- *Financial incentives are broadly insufficient*: On land with forest cover, farmers are paid 50,000 dong per hectare per year for protecting the forest (under Regulation 202/TTG). However this amount does not provide sufficient economic incentive for most farmers (compared, for example, to illegal cutting of scattered trees) - although it appears to be a significant source of cash for some, representing up to 30 per cent of the household's annual cash income (GTZ, 1997).

- *Cost to the government is high*: Provision of protection payments to households - currently channelled through SFEs - incurs a potentially very high annual cost to the state: Christ and Kloss (1998) estimate that payment of this fee would amount to an annual cost of 400 billion dong if the area of 8 million hectares of protection forests were to be managed in this way.

- *Insufficient credit available*: The law states that 40 per cent of the budget should be used for interest-free credit to households. However, in reality most of the budget has been allocated to SFEs and local forestry services[24]. However this has been further compounded by the provisions of Programme 556 (see section 4.2).

[24] According to Sikor (1998), The State Planning Committee estimates that implementing agencies, mainly district authorities and SFEs, have diverted more than 50 percent of total funds for other purposes than the ones officially planned within Programme 327/256.

Hence it appears that the economic incentives attached to forest protection contracts are feasible neither for the farmers nor for the state.

The issue of financial viability is complicated by the lack of clarity over who is the true owner of the resources. Under current land allocation procedures, farmers have use of the land on a long-term lease, and various rights as to what they can do with that land; however the state retains some control. Whoever is not the owner of the resources would tend to want to be paid for their services: if the farmer does not consider her- or himself the owner, then payment for protecting and managing the resources would be expected. If the state does not consider itself the owner, then it would expect to be paid for providing support services (van der Poel, 1998. Personal communication).

In summary, there is a wide range of issues arising from implementation of land use planning and land allocation to date, and many of these issues have been identified through evaluations, assessments and experimentation by projects. There is reasonable consensus on the weaknesses of the existing official system. Many donor-supported projects have made similar adaptations to the process (such as increasing local participation) and now national projects also broadly agree on methods of implementation and improvements required (see Box 12). Most projects and an increasing number of Vietnamese decision-makers and practitioners now agree on the principles that should be followed to improve the current process of LUP/LA (although it is not clear how far this consensus extends), and the government's considerable willingness to adapt the process is reflected in the gradual incorporation of recommendations in revised legislation. Yet despite the various improvements to be made to the system, a recent Government decision states that all land is to be allocated by the year 2000 (van der Poel, 1998. Personal communication). This seems very ambitious if some of the issues described above are to be addressed during the process of allocation.

Box 12: How to improve LUP/LA - some areas of agreement

- national, top-down land use planning as reflected by programmes such as the 5 million hectares programme tends to absorb much of the available resources and capacity, whilst at the same time local-level land use planning is encouraged yet given inadequate support. There is a need to find ways to fulfil both national and local needs, and for national-level planning to be informed of field reality.
- land use planning should precede allocation; it is both cheaper and more locally acceptable if it is conducted in a participatory way and decisions regarding allocation are made at the village level; there is a need to develop a standard framework methodology
- the rights, benefits and responsibilities of farmers receiving allocated land or contracted land with forest cover are not clear; these need to be clarified and designed to provide the farmer with sufficient incentives to manage allocated land
- land use planning and land allocation should be considered as a long-term process, to take account of changes in demographic structures, policies and market forces
- there is a need to improve co-ordination between the agencies charged with implementation of LUP/LA, provision of technical services, support to farmers, etc.
- more cost-effective systems of LUP/LA, which are financially viable to both the farmer and the government, need to be developed.

Source, and further examples: Christ and Kloss, 1998; Asian Development Bank, 1996; Vu Van Me *et al*, 1994.

4.3.4 The transition to 'people's forestry': possible research issues

The transition to 'people's forestry' is a radical change from the previous system of land tenure and management. Just as with the liberalisation of the economy, the transition

process is fraught with difficulties and requires continual improvement and readjustment. Whilst many of the issues mentioned above are being assessed and gradually changed, a number of research issues arise from this overview of the current status of the land use planning and land allocation system:

⇒ *Given the allocation of forest land, under what conditions do upland farmers make productive land management investments?* Such investments are not based on tenure alone, and do not necessarily lead to productive and sustainable development of the land. This issue might be addressed by looking at the balance of incentives, rights, responsibilities and benefits in the land allocation process, taking into account traditional rules and knowledge of upland farmers. Tenurial security alone does not guarantee sound use of the land by the farmer. Conversely to some official strategies, traditional rules often acknowledge this by linking an increase of rights to long-term investments in the land. This is illustrated in the case of the Philippines in Box 13

Box 13: Linking tenurial security to actual land use - an example from the Philippines

In the Philippines, tenurial rules of upland groups usually follow a logic different from that of the government: whilst within ethnic groups, tenurial rights to land increase with the amount of perennial investments on the land (e.g. stonewalls, terraces, perennial crops), the government starts by giving a tenure certificate subject to a farm plan, and then expects the farmer to implement the plan, hence to invest in the land. Experience shows that this seldom occurs, i.e. the land certificate makes the farmer feel more entitled to farm the land according to his or her desires and interest.

Source: Pill Brett, 1994, cited in Dubois, 1994.

The Vietnamese government is following the same approach than the Filipino one, i.e. first giving tenure security, then expecting improvement. In light of the Filipino experience, it would be worth experimenting with an approach which would build on traditional rules of some ethnic group in terms of land management, as they might be similar to some extent to the ones of upland dwellers in the Philippines. This could be combined with an exercise comparing the real value of micro-planning, even at village level vis-à-vis the simple setting of norms and standards of what should not be done in terms of land use.

⇒ *How can the risk of increased economic disparity within villages be averted during the land allocation process?* Currently the poorer families may be allocated land, but lose access to products from former common land, and likely to lose out in the emerging land market and speculation process in the uplands. There is a need to define how allocation procedures and support services can take account of the poorest and most vulnerable sections of the community, possibly through provision of some common land.

5 From land allocation towards land development and sustainable livelihoods

The process of land use planning and land allocation is a means to achieve the goal of sustainable land development rather than an end in itself. In other words, even if all forest land were allocated, this does not guarantee sustainable land development. A number of researchers consulted agreed with information gathered from literature, i.e. *that less than 30 per cent of the forest land currently allocated has been developed according to land*

use plans[25]. It is clear that land use planning and land allocation alone are not leading to sustainable land development in Vietnam's uplands. Farmers often do not follow the prescriptions contained in the LTCs. However, this does not necessarily mean that farmers' practices are less sustainable.

This poor performance in terms of upland development illustrates how the government of Vietnam faces difficulties in implementing policies, despite a vast array of projects and an increasing budget for that purpose. The issue then lies in making the links between policies and reality, which calls for a critical review of ways used to promote sustainable land use in these areas. The Government is increasingly willing to shift gradually from a "command and control" to a more liberalised system, with increasing influence by market forces. However, many Vietnamese decision-makers also have sound fears that the developing market economy might lead to unsustainable exploitation of environmental resources and increased economic and social differentiation. Indeed, there is sufficient evidence from research and experience elsewhere to argue that pure state control or pure market control are just the two extremes of a spectrum which involves different degrees of involvement of the state, the market and civil society.

A key lesson from experience is that there is not a unique recipe to achieve the right balance of roles of these players, and that "quick-fix" measures seldom live up to expectations. Solutions must be found by taking into account a mix of factors which may, in the case of upland Vietnam, be grouped into technical, economic/market and institutional/governance issues. Over-arching questions which set the framework for the formulation of the more specific research questions detailed later, are:

On technical aspects:

- *How can the shift from sectoral to more holistic approaches to upland land management be made in a cost-effective way?*

On economic/ market aspects:

- *How can the market be made to "work" (e.g. through incentives) without entailing over-exploitation of resources and more economic differentiation?*

On institutional/ governance aspects:

- *What are appropriate roles for the state, the market and civil society?*

- *What institutions should be in charge after the shift from a state-run command and control system, to ensure sustainable use of the resource and reduce the risk of increased social inequity?*

We shall discuss these issues in turn, but differentiate the case of land without trees (the so-called 'bare' land and fallow land) and land with trees (plantations and natural forest). In the former case, improvement will be based on incentives to influence *the farmer, as the ultimate effective decision-maker*. In the latter case, the decision becomes one of *forest management, and the farmer is therefore only* one amongst several other interested players, including the state (central and local), forest companies and user groups or communities at large. We are aware that the distinction between land with or without trees is often blurred on the ground (e.g. how should natural regeneration on fallow land be classified?). Thus, the emphasis of this categorisation rests more on differences in

[25] See for instance, Sikor (1998) and Dinh Bong (1998).

decision-making processes than on forest cover, and the link to land cover is mainly for convenience.

Underpinning the questions mentioned above is the need to improve the relationships between the targeted recipients/"demanders" of development (i.e. upland dwellers) and the "suppliers" of support to this development (i.e. policy-makers, but mostly the government front-liners at local level, and increasingly other institutions). To date, these are often characterised by a belittling attitude on the part of the supplier and distrust on the part of the demander. Reconciling these attitudes is vital in the quest for more efficient marketing systems and better working relationships, and it will take time. Possible avenues to achieve this include issues related to:

- less government-led targets, allowing the extensionist to be more responsive to needs and objectives from the demand side;
- more two-way and efficient information flows on each side's social values and constraints;
- mutual learning of each side's technical skills by joint experimentation;
- development of constructive fora for dialogue building on the above, and aiming at a consensus on stakeholder's roles, as defined by their respective Rights, Responsibilities (including who pays what), Returns/Revenues and Relationships ('4Rs' [26]).

5.1 Land without trees - farmers' decision

5.1.1 Technical feasibility

The key issue here is how to ensure that "improved" farming systems on allocated land *are both technically feasible and sustainable, and also attractive to farmers.*

From a technical point of view, the diverse and often marginal ecological conditions found in the uplands eliminate the feasibility of some "model" farming systems designed to apply everywhere, and there are still many technical uncertainties surrounding the feasibility of many patterns of intensification. This applies in particular to annual crops - essential for subsistence - on poor soils. Hence hastening the development of settled farming systems makes the risk unbearable for the farmer. Time must be given for experimentation.

There is nowadays sufficient information, based on experience in Vietnam and elsewhere, to contend that top-down extension systems, dominated by a "teacher" (the extension agent) - "student" (the farmer) attitude, do not entail a significant adoption rate by the latter. This is especially the case in contexts where subsistence, hence security of production, is at least as important as income generation - as is the case for the majority of Vietnamese upland dwellers. The driving force should therefore not be transfer of technology (TOT) or demonstration/model farms, but rather the recognition that indigenous farming systems stem from valuable knowledge, and that they evolve and try

[26] The '4Rs' framework for analysing and negotiating stakeholders' roles at local level and in policy statements, has been developed over the last three years by IIED and African partners in six African countries (Dubois, 1998). More details are presented in Annex 3.

to adapt. Box 14 gives some examples of the failure of TOT and the value of some farmer's techniques and experimentation, in Vietnam and elsewhere in south-east Asia.

Box 14: Examples of failures of TOT, of the value of farmer's knowledge, and of farmers experimentation under pressure

1. SALT (Sloping Agricultural Land Technology) is a technological package developed in the Philippines and promoted by several governments in Asia as a cure-for-all-ills in upland farming. It is based on alley-cropping techniques that alternate strips of annual and perennial crops, using leguminous trees as hedgerows (SALT 1), with the possibility to add a livestock (SALT 2) or forest (SALT 3) component to the system. It looks very effective on paper and in experimental stations/demonstration farms. However, it is seldom adopted on a large scale by farmers unless they are paid to do so (e.g. workers in tea estates in Sri Lanka, model communities in the Philippines). The major reasons for low adoption rate include (Dubois, 1994):

- high labour requirements (e.g. about 60 mandays/ha for SALT 1);
- high planting material requirements (about 2,000.00 seedlings/ha);
- no significant generation of income.

Surveys of upland farmers' opinion in the Philippines and Thailand (Pahlman, 1990) show that they usually consider dense tree planting (especially fruit trees) as the most appropriate means to prevent soil erosion. The main reason behind this choice lies probably in the potential dual use of fruit trees, as food and/or source of income.

2. In Vietnam, a recent paper by Hoang Xuan Ty (1998) describes some indigenous farming practices in the uplands of Vietnam. If they had not been neglected, these would have reduced the failure of farming practices/models based solely on technicians' knowledge, both within government and donor-supported programmes. For example:
- the development of thousands of hectares of Cinnamon plantations in Quangnam Province, which failed because, in contrast to farmers sparse ones, they were planted in large blocks and below 800m a.s.l., which exposed them to droughts;
- the low survival rates of Anise trees in thousands of hectares planted in Lang Son, in contrast with successful plantations of the local Thay group. This group's intimate knowledge on how to select the best soils for Anise was not tapped by the government technicians.

3. Also in Vietnam, Do Dinh Sam *et al* (1997) describe the case of a farmer in Xom Ranh village, Hoa Binh Province, who, without any outside assistance, has attempted to shorten the fallow period of his swidden by planting three crops of corn, followed by one of cassava, but leaving the cassava in the soil for three successive years for soil protection and restoration, and then return to corn. First results showed that the cassava vegetation has achieved good protection of the soil against erosion, and the farmer could obtain some food and income from the fallow.

The recognition of farmer's practices is key to the development of extension systems able to capture the synergy indigenous and outside knowledge. This approach, where farming systems are gradually developed e.g. through on-farm trials as opposed to "model farms", has usually brought about higher adoption rates of improved techniques and sustainable change in a cost-effective manner. However, it requires sufficient time for mutual learning by both the farmer and the technician.

The farmer bears the risk involved in adaptation to new land use practices, something that wealthier farmers are more able to do. Those with greater security can afford new inputs, to innovate and experiment, and to wait for results. Poorer households may prefer to rely on tried and tested methods - such as shifting cultivation. On land used for tree-growing, there is likely to be a preference for fast-growing trees to provide a quick return.

There is therefore a need to reduce the uncertainties (hence risks) for the farmer - regarding more settled/intensive farming systems, through more demand-oriented experimentation. This avenue for further work should build on experience from on-going initiatives, both within Vietnam and elsewhere in south-east Asia[27].

Priority should of course be given to food security, and also the satisfaction of other basic needs. It can be achieved either through local production, purchase, or a combination of both. Security regarding basic needs is the prime factor in farmer's choice regarding his cropping pattern, including the proportion of annual and perennial crops. With regard to tree crops, Box 15 synthesises the results of a survey on Farm and Village Forestry practices. This survey, carried out by FAO in the early nineties in several Asian countries[28], provides interesting insights on patterns of tree procurement in the region.

Box 15: Patterns of tree procurement by farmers in south-east Asia

What do Asian villagers use trees for?
Construction materials top the list, closely followed by fuelwood and food.

What is a multi-purpose tree for Asian villagers?
Topping the chart are fruit trees. This is not surprising, since the twin concerns of food security and income can be jointly addressed by fruit trees. It is also worth pointing out that fast-growing nitrogen-fixing trees are far from dominant in villagers' way of thinking.

Where are tree products obtained?
The results show that rural households rely far more heavily on farm sources than off-farm forest sources and market places to satisfy their needs for tree products. It seems therefore that the importance of farm forestry has been greatly underestimated in comparison to community forestry.

Another interesting result concerns the relative importance of market places (16 per cent) as source of tree products for small scale farmers. This suggests a significant opportunity and interest on the part of villagers to embark in market-oriented tree production.

How much of villagers' current tree production is market-oriented?
The great majority of farmers (86 per cent) use tree products for household consumption. Only a minority consider tree products for the sole purpose of sale. Yet, further results also show a strong positive correlation between the proportion of household income derived from tree products and size of urban population in the district. This clearly highlights the importance of a ready market as incentive to farm trees.

Source: Raintree, 1993, cited in Dubois, 1994.

However, whilst addressing the technical feasibility of upland land management may enable farmers to meet subsistence needs, it does not necessarily ensure sustainable upland livelihoods. Agricultural diversification and opportunities to raise income can be encouraged by provision of both good information about the market, and incentives to participate in the market economy.

5.1.2 Marketing of farm products

Given the tendency for government "campaigns" to focus on one crop, creating a significant marketing risk for farmers, there is a need to develop farmers' capacity to

[27] For instance, documentation on indigenous techniques and farmers' adaptive experiments by the FSI and foreign-assisted projects in Vietnam, the Alternatives-to-Slash-and-Burn Programme of ICRAF, research on fallow improvement by ICRAF and CIFOR.
[28] The survey concerned 1,315 households from 26 villages in 6 countries, most of them in south-east Asia.

evaluate different crops on their merits, despite the promotion of single crops or products (Ockerman, 1995).

Within Vietnam, discussion of market issues tends to focus on production, and not the actual functioning of the market - although in an increasingly diversified economy there is an urgent need for market development. As pointed out by Ockerman (1995), the market still tends to be perceived as purely the transport and distribution system. The farmer's need for alternative outlets and competition, in order to enhance his or her negotiating power, and to foster an efficient market, are generally not given consideration.

Government support has been increasing in budgetary terms, but has revealed weaknesses when it comes to cost-effectiveness. Here, the challenge is to strike a balance between better access roads, fairer farmgate prices, opportunities for off-farm income, more liberalised market channels; and safeguards against the influence of a distorted market on farmer's decisions. Moreover, easier access to resources by outsiders *should not bring about unsustainable use of natural resources and/* or more economic differentiation.

⇒ *What incentives are required to encourage involvement of upland farmers in the market?* 'Commodity-chain' studies for a sample of key annual and perennial products could be used to illustrate constraints on the market and what incentives might be appropriate.

⇒ *What is the potential contribution of off-farm activities to the upland economy?* Studies of particular commodities may be complemented by an assessment of factors promoting off-farm activities elsewhere in the region.

Access to fair credit is another key factor for changes in farming practices in places like the upland areas of Vietnam, where people lack cash to invest in agricultural inputs. Formal credit schemes are often less accessible than informal ones, via e.g. middlemen. In this case the middlemen hold significant clout over farmers as they are responsible for trading agricultural products and access to credit. This concentration of power often results in terms of credit unfavourable to the farmer. This often limits farm development, and alternative schemes should be explored.

⇒ *How do different credit schemes (formal and informal) influence farmers' farming opportunities and income?*

However there is a fear that rapid market development and liberalisation could lead to unsustainable use of resources and increasing inequity. More market-driven mechanisms and better access should be accompanied by appropriate levels of local (enforceable) checks-and-balance mechanisms over the use of resources. This leads to institutions and local governance issues.

5.1.3 What institutions are needed to support upland farming activities?

Land allocation is bringing about a change in institutional "ownership" of resources. Classification of land may be concerned with the willingness of, for example, the forest sector to give up what they "own" when there is agricultural land on slopes or in watersheds, which would formerly be classified as forest land (Gunther Meyer, 1998.

Personal communication). This calls for much more flexibility within institutions whose roles and modes of operation have been fixed for several decades.

The challenge facing the Vietnamese Government is to find the right institutions and mechanisms to gradually shift from government led - but not very cost-effective - support to farmers, to other or complementary mechanisms and institutional arrangements that would protect against exploitation of farmers and overuse of resources. Absence of State support should not be envisaged, however. Indeed, a recent review of institutional arrangements in natural management (Carney and Farrington, 1998) concludes that *"social efficiency", that is ensuring that the weaker groups of society adequately participate in and benefit from natural resource management, requires some degree of state intervention.* Options to support farmers worth exploring include: partial privatisation of the extension service (already existing to some extent, but so far very informal and lacking accountability), "new style" co-operatives, farmers' organisations, and outgrower schemes where opportunities exist. For all these options, research questions might include the following:

⇒ *What are the current institutional mechanisms providing support to upland farming activities?* A review of the current institutional structure both within the uplands, and in the lowlands but providing support to the uplands should include both formal and informal systems. This could build on existing research[29], or expand on research currently carried out for lowland areas[30].

⇒ *What are the comparative advantages of co-operative management?* Given the current impetus on "new style" co-operatives (i.e. village rather than state-led), it is timely to carry out a study of comparative advantage, both for the farmer and the state, for areas under co-operative management and areas without co-operatives. The study would be further subdivided according to distance from the market, and in terms of economic, social and environmental impacts, and financial sustainability[31].

⇒ *What is the balance of stakeholders' rights, responsibilities, revenues and relationships (the '4Rs') regarding land use?* For different types of existing and emerging institutions supporting farmers, case studies assessing the balance of the '4Rs' would indicate the quality of the delivery service, and the factors affecting it.

Box 16: One example of "new style" co-operatives in Vietnam: The CAEV Programme

The Centre for Agricultural Extension Volunteer (CAEV) was founded in 1992. Since 1993 it has established nine co-operatives on allocated land, mostly in remote areas, populated by ethnic minorities. It has received technical and financial support from the Canadian Co-operative Association (CCA).

These co-operatives are based on seven principles, i.e.:
- voluntary and open membership shares vary between 50 and 200,000 VND);

[29] For instance, a recent report on the development of forest farmers' organisations within the MARD/KfW Afforestation Project in Lang Son and Bac Giang Provinces (Kohler, 1998), and the current research on Vietnamese extension by the Swedish University of Agricultural Sciences, within MRDP.
[30] For instance, a follow up on the current research by a team of Australian and Vietnamese researchers concerning the emergence of farmers' organisations in the Mekong and Red River Deltas (Christoplos, 1997b).
[31] A possibility includes one or two cases currently supported by CAEV and CCA - see Box 16

- democratic member control;
- members' economic contribution;
- autonomy and independence of decision regarding plans, investments and activities;
- education, training and information;
- co-operation among co-operatives;
- concern for community development.

Main activities include:
- training of members, co-operative leaders[32], and local government officers;
- development of irrigation;
- agriculture intensification and integration, with the use of high-yield varieties, chemical inputs and VACs (garden-livestock-aquaculture);
- credit extension, thanks to the creation of revolving funds; and
- development of off-farm activities, such as mushroom cultivation and rice paper-making.

One interesting aspect in the current reflection on the role of the State concerns the funding of these activities. Only some 15 per sent comes from local government, the rest is split between Canadian support (around 35 per cent) and members themselves (some 50 per cent, either in cash or kind). These co-operatives appear quite successful, as they have increased food security as well as the average income of their members. Such success is prompting increased membership. This bears the risk of jeopardising the sustainability of the activities and lead to overuse of natural resources if the community control and legal clout are not sufficient to enforce its rules.

Source: Toan B.T., 1997 and personal communication, 1998

5.2 *Land with trees (plantations and natural forests) - forest management decisions involving many stakeholders*

In this case, land use has to be considered from a forest management perspective; the farmer is just one amongst the interested parties who should take part in decisions.

5.2.1 *Financing forest management for trees and people*

Given the strategic importance of hydrological resources in the supply of energy at national level, watershed protection is seen as a priority by the Government. Yet, it does so in a restrictive way, by considering forests as the main, if not only means to effectively protect watersheds, therefore prioritising natural forests and plantations versus other types of vegetative cover (e.g. grassland, agroforests, etc).

However, the main reason for this probably rests in the dependence of local forestry bodies and SFEs on the management of protection forests and plantations as main sources of funding (through Programme 327/556). This is also likely to explain the resistance displayed until recently by foresters towards assisted natural regeneration (ANR) as a means to regenerate forest resources.

⇒ *What are appropriate financing mechanisms to support forest management beyond forest protection and plantations?* Innovative financing mechanisms, and existing mechanisms used in new ways, to support forest management would reduce the dependency on programmes solely concerned with forest protection and plantations.

Finding more flexible ways to finance forest management would provide opportunities to look at improvements with respect to technical, marketing and institutional aspects of forest resource use, in a watershed and livelihood perspective.

[32] Some leaders were trained in India and the Philippines.

5.2.2 Technical issues

Watershed protection should be considered in a more holistic manner, through various types of land use, including pastures, agroforestry systems and assisted natural regeneration (ANR).

⇒ *What are the most appropriate land uses for watershed protection?* A comparative analysis of different land use systems would illustrate how environmental services such as soil protection may best be ensured, together with an assessment of the comparative advantages of each for farmers or groups of farmers.

On land with forest cover, land contracted to farmers by SFEs is to be protected in return for payment. From a technical, but also economic point of view (economies of scale), it is questionable whether protection of small plots by individuals is a feasible system of forest management and protection. Therefore, alternative institutional arrangements should be explored, as suggested in section 5.2.4. of this paper.

5.2.3 Marketing issues

At the macro level, the marketing of forest products is characterised by:

- Official restrictions on amounts of logging, but significant levels of illegal logging to bridge the considerable gap between demand and supply (see section 3.2);
- Monopolistic position of SFEs - at least officially - as regards extraction of wood products;
- Controlled market for wood products;
- Little attention paid to the marketing of NTFPs: there is a need to document results concerning lessons from experiments in Vietnam and elsewhere in the region.

Hence key challenges are currently faced by the Vietnamese Government include the following questions:

⇒ *To what extent can the market be liberalised so that prices are less distorted without increasing exploitation?* How can sufficient safeguards be set to avoid over-exploitation of the resource asset and increased economic differentiation?

⇒ *How may SFEs be complemented or replaced in their commercial and service functions, both as loggers and providers of jobs and technical support to farmers in forest management?* Regarding creation of jobs and trading, an alternative/complement might be the promotion of Forest-Based Small Scale Enterprises (FBSSEs), as initiatives in the field of off-farm income generation[33]. Table 4 synthesises some lessons from a study carried out by FAO in the beginning of the nineties (FAO, 1991)[34].

[33] A survey conducted in 1996 shows that the number of non-farm households/establishments has grown on average by 10 per cent per year since 1992 in Vietnam, with the highest increase in coastal and midland areas (Tuan Khai, 1997).

[34] The cases were:
- rattan industries in Indonesia;

Table 4: Synthesis of findings from an FAO study on Forest-Based Small Scale Enterprises (FBSSEs)

Advantages of FBSSEs	Constraints of FBSSEs	Recommendations
• Simple and replicable technologies • Flexibility of work schedules; • Significant source of extra income for poor households, though profits are not high in absolute terms • Small scale sometimes increases competitiveness if resources are scattered and reduces the scale of exploitation • More flexibility for subcontracting • Better adaptation to local markets	• Diminishing supplies of raw material. • Financial, i.e. difficulties to access credit and to add-value to the products. • Marketing, i.e. lack of flexibility and diversification, transportation problems and too many intermediaries. • Control of resources by outside interests	• Comprehensive measures to secure sustainable harvests and regeneration; • Controlled access to the resources. • Better linkages between financial institutions and self-help groups; • Training on new technologies and entrepreneurial skills. • Systematic market studies; • Locate first-stage processing nearer to source of products • Empowerment of local stakeholders; • FBSSEs as part of location-specific socio-economic settings.

Source: FAO, 1991

At the farmer level, the question becomes whether protection under the provisions of the contract provides a feasible livelihood, in comparison to the exploitation of forest products. As mentioned earlier in this paper, opinions diverge on that point.

⇒ *What forest activities and/or products would provide sufficient incentive (income) to motivate the farmer to use the resource sustainably?* It would be useful to add the marketing of forest products by farmers to the marketing of farm products.

⇒ *What are the comparative benefits accruing to the farmer from exploitation of forest products and from protection contracts?*

5.2.4 What institutions for forest and people?

It appears that many farmers are not clear about their rights and obligations with regard to allocated land. Ironically, as pointed out by several practitioners, the forest may be better protected on production land than on protection land, since farmers have rights to the products of the forest and are therefore more likely to conserve and manage such produce. Moreover, the individual farmer has little power to protect the forest (for example from illegal loggers).

A number of observers (e.g. Christ and Kloss, 1998) suggest that, where possible, the management of forest areas by the actual forest users at group or community level should

- safety match industries in India;
- forest-based handicraft industries (wood-carving, rattan, traditional umbrellas and clogs) in Indonesia.

be favoured over a general individualised control, preferably building upon existing village institutions.

We have already illustrated the central position held by State Forest Enterprises (SFEs) in these challenges, not only as bodies in charge of forest production but also as intermediaries between the State and farmers concerning forest activities by rural households[35].

⇒ *What are the current functions of SFEs?* Given the transition in SFEs' roles, and their key position in contracting forest land, a thorough assessment of their *raison d'être* would be useful for future orientations of forest policies.

This investigation would lead to other areas of work, including:

⇒ *What are the impacts of other potential institutional arrangements?* Institutional arrangements considered would include private companies, community forestry, partnerships (e.g. community-state, community-private companies, farmers' groups). Box 17 provides some examples of approaches aimed at the management of forests as commons, developed over the last decade in south-east Asia. Given the multiple interests at stake, and the fact that the state cannot handle forest management alone, application of the '4Rs' framework could be used to clarify roles in partnerships.

⇒ *How may the institutional capacities of the bodies in charge of forest management be improved?* Leading on from the use of the '4Rs' framework, institutional analysis exercises would aim to identify how institutional capacities of the bodies in charge of forest management may be improved. Such capacities would encompass accountability, representativeness of local interests, enforceability of rules, etc.

Box 17 : Examples of different approaches towards community forestry in south-east Asia.

Communal Forest Stewardship Agreements - The Philippines

Since 1982, the Philippines has developed a large Integrated Social Forestry (ISF) Programme, centred around the concept of "stewardship", through three types of contracts:

- individual certificates (i.e. Certificates for Stewardship Contracts - CSCs), granting exclusive rights to occupy land for 25 years, renewable, to households, associations and indigenous communities. Most CSCs have been issued to households, but this component of ISF has been beset by numerous implementation difficulties (e.g. inaccurate mapping, time requirements, lack of enforceability of contracts, sale of CSCs), and, in most cases, allocation of individual plots has not translated into better land development. These problems are actually very similar to the ones experienced by the land allocation programme in Vietnam in the case of land without trees (i.e. under Decree 02/CP).
- a second type of contract, whereby groups or communities are granted Community Forestry Stewardship Agreements (CFSAs) has recently received increased interest, as experience shows that agreements with groups are likely to be more viable and stable than individual licences, locally-derived rules are likely to be more enforced, and the administrative procedures for implementation and monitoring are proportionally less demanding on the part of government agencies (though tedious for the communities). However, concern has been expressed on the limited tenurial security for groups or communities, as the government can revoke a contract if it considers that its terms have not been fulfilled.
- Hence, there has been growing interest among long-term upland dwellers in Certificates of Ancestral Domains, which cannot be revoked by the government. The recognition of Ancestral Domains is recent (1997), and their delineation by government staff has reportedly been slow.

[35] This latter role is linked to Decree 01/CP and Decision 202/TTG, as illustrated by Table 2, Section 4.2.

Forest Villages - Thailand

Initiated in the mid-1970s, the process of creating forest villages was expanded considerably in the mid-1980s, in response to the significant rate of deforestation (through heavy logging and expansion of agriculture in forest areas). The objective has been to regroup people already farming in the forest into villages, in order to stabilise agriculture, encourage reforestation and ease the provision of services. The programme has faced the usual problems of resettlement schemes (e.g. social disaggregation, conflicting claims over land, lack of incentives to resettle) and of forest departments having to cope with their new roles in local collective forest management. Attempts to overcome these difficulties have included:

- creation of more decentralised structures;
- training of staff on how to work with villagers; and
- identification of effective village-level institutions to work with
- formation of inter-agency working groups, bringing together academics, social scientists, NGOs and foresters.

Village Forestry - Republic of Korea

The reforestation programme was initiated in the 1970s, through Village Forestry Associations (VFAs) in all villages, composed of all heads of households, and grouped into forestry associations at county level and a national federation. These bodies were not governmental, and it was thought that they would therefore be more effective in mobilising villagers. The Programme also built upon a tradition of forestry co-operatives, under the broader framework of Saemeul Undong, or New Community Movement, aimed at the promotion of collective self-help actions. This was in response to land reform that turned tenants into landowners and the weakening of indigenous social structures. VFA activities benefited from subsidised credits but members had to contribute their labour, with benefits being distributed proportionally. A notable feature of the programme was its holistic nature: the technology package combined reforestation and an array of commercial activities (e.g. village-managed nurseries, employment in government watershed protection activities, promotion of marketing of NTFPs). Factors contributing to the success of the programme include:

- an incremental approach, based on village potentials at each stage;
- a blend of top-down and bottom-up planning;
- financial and other assistance geared to self-help to avoid village dependence on outside support;
- formal empowerment of VFAs via clear and strong regulations regarding the policing of activities and regulating the use of resources; and
- the marketing and negotiating strength, and easier access to services provided to VFAs by their grouping at county and national level.

A feature common to the three cases described above is the involvement of intermediary bodies between government and communities, hence facilitating the implementation of programmes.

Source: Arnold, 1998

In Vietnam, experiences of community forestry are just emerging. Every village has a farmers' association. An assessment of their institutional capacities would however be needed before relying on them as basis for group/ community management of forest resources. Some experiences of forest management by groups of farmers have recently started, however mainly in the context of donor-supported initiatives. They concern mainly assisted natural regeneration (e.g. within the MARD/ SFDP initiative) or tree planting activities (e.g. the MARD/ KfW afforestation project). Sikor and Apel (1998), in reviewing the possibilities for community forestry, note that there is a lack of documented evidence of community forestry in Vietnam, which does not allow judgement of community forestry to be made compared to other management strategies.

⇒ *What is current experience of community forestry in Vietnam?* A review of the existing documentation on experience concerning community forestry in Vietnam would be complemented with summarised experience from elsewhere in the region.

5.3 *Improving relationships between "demand" and "supply" sides of upland development - towards better collaboration in natural resource management*

Arguments over factors affecting sustainable management of natural resources usually deal with stakeholders' "means", i.e. their resources, rights, responsibilities and benefits. However, progress often hinges on the type of relationships that exist between these stakeholders. More often than not, relationships between the State and its constituencies in poor rural areas are, at best, uneasy and opportunistic. On the face of it, some advocate a substantial reduction of State intervention in the management of local resources, calling for a more important role for private bodies and village organisations. However, it is becoming increasingly accepted that some intervention by public sector bodies is necessary if support is to reach the poorer sectors of rural societies. Nevertheless, the need for the State to shift from a managing towards a regulatory and facilitative role in natural resource management implies significant changes in the ways government agencies have been used to operate. These changes are often hindered by:

- Resistance to relinquish prerogatives, hence power on the part of government officers, and lack of incentives to do so;

- Lack of capacities to take up their new role, as this means attitudinal changes which can seldom be learnt from textbooks or implemented through written instructions;

- Lack of funds to play such a role, as being more client-oriented. However, evidence from other countries suggest that demand-led and participatory activities often does not necessarily mean reduction of costs for government agencies, but rather a more cost-effective use of existing funds (Carney and Farrington, 1998).

Progress therefore requires less government-led targets, allowing time and resources for the extensionist to be more responsive to needs and objectives from the demand side; and the acceptance to embark in a participatory learning process.

Areas that deserve further work concern mutual learning through joint experimentation, better communication and improved information flows, i.e.:

⇒ *How can efficient, two-way information flows on values and constraints be encouraged?*

⇒ *How can joint experimentation assist in mutual learning of each side's technical skills?*

⇒ *How can dialogue be fostered through the development of constructive fora?* Such fora would aim to achieve consensus on stakeholders' roles, as defined by their respective '4Rs'.

6 Concluding remarks - Potential for sustainable upland livelihoods?

Vietnam's forest sector is currently undergoing a transition to 'people's forestry', with the multiple objectives of re-greening the hills, alleviating poverty and developing the upland economy. This transition involves the transference of management authority for forest lands to local people, through land use planning and land allocation. Forest land without tree cover is allocated to people using land use certificates, whilst forest land with tree cover is contracted to people for protection via State Forest Enterprises.

So far, the outcome of people's forestry has been disappointing. Less than 5 per cent of the total forest land has been allocated to households, and less than 2 per cent of the households in the uplands have received forest land. Of the land allocated, only 20 to 30 per cent is developed by the farmer according to agreed land use plans.

Hence not only has 'people's forestry' failed to achieve its objectives, but land use following allocation is not found to be sustainable. Despite some encouraging achievements such as better protection of selected forest areas, benefits to the environment are slow to result, whilst poverty and food insecurity remain. Allocation of forest land is time-consuming, expensive and complex. Despite frequent adaptation of land use legislation it is not clear whether the Government of Vietnam has the capacity to implement its policies or the resources to sustain the process financially and in a cost-effective manner.

However, there appears to be great potential for the process to become a useful means of fostering improved land use and, as an economy in transition, the Government is clearly willing to learn from experiences to date elsewhere. Vietnam is introducing a market economy but, concerning upland natural resources, it is progressing cautiously out of fear that further liberalisation will encourage increased and unsustainable exploitation - and thus loss of natural resources and further social inequity.

There is an expressed demand for research and recommendations on how policies concerning upland resources and livelihoods, and the implementation of those policies, can be improved.

An increasing number of policy specialists tend to agree that good policy-making should follow a step-wise process, including :

- stakeholders' information of what is at stake,
- stakeholders' involvement in "setting the agenda", policy analysis and development;
- the above-mentioned steps allow for the gradual building of a broad *"policy community"* aimed at informing the State regarding the policy formulation stage, i.e. the preparation of a policy statement agreed by all parties.

In Vietnam, too much emphasis seems to have been placed on the policy formulation stage, i.e. meeting targets through "command and control" policies on the mere basis on reports and statistics. This has resulted in policies that, though very laudable, face significant difficulties in implementation, thus failing to bridge the gap between reality and policies.

Throughout this paper we have suggested ways to develop a policy formation process that would lead to more effective policies. We have used examples from neighbouring countries in the region to illustrate this and inform decision-makers in Vietnam about the current status of the debate concerning practices, institutions and policy-making in relation to upland development and forest management, particularly in Asia. These ideas are also reflected in a recent review of Ford Foundation-supported community forestry programmes in Asia[36], pointing out lessons and key challenges ahead concerning collaborative forest management in upland areas. These are summarised in Box 18.

Box 18: The path towards sustainable management of the uplands - Recent lessons and key challenges, based on community forestry programmes in Asia

A recent review carried out in Asia by the Ford Foundation (1998) provides lessons and challenges in moving towards more sustainable upland and forest management in Asia. Major lessons include:

- *Local people can be an asset to conservation*

The review found that, when given the opportunity and the right incentives, local people, even when extremely poor, are often willing to invest in conservation of forests and restoration of degraded land.

- *Community organisations are essential*

They increase the communities' bargaining power in negotiating the use and management of natural resources, but they are also effective in enforcing local agreements.

- *Policy is important*

Changes in policies - in favour of both forests and people - have provided the background for institutional change. They have also improved the relationships between villagers and government personnel, the latter becoming perceived, not only as representatives of State authority, but more as people villagers could learn from.

- *Government agencies can change*

Government agencies, usually perceived as entrenched, have shown capacity to change. The change process has been slow, however, generally taking 5 to 10 years to have a significant impact. It requires continuous open-mindedness and the acceptance to embark on a participatory learning process on the part of agency leaders and field staff.

- *Collaboration provides needed skills and perspectives*

Programmes were developed through close collaboration between government agencies, NGOs and academic researchers: NGOs were often critical in voicing people's needs and providing an understanding of how to deal with local communities. Academics were important in providing information on the effects of village-level interventions. Government leaders were essential in changing government policies and procedures. A "learning-process" was also essential to allow for continuous adaptation of programmes according to new opportunities.

- *Donors can encourage constructive collaboration*

Essential to this is however donor willingness to accompany the change process over 10 to 15 years, thus allowing policies, institutional capacities, attitudes and norms to evolve based on experience.

Notwithstanding remarkable success in reducing forest degradation, community forestry programmes in Asia have also brought about key challenges, i.e.:

- *Ascertaining actual village benefits*

Actual benefits for villagers from these programmes is not very clear, especially when compared to the costs - both in time and energy - they have incurred. There is a need for realistic estimates, as basis for distribution of benefits between communities and governments.

- *Promoting the equitable distribution of benefits*

[36] Countries covered by the review included: The Philippines, Thailand, Indonesia, China, Bangladesh and India.

Community forestry programmes have allowed communities to access resources and benefit from them. However, new problems of inequities, both within and between villages have often arisen. More work is needed on ways to mitigate these inequities.

- *Recognising issues of power*

Negotiations about land use and forest management are fundamentally about balancing roles and power structures. As communities have gained more bargaining power, this has been fraught with difficulties, i.e. facing resistance by government agencies, and increasing interests by private entrepreneurs.

- *Resolving competition and conflict*

Following on the recognition of issues related to power is the need to develop mechanisms to resolve conflicts of interest in ways that achieve, productivity, equity and environmental health.

- *Responding to new roles for local government*

Increasing authority and responsibilities of local government brings both opportunities , in that it allows more quick and adapted responses, but also problems if local governments are too attached to local power structures and lack accountability. Developing not merely technical, but also institutional capacities within local government units is therefore a key task.

- *Maintaining quality while expanding*

Preliminary successes have often prompted too-rapid expansion, at the expense of quality. Developing institutional mechanisms that reward staff for quality rather than quantity e.g. through village organisations or federations, seems therefore essential.

- *Finding funds*

Donor funds have helped initiate and expand these programmes. However, in the long run, other sources of funds will be needed. These should be diverse, from the already tries local charges to downstream users for forest protection to the ones stemming for instance from recent international agreements such as the one on Climate Change.

- *Combining conservation and livelihoods*

As opportunities for income generation rise, there is a risk that this will increase the interest for unsustainable use of the resources. It will therefore important to maintain the idea of stewardship of natural resources by local communities, and find income opportunities that do not rely exclusively on forest resources.

Source: Ford Foundation, 1998

Despite its very laudable objectives, the 5 million hectares Afforestation National Programme is likely to face serious implementation difficulties, linked to many of the issues discussed in this paper, i.e.

- It assumes that the land required for plantations will be found among the so-called unused lands and 'bare' hills. But since these lands are actually used by local populations involved in shifting cultivation and upland agriculture, the implementation of the programme will result in considerable pressure on these traditional land use systems;

- A significant part of its funding is supposed to come from Programmes 327/556, which are already experiencing difficulties in funding the current allocation programmes, and in particular the land tenure certificates and compensation for protection to farmers. The incentives for lending organisations to contribute to the programme remain vague;

- Given the current concentration of land allocation in "easy access areas" and weak performance for land allocation to translate into land development, the massive participation of upland farmers in the programme remains to be seen.

7 Towards a research agenda

The process of policy-making and implementation takes time. Meanwhile, Vietnam faces pressing challenges, for which immediate answers are needed. As an economy in transition, it cannot rely much on the past to find solutions, and still lacks experience on lesser known avenues that are already being explored by other countries in south east Asia. Therefore, in addition to learning from these experiences and from new ones to be developed in-country, Vietnamese decision-makers also need suggestions and guidance concerning policies to cope with immediate issues, while not jeopardising future prospects.

This paper has attempted to provide an overview of the current situation in the uplands of Vietnam. It is intended that IIED and its partners in Vietnam will collaborate to address some of the research questions raised in this paper, in the near future. For such collaboration to be useful to policy-makers, we envisage three types of outputs:

- Short notes on specific topics, to be delivered upon request, that would allow policy makers to formulate "interim" guidelines whilst waiting for the outcome of effective policy-making;

- Collaborative research and experimentation programmes, aimed at providing medium *and long-term products;*

- Exposure of future decision-makers (e.g. young graduates) to experiments or debates occurring elsewhere on topics relevant to upland development (e.g. through seminars)

Topics for research are summarised in Table 5, based on sections 4 and 5. We have not carried out any prioritisation of the topics mentioned in Table 5. We believe that this should be done through a consultative process during the next phase of work in Vietnam, in order to increase local ownership of the research agenda. The process would involve concerned representatives of the Vietnamese government and research sector as well as from the donor community in Vietnam.

The research agenda described above is broad and diverse, and concerns an array of disciplines. As is usual for IIED, much of the research would be carried out collaboratively with Vietnamese partners. For any topics where IIED does not possess the relevant skills, collaboration would be sought with other institutions outside Vietnam.

However, in addition to its competence in some of the proposed research areas and in managing collaborative research, IIED's comparative advantage perhaps lies in its experience in digesting information from different disciplines, linking such information in a coherent fashion, and translating it into recommendations that are useful at the policy level.

Table 5: Synthesis of proposed topics for future research

Topic / Type of issue	Land Use Planning/ Land Allocation (LUP/LA) as a basis for land development	Land development aiming at sustainable livelihoods and sound environmental management	
		Land without trees / fallow land - Farmer's decisions	Land with trees - Forest management decisions
Technical *How to shift from sector to more holistic approaches in a cost-effective way?*	1. Impacts of different LA schemes on the environment and farmers' livelihoods 2. Trial on more flexible LUP/LA systems, including Indigenous systems where relevant	5. Documentation of best practices concerning farmer-led experimentation	11. Performance of various ANR systems, from a technical but also economic and social point of view 12. Performance of various land uses/vegetation covers (from a watershed protection but also farmer's point of view)
Economic/Market *How to make the market work (incentives) without risking overuse and more inequity?*	3. Ways and means to reduce likelihood of increased economic inequity (e.g. by retaining areas of common land)	6. "Commodity-chain" studies on the marketing of some key annual and perennial products 7. Potential and constraints of off-farm income opportunities e.g. FBSSEs 8. Influence of different credit systems (formal and informal) on farmers' farming opportunities and income	13. Innovative mechanisms to replace/complement government subsidies (Programme 327/556) 14. Marketing of forest products (timber and NTFPs), including "commodity-chain" studies 15. Comparative analysis of the advantages/benefits accrued to the farmer from the trading of forest products and from protection contracts
Institutions/Governance *What Roles for the State, the Private Sector & Civil Society?* *What institutions should be in charge after the shift from an ineffective state command-control system, to reduce the risk of unsustainable use & increased inequity?*	4. Development of mechanisms to achieve a better balance of stakeholders' roles, i.e. their '4Rs' e.g. by comparing official and traditional ruling systems.	9. Review of existing upland farmers' support systems (formal and informal) in the uplands 10. Comparative analysis the quality of support based on the balance of stakeholders' '4Rs' (including conventional and "new" co-operatives)	16. Survey of SFEs actual functions/activities and *raison d'être* (for the State, SFEs and farmers) 17. Implications of other (than SFEs) institutional arrangements to manage forests (e.g. private companies, partnerships) 18 Clarification of roles under current and pilot institutional arrangements to manage/protect forests (using the '4Rs') 19. Institutional analysis of different arrangements/bodies in charge of forest management 20. Review of existing documentation and experience on community forestry in Vietnam
Relationships	21. Review of best practices in Vietnam and the region re: JFM, communication and information 22. Development of cost-effective and transparent information/communication strategies regarding issues on upland development		

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Annex 1: Schedule of meetings

Friday 29 May	Scandiaconsult International: Mountain Rural Development Programme	• Jerker Thunberg, team leader
Saturday 30 May	Forest Science Institute of Vietnam, MARD	• Prof. Dr. Ha Chu Chu, Director • Prof. Dr. Do Dinh Sam • Vu Long, Vice Director and Forest Policy Expert • Prof. Dr. Bui Minh Vu, Senior Forestry Economic Researcher, Head of Forest Economic Research Division • Dr. Tran Quanh Viet, Head of Silviculture Research Division, FSIV • Prof. Dr. Hoang Xuan Ty, Director, Research Centre for Forest Ecology and Environment, FSIV • Prof. Thai Phien, National Institute for Soils and Fertilisers • Vo Nguyen Huan, forest economist • Dr Do Doan Trieu, forest economist
Monday 1 June	Land Investigation and Planning Institute, GDLA	• Dr Vo Tu Can, Managing Vice Director, Centre of Land Resources and Environment • Prof. Dr. Ngo Duc Phuc, Head of Section, Research Science and Cooperation • Dr Nguyen Duc Tien
Tuesday 2 June	World Food Programme	• Malcolm Duthie, Adviser • Jyoti Rajkundlia, Project Officer • Mr Nguyen
	Department for Resettlement and Development of New Economic Zones	• Dr Ma Chung Tho, Deputy Director • Trinh Ba Bao, Head of Division
Wednesday 3 June	Forest Protection Department, MARD	• Doan Diem, Deputy Director
	International Cooperation Department, MARD	• Dr Vu Van Me, Senior Expert • Ngo Sy Hoai
Thursday 4 June	National Institute for Agricultural Planning and Projection	• Prof. Dr. Bui Quang Toan, Deputy Director (and Director of the Centre of Agriculture Extension Volunteer)
	Swedesurvey	• Gösta Palmkvist, Land Management Advisor
	Social Forestry Development Project, MARD-GTZ	• Paul van der Poel, Team Leader/ Project Manager
	Forest Sector Project, MARD-ADB	• Günther Meyer, Team Leader
Friday 5 June	MRDP	• Jerker Thunberg
Saturday 6 June	Department of Agricultural and Rural Development Policy, MARD	• Eng. To Dinh Mai, Senior Expert and Coordinator, Support to Forestry Policy Formulation and Legislation Project (FAO) • Cao Duc Phat, Director
Tuesday 9 June	Social Forestry Support Programme, Helvetas	• Bardolf Paul, Chief Technical Advisor • Karin Ann-Mari Ralsgard, Research/ Extension Advisor
	Mountainous Ethnic Pro.Development Corporation	• Prof. Vu Biet Linh, Director • Nguyen Ngoc Nhi, Director, Centre for Community Forestry Extension and Development
	Ford Foundation	• Oscar Salemink
	UNDP	• Oystein Botillen, Programme Officer • Susanne Schmidt • Hans Warfvinge (Orgut Consulting) • Ngo Sy Hoai
Weds 10 June	CRES	• Terry Rambo
Thurs 11 June	WRI-REPSI	• Blake Ratner

Annex 2: Some current donor-assisted research initiatives in upland Vietnam

- The *Resources Policy Support Initiative* (REPSI) of the World Resources Institute aims to improve the management of natural resources in the uplands of main south east Asia (Vietnam, Lao PDR, Cambodia, Thailand, Myanmar and Yunnan province of China). It aims to do so through policy analysis and strengthening the capacity of research institutions. REPSI's activities in Vietnam are focused on field research and analysis in the Ca river basin, seed grant research by independent researchers to identify opportunities for policy analysis, and analysis and consultation to define strategic focus and partnerships for the future. The REPSI programme spans five years and is soon to move into a new phase to implement the above activities.

- The *Vietnam Sweden Mountain Rural Development Programme* (MRDP), supported by SIDA, supports field projects while at the same time strengthening the capacity of the Ministry of Agriculture and Rural Development in Hanoi. The five project provinces are Ha Giang, Lao Cai, Yen Bai, Tuyen Quang and Phu Tho, all of which are located in the upland and mountainous area of northern Vietnam. MRDP support is threefold: institutional development to improve a demand-driven support structure from central to village level in the five provinces; the development and testing of methods and systems to convert the barren uplands in the five provinces to productive and sustainable land use; and the creation of policies, recommendations and guidelines for the sustainable upland and mountain rural development, based on learning from the institutional and method development in the five programme provinces. MRDP runs from 1996-2000.

- GTZ assists three projects in the field of forestry in Vietnam:
  - The *regional project of the Mekong River Committee* supports initiatives of watershed management in Daklak province, especially in the field of joint forest management.
  - The *Social Forestry Development Project* (SFDP) supports watershed management in the provinces of Son La and Lai Chau. Sustainable land use activities understaken together with ethnic minorities of the region include decentralised planning, land use *planning and land allocation and natural regeneration of forests.*
  - The *Reform of the Forestry Administration System* (REFAS) project assists MARD in the public administration reform process and the modernisation of the forestry sector from central to grassroots level.

- The *Asian Development Bank* has a major forestry programme in northern Vietnam.

- The *Centre for Natural Resources and Environmental Studies* (CRES), with support from the East-West Centre and the Centre for south east Asia studies at the University of California, has produced comprehensive assessments of highland development in Vietnam. CRES plans to undertake further research on development trends in Vietnam's northern mountain region, to support implementation of the MRDP. The proposed research will include baseline studies of representative communities facing different development conditions; development of a methodology for monitoring long-term changes in the sample communities; and building of capacity in CRES and MRDP to conduct applied development research in the uplands.

- *The World Food Programme represents the largest donor to Vietnam in the* environmental sector. Projects include support (food aid) to smallholders during periodic food shortages, microplanning and training.

- The *Canadian Cooperative Association* supports a project on community strengthening through cooperatives, implemented by the Centre of Agricultural Extension Volunteers. The project has supported the development of at least six 'new style' cooperatives in different regions of Vietnam, through training, development of demonstration plots, materials and credit provision.

- The *Ford Foundation's* Vietnam programme includes a focus on poverty alleviation through equitable and sustainable development of upland areas. Foundation grants to the Forest Science Institute and CRES support research to improve the agricultural productivity and sustainability of highland production systems by building on indigenous knowledge and customs, as well as training to cadres on natural resources management and environmental studies.

- Vietnam is one of four countries participating in *UNDP's Global Programme on Forests* (GPF), which was launched in late 1997 with the overall aim of supporting sustainable forest management. A national GPF unit will be established in Vietnam; precise activities of the unit are still being defined.

- The *Social Forestry Support Programme* (SFSP) of the Swiss Agency for Development and Cooperation in cooperation with MARD is supporting training in social forestry at five tertiary level colleges through human resources development, complemented by generation of knowledge and information exchange. The SFSP runs from 1997 to 2001.

- The Vietnam Sweden *Cooperation Programme on Land Administration Reform* (CPLAR) includes study of the following elements: land legislation for ethnic minorities; cadastral mapping and the issuance of land tenure certificates; land use planning and mapping; land evaluation; and a land information system

- Through the project on *Capacity-building and cooperation in social anthropology between Sweden and Vietnam*, the Department of Social Anthropology at Gothenburg University is working with Vietnamese anthropologists to further socio-cultural and socio-economic studies in the context of the multi-ethnic situation in Vietnam's highlands, and to support regional exchange of knowledge in the field of social science.

- Some other NGOs also deal with upland development and forestry issues, e.g.
  - CARE project on community forestry;
  - OXFAM and Action Aid on equity issues regarding land allocation and upland development programmes;
  - IUCN on the national environmental action plan;
  - Some Vietnamese organisations, such as the Rural Development Service Center (RSDC) and the Association of Vietnamese Gardeners (VACVINA).

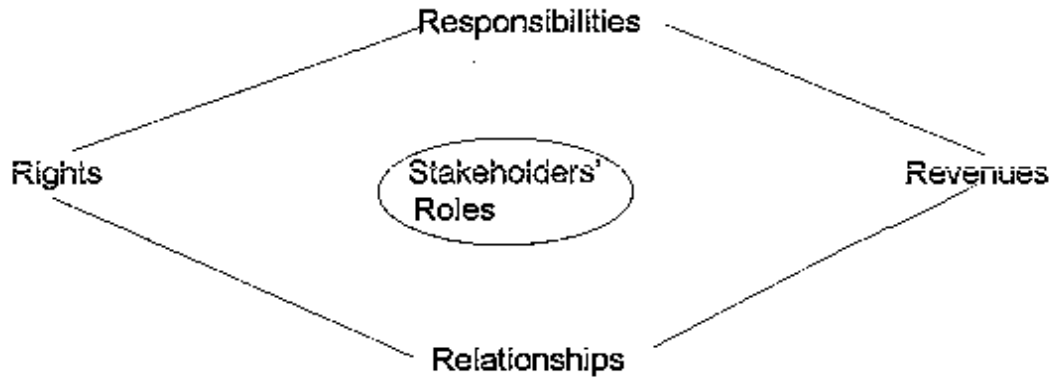
Annex 3: Introducing the "4Rs" framework to define stakeholders' roles in collaborative forest management.

1. Introduction

Over the past decade or so, there has been an growing consensus that state forest authorities have not fulfilled their function to meet both conservation and societal needs, providing the goods and services that people want in a sustainable manner. Hence the need to renegotiate the roles of the primary stakeholders[37] - i.e. the State, the private sector and the local communities - in order to better meet these needs.

In order to operationalise the rather vague concept of stakeholders' roles and attempt to assess local resilience, IIED has been testing a framework called the '4Rs', which stands for stakeholders' *Rights, Responsibilities, Revenues/Returns and Relationships*, as illustrated in Diagram 1

Diagram 1: The '4Rs' framework to define stakeholders' roles in forest management



This framework has been tested in six different countries of Africa[38], in the context of a project on 'Capacity Development for Sustainable Forestry in Africa'.

2. The use of the '4Rs' framework

(i) Use of the '4Rs' to analyse situations and diagnose problems.

All the national working groups have used the '4Rs' framework to analyse situations and diagnose problems. For instance, Tables 3 and 4 illustrate such uses in the case of Zambia.

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37 Primary stakeholders are the ones that have a direct stake in the use of forest resources. In that line, NGOs are considered secondary stakeholders. This does not belittle their essential role in facilitating processes aimed at a better management of the forest.

38 Niger, Senegal, Cameroon, Uganda, Zambia and Mozambique (later replaced by Ivory Coast)

Table 1: A summary of the Rights, Responsibilities and Revenues in Lukolongo, Zambia

Stakeholders	Responsibility	Rights	Revenues
Subsistence farmers	Custodians to land	Forest harvesting, cultivation of the land	Income from forest and agricultural products
Emergent farmers	Some land management	Land cultivation	As above
Charcoal producers	None	Wood harvesting	Income from forest products
Charcoal traders	None	Charcoal marketing	Income from trade
Curio-makers	None	Wood harvesting	Income from forest products
Fishermen	None	Fishing	Income from fishing
Forestry Dept.	Forest management, forest law enforcement	Collection of revenue from forest taxes	Revenue from forest taxes
ECAZ (an NGO)	Facilitator of development	To facilitate development	Indirectly, creation of employment

(Source: Makano et al, 1997)

Based on Table 1, a strength and weakness analysis would show notably a clear imbalance between the private operators' responsibilities and their rights and benefits.

Table 2: Stakeholders' Relationships in Lukolongo, Zambia

	Subsistence farmers	Emergent farmers	Charcoal producers	Curio-makers	Fishermen	Forestry Dept.	ECAZ
Subsistence farmers							
Emergent farmers	Good						
Charcoal producers	Good	Good					
Curio-makers	Good	Good	Fair				
Fishermen	Good	Good	Good	Good			
Forestry Dept.	Fairly good	Fairly good	Poor	Poor	Fair		
ECAZ	Good	Good	Good	Fair	Good	Good	

(Adapted from Makano et al, 1997)

Table 2 highlights the usually poor state of the relationships between the State and the other stakeholders.

(ii) Use of the '4Rs' to assess/compare policies

Table 3, taken from the work carried out in Zambia, shows one possible use of the '4Rs' framework to compare different policy statements and assess their coherence.

Table 3: Policy statements and Legislative Provisions in relation to the "4Rs"

Legislation and Policy statements	Provisions in relation to the "4Rs"			
	Responsibilities	Rights	Revenues	Relationships with local people
Forest Act	Government	Government	Government and local people	Poor
Wildlife Act	Government and local people	Government	Government and local people	Good
NEAP	Government and local people	Government	Government and local people	?
Water Act	Government	Government	Government and local people	?
Energy	Government	Government	Government and local people	Poor
Land Act	Government and chiefs	Government and chiefs	Government and local people	Poor
Local Gvnmt and Housing Act	Government and Landlords	Government and Landlords	Government and local people	?

(Source: Makano et al, 1997)

A strength and weakness analysis of policies on the basis of Table 5 would clearly show that:

- there is a lack of harmonisation of the different regulations in terms of rights and responsibilities;
- in the case of revenues, there is harmony between the different policies. However, in this case, the policy statements do not correspond to reality, as almost no revenues return to the local level from the Central Treasury;
- the quality of relationships are seldom mentioned in policy statements. More generally speaking, they are also more difficult to assess than the other 'Rs'.

(iii) The use of the '4Rs' framework in the negotiation process

So far this framework has not been tested in the negotiation process itself. It is likely that it should be adapted accordingly, i.e.

- The negotiation on stakeholders' respective '4Rs' cannot start directly, given the typically poor quality of relationships between government agencies and other local stakeholders. Therefore, it is advisable to first 'level the ground by':
  - * using this framework around very specific issues rather the general topic of forest resources. Piecemeal negotiation could then lead to a gradual improvement of relationships;
  - * start by assessing the needs with a conventional participatory approach, in order to differentiate needs from desired '4Rs'.

- The issues related to the '4Rs' are often very sensitive, and difficult to discuss in public by marginalised groups. This may lead to the prioritisation of small social groups/individual interviews rather than assembly meetings, in order to elicit the opinion of less vocal groups.

- When using the '4Rs' to negotiate, it is important to assess three types of situations, i.e.

  * the '4Rs' according to the *policies*;
  * the '4Rs' according to *reality*;
  * the desired '4Rs' for the *future*.

  It is recommended to start with the desired future state, as a more likely point of agreement; and subsequently discuss how the reality should change to reach that stage

- Given that negotiations on the '4Rs' indirectly imply potential changes in local power structures, they are likely to raise higher expectations than PRA. It is therefore recommended to use this framework in negotiation only if it can be followed by effective change in the '4Rs', even on a pilot basis.

(iv) The use of the '4Rs' beyond forestry issues

The first feedback from the evaluation workshop in the focal countries shows that there is an agreement that this framework could and should be tried in all aspects related to the management of natural resources.

(v) The '4Rs' framework in projects

One of the outputs of the Niger working group has been a methodology to evaluate CFM projects as regards their performance on the '4Rs'. This has led to two types of comparison:

- Between project objectives and results, in relation to the '4Rs', leading to one matrix per project, framed as follows:

4Rs	Project objectives	Results (from surveys of CBO members)
Rights		
Responsibilities		
Returns/Revenues		
Relationships		

- A Strengths, Weaknesses, Opportunities and Threats analysis (SWOT) of the '4Rs' for each project, leading to the following type of matrix:

4Rs	Strengths	Weaknesses	Opportunities	Threats/Risks
Rights				
Responsibilities				
Returns/Revenues				
Relationships				

(vi) The '4Rs' as a complement to stakeholder analysis

Stakeholder analysis (SA) is defined by Grimble et al (1995) as 'an approach for understanding a system by identifying the key actors or stakeholders in the system, and assessing their respective interests in that system'. This definition shows that SA, likewise the '4Rs', complements participatory approaches in dealing with some of the structural factors likely to give rise to conflicts of interest.

However, the '4Rs' framework, in turn, complements SA in this respect, i.e.:

- It does not limit the analysis to stakeholders' interests, but also encompasses their relative power, by proxy assessment, as discussed below;

- Whilst SA assesses stakeholders' relationships vis-à-vis the resource, the '4Rs' adds stakeholders' mutual relationships to the picture, and this factor is key in CFM

- SA is often carried out by outsiders, usually project teams. Whilst this has so far been also the case for the assessment of the '4Rs', this framework allows for the involvement of key stakeholders when it is used in the negotiation of roles itself.

On the other hand, SA can complement the '4Rs' framework in identifying stakeholders[39].

(vii) Assessing stakeholders' relationships and power

Despite their importance in 'making things work', assessment of relationships was found to be particularly difficult by most national working groups within AFRICAP. The best attempt has been made in Cameroon, where the local working group has used three criteria to qualify relationships (Foteu *et al*, 1998):

* formal/informal;
* weak/strong, based on the frequency of contacts;
* good/fair/poor, based on convergence of stakeholders' opinions.

However, these criteria do not provide enough information on the performance of the linkages between stakeholders.

More generally speaking, the assessment of stakeholders' relationshipsis a topic where information on methodologies is scant. Outside forestry, one interesting attempt was carried out by FAO in the Philippines, in evaluating the performance of the linkages between farmers, researchers, traders and agricultural technicians (FAO, 1995). The criteria developed in that experiment include:

* awareness of other actors' service;
* relevance of other actors' service;
* timeliness of other actors' service;
* accessibility to other actors' service;
* communication medium through which link is mediated;
* linkage control.

[39] Indications on how to identify stakeholders, their interests, their potential influence and importance in projects and/or forest enterprises can be found in ODA (1995) and SGS/IIED (forthcoming).

This experiment was focused on transfer of technologies, hence the service between actors. Service is actually only one among several factors suggested by GTZ (1996) to categorise relationships. These factors include:

* *service*;
* *legal/contractual*;
* *market* (determined by demand and supply of goods and services);
* *information exchange*;
* *interpersonal*;
* *power.*

These types of relationships are not mutually exclusive.

Special attention should be paid to the nature of the power-type relationship. Power assessment has always been a difficult task, and it has usually been carried out through the assessment of the outcome of negotiations between stakeholders. As an *ex-post* assessment, this is not very helpful in the preparation of negotiations. To overcome this pitfall, GTZ (1996) suggests that three key questions must be answered:

- On what basis is power built?
- How does power affect the relationship?
- When and how do power relations change?

The first question relates often to some type of *dependency*. The economic (e.g. financial dependency), social (e.g. hierarchical dependency, expertise) and emotional (e.g. personal dependency due to nepotism, cronyism, etc.) dimensions of the relationship are good indicators fo the source of power.
With respect to the second question, power can affect the relationship in three ways, i.e. physically, materially or in terms of social status. In many instances, the mere potential to exert power suffices to make power relationships work.

The third question helps understand how to best induce changes in an attempt to assess and rectify the imbalance in stakeholders' '4Rs'. It might therefore be argued that the balance of stakeholders' '4Rs' can constitute a *proxy measurement of stakeholders' power* in forestry. They can usefully complement dependency and other factors, such as education, wealth, locally recognised authority and "whose knowledge counts" - as used by Colfer (1995) to determine stakeholders' power deficit.

3. Conclusion

The use of the '4Rs' framework has proven to be a useful and cost effective tool in analysing situations and diagnosing problems in relation to collaborative management of natural resources, by highlighting imbalances in stakeholders' roles, which are often the cause of conflicts and unsustainable use. It can alos hence providing indications on local resilience to respond to pressures. It might help to gradually move participation beyond the community level, towards negotiation between stakeholders. However, the framework needs to be further tested and improved. It also needs testing when it comes to the role negotiation process itself.

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International Institute for Environment and Development

Forestry and Land Use Programme

International Institute for Environment and Development
3 Endsleigh Street
London
WC1H 0DD

Tel: (+44 171) 388 2117
Fax: (+44 171) 388 2826
E-mail: forestry@iied.org
Internet: http://www.iied.org/

Sustainable livelihoods in upland Vietnam: land allocation and beyond

The perceived natural wealth of Vietnam's uplands contrasts with the poverty of many of its inhabitants: about one third of the population inhabits upland areas, and the majority of those are poor and suffer food insecurity. At the same time, forest resources have become impoverished over the last fifty years, although there are signs that the escalation in forest loss in the 1980s has slowed considerably during the 1990s.

Of various attempts by the Government of Vietnam to reduce forest loss and enhance livelihoods, allocation and contracting of land to households represents the most ambitious and radical. So-called "people's forestry" began in 1994, with the transfer of management authority for forest land - whether with forest cover or not - from the state to the household unit. The system of allocation (of forest land without forest cover) and contracting (of forest land with protected forest cover) has been gradually adapted over the years, following experience of implementation. However, a number of problems remain, and the process of allocation of forest land has not yet been completed or achieved its objectives. This paper identifies a number of issues related to upland development and discusses possible areas for further research.

The **International Institute for Environment and Development (IIED)** is an independent, non-profit organisation which promotes sustainable patterns of world development through research, policy studies, consensus-building and public information. In its 25 years, IIED has accomplished much in a large number of countries. Focusing on the connections between economic development, the environment and human needs, IIED's principal aim is to improve the management of natural resources so that countries can improve living standards without jeopardising their natural resource base. Work is undertaken with, or on behalf of, governments and international agencies, the private sector, the academic community, foundations and non-governmental organisations, community groups and the peoples they represent.

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- **policy processes**: supporting participation of multiple interests in policy analysis, formulation and monitoring;
- **sustainability assessment** of forest management and use;
- **capacity development** of government bodies, NGOs and communities for sustainable forest management;
- the **development and monitoring of incentives** for sustainable forest management.

The authors' work was funded by the Swedish International Development Cooperation Agency (Sida).

ISBN 1 899825 21 5